



Energize Eastside Project

Final Environmental Impact Statement

VOLUME 3: APPENDIX J-2

Phase 1 Draft EIS Comments and Responses

MARCH 2018

PREPARED FOR:

The Cities of Bellevue, Newcastle,
Redmond and Renton

PREPARED BY:

ESA



Environmental Impact Statement

APPENDIX J-2: PHASE 1 DRAFT EIS COMMENTS & RESPONSES

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From: [Karen Walters](mailto:Karen.Walters@energizeeastside.org)
To: info@energizeeastside.org
Subject: Energize Eastside, Phase 1 Draft Environmental Impact Statement
Date: Monday, March 14, 2016 1:57:39 PM

Heidi,

T1-A-1 Our Habitat Program has reviewed the Phase 1 Draft EIS for the proposed Energize Eastside PSE project. As you know, this project seeks to expand existing electrical power capacity serving Eastside communities and businesses. We are particularly concerned that the Phase 1 Draft EIS includes Alternative 1, Option D to construct underwater transmission lines in Lake Washington to provide the new 230 kV transmission lines. This Alternative does not fully describe potential impacts not only to including fish and water resources, but also impacts to Muckleshoot tribal fishing as a result of construction and potentially operations, particularly if the pipeline is not buried (see page 2-29 describing the potential for cables to be laid on the lake bottom). The Muckleshoot Indian Tribe is federally recognized tribe who is signatory to both the Point Elliott and Medicine Creek treaties and has treaty rights to conduct fisheries within the Lake Washington watershed and beyond. The DEIS fails to acknowledge the Muckleshoot Indian Tribe and its treaty rights, particularly on page 13-5 where the lone discussion on treaties occurs.

T1-A-2 The DEIS notes on page 1-36 that shoreline regulations prohibit new utilities in Lake Washington. If this is the case, then Alternative 1 Option D is not a viable alternative and should be removed from further consideration. We have further concerns regarding Alternative 1, Option D as discussed below.

T1-A-3 Table 5-1 regarding federal program or policies fail to note that the US Army Corps of Engineers must ensure that tribal treaty rights, including but not limited to fish, water resources, and fishing are not impaired as part of their authorizations under Section 10 and 404. In addition to causing adverse impacts to water resources and salmon, the Alternative 1 Option D underwater transmission lines have the potential to impact Muckleshoot Tribal fishing access by limiting access to fishing sites within the entire construction area which is shown from the Renton area all along the eastern Lake Washington shoreline up to the Kirkland area (Figure 2-1). Another potential impact to treaty fishing during construction is due to vessel movements and barge traffic. The DEIS notes that the construction materials to need to be transported via ships and barges coming from the Locks to the construction sites (page 2-31). If so, the construction area for this project is larger than described. These transport ships and barges can also adversely affect Muckleshoot tribal fishing activities in all areas of the Ship Canal and Lake Washington as a result of vessel traffic potentially causing gear damage and obstruction of other fish sites if vessels and barges need staging outside of the construction areas.

T1-A-3 Table 5-1 in the DEIS also fails to note that there likely aquatic lands in the project area owned by the Washington Department of Natural Resources. At a minimum, assuming WDNR agrees with the new utility on their lands, lease agreements and permission would be needed from WDNR to allow an underwater cable to be located on State-owned Aquatic Lands.

T1-A-4 With respect to water resources and fish, the Alternative 1 Option D wisely assumes the presence of contaminated sediments (page 5-7). The existing WA DNR owned aquatic lands in front of the Barbee Mill Plat are a good example of this occurrence. This particular area was capped as part of the clean-up efforts and is not to be disturbed. The Alternative 1 Option D would have to avoid this area to avoid disturbing these sediments which may not be possible.

T1-A-4 The impact assessment on page 5-17 is incomplete for Alternative 1 Option D as this option requires a minimum of three landing points that include six vaults for each landing point. Roads would also be required to access these vaults. These facilities will result in permanent impacts to vegetation (at a minimum) and where they occur on the shoreline there is the potential to permanently eliminate shoreline buffers, potential filling of shoreline wetlands, or impacts to streams and their buffers that drain to Lake Washington. The DEIS fails to acknowledge that where these facilities area built and their associated corridors for power lines and poles are permanently limited in their ability to restore

- T1-A -1 See response for Key Theme P&A-2.
- T1-A -2 See response for Key Theme ALT-1.
- T1-A -3 See response for Key Theme WTR-6.
- T1-A -4 See response for Key Theme LU-4.

T1-A-4 | native trees per PSE policies and requirements regarding vegetation. They should be viewed as significant given the level of shoreline degradation already documented in the Shoreline Inventory documents for the Lake Washington jurisdictions shown in Figure 2-1. A new powerline corridor in and along Lake Washington would also preclude restoration actions where they were identified as part of the individual Shoreline Master Programs. We fail to see how this Alternative is similar to Alternative 1 Options A and C impacts to water resources when Option D is the only Option that involves direct impacts to Lake Washington and its shoreline (page 5-20).

T1-A-5 |

T1-A-6 | Section 6.6.4.3.2 lacks any consideration of impacts to salmon and their prey in Lake Washington from exposure to contaminated sediments under Alternative 1, Option D. Without knowing the extent of contaminated sediments in the Alternative 1, Option D project area, the construction of this alternative could be significant. Further, it seems unlikely that the fish window will be met as this alternative requires at least 8 months of construction excluding upland areas (page 2-49) unless construction is done over more than one work window.

T1-A-7 | Another issue that is not considered is the potential for salmon resource impacts to limit fishing opportunities for Muckleshoot tribal members. There are already limitations on tribal fishing due to the poor condition of some salmon stocks (i.e. ESA listed Chinook and steelhead) in Lake Washington. Further impacts to these species will continue limitations on tribal fishing opportunities as well as potentially creating restrictions on other salmon species available for harvest that overlap in run timing with ESA stocks.

T1-A-8 | In conclusion, given the potential impacts to Lake Washington; its shoreline; water and salmon resources; and Muckleshoot fishing activities, Alternative 1, Option D should be eliminated from further consideration for this project.

We appreciate the opportunity to review this Phase 1 DEIS. Please let me know if you have any questions.

Thank you,
 Karen Walter
 Watersheds and Land Use Team Leader

*Muckleshoot Indian Tribe Fisheries Division
 Habitat Program
 39015 172nd Ave SE
 Auburn, WA 98092
 253-876-3116*

T1-A -5 See response for Key Theme ALT-1.
 T1-A -6 See response for Key Theme P&A-3.
 T1-A -7 See response for Key Theme P&A-3.
 T1-A -8 See response for Key Theme ALT-1.



801 228th Avenue SE • Sammamish, WA 98075 • Phone: 425-295-0500 • Fax: 425-295-0600

March 1, 2015

Heidi M. Bedwell
Energize Eastside EIS Program Manager
Development Services Department
City of Bellevue
450 110th Ave NE
Bellevue, WA 98004

Ms. Bedwell,

The City of Sammamish (Sammamish) has been notified of document availability and opportunity to comment on the State Environmental Policy Act (SEPA) Phase 1 Draft Environmental Impact Statement (DEIS) developed in support of Puget Sound Energy's (PSE) proposed Energize Eastside Project (E2). We provide this comment letter for your consideration in response to the published Phase 1 DEIS and to establish a formal standing as a party of record in the ongoing EIS process. We also ask that standing be established to enter into the Eastside Cities E2 EIS Inter-Agency Agreement as a Co-Lead Counterpart on an as needed basis.

L1-A-1

To date Sammamish has not been included in past regional planning and Citizen Advisory Group (CAG) efforts with PSE that have identified the need to implement the E2 project and that have aided PSE in preliminary alternative selection. Sammamish has also not been included in the current resultant EIS process where other eastside cities have been afforded opportunity to engage in fundamental SEPA EIS process steps as Co-Lead Jurisdictions. Sammamish has not been afforded similar opportunity as its neighbors to engage in interagency agreement coordination, scoping, alternatives selection, and background analysis; steps essential to building an agency's understanding of a complex project such as Energize Eastside.

L1-A-2

Sammamish was recently made aware of the alternatives under consideration in the Phase 1 DEIS through Notice of DEIS Comment Period published January 28, 2016. The City is now evaluating the proposed E2 project for potential impacts. With a goal of facilitating citywide utility services that are consistent, reliable, equitable, competitive, and financially sustainable Sammamish does support the objective of operating a safe and reliable electrical grid and respects the complexities in generation, transmission, and distribution planning for the PSE service area. Sammamish citizens and businesses are customers of PSE, essential infrastructure serving Sammamish is reliant

L1-A -1 See response for Key Theme EIS-2.

L1-A -2 Comment noted.

L1-A-2

on safe conditioned electrical power, and many Sammamish residents are employed within the larger economic and employment centers of the eastside that are the primary beneficiaries of the proposed E2 project.

Sammamish also takes great pride in the quality of life it offers its citizens and is engaged in regional conservation efforts. This is manifested in programs that among others protect the communities' natural features and forested character and that strive to reduce consumption patterns with a goal of encouraging the use of innovative measures and new technologies to reduce overall utility demand and enhance services to city residents. Sammamish encourages opportunities for individual businesses or homeowners to become more energy independent by reducing energy use and/or generating a portion of their energy needs on site or by purchasing green power through programs such as PSE's Green Power Program.

After review of the January 28, 2016 published Phase 1 E2 DEIS our understanding of the project objectives, technical limitations, and reasonably approximate alternatives identified by the nominal lead and co-lead agencies results in the following comments:

1) **Sammamish suggests further design and review of Alternative 1** (230 kV wired transmission system improvement from roughly Renton to Redmond). This suggestion is accompanied with the caveat that implementation of this system upgrade does not cause for PSE to diminish efforts in researching, designing, or utilizing emerging alternative technologies to account for a growing portion of its system capacity.

L1-A-3

2) **As an engaged member of King County Cities Climate Collaboration (K4C), Sammamish is interested not only in the delivery of safe and reliable power, but also in the communities' aspiration to acquire clean energy.** A project at the scale of Alternative 1 is a major investment. Although Sammamish supports the goal of operating a safe and reliable electrical generation, transmission, and distribution system this objective must be tempered with the longer term vision and flexibility necessary to embrace emerging technologies needed to establish a dynamic and functional integrated resource approach to generation and grid management. Our concern is that an investment made at the scale of that proposed for Alternative 1 could result in an outcome where electricity is generated or purchased out of the region that is not considered as "clean energy" as a most cost effective means of delivering required power. After the investment is made local distributed generation, storage, and improving efficiency may be of lesser importance. The Phase 1 E2 DEIS should include an analysis of PSE's Integrated Resource Plan (IRP) currently under review by the Washington Utilities and Transportation Commission (WUTC) to evaluate possible long term impacts of large scale transmission infrastructure on regional clean energy goals.

L1-A-4

3) **Better define the extent of impacts associated with Alternative 3.** If Alternative 3 is carried forward into Phase 2 the following questions should be addressed:

- a. **Miles of line to be newly constructed or retrofitted:**
 - i. How many miles of existing 115 kV system would be upgraded or retrofitted?

- L1-A -3 See responses for Topic ALT.
- L1-A -4 See response for Key Theme ALT-1.

ii. How many new miles of 115 kV system would be required (either construction of a new alignment with new poles and 115 kV transmission lines or the retrofit of existing distribution corridors to add new 115 kV compliant poles and lines)?

b. Clearance zones for 115kV lines:

- i. What is the clearance zone required for initial construction for a 115 kV corridor of this type?
- ii. What is the clearance zone required for ongoing operational maintenance for a 115 kV corridor of this type?

c. Diversion of electrical capacity from existing substations. The Sammamish area is primarily served by the following substations:

- Plateau Substation on NE 8th Street & 230th Avenue NE
- Sahalee Substation on Sahalee Way & NE 36 St.
- Pine Lake Substation on 228 AVE SE & SE 31 St.
- Klahanie Substation on Issaquah-Fall City Rd & Klahanie Dr SE

In addition, other local substations that provide back-up service include:

- Redmond Substation by Bear Creek Mall in Redmond,
- Fall City Substation north of downtown Fall City,
- Pickering Substation on East Lake Sammamish Parkway at SE 61 St.

Please analyze how the diversion of electrical capacity from these substations as proposed to augment capacity of the eastside core affects the performance of these substations. We are concerned that if electrical flow was diverted with priority from any of these substations that the Sammamish distribution grid would be put at risk of not meeting the objective of safe and reliable service. If Alternative 3 is moved forward, what controls would PSE implement to ensure the integrity of the Sammamish distribution grid is maintained during the triggering of one or more contingencies?

d. Safety of co-location with existing or to-be expanded regional natural gas pipelines. Please consider construction and operational impacts on regional high capacity natural gas pipelines with your evaluation of Alternative 3. Specifically, please consider and cross reference with the E2 DEIS findings published in the August 5, 2015 FERC issued DEIS for the Northwest Pipeline LLC Washington Expansion Project. Pipeline co-location and crossing is a concern to Sammamish especially in areas around the Seattle Fault.

e. What are the operational safety requirements for a new or upgraded 115 kV transmission line? Does the City or Eastside Fire and Rescue need to invest in any specific equipment or update emergency response plans to account for additional transmission lines?

L1-A -5 See responses for Key Themes PLS-1, PLS-2, PLS-3, and EARTH-1.

L1-A -6 See response for Key Theme SVC-3.

L1-A-4

L1-A-5

L1-A-6

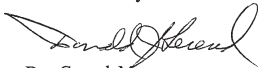
L1-A-7

We appreciate the opportunity to learn more about PSE's E2 proposal and provide comment on the Phase 1 DEIS. As the EIS process continues, we anticipate taking an active role in review of proposed alternatives and request that we be included in the ongoing process as a stakeholder with special interest. Sammamish staff are available to work collaboratively with other E2 EIS stakeholders.

Sincerely,



Bob Keller, Chair
Utilities Committee
Sammamish City Council



Don Gerend, Mayor
Sammamish City Council



Ramiro Valderrama-Aramayo, Deputy Mayor
Sammamish City Council

L1-A -7 Comment noted.


King County

 Department of Natural Resources and Parks
 Wastewater Treatment Division

Community Services & Environmental Planning

 King Street Center, KSC-NR-0505
 201 South Jackson Street
 Seattle, WA 98104-3855

March 9, 2016

 Sent via email: info@EnergizeEastsideEIS.org

 City of Bellevue
 Development Services Department
 Attn: Heidi Bedwell
 450 110th Ave NE
 Bellevue, WA 98004

RE: Energize Eastside Project Phase I Draft Environmental Impact Statement

Dear Ms. Bedwell:

The King County Wastewater Treatment Division (WTD) has reviewed the **Phase I Draft Environmental Impact Statement (DEIS) for the Energize Eastside Project**. During the scoping period for the DEIS, WTD requested that PSE and the City of Bellevue consider potential impacts to wastewater facilities when analyzing the impacts of project alternatives. Chapter 16 of the DEIS, "Utilities," includes WTD's wastewater facilities in its analysis of potential utility impacts. Due to the programmatic nature of the Phase I DEIS, WTD does not have enough information to comment at this time on physical impacts to specific facilities, access to these facilities for maintenance, or permanent easements associated with these facilities.

As the design of specific alternatives continues, WTD requests that PSE and the City of Bellevue submit design drawings so that WTD staff can assess the project's impacts. Information should be sent to:

Mark Lampard, Local Public Agency Coordinator
 King County Wastewater Treatment Division
 201 South Jackson Street, KSC-NR-0508
 Seattle, WA 98104-3855
 (206) 477-5414
mark.lampard@kingcounty.gov

Thank you for the opportunity to review and comment on this project.

Sincerely,

 Jacob Sheppard, Water Quality Planner
 Community Services and Environmental Planning

cc: Mark Lampard, Local Public Agency Coordinator, Project Management Unit

CREATING RESOURCES FROM WASTEWATER

L2-A -1 Comment noted.

L2-A-1



P.O. Box 1307
Issaquah, WA 98027
425-837-3020
issaquahwa.gov

March 11, 2016
Heidi Bedwell
Energize Eastside EIS Program Manager
Senior Planner, Land Use division, Development Services
City of Bellevue

RE: Energize Eastside Phase One DEIS

Dear Ms. Bedwell,

Thank you for the opportunity to review and comment on the Energize Eastside Environmental Impact Statement.

L3-A-1 As part of the growing Eastside, sufficient and reliable electricity is important to Issaquah. It is essential to maintaining a high quality of life for our residents and a reliable, thriving operating environment for our businesses. We are greatly concerned about PSE projections for power deficiencies as soon as winter 2017 and the resulting consequence of increased power outage frequency all over our region—including Issaquah. For these reasons, we do not support the No Action Alternative nor do we support Alternative 2. Instead of securing electrical service reliability, the DEIS finds Alternative 2 to be second only to the No Action Alternative for adverse impacts to reliability, with the added possibility of burdening other utilities and greatly impacting one of Issaquah’s most-visited natural and recreational areas (Lake Tradition Plateau) via noise generation.

L3-A-2

L3-A-3 In addition to these comments, we would like to correct a few errors found with the DEIS. Figure 10-2 regarding future land use incorrectly labels most of the park lands and open space (including Lake Sammamish State Park, Squak Mountain State Park and Natural Area, and Cougar Mountain Regional Wildland Park, among others) as planned “institutional lands.” There is no planned change from their current uses as park land and open space. Indeed, Figure 10-5 also mislabels large swaths of land within the project area, including the Issaquah Highlands, the area surrounding the Lake Tradition substation, and the parklands on Cougar and Squak. While we agree with the statement on page 10-11 that parcel-by-parcel reconciliation of data is unnecessary for the purposes of the analysis, we feel the extent of this error is worthy of correction.

The City of Issaquah applauds our fellow Eastside cities’ efforts in working with PSE to discover the best fit solution that will ensure reliable power supply to our area for years to come. We look forward to the next phase of the DEIS for more detailed information about the alternatives. Please consider me your City of Issaquah point of contact and as a resource for future work and information needs associated with the DEIS.

Sincerely,

Andrea Snyder
Economic Development Manager
City of Issaquah
425-837-3424

L3-A -1 Comment noted.
L3-A -2 See response for Key Theme ALT-1.
L3-A-3 See response for Key Theme LU-5.

From: [Devita, Melissa C](#)
To: info@energizeeastsideeis.org
Cc: [Mills, Tim \(Justin J\)](#); [McLeod, Jack \(John E\)](#)
Subject: Phase I EIS for the Energize Eastside Project
Date: Tuesday, March 08, 2016 10:52:14 AM

To Whom it May Concern:

My name is Melissa deVita and I am the Deputy Superintendent of Finance and Operations for the Bellevue School District. I have been asked to provide comments regarding the Energize Eastside Project on behalf of the school district.

Bellevue School District has been experiencing significant student enrollment growth since 2005. Prior to that, student enrollment had peaked in 1960 with just over 24,000 students and then dropped to a low of 15,000 students by 1990 remaining at that level for 15 years. In the past three years, enrollment has gone from 18,500 to just under 20,000 students this fall. We expect this growth to continue through 2025.

The rise in enrollment has resulted in the District constructing larger school buildings and expanding many of our campuses. For example, prior to re-construction, Chinook Middle School's capacity was approximately 800 students. The new building has a capacity of 1,200 students. When the re-construction of Tillicum Middle School is completed, that building will accommodate up to 1,400 students. In addition, the District is building a brand new elementary school to ease crowding at Woodridge Elementary, Enatai Elementary and Clyde Hill Elementary. While these new buildings are more energy efficient, they do contain more items that use energy such as computers, projectors, and white boards in every classroom and in the hands of every student in the next few years.

Needless to say, reliable electricity is essential for a school district. Based on the information provided by Puget Sound Energy, no action is not an alternative. Rolling blackouts would be devastating to student learning and achievement. I urge the City of Bellevue and its partner Eastside Cities to implement a permanent solution to this problem that will provide reliable electrical service to our schools and community.

Regards –

Melissa deVita
Deputy Superintendent
Finance & Operations
Bellevue School District

L4-A-1

L4-A -1 Comment noted.

From: [Tom Burdett](#)
To: info@EnergizeEastsideEIS.org
Cc: council@bellevuewa.gov
Subject: Energize Eastside Project DEIS Phase I
Date: Monday, March 14, 2016 6:20:10 PM
Attachments: [image012.png](#)
[image013.png](#)
[DOC172634.pdf](#)

Please see attached comments concerning Energize Eastside Project DEIS Phase I. Electric Power is a significant driver of growth and economic development. Please include these comments with the register of the DEIS.

The work completed to date is greatly appreciated.

Thank you,

Tom

Tom Burdett, AICP

Community Development Director
City of Bothell

tom.burdett@bothellwa.gov

Office: 425-806-6400

Direct: 425-806-6401

18415 101st Avenue NE

Bothell, WA 98011



March 7, 2016

City of Bellevue
Development Services Department
Attn: Heidi Bedwell
450 110th Avenue NE
Bellevue, WA 98004



Ms. Bedwell:

I appreciate the opportunity to comment on the Phase 1 Draft EIS for the Energize Eastside project. The City of Bothell is concerned with the No Action Alternative as outlined in the Draft EIS. It would negatively impact our growing community and its plans for future development in our business parks.

While our city is not directly involved in the environmental review process, I am concerned that future economic development of the Canyon Park Regional Activity Center could be stifled by the threat of future blackouts or insufficient power. In the last six months there have been two significant power outages in Bothell, as a result of wind storms. This is very detrimental to business, business growth and the University of Washington Bothell / Cascadia Community College.

Doing nothing affects more than the five jurisdictions undertaking the EIS for this project, it impacts the entire Eastside economy. Residents and businesses cannot afford any delay of this important reliability project. Therefore, I support expansion of transmission facilities to ensure that reliable power is provided to surrounding communities like Bothell that may be negatively impacted if the project is not built. The No Action Alternative is not an option.

Sincerely,

Tom Burdett
Community Development Director
City of Bothell

Cc: Kara Durbin, PSE Senior Local Government Affairs

Community Development Department
18415 - 101st Avenue NE
Bothell, WA 98011
425.806.6400
www.bothellwa.gov

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L5-A -1 Comment noted.

L5-A-1



CITY OF NEWCASTLE

12835 Newcastle Way • Suite 200 • Newcastle, WA 98056-1316 Phone 425.649.4444 • Fax 425.649.4363 • www.ci.newcastle.wa.us

March 14, 2016

Heidi Bedwell
 Energize Eastside EIS Program Manager/Senior Planner
 City of Bellevue
 450 110th Avenue NE
 Bellevue, WA 98004

Transmitted via email: info@EnergizeEastsideEIS.org

Dear Heidi:

The City of Newcastle has the following comments on the Phase 1 Draft Environmental Impact Statement (DEIS) for the proposed Energize Eastside project:

- | | |
|--------|---|
| L6-A-1 | <p>1. Environmental Health and Risk of Explosion: Any alternative that proposes to construct and operate electrical transmission facilities within the existing corridor for the Olympic Pipeline creates the potential for significant environmental health and public safety impacts as a result of increased risk of explosion. These impacts include short term construction impacts and long term operational impacts from induced AC corrosion, seismic events, and other catastrophic events. Significant technical and engineering analysis will need to be included in the Phase 2 DEIS to identify these impacts and to propose mitigation. It is imperative that Olympic Pipeline Company and its operator, BP Pipelines, be engaged and consulted extensively as part of the Phase 2 DEIS.</p> |
| L6-A-2 | <p>2. Aesthetics and Scenic Resources: Any alternative that proposes to construct and operate overhead electrical transmission lines creates the potential for significant impacts to aesthetics and scenic resources. Significant visual analysis will need to be included in the Phase 2 DEIS to identify these impacts and to propose mitigation. It is imperative to include a process to identify the appropriate public vantage points from which to assess these impacts and proposed mitigations based on individual neighborhood natural and built environment character. A full range of mitigations must also be assessed, including, but not limited to, undergrounding sections of the transmission lines, a range of pole heights, pole colors, aesthetic treatments to poles, landscaping, and tree replacement.</p> |
| L6-A-3 | <p>3. Land Use: Any alternative that proposes to construct and operate electrical transmission facilities creates the potential for property acquisition or condemnation</p> |

- L6-A -1 See responses for Key Themes PLS-1 and PLS-3 and Key Theme EARTH-1.
- L6-A -2 See responses for Key Themes VR-2 and VR-7.
- L6-A -3 See response for Key Theme LU-1.

L6-A-3

for additional easements and/or rights of way. It is imperative to determine the extent of required property acquisition or condemnation and the resulting land use impacts. These impacts may be significant in existing neighborhoods based on the natural and built environment character. A full range of mitigations must also be assessed, including, but not limited to, designing facilities to eliminate or minimize property acquisition or condemnation, landscaping, tree replacement, screening, and development of compatible land uses and neighborhood enhancement features.

Thank you for considering these comments on the DEIS for the proposed Energize Eastside project. The City of Newcastle looks forward to working with you and the other partner cities throughout the balance of the EIS process.

Regards,


Tim McHarg, AICP
Community Development Director

CC: Rob Wyman, City Manager
Dawn Reitan, City Attorney

February 1, 2016

*Janna - please scan
 And to: Heidi Bedwell
 Carol Helland
 Nicholas Matz.*

Don Marsh, CENSE
*original back
 to me. Tux - Kate*

Dear Councilmembers,

CENSE appreciates being invited to comment on the Draft EIS for Energize Eastside.

Tonight let's look at the broad picture. The Draft EIS presents three alternatives for our energy future.

O1-A-1

The first alternative is a 230 kV transmission line through the Eastside. Four variations are studied: two different overhead lines, an underground line, and a line submerged in Lake Washington. Let us be clear. Because of the state tariff on undergrounding enforced by the Washington Utilities and Transportation Commission, only the overhead lines operated by PSE or Seattle City Light are economically feasible. Since Seattle City Light removed their line from consideration, PSE's transmission line is the only serious option under Alternative 1.

O1-A-2

Alternative 2 uses innovative technology and policy solutions to address the peak load problem PSE says we have. This is the smart way to grow our electric system.

O1-A-3

Alternative 3 would build three times as many transmission lines all over the Eastside. No one considers this to be a realistic option, and it is included just to make the first alternative look less horrific. Gamesmanship like this makes residents cynical about the EIS process.

O1-A-4

Having identified the red herrings in the EIS, let's look at the two remaining options: Alternative 1, PSE's transmission line, and Alternative 2, the smart technology solution.

PSE's transmission line is a solution that is vastly bigger than we need. The line will have a capacity exceeding 1,000 megawatts when only 70 megawatts are required in the foreseeable future, according to PSE's graphs. CENSE has reason to believe even this figure has been exaggerated to justify the project. The transmission line option would put all our eggs in one basket. Ratepayers would finance a huge upfront cost of more than a quarter billion dollars to build a transmission line that has reliability and security risks. The transmission line would be vulnerable to extreme weather, fires, landslides, terrorism, solar flares, pipeline accidents, and errors of human judgment. If only one power pole falls, a big piece of our electricity supply would be out of service.

- O1-A -1 Comment noted.
- O1-A -2 See response for Key Theme ALT-1.
- O1-A -3 See response for Key Theme ALT-1.
- O1-A -4 See response for Key Theme OBJ-1.

February 1, 2016

Don Marsh, CENSE

Alternative 2, the smart solution, envisions a 21st century distributed energy network that is much more flexible and adaptive. It's more reliable, because multiple elements can fail without impacting overall reliability.

It's also more attractive financially, because it can be built incrementally. We can make smart decisions about how much additional infrastructure we need each year. For example, if the economy slows down and electricity demand plummets like it did in 2009, the level of investment could be adjusted to match the new consumption pattern. If a new kind of battery comes along that solves our problems more efficiently, it could be incorporated into the energy grid. This strategy would better support local companies like Mukilteo-based UniEnergy, which is developing batteries that will be used by utilities all over the country. By contrast, there is no local company that makes the steel monopoles used in PSE's transmission line.

Be ready for PSE's arguments against the smart solution. PSE prefers building transmission lines because it is more profitable for them. The company has disparaged Demand Response, a proven way to handle peak loads. The power plan about to be released by the Northwest Power and Conservation Council says, "Under a wide range of future conditions, energy efficiency consistently proved the least expensive and least economically risky resource. In more than 90 percent of future conditions, cost-effective efficiency met *all* electricity load growth through 2035. It's not only the single largest contributor to meeting the region's future electricity needs, it's also the single largest source of new winter peaking capacity."

Energize Eastside is all about winter peaking capacity, but PSE argues that the Eastside is an anomaly in its service area, that growth has brought us to the brink of a crisis, and a larger transmission line is our only solution.

Citizens do not want a solution that despoils our neighborhoods, cuts down our trees, and increases risk of devastating pipeline fires. Instead we want an energy solution that is forward-looking, reliable, safe, cost-effective, and environmentally sound. The only alternative in this EIS that fills these criteria is Alternative 2.

Thank you.

O1-A -5 See response for Key Theme ALT-1.

From: [Don Marsh](#)
To: hbedwell@bellevuewa.gov
Cc: info@energize-eastside.org
Subject: Comments at Tuesday's EIS Comment meeting
Date: Sunday, February 28, 2016 5:13:56 PM

Dear Heidi,

I wanted to convey my personal gratitude and the appreciation of CENSE members for the gracious way you handled our unanticipated appearance with table and informational materials at the Draft EIS Comment Meeting in Newcastle on Saturday. I also received a nice apology from one of the EIS consultants who initially suggested we set up the table far to the side of the other displays. In both cases, we felt welcomed and well cared for by city representatives.

As I mentioned, we would like to have a table at the Redmond and Bellevue meetings this week. We can bring our own table, or we can use one of yours – whatever is easiest. We will try to arrive by 5:30 on both days so we can take care of logistical details. I'm happy to answer questions if any arise.

I have an additional request. We are hoping for a large turnout at Bellevue, and there is a possibility that there will be more speakers than can be heard in the allotted time. We think it would not be optimal if the official CENSE comments come late in the evening (or not at all) due to random ordering. CENSE is speaking for many members who have invested huge amounts of their personal time and energy to read the EIS and understand PSE's project. We represent people from many neighborhoods in every Eastside city, many of which cannot attend on Tuesday night. CENSE is the only group of any sort whose existence and energy is focused on this project.

Therefore, we would like to request an opportunity to speak early in the rotation. We can speak first or at any time in the first half hour, before some of our supporters must leave for other engagements. We will be submitting at least half a dozen important documents into the EIS on Tuesday evening.

Thanks for your consideration,

Don Marsh, President
CENSE.org

O1-B-1

O1-B -1 Comment noted.

Comments for Bellevue Draft EIS Comment Meeting

March 1, 2016

I'm Don Marsh, president of CENSE, the Coalition of Eastside Neighborhoods for Sensible Energy. I live at 4411 137th Ave. SE in Bellevue.

On behalf of CENSE, I am submitting documents supporting our concerns about the Energize Eastside project. Tonight we focus on four topics:

1. The need and purpose that motivate the project.
2. Pipeline safety concerns.
3. Feasibility of Alternative 2.
4. A petition signed by members of the community.

To address the need and purpose of the project, we submit the *Lauckhart-Schiffman Load Flow Study* by Richard Lauckhart, the former VP of transmission planning for PSE, and Roger Schiffman, a transmission analyst with a long career in this field. Their conclusion is that the conditions PSE stipulates to overload transformers in Redmond and Renton would, in fact, risk widespread blackouts throughout the Puget Sound region. Grid operators would never allow the system to run in this irresponsible manner. Using reasonable assumptions, the study shows that we have plenty of capacity to serve Eastside growth for more than a decade.

O1-F-1

PSE does not contest any fact in this study, but says the Lauckhart-Schiffman report does not comply with federal reliability standards. However, this *ColumbiaGrid 2013 System Assessment* describes a theoretical study which exports 1500 MW to Canada and turns off local generation plants. These are the same assumptions PSE uses to establish the need for Energize Eastside. ColumbiaGrid states: "This case is being studied for information purposes ... it goes beyond what is required in the NERC Reliability Standards."

These two documents unequivocally contradict PSE's rationale for building Energize Eastside. That is why CENSE is requesting that the EIS process stop at Phase 1 and be judged by a Hearing Examiner to resolve these fundamental questions about need and reliability. Answers are needed now to avoid costly legal challenges in the future.

O1-F-2

Next, we submit two documents that address the safety of co-locating the pipeline and transmission lines. The first document lists five criteria that determine the risk of accelerated

O1-F -1 See response for Key Theme OBJ-3.

O1-F -2 See response for Key Theme PLS-3.

O1-F-2

corrosion when pipelines and transmission lines are located in close proximity. When the Olympic pipeline is paired with PSE's proposed transmission line, at least 4 of the 5 risk criteria are raised to the highest level of risk.

The second document includes analysis by Dr. Frank Cheng, an internationally recognized pipeline safety expert. He questions Olympic Pipeline's cathodic protection program, and his concerns are reinforced by the Office of Pipeline Safety, which only six weeks ago determined that the Olympic Pipeline Company is violating federal safety standards and failing to adequately protect the public from electrically induced corrosion of their pipelines. When one considers the fact that these pipelines pass close by the Tyee and Rose Hill middle schools, the coverage of safety issues in the Draft EIS is woefully inadequate.

O1-F-3

The next document, entitled *The Best Alternative*, examines Draft EIS Alternative 2. Industry consultant EQL Energy identifies many errors and obsolete data that make Alternative 2 appear unattractive in terms of risk, reliability, and cost. However, Alternative 2 was not developed or reviewed by experts who are experienced with distributed energy resources. EQL presents feasible and cost efficient alternatives that would have minimal impact on our communities and environment. For the EIS, these proposals should be carefully analyzed by consultants like EQL who have a proven track record in smart grid solutions.

Finally, we submit a simple form letter with the names and addresses of 372 residents who wished to comment on the Draft EIS, but felt they did not have the time or expertise to scrutinize the 715-page document. Some of these residents submitted brief comments along with their signatures, but all of them wanted to help save their communities from a dangerous, expensive, unnecessary project. We ask that each be entered as an individual participant in the comment process entitled to a response.

Thank you.

References

[Lauekhart-Schiffman Load Flow Study](#)
[ColumbiaGrid 2013 System Assessment](#)
[Criteria for Pipelines Co-Existing with Electric Power Lines](#)
[CENSE concerns about pipeline safety for Draft EIS](#)
[Olympic Pipeline Final Order](#)
[Bellevue Fire Department Standards of Response Coverage](#)
[The Best Alternative](#)
[EIS Comment Letter](#)

O1-F -3 See response for Key Theme ALT-1.

From: CHelland@bellevuewa.gov
To: info@energizeeastsideeis.org
Cc: HBdwyer@bellevuewa.gov; SJNunnelee@bellevuewa.gov
Subject: FW: CENSE disputes PSE's facts
Date: Wednesday, March 09, 2016 5:22:27 PM
Attachments: [PSE facts disputed.pdf](#)

Thanks, forwarded to the EIS Portal. No further response is necessary, unless you would like to inform Don that the information has been forwarded to the EIS Portal. Carol

From: Nunnelee, Sandra J.
Sent: Wednesday, March 09, 2016 11:24 AM
To: Helland, Carol <CHelland@bellevuewa.gov>
Subject: FW: CENSE disputes PSE's facts

FYI

From: Don Marsh [<mailto:donmarsh@cense.org>]
Sent: Tuesday, March 08, 2016 15:03
To: Council <Council@bellevuewa.gov>; Miyake, Brad <BMiyake@bellevuewa.gov>
Cc: 'Pravitz, Keri' <Keri.Pravitz@pse.com>
Subject: CENSE disputes PSE's facts

Dear Council Members and City Manager,

At last night's council meeting, Keri Pravitz suggested that CENSE is misleading the public by questioning the export of 1,500 MW to Canada during a peak load scenario (one of the top five assumptions PSE uses to justify Energize Eastside).

The attached memo disputes statements that Ms. Pravitz presented as facts. When PSE grants CEII clearance to Richard Lauckhart and me, we will issue corrections if the data shows our analysis to be mistaken in any way.

In the meantime, we believe it would be helpful for everyone if PSE provides evidence that 1,500 MW transmitted to Canada in this scenario does not overburden the 11 transmission lines that supply electricity to the Puget Sound region. We note that no study other than the Lauckhart-Schiffman study has examined this regional question.

I have copied Keri Pravitz on this email so she can provide written clarifications of any fact PSE thinks we have misstated.

Sincerely,

Don Marsh, President
 CENSE.org

O1-G -1 See response for Key Theme OBJ-3.

O1-G-1

From: [Don Marsh](#)
To: info@energizeeastsideeis.org
Subject: Please add Alternative 2.B
Date: Monday, March 14, 2016 5:00:29 PM
Attachments: [Alternative 2B.pdf](#)

Dear EIS Officials,

Attached is a document which endorses a new alternative developed by EQL Energy, an expert in the design of forward-thinking, cost-effective smart grid technology and policies. The document also points out shortcomings in the design and evaluation of Alternative 2 in the Draft EIS.

O1-J-1

We believe that the EIS cannot fulfill its goal of fairly comparing the impacts of the Energize Eastside project and alternatives without an accurate formulation of those alternatives. Therefore, we ask that "Alternative 2.B" be added to the EIS and evaluated by independent experts with knowledge of smart grids, demand response, electrical efficiency, distributed generation, energy storage, etc.

Sincerely,

Don Marsh, President
CENSE.org

My address is: 4411 137th Ave. SE, Bellevue, 98006

O1-J -1 See response for Key Theme ALT-1.

Alternative 2 can be improved

The Draft EIS for Puget Sound Energy’s Energize Eastside project includes a “non-wires” alternative based on intelligent management of energy, sometimes referred to as a “smart grid.” While CENSE endorses this concept, the design and evaluation of Alternative 2 are flawed, making it seem less feasible and realistic. We would like to propose a better “Integrated Resource Approach” based on analysis performed by industry expert EQL Energy. The new proposal is reasonable from both an economic and environmental perspective.

To distinguish between the proposals, CENSE refers to the original proposal as “Alternative 2.A” and the new proposal from EQL as “Alternative 2.B.”

The primary differences between Alternatives 2.A and 2.B are:

- Alternative 2.B reduces or eliminates the need to locate gas-fired peaker plants in residential neighborhoods.
- Alternative 2.B reduces the size of battery storage by a factor of four, eliminating concerns about recharging time and siting.
- Alternative 2.B uses a more realistic assessment of energy efficiency potential.
- Alternative 2.B proposes two classes of Demand Response, which are more specific and accurate than Demand Response proposed in Alternative 2.A.
- Alternative 2.B includes “Combined Heat and Power,” which incentivizes new buildings to combine heating and electricity production, thereby reducing carbon emissions and increasing grid reliability.

Those are just some of the highlights. The following table shows a summary of the differences:

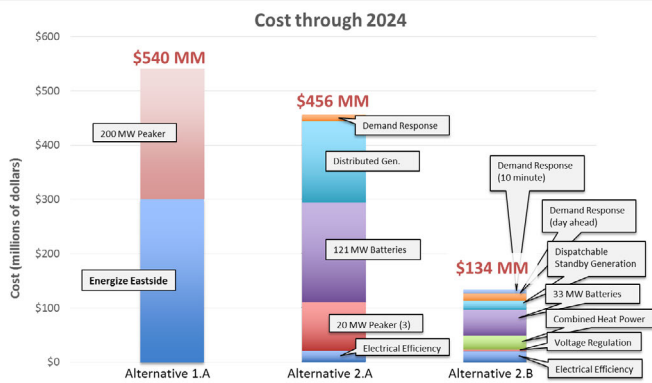
Component	Alternative 2.A (MW in 2024)	Alternative 2.B (MW in 2024)
Targeted Energy Efficiency	42*	39
Distribution Efficiency (CVR)	0	4
Combined Heat & Power	0	27
Energy Storage	121	31
Peak Generation Plant	60	0
Dispatchable Standby Generation	0*	22
Demand Response (unspecified)	32	
Demand Response (day ahead)		34
Demand Response (10 minute)		12
Total	255	169

* Incompletely specified in Draft EIS

Compared to Alternative 2.A, Alternative 2.B has 86 MW less of energy potential by 2024, but that is sufficient to meet the projected local need (although CENSE continues to dispute the magnitude of this need based on the Lauckhart-Schiffman Load Flow Study).

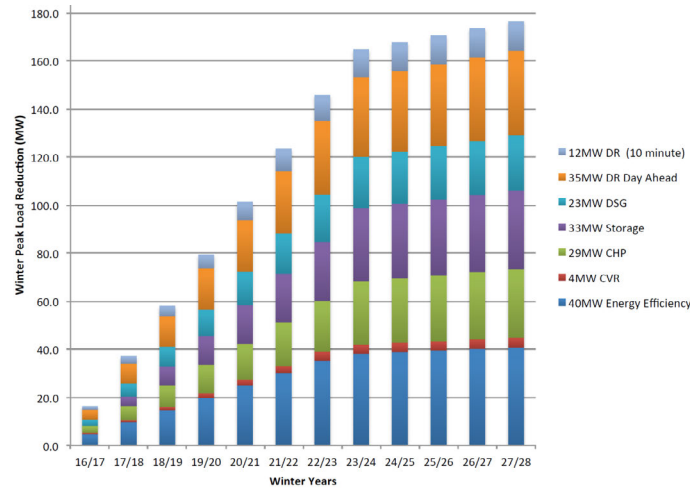
Compared to Alternative 1.A, Alternative 2.B offers many advantages that communities will find attractive. For example, EQL has shown that Alternative 2.B will reduce peak load demand and therefore delay the need for a new gas-fired peaker plant that PSE has stated the company may need to build in 2021, just a few years after Energize Eastside is built.

The graph below compares outlays for Alternatives 1.A, 2.A, and 2.B until the year 2024, including a new 200 MW peaker that may be needed if winter peak demand is not moderated through smart integrated resource approaches:



Both Alternative 2.A and 2.B have lower total cost and reduced carbon emissions compared to the transmission line proposed in Alternative 1.A. Both Alternative 2 plans have another economic advantage. Unlike Alternative 1.A, which can't transmit its first electron until it is completely built and paid for, the Integrated Resource Approach can be built incrementally, a little bit each year. EQL proposes outlays of about \$20 million per year, which can be scaled down if demand does not increase as fast as PSE predicts. Incremental investment has the added advantage of profiting from the rapid development and associated cost reductions of energy technologies, especially battery storage.

The following graph shows the expected ramp of peak reduction (in megawatts) for each component over the next 8 years:



These technologies and energy policies are being used effectively in other parts of the country. For example, the table below lists companies contracting with Southern California Edison to deliver 510 MW of energy savings and storage.¹ There are many examples of projects in other states that suggest that these kinds of solutions are feasible and cost effective.

Seller	Resource Type	MW
NRG	Energy Efficiency	102.5
Onsite Energy Corporation	Energy Efficiency	11
Sterling Analytics LLC	Energy Efficiency	16.7
NRG	Demand Response	75
SunPower Corp.	Behind-the-Meter Renewable	44
Ice Energy Holdings, Inc.	Behind-the-Meter Thermal Energy	25.6
Advanced Microgrid Solutions	Behind-the-Meter Battery Energy Storage	50
Stem	Behind-the-Meter Battery Energy Storage	85
AES	In-Front-of-the-Meter Battery Energy Storage	100
Total		509.8

¹ <http://www.greentechmedia.com/articles/read/The-Worlds-Biggest-Battery-is-Being-Built-in-Southern-California>

The exact mix of technologies, incentives, and energy policies that will be used is subject to further study and debate. EQL has provided specific capacity and cost estimates to provide illustrations of what is practical and cost-effective. A final plan will need to be developed in discussion with PSE, independent experts, local officials, and community representatives.

Alternatives 2.A and 2.B differ in the use of small peaker plants located in Eastside substations. PSE mentions concerns about noise and impact on residential areas. CENSE has a keen interest in these issues. However, if peaker plants are proven to be necessary and economically attractive, a small plant located in the light industrial area next to Bellevue's Lakeside substation (also near the new garbage transfer facility) could be an acceptable compromise.

In summary, we believe Alternative 2.B is less expensive, less dangerous, more reliable, less damaging to the environment, and less impactful to communities than the 18-mile scar through five Eastside cities that would result from building Alternative 1.A. We find Alternative 2.B to meet the definition of a "Reasonable alternative" described in WAC 197-11-786.²

We respectfully request Alternative 2.B be added to the EIS and receive fair evaluation by independent experts with experience in delivering solutions based on energy efficiency, demand response, distributed generation, and battery storage during Phase 2 of the EIS process.

Feedback on Draft EIS components

According to the Washington State Environmental Policy Handbook,

*Alternatives are one of the basic building blocks of an EIS. They present options in a meaningful way for decision-makers. The EIS examines all areas of probable significant adverse environmental impact associated with the various alternatives including the no-action alternative and the proposal.*³

Alternative 2.A is distorted by incomplete information and questionable assumptions. Its impacts cannot be honestly compared to the impacts of PSE's proposal (Alternative 1.A).

Here are some of the problems we saw in the design and evaluation of Alternative 2.A:

1. An "Integrated Resource Approach" must be designed by a consultant with expertise and practical experience in creating solutions based on Distributed Energy Resources.
2. The solution must be designed by an entity independent of PSE, because the project proponent has a vested interest in making Alternative 1.A look good.
3. The solution must not be based on information in PSE's Integrated Resource Plans (IRPs), because **IRPs are not required to incorporate feedback from stakeholders or the Washington Utilities and Transportation Commission.**
4. The DEIS should cite examples from other cities in which a proposed solution or component was successfully applied, and note if any unanticipated problems arose.
5. The solution should cite other Northwest agencies that were consulted and/or referenced. For example, alternatives should note agreement or disagreement with recommendations made by

² <http://apps.leg.wa.gov/wac/default.aspx?cite=197-11-786>

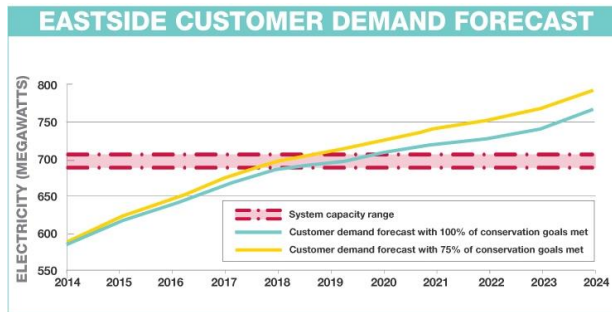
³ <https://fortress.wa.gov/ecy/publications/documents/98114.pdf>, p. 53

the Northwest Power and Conservation Council in the recently released *Seventh Northwest Power Plan*.

Specific reactions to DEIS Alternative 2.A

- 2.3.3: "According to PSE projections, it would take 74 MW of additional transmission capacity to marginally meet the demand through 2018 (Gentile et al., 2015). However, to address the capacity deficiency in 2018 with non-transmission resources would take approximately 163 MW of additional conservation, storage, and new generation within the Eastside..."

PSE seems to be changing the rules as the Energize Eastside proposal proceeds. The 74 MW figure quoted above for 2018 is significantly higher than the need PSE shows the public on its website:



This graph shows a deficit of about 74 MW in 2024, six years later than the reference from Gentile et al. implies. We wonder why there is such a significant difference between PSE’s public and private communications on the size of the capacity deficit.

When consultant E3 studied a non-wires solution in February 2014, the requirement was simply stated: "Assuming typical weather conditions of 23° F during PSE’s winter peak demand, PSE powerflow cases identified that 70 MW of incremental peak demand reduction (beyond the reduction included in the baseline load forecast reflecting 100% of IRP target conservation levels) would be required in King County to defer transmission need until 2021."⁴

As one can see in the graph on page 3 of this document, EQL projects over 121 MW of peak load reduction by 2021. But PSE now says the company needs 163 MW of reductions by 2018. This higher number seems to be based on a new standard of effectiveness that is described in this

⁴ <https://energizeeastside2.blob.core.windows.net/media/Default/Library/Reports/PSEScreeningStudyFebruary2014.pdf>, p. 6

email from Energize Eastside Program Manager Jens Nedrud:

http://www.energizeeastsideeis.org/uploads/4/7/3/1/47314045/pse_emails_referenced_in_the_deis.pdf. We wonder why this issue did not arise in the E3 study. Is it real, or is this an obfuscation designed to cast doubt on non-transmission alternatives in the EIS? If it is real, is the magnitude correctly stated by PSE?

We suspect that the different requirements for transmission and non-wires solutions stem from PSE's stated requirement that the Eastside grid must assist in the export of 1,500 MW to Canada during peak demand. This requirement favors transmission-based alternatives. However, the export of electricity at this level has never been proven, and the *Lauckhart-Schiffman Load Flow Study* raises important questions about whether the regional grid can sustain this level of transmission.

All of these fundamental questions have yet to be studied by a neutral and independent expert. Since many questions have come to light only after the EIS process began, they must be validated in order for non-wires solutions to be appropriately scaled. After that, the impacts of these alternatives can be appropriately compared.

A fair and independent expert must answer questions about how much electricity must be exported to Canada during winter peak loads and an N-1-1 failure. The number should reflect how much electricity is required by contractual agreement, and also how much can be reasonably delivered by the regional grid. Once this is known, the effectiveness of non-wires alternatives must be independently derived. This should lead to a clear determination of the level of peak load reduction that is required for each alternative in each year.

- 2.3.3: *"[Alternative 2.A] could address the project need but results in uncertainty about how much infrastructure would be installed and how much additional supply would be needed each year."*

Vague, unsubstantiated statements like this reinforce an impression that the DEIS is biased against this alternative. Many utilities have used similar solutions without excessive fear and uncertainty about their infrastructure and supply.

The DEIS should provide positive and negative examples from other utilities that have employed these approaches. We can learn from the trials and successes of others. Let's not make decisions based on unfounded fears and doubts.

- 2.3.3.1: *"The potential for additional energy efficiency on the Eastside is not currently known and would require additional evaluation."*

There is plenty of data for making a more accurate determination, and an independent expert can provide a good estimate based on the experience of other communities as well as particular details that apply to our region. To avoid bias and conflicts of interest, "additional evaluation" should not be performed by PSE. Further, PSE has not demonstrated an ability to evaluate the

potential of energy efficiency in a credible way. The WUTC and the Sierra Club have roundly criticized PSE's energy efficiency estimates in recent Integrated Resource Plans.

To maintain credibility and independence, the DEIS must employ an expert who can provide a reasonable estimate of potential savings on the Eastside through cost-effective energy efficiency technologies and policies.

- 2.3.3.1: *"PSE's Integrated Resource Plan (2013a) estimated PSE could achieve approximately 100 MW of additional energy efficiency during the period from 2024 to 2033 systemwide, which would equate to approximately 14 MW of energy efficiency gains on the Eastside during that time period. The additional energy efficiency assumed for Alternative 2 would be triple the amount that PSE estimated is achievable after 2024."*

PSE's 2013 IRP is not a credible source to cite as a basis for energy efficiency projections. The IRP is known to be deficient in its evaluation of energy efficiency. The company's data was incomplete and out of date. Quoting the IRP without independent confirmation allows PSE to indirectly sabotage the viability of solutions that rely on accurate energy efficiency projections.

It is also unreasonable to assume that energy efficiency gains are directly proportional to the Eastside's share of total system load. The mostly urban Eastside has a different level of energy intensity than more rural areas, and the potential for substantial gains through energy efficiency is greater. Quoting a back-of-the-napkin estimate like 14 MW is an affront to the honest and independent process we expected from the EIS. The earlier statement was preferable: "[energy efficiency potential] is not known and would require additional evaluation."

To maintain credibility and independence, PSE's Integrated Resource Plans cannot be referenced as a source of data used to design or evaluate non-wire solutions. The DEIS must cite credible experts and case studies instead of rough calculations based on IRPs written by the project proponent.

- 2.3.3.2: *"The Integrated Resource Plan (PSE, 2013) estimated that demand response systems would result in 116 MW systemwide reduction in capacity needed by 2024. Because the Eastside represents approximately 14 percent of the systemwide load, and assuming that adoption of demand response would be proportional on the Eastside to the rest of PSE service areas, it is assumed that approximately 14 percent of the systemwide reduction (16 MW of conservation by 2024) would occur on the Eastside."*

PSE's 2013 IRP has been strongly criticized for its lack of credible analysis on Demand Response. The Eastside has significantly greater potential for savings from Demand Response compared to other parts of PSE's service area. The Eastside potential is not proportional to other PSE service areas.

PSE will be sending out an RFP for Demand Response solutions as part of its 2017 IRP process. Let's see what kind of Demand Response potential the competitive market can identify. Market-

driven answers are likely to be more informative and aggressive than PSE's weak efforts were 3 or 4 years ago.

Demand Response is a central feature of the Seventh Northwest Power Plan. The DEIS must be much more specific about the kinds of Demand Response that will be incorporated in alternative solutions. For example, EQL Energy describes different programs for "day ahead" and "10 minute" Demand Response. These two programs deliver 43% more savings than the vaguely described program in the DEIS. Many states are far ahead of Washington in using Demand Response programs. The DEIS should cite positive and negative examples in other states to better inform the public and policymakers about the potential for these solutions in PSE's service area.

- 2.3.3.3.1: *"In order to address the Eastside transmission deficiency with distributed generation alone, approximately 300 to 400 MW of capacity would be needed by 2024 depending on the geographic location of the generation (PSE, 2013; Strauch, personal communication, 2015a)."*

The use of distributed generation alone is not a scenario proposed by any alternative in the DEIS. This statement obfuscates the facts and may confuse the public. Worse, it states large numbers of megawatts that depend on an unspecified geographic location. What purpose does this serve? How would those numbers change if the generation were located in a more advantageous location? No useful information is provided.

It is disappointing to see PSE's 2013 IRP again cited as a source. This corrupts the supposedly independent EIS process. Although the IRP documents are reviewed by the WUTC and other stakeholders, **no one has the authority to correct inaccurate statements in the IRP.** If the DEIS must cite the IRP as a source, it should also cite the criticism that those citations generated during the IRP review.

The DEIS should engage experts in the field of distributed generation and provide positive and negative examples from communities that have used distributed generation strategies to address peak load issues.

- 2.3.3.3.1: *"To ensure adequate capacity even when some equipment is not working, a substantial degree of redundancy is needed in distributed generation resources."*

This statement ignores the fact that successful Distributed Standby Generation programs have been deployed in the Pacific Northwest. For example, Portland Gas & Electric has a program in which the utility is responsible for testing and maintaining generators that are owned by private businesses and hospitals. The businesses get free maintenance in return for allowing their generators to be used by the utility during peak load scenarios that happen only a few hours each year. This is a good deal for the businesses who don't have to do maintenance themselves. It's also a good deal for customers who don't have to pay for extra infrastructure.

To address the questions of adequate supply and redundancy, the DEIS must describe what

kind of maintenance programs would be needed to keep these generators in good working order. The cost of these programs must be compared with the cost of having redundant generators that are maintained in a less regular fashion.

- 2.3.3.4: *“While it is possible that home battery storage could occur in homes using technology that is currently being developed, [we won’t consider it].”*

It may be true that home battery storage won’t be so widespread in the next few years that it will make a big difference in the Eastside’s energy mix. However, it is worth considering how a utility might incentivize customers to consider this investment. PSE could offer rebates for installing home batteries. Or the company could give battery customers a special discount on electricity if they charge the battery during non-peak hours and then use the stored electricity during peak hours. Incentives could make it financially attractive for customers to install batteries for the purpose of saving money on their electricity bills and having a backup source of electricity during power outages. This would especially appeal to customers with solar panels. A battery would allow these customers to bank their solar output and survive power outages spanning multiple days (with a big enough battery and judicious use of electricity).

Instead of dismissing home batteries in a single sentence, the DEIS should describe incentives in other states that encourage home battery installation. How do incentive costs, impacts, and benefits compare to other alternatives? Of course, the DEIS should account for the societal cost of carbon emissions, and the possibility that carbon will be taxed in the future.

- 2.3.3.4: *“This analysis considers a PSE controlled facility capable of storing 121 MW, which would be adequate to eliminate emergency overloads (Strategen, 2015). This would require a site of approximately 6 acres.”*

We disagree that a battery of this size is necessary. A huge battery is needed only because the DEIS significantly underestimates the amount of energy that could be addressed through energy efficiency, demand response, and distributed generation. According to our expert, EQL Energy, the Eastside could realistically install a battery that is 4 times smaller than described in the DEIS. A smaller battery would take less land to site.

The DEIS would do well to reference a project that is currently being installed by Southern California Edison.⁵ It’s a mix of utility-side and behind-the-meter batteries that might work on the Eastside at a much smaller scale. There are exciting batteries being produced locally (UniEnergy Technologies in Mukilteo⁶) and intriguing salt-water batteries that are inexpensive, non-toxic, non-flammable, and non-corrosive (Aquiion Energy⁷). Battery technology is evolving quickly, and even PSE says batteries will be transformative soon. The main questions are how big, how much, and when?

⁵ <http://www.utilitydive.com/news/inside-southern-california-edisons-energy-storage-strategy/406044/>

⁶ <http://www.uetechologies.com/>

⁷ <http://www.aquiionenergy.com/products/grid-scale-batteries>

Because the huge battery described in Alternative 2.A is practically impossible to charge and difficult to site, the DEIS must consider smaller batteries that are enabled by better energy efficiency, demand response, and distributed generation. Also, the DEIS must correct a significant error in the Strategen report that fails to account for the avoided cost of transmission, making batteries look less cost-competitive than they actually are (the table below shows batteries to be twice as cost-efficient as PSE’s transmission project if an additional peaker plant can be avoided). The benefit of reduced carbon emissions must be recognized if additional peaker plants are supplanted by energy storage.

Benefits (avoided capital costs)			
Transmission Deferral cost	155	\$/kW-yr	\$220MM capital cost for Energize Eastside E3 based on SCCT \$190/kW -yr levelized cost Based on NWPCC value Strategen report
Generation Capacity Cost	184	\$/kW-yr	
Distribution costs	31	\$/kW-yr	
Flexibility (Ancillary Services)	99	\$/kW-yr	
Oversupply	1.4	\$/kW-yr	
Storage Benefit	470.4	\$/kW-yr	
Storage Cost	218	\$/kW-yr	2015 Strategen report EE EIS
Benefit/Cost ratio	216%		

- 2.3.3.4: *“The Eastside system has significant constraints during off-peak periods that could prevent an energy storage system from maintaining sufficient charge to eliminate or sufficiently reduce normal overloads over multiple days.”*

This is only a concern for the huge batteries proposed in the DEIS. It is not a problem for the more realistically-sized batteries proposed by EQL Energy.

The DEIS must redo analysis of battery charging limitations with smaller batteries.

- 2.3.3.4: *“A system large enough to address the entire transmission capacity deficiency would need to deliver approximately 328 MW of electricity and store 2,338 (MWh) of power. A storage system of this size is not technically feasible.”*

This statement might be misread by the public. Someone might conclude that batteries are not technically feasible, when they are only infeasible if they are used to address the **entire deficiency** without any other components included.

The DEIS should not include statements that confuse or obfuscate the issues. Statements like this must be moved into a separate section clearly labeled “Ideas that were considered but proven unworkable.” Some readers might be confused by the proximity of this fantastical speculation to realistic proposals.

- 2.3.3.4: *“Summer requirements were not evaluated because the limitations identified during the winter study indicated that energy storage would not be a feasible stand-alone alternative.”*

Everyone agrees that energy storage is not a *stand-alone* alternative. This statement applies only to the previous fantastical speculation.

The DEIS must remove or clearly separate fantastical speculation from factual information.

- 2.3.3.1 (Peak Generation Plant Component – the section numbers are wrong, it should be 2.3.3.5): *“Most of the substations on the Eastside are in residential areas, and these types of generators produce a high noise level that would be incompatible with those surroundings. For this reason PSE had eliminated this option from consideration.”*

CENSE remains keenly interested in protecting residential neighborhoods from the impacts of demand growth that are mostly driven by the commercial sector. The DEIS does not consider how the costs of serving demand growth should be shared with commercial enterprises and developers who create increased demand.

- 2.3.3.2 (Construction, also incorrectly numbered): *“Construction of battery storage facilities would last approximately 6 months and would require standard construction equipment similar to what is required for construction of a substation under Alternative 1.”*

This statement compares the construction impact for a huge battery (which is way too aggressive) to the construction of a substation under Alternative 1. Shouldn't the DEIS also consider the construction impact of removing thousands of mature trees and bulldozing dozens of homes in order to install 18 miles of transmission lines in Alternative 1.A? It is a mockery of the SEPA process to worry about the impact of 6 acres of development while ignoring 18 miles of impacted neighborhoods, parks, schools, and businesses.

To be fair, the DEIS must compare apples to apples. The total construction impact of an alternative should be compared to the total construction impact of another alternative. Comparing the impact of one subpart of one alternative to the impact of a selected subpart of another alternative is not useful.

- 16.7.4: *“Uncertainties about the feasibility and performance of certain technologies, customer participation levels, and achievable conservation result in a risk to reliability.”*

These unsubstantiated statements about reliability, coming from the project proponent, might be used to eliminate non-wires solutions from consideration. However, these solutions rely on many different technologies and policies, and are actually more reliable than a transmission line. A transmission line is vulnerable to earthquakes, extreme weather, solar flares, and terrorism. For example, an extreme wind or ice storm may jeopardize more than a single pole. If two poles fail, the entire transmission line that PSE proposes to build could be knocked out, reducing the capacity of the Eastside grid by up to 20%. The same storm is unlikely to disable more than 5%

of the capacity of Alternative 2 solutions.

The DEIS must compare apples to apples. The overall reliability of one alternative must be compared to the overall reliability of another alternative.

Why is the Eastside an exception?

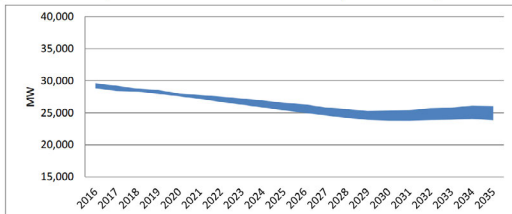
The *Seventh Northwest Power Plan*⁸ published by the Northwest Power and Conservation Council says

In more than 90 percent of future conditions, cost-effective efficiency met all electricity load growth through 2030 and in more than half of the futures all load growth for the next 20 years. It's not only the single largest contributor to meeting the region's future electricity needs; it's also the single largest source of new peaking capacity.

CENSE wonders why efficiency is not the answer to the Eastside's load growth. Obviously, the Eastside is growing quickly. However, the 2.4% annual growth rate in demand that PSE predicts is nearly five times the rate that Seattle City Light predicts. It is not obvious that the Eastside is growing five times faster than Seattle.

Perhaps PSE projections do not rely enough on conservation and demand response. Here is a graph of expected **Winter Peak Demand** included in the Seventh Plan:

Figure 7 - 11: Sales (Net Load After Conservation and DR) Forecast Range – Winter Peak



Even if the Eastside is growing quickly, we would expect winter peak growth to be flat or very slightly positive, not the explosive 2.4% growth that PSE projects.

The DEIS must clarify what level of growth is realistic, and evaluate the impacts of alternatives that are specifically designed to address that level of growth. Each alternative must be vetted by experts. If possible, the DEIS should cite positive and negative examples from communities that have gained experience with an alternative. Above all, the DEIS must be clear, unbiased, and independent. The Draft EIS fails these criteria and must be corrected.

Sincerely,
 Don Marsh, President
 CENSE.org

⁸ <https://www.nwcouncil.org/energy/powerplan/7/plan/>

From: [Don Marsh](#)
To: info@energize-eastside.org
Subject: CENSE reference document
Date: Monday, March 14, 2016 10:32:40 PM
Attachments: [SRC DEIS comment letter Final.docx](#)

Dear EIS Officials,

CENSE would like to reference the comments made in this letter from the Somerset Recreation Club. This letter raises many issues that CENSE believes are relevant, and we would like to acknowledge them for possible future action.

Sincerely,

Don Marsh, President
CENSE.org

4411 137th Ave. SE
Bellevue, WA 98006

Somerset Recreation Club
 4445 Somerset Blvd SE, Bellevue, WA 98006
 March 10, 2016

City of Bellevue
 Development Services Department
 450 110th Ave NE
 Bellevue, WA 98004

Attn: Heidi Bedwell

The Somerset Recreation Club (SRC), has been a community hub for Somerset and surrounding neighborhoods since 1963. We have been following the Energize Eastside (EE) project closely since its inception and are trying to determine the impacts on SRC if the new high voltage lines are installed along the existing PSE corridor. The current PSE power lines bisect the northwest corner of our property and are directly over our 2 tennis courts. Additionally, there are 4 PSE poles (in pairs of two) located on our property that support the current power lines.

O1-K-1

Somerset Recreation Club is concerned about the contents of the DEIS not addressing the significant environmental and operational impacts of the PSE proposed project, especially Alternative 1, on the club. It should also be noted that there were no mitigation measures that will provide significant solutions to SRC for both short term construction and long term location and operational/maintenance impacts due to the potential removal of the 115kv poles and/or transmission lines, and replacement with 230kv poles and transmission lines.

O1-K-2

As a result, we have reviewed the Phase 1 Draft EIS and are providing the City of Bellevue and PSE with our comments (see below) on the documents for the key and relevant sections of the DEIS, as they pertain to SRC.

O1-K-3

Alternative 1- Location of the proposed new powerline upgrade through the Somerset Residential Neighborhood

We would like to know more details on PSE's preferred alternative (Alternative 1) and the specific plans with regard to locating the 85' to 130' poles that would support the new, higher voltage power lines. Specifically, where precisely the poles would be located (vis-a-vis the existing PSE power poles on SRC property). Will the existing poles be removed or retained? If so, how much more of our property would be taken and/or what effect would the larger poles/wires have on our Clubhouse/pool? Can our existing tennis courts stay below the new, higher voltage lines? According to the DEIS in Chapter 12. Recreation (Section 12.5.3.1), the new higher voltage power lines will require a widening of the existing corridor by as much as 50' and that no buildings or houses will be allowed within the easement and/or below the lines. If this is true, then the Somerset Recreation Club, a recreation facility that has been in use for more than 50 years, may literally have to close its doors, because we would not be able to

O1-K-4

- O1-K -1 See response for Key Theme REC-3.
- O1-K -2 See response for Key Theme REC-3.
- O1-K -3 See response for Key Theme ALT-1.
- O1-K -4 See response for Key Theme REC-3.

O1-K-4 | comply with the new expanded corridor requirements as our current clubhouse, tennis courts and possibly our pool would sit below these lines. As a result of these impacts to SRC, what mitigation will you provide?

Chapter 1 Section 2.3

O1-K-5 | In Section 2.3, the alternatives were presented and the overhead transmission lines and pole location were discussed. The DEIS did not mention ways to mitigate through design, location, and/or minimize the impacts associated with the removal of the 115 kV system and upgrading it to 230kv. This upgrade has significant impacts such as: the foundation location and size and the pole height on the SRC which is located in the existing transmission corridor.

The following are comments on each of the following Elements of the Environment that are included or should have been included in the DEIS.

ELEMENTS OF THE ENVIRONMENT

**Natural Environment
Chapter 3. Earth**

O1-K-6 | SRC (and the Somerset Community) is on a steep hill and adjacent to the Fault that is located along I-90. Based on our review of this element, the DEIS does not identify major issues nor provide significant mitigation measures to prevent damage to the SRC facility from poles and powerlines collapsing and the Olympic pipeline breaking due to significant seismic and/or storm events. In addition, construction impacts due to removing the old poles, the access to locations where the poles are located, and replacing them in the same location may adversely impact the SRC property/facility. Since SRC was not mentioned as a key facility in the region, no proposed mitigation measures were offered. Vibration (e.g. air and ground vibration) is a significant issue, due to the proximity of the poles to all the SRC structures (buildings, pool, and tennis courts). Also, the underground gas pipeline could be affected. The DEIS stated on page 3-14 that “no potentially significant adverse impacts related to work near pipelines are expected under any of the alternatives”. This seems to be an inaccurate statement, since the location of SRC is both near the Olympic pipeline and along the PSE corridor. We should be protected from immediate construction impacts, as well as any future impacts as a result of the construction activities, such as: the relocated poles (e.g. removing old poles and/or locating new poles, expanding the foundation of the new poles, easement encroachment, etc.).

Chapter 5. Water Resources

O1-K -5 | For a discussion of construction methods for removal of existing wooden poles and conductors and installation of new steel poles, see Section 2.3.2 of the Phase 1 Draft EIS. For project-level analysis and mitigation, see the Phase 2 Draft EIS and Final EIS.

O1-K -6 | See response for Key Theme EARTH-3.

O1-K-7

SRC has been impacted by a significant amount of storm water runoff from the hill/roadway along Somerset Blvd. This issue has undermined the SRC facility (e.g. Tennis Courts) and potentially the pole/pipelines that exist in close proximity to the facility. It may also adversely impact the potential location of the new and larger poles that may be placed adjacent to SRC. An analysis of this issue needs to be evaluated before any further action is taken.

Chapter 6. Plants and Animals

O1-K-8

The DEIS did not include an overview of the aquatic and terrestrial habitat within the entire study area. In addition, it failed to mention the impact of the potential removal of 8000 trees in the region due to the proposed action/alternatives. The SRC facility also has a number of mature trees around its perimeter that have been there for decades and would potentially be eliminated if the poles are removed and/or replaced. Historically, Bellevue has a problem with its canopy being reduced. As a result, PSE's actions should not contribute to this ongoing long term problem and it needs to enhance, not eliminate the tree canopy.

Chapter 7. Energy & Natural Resources

O1-K-9

Per the DEIS Section 7.2, it stated the "none of the study area communities have control over how PSE uses energy to provide power. However, all of the study area communities have comprehensive plan energy goals or policies that lead them to encourage, facilitate, promote, or participate in actions addressing climate change sustainability, or energy conservation and efficiency, or reduction of greenhouse gases". Since the City of Bellevue is the Lead Agency for the EIS process why are they allowing PSE to propose a project that has detrimental impacts on our individual and collective community. This project may eliminate the SRC facility or seriously impact it due to the size and location of the new power poles. As well as the adverse impacts or elimination of homes along the corridor in Somerset (thus reducing our overall membership base).

Lastly, the DEIS states that they anticipated no cumulative or significant adverse impacts (Section 7.8 and 7.9) to natural resources from any of the alternatives. This is incorrect and needs to be reevaluated, per the comments provided above.

Built Environment

Chapter 8. Environmental Health

O1-K-10

The environmental health for this proposed project includes Electric Magnetic Radiation, Hazardous Materials, Corona Ionization, and Noise. The DEIS concluded that there were "No cumulative adverse impacts to environmental health as anticipated" (page 8.46). However,

- O1-K -7 See response for Key Theme WTR-2.
- O1-K -8 See responses for Key Themes P&A-1 and P&A-2.
- O1-K -9 See responses for Key Theme ALT-2, Key Theme REC-3, and Key Theme VR-5.
- O1-K -10 See responses for Key Themes EMF-1 and EMF-2.

based on the contents of this section, this statement is inconsistent and in opposition with the information provided.

The following sections will provide an overview of the impacts. These issues are of particular concern to SRC due to our proximity to the PSE corridor and the fact that SRC has a heated pool (adjacent to) and tennis courts (directly below) the existing corridor. The EIS does not cover this, but we believe the proximity to water may increase the diverse effects and enhance the health hazard.

Electric Magnetic Radiation (EMR)

The DEIS stated that epidemiological and other studies have reported an increased cancer risk associated with the estimates of magnetic field exposure. The EMR's, Noise and/or the Olympic Pipeline may have cumulative effects that caused these significant maladies.

Corona Ionization: The effects of corona ionization are also of particular concern for SRC, both physically and psychologically:

1) Given the humid air/rain in the PNW and the additional humidity provided by the heated pool area, the buildup and discharge of the corona ions as "static discharge" will most certainly have adverse impacts on SRC club members, in particular in an around the pool deck area.

2) The audible cracking and popping of the discharge along the lines and line-to-pole connections will also have negative impacts, as it should be obvious that electricity and water don't mix and therefore are important factors in how members enjoy their experience at the SRC.

3) It was also stated in the EIS that the corona ions adhere to other particles (airborne pollution, etc.) and can then be inhaled. Given the SRC pool and tennis courts are very near the power lines, these impacts most certainly apply.

Hazardous Materials: The Olympic Pipeline and its alignment with the transmission lines needs to be assessed to ensure that the pipelines is in good condition in Somerset and on/near SRC. Also, there is significant risk if the transmission lines through Somerset are upgraded. PSE and Olympic Pipeline must ensure that the residents are protected from construction and operation/maintenance impacts that may cause ruptures or damage to the pipeline and adjacent residences and facilities.

Chapter 9. Noise (Per SEPA, this Category should be listed under Environmental Health)

There is a significant noise issue ("it is not a relatively low noise level "per the DEIS) that is emitted from the PSE power lines. Members of the SRC (e.g. individuals using the SRC facility) and many of the residents that live along the corridor (who are also SRC members) often comment on the noise issue. The DEIS stated (page 1-33) that the existing transmission lines "may be audible...at adjacent sensitive land uses" such as homes and facilities, like SRC.

Chapter 10. Land Use & Housing

O1-K -11 See response for Key Theme NOI-3.

O1-K-10

O1-K-11

O1-K -12 See responses for Key Themes LU-3 and LU-4.

O1-K -13 See response for Key Theme VR-1.

As highlighted in the DEIS, the changes in Land Use in the proposed alignments will cause significant impacts in the region. As stated in other sections of this letter, there have been numerous erroneous statements, such as on Page 1-36: "construction of action alternatives would be relatively short duration at any one location with negligible land use impacts". The impacts maybe in short duration, but land use impacts could be significant if the new pole placement and supporting structures impede on the existing SRC pool and structures.

On page 10-18, it was stated that the study area communities would have to "determine whether to designate the project as an EPF (Essential Public Facility) as part of the project-specific application process". Since this is the programmatic DEIS, it does not provide for a comprehensive analysis. However, we would like to state that based on contents of the DEIS and its attachments, and the information provided through community meetings, etc.; that the PSE's proposed EE project is not needed nor required to sustain the energy requirements of the region and that the potential alignment through Somerset has significant, adverse, and permanent impacts to the community and they cannot be mitigated.

On page 10-20, a discussion on the projects effect on land uses and housing would occur and "Specific designs for the project would need to be reviewed by each community to determine compliance with applicable zoning codes and regulations". SRC and the community have already reviewed the preliminary design and relevant document for this project and its alternatives and we would like to state that they are not in compliance with the COB codes and regulations.

On page 10-26, it provides a list of Study area communities, but it does not include the City of Bellevue and states that if is not listed in the table it would "appear to either allow the alternative outright or as a conditional use in all zones". Why was the COB's information not included in this table since they are the Lead agency for this DEIS? What is the COB list of restrictions in the Somerset area?

Also, SRC is currently partnering with the Forest Ridge School of the Sacred Heart (FRS) (also located in the Somerset neighborhood) to completely renovate the SRC facility, and PSE/COB indicated through previous contacts with both entities that there would not be any problems with the SRC's proposed architectural design for the renovation. However, based on the proposed action outlined in the DEIS, this now seems incorrect, and the \$7 - 10 million renovation jointly proposed by SRC and FRS may be in jeopardy if Alternative 1 (Energize Eastside) is chosen. This information has never been directly conveyed by PSE or COB to the Somerset Rec Club and/or the Forest Ridge School.

Chapter 11. Views & Visual Resources

The Somerset Community was developed in the early 1960's and the views of Mt. Rainier to the Cascades from the areas homes and SRC are significant. This view has attracted and helped retain members at SRC for decades. The view is one of the reasons why our facility is full on sunny days and evenings with beautiful sunsets. In Section 11.3.2, 11.3.3 and 11.3.4, a list of

O1-K-12

O1-K-13

O1-K-13

visual resources and key viewpoints are provided, but the Somerset community/SRC were not included and should have been mentioned in these sections. Also, the private views were probably not included for the Somerset area as noted in Figure 11-12. There are 100's of homes and SRC that have views on both side of the hill. Any view blockage at SRC would minimize our financial viability, which is an economic issue that can be quantified.

O1-K-14

On page 11-1- it stated that "the importance of visual resources is subjective, based on the viewer's perspective". Also, in Section 11.1.2- it stated that "differences in actual assessed values are not useful for this evaluation because the data were inconclusive as to whether the reason parcels were valued differently was because of use restrictions within a power line easement, because of visual impacts, or for some other reason." However, realtors in the area have information that they can provide COB about types of views in the area and the home values with full, partial views, views of the power lines, and without views. This difference is significant and also has an affect the property values too. The greater the price of the home the greater the property value and contribution to the region for school levies, road improvements, etc. This issues should be addressed in the Economic section of the future EIS.

O1-K-15

Chapter 12. Recreation
 SRC's facility and other key private/community recreation facilities were not included to avoid placing overhead lines in recreation sites. "The enjoyment of recreation sites can be linked to visual quality and natural resources". Based on this statement, the power lines across Somerset and SRC should not be permitted per the COB's policies. Section 12.6 stated that "new infrastructure is located within recreation sites ... it will reduce user enjoyment of a recreation site through noise or visual impacts or changes to the resource- changes in light and shade; access to a recreation site, or disruption of informal recreation activities". The DEIS stated that the Phase 2 EIS will address these impacts. However, SRC and even the Somerset community would like to request that since our facility and the community has been impacted by the existing power line system for over 53 years, any further expansion/upgrade to the system would a significant and adverse impact and no proposed mitigation could compensate for the cumulative impacts to date. Section 12.7.1 offers another option, it states that "if recreation sites are affected and cannot be restored, they would be relocated and replaced as required; for example property could be purchased and a new recreation facility created".

In Section 12.5.1, it stated that if SRC is "unusable or access is completely blocked during peak use, then impacts are considered significant". Based on our review of the DEIS, "significant" impact would occur for all construction activities between May and September that would generate noise and aesthetics issues (see Chapter 14 below). Furthermore, any construction taking place on SRC property during peak use months of May through September that would block use of the SRC in any way could result in a loss of membership, and a decline in membership for even one summer season would be deleterious to the SRC's future financial viability. The SRC cannot underscore enough the criticality that any construction on SRC property must be done when the SRC is not open for business.

O1-K -14 See responses for Key Themes ECON-1 and ECON-2.

O1-K -15 See response for Key Theme REC-3.

O1-K-16 **Chapter 13. Historic & Cultural Resources**
 SRC was built in 1963, and therefore because it is over 50 years old, it should be considered as a historic structures per Washington State Department of Archaeology and Historic Preservation, King County Historic Preservation Program and the following registers: National Register of Historic Places, Washington Heritage Register, and King County Landmark. Per the DEIS, currently no structure in the Somerset area has been listed. In addition, per the DEIS (Section 13.7), if “operational impacts to above ground resources may include noise, vibration, and views... The impacts of each identified historic resource will need to be assessed individually to determine mitigation measures, which may include redesign options or measures to minimize noise and vibration impacts”. SRC and the Somerset Community will investigate further to determine the mitigation measures that would be proposed.

O1-K-17 **Chapter 14. Transportation**
 SRC is located on Somerset Blvd. in the middle of the Somerset Community. The key potential transportation impacts to the SRC facility would be to access the facility and the parking lot(s). There is limited parking at our facility, so that potential construction impacts and long term operational impacts need to be reviewed and assessed to minimize impacts during our summer season and the swim team meets (There are often 100’s of people parking around the pool a day or two a week from May- July for these and other events.).

O1-K-18 **Chapter 15. Public services**
 In order for SRC to operate per governmental requirements, Police, Fire, and Emergency Response services must be able to access SRC facilities. So any and all potential construction activities will have to ensure access to the site and the facility.

O1-K-19 **Chapter 16. Utilities**
 The comments on the preceding Elements of the Environment cover our current basic issues and concerns. Both the existing transmission lines and proposed transmission line upgrade as well as the co-located Olympic Pipeline have to be evaluated further, with potential impacts/mitigation measures discussed. In addition, there is a telecommunications – Cell Tower (T-Mobile) on a PSE pole on SRC’s site and this system needs to be protected due to any proposed action, since it provides cell coverage in the area and rental income essential to SRC operations. The natural gas, other telecommunications systems, water, and wastewater utilities in the area have not been identified and will potentially be impacted.

O1-K-20 **Elements of the Environment that were not included- Economics**
 Economic analysis is often included in a DEIS and is an allowed part of the SEPA process. The DEIS (Section 10.7.1.4) stated that “the effect of transmission lines on property values is an economic rather than environmental issue as defined by SEPA”. This implies that it is not a criterion that would be allowed in the SEPA process. This is incorrect; Economics is an Element of the Environment in many SEPA EIS’s.

O1-K -16 See response for Key Theme H&C-3.
 O1-K -17 See response for Key Theme TRAN-1.
 O1-K -18 See response for Key Theme SVC-3.
 O1-K -19 See response for Key Theme UTL-1.
 O1-K -20 See responses for Key Themes ECON-1, ECON-2, and ECON-3.

O1-K -21 Comment noted.

O1-K-20

Also, Section 11.6.14 stated that the data was inconclusive about the reasons for different valuations set by Assessors and the degree to which various factors negatively impacted the property assessment. These statements are incorrect and an economic analysis would provide accurate and proven conclusions based on similar studies performed in the west.

Due to the EE significant impacts, it is essential that COB include in an economic analysis in the next EIS. SRC is also concerned about the economic impact on our Club, if construction of EE takes place on our property during the summer months when we are open.

The DEIS also does not accurately state how property values are assessed. King County's property tax assessment is based on the statute. However, the market value is dependent on the economy and what potential buyers are willing to pay. If 85-100 foot towers are placed in a property owner's back yard and possibly on two locations at SRC and they both block views and access to the property, then this will result in lower property values. It will also reduce SRC membership to a point that we may have to close the facility. In addition to the effects of the transmission line upgrade, EE is proposing to upgrade and co-locate the new towers with the Olympic Pipeline corridor and this may also affect our property values and a construction issue may result in a hazardous event in the community.

O1-K-21

Additional note - Outreach and Coordination

PSE has never met with the Somerset Rec Club's Board of Directors regarding EE's impact on our Club. It is a concern that due to the significant impact to SRC, we have not been given any information on the mitigation measures (e.g. potential reimbursement) that we would receive from PSE due to the impacts to our Club.

Thank you for reviewing this comment letter. We look forward to receiving comments through the EIS process that adequately address our questions and concerns.

Regards,

Somerset Recreational Club and its Members

From: [Don Marsh](#)
To: info@energizeeastsideeis.org; hbedwell@bellevuewa.gov
Subject: Energize Eastside EIS Petition
Date: Monday, March 14, 2016 4:36:51 PM
Attachments: [Energize Eastside EIS Petition.pdf](#)
[Petition signers 4-13-2016.csv](#)

Dear Ms. Bedwell,

Attached is a petition and comments signed by approximately **891 residents**, asking for flaws in the Energize Eastside EIS to be corrected. This level of response is notable in that we didn't publicize this petition outside of the Nextdoor social networking site, the CENSE newsletter, and word-of-mouth. Residents have many concerns about PSE's proposed project.

The attached PDF file contains the petition along with names and zip codes of the signers, and any comments that were submitted in the online form.

The attached CSV file contains additional information, including the email address and physical address (if provided) for each signer.

We ask that each of these folks be responded to as full participants in the EIS comment process. Many are quite passionate in their opposition to the project, but weren't able to read and respond to the 715-page Draft EIS in specific detail.

The PDF file contains one respondent, "Test Cense" that was used as an initial test case, and is not a real person. I'm sorry we couldn't figure out how to delete that entry. We did remove it from the CSV file.

Thanks for your efforts on our behalf.

Sincerely,
Don Marsh, President
CENSE.org

My address is: 4411 137th Ave. SE, Bellevue, 98006

O1-M -1 Comment noted.

O1-M-1

O1-N

COMMENT

RESPONSE

3/23/2016

Weekly Email Service Mail - CENSE DEIS Comments Compilation



Energize Eastside EIS <info@energizeeastsideeis.org>

CENSE DEIS Comments Compilation

Don Marsh <donmarsh@cense.org>
To: info@energizeeastsideeis.org

Mon, Mar 14, 2016 at 9:05 PM

Dear EIS Officials,

CENSE would like to reference the attached compilation of comments submitted by members of the community regarding the EIS for Energize Eastside.

Thanks for helping us participate in this important feedback process.

Sincerely,

Don Marsh, President
CENSE.org

4411 137th Ave. SE
Bellevue, WA 98006

 CENSE DEIS Comments 3-14-16e.pdf
21975K

<https://mail.google.com/mail/u/0/?ui=2&ik=8b5d9e4da2&view=pt&search=inbox&msg=15378748240d0349&siml=15378748240d0349>

1/1

O1-N -1 See the introduction of Appendix J (Phase 1 Comments & Responses).

O1-N-1



From: CHelland@bellevuewa.gov
To: info@energizeeastside415.org
Cc: lhelland@bellevuewa.gov
Subject: FW: PSE Refusal to provide information#2
Date: Wednesday, February 24, 2016 9:32:26 AM

FYI

From: Helland, Carol
Sent: Tuesday, February 23, 2016 3:08 PM
To: 'Loretta Lopez' <loretta@mstarlabs.com>
Subject: RE: PSE Refusal to provide information#2

Apologies Loretta for the delay. The issue that you raised about information sharing was previously responded to as part of the City Attorney's reply to Rich Aramburu. Specifically, the City Attorney included the following information in her October 23, 2015, letter.

[4. Access to Critical Energy Infrastructure Information](#)

Stantec plays an important role on the EIS team as reviewer of the utility planning and operations information associated with PSE's electrical utility system that is protected as Critical Energy Infrastructure Information (as such term is defined in 18 C.F.R. 388.113 or as amended, otherwise known as CEII). The City is precluded from releasing un-redacted utility planning and operation information protected by federal law, therefore we are unable to comply with your request that we produce the CEII document related to this project. This does not mean that the information is unavailable to your clients. The information reviewed by Stantec is available upon request from PSE with appropriate advance security clearance. PSE has a standardized security screening process in place to assist in providing access to un-redacted information. We understand that there is some ongoing disagreement between PSE and CENSE about PSE's screening process impacting your client's ability to access the documents, however the City does not have authority to resolve that disagreement. Parties interested in reviewing the protected utility planning and operations information associated with PSE's electrical utility system, can request a security clearance from NERC.

One of the reasons that Stantec was included on the EIS consultant team was to evaluate the process utilized by PSE to model operation of their electrical system. Reviewers that are either unable to secure CEII clearance or unwilling to go through the necessary security steps should review the materials prepared by Stantec as a component of the development of the DEIS. With respect to the "need" question, PSE is a privately held regulated utility, and as such they are responsible for identifying the objectives they are trying to achieve with their proposed project. That said, I have forwarded to your comment regarding consultation on to the City Attorney and to Nicholas and Kate.

Regards, Carol

From: Loretta Lopez [<mailto:loretta@mstarlabs.com>]
Sent: Tuesday, February 23, 2016 12:51 PM
To: Helland, Carol <CHelland@bellevuewa.gov>
Subject: RE: PSE Refusal to provide information#2

Carol,

I am checking on whether you received my message below.

Please let me know that you received it.

Loretta

PS I was at the City Council meeting last night. I was surprised to hear Nicolas Matz and Kate Berens response regarding the issue of Need for PSE project. Their position is that the neither the City nor the public can question the Need for the project. I suggest that they consult with the City Attorney for clarification and provide substantive legal support for advice to the City Council.

From: Loretta Lopez
Sent: Friday, February 19, 2016 11:01 AM

O3-A -1 Comment noted.

O3-A-1

To: CHelland@bellevuewa.gov
 Subject: PSE Refusal to provide information

Carol,

Don Marsh has repeatedly asked for information from PSE. See the stream of email messages below. PSE has not provided the information.

The information Don Marsh is requesting is necessary for citizens to understand the basis of PSE's assertions. The City has a responsibility to require PSE to provide information to support its position that there is a need for the proposed project.

PSE refusal to respond to Don's question is unacceptable. PSE cannot assert that its position is true and expect citizens to accept without question.

We request that you, as the Environmental Coordinator for this EIS, require PSE to respond to Don's requests.

Thank you.

Loretta


From: Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]
Sent: Thursday, February 11, 2016 11:19 AM
To: 'Don Marsh' <don.m.marsh@hotmail.com>; Pravitz, Keri <Keri.Pravitz@pse.com>
Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov
Subject: RE: Two questions regarding Eastside need

Don -

It is apparent from your response that we are at a point where continued email exchanges are not helpful. I have done my best to explain complex issues in a way that you can understand, and clearly that is not working. All the experts agree that the need has been established.

On other issues you may wish to engage in the public process - currently there is a public comment period for Phase I of the Draft Environmental Impact Statement in which you can participate - please see the cities' EnergizeEastsideEIS.org website.

Sincerely,
 Jens

Jens Nedrud, P.E.
 Senior Project Manager

 PUGET SOUND ENERGY
 PO Box 97034, EST03W, Bellevue, WA 98009
 d (425) 462-3818 | c (425) 533-5307 | jens.nedrud@pse.com

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Please note:

- The City of Bellevue is leading the SEPA EIS process. No comments or questions submitted to Puget Sound Energy will be considered part of the EIS. To submit comments as part of the EIS, please visit EnergizeEastsideEIS.org.
- For background information about the Energize Eastside project, please visit pse.com/energizeeastside or refer to the project's [Frequently Asked Questions](#).

From: Don Marsh [<mailto:don.m.marsh@hotmail.com>]

Sent: Friday, January 29, 2016 8:25 AM

To: Nedrud, Jens V; Pravitz, Keri

Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov

Subject: RE: Two questions regarding Eastside need

Dear Jens,

Thank you for your lengthy (and quick) response. You have explained a bit of your methodology. However, there are still some things that are not made clear in your answers or the studies you mention:

1. Did you or your team personally review each of the 6.25 million contingency cases that you simulated to determine the system capacity line?
2. If not, how many of the cases were reviewed?
3. Was the system capacity determined by the worst case you observed, or did you combine some number of cases to calculate the capacity?
4. In any system that has a limited capacity, the limit is usually determined by one or two "weak links." For example, my car engine may be able to go 100 mph, but if my tires are only rated for 90 mph, that's as fast as my car can go. I must ask again, is the system capacity limited by the two 230 kV transformers that are overloading, or is there some other component of the system that is limiting the total capacity?

Your answers to these questions are important, because neither PSE, Quanta, Utility System Efficiencies, nor Stantec has described the methodology used to produce the result. If the need for the project is as obvious as you claim, and if the methodology is as solid as you imply, then we should be satisfied as soon as we know these details.

We seem to have different interpretations of the FERC ruling on our complaint. You have focused on one part of FERC's ruling, but we think the following conclusion is important: "The record before us shows that the Energize Eastside Project is located completely within Puget Sound's service territory, ... and that neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation; therefore, the project is not subject to the Order No. 1000 regional approval process." In other words, FERC dismissed the case at least partly because the commission lacked jurisdiction. FERC did not say PSE is correct in its assertion that it must transmit electricity to Canada under all conditions. In fact, FERC seems to think that the project will play no significant role in regional transmission.

Your email says PSE must participate in "regional power flows" that are not optional. Your consultant, Mark Williamson, told the Newcastle Planning Commission that the project has nothing to do with Canada, and that there are better ways to transmit energy to Canada than pushing it through the Eastside. Can you explain these apparent contradictions?

It is also puzzling to us that you seem unaware that the NERC Reliability Coordinator headquartered in Vancouver, Washington would cut power flows to Canada within minutes if an N-1-1 emergency occurred during peak winter loads. Do you assert that the coordinators responsible for grid reliability would force you to overload your transformers to continue transmitting a large flow of electricity to Canada when it isn't required to keep lights on in British Columbia?

Sincerely,

Don Marsh

From: Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]
Sent: Thursday, January 28, 2016 4:24 PM
To: 'Don Marsh' <don.m.marsh@hotmail.com>; Pravitz, Keri <Keri.Pravitz@pse.com>
Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov
Subject: RE: Two questions regarding Eastside need

Don,

I am sorry you do not think we have answered your questions; I do know that we have discussed these very issues with you and your CENSE colleagues several times. Perhaps this is a case of not understanding the answers. Therefore, in an effort to explain our answers to you again, I have addressed each question below.

Question 1: "Is this capacity determined by adding the capacities of the two 230/115 kV transformers that would serve the Eastside in the event of an N-1-1 outage of the other two transformers?"

ANSWER: The simple, non-technical answer is No. The system capacity lines on the graph were NOT determined by the ratings of the two 230 kV transformers. They were determined from power flow studies as a result of simulating approximately 6.25 million contingencies. As we have previously discussed, the "system capacity" or "level of concern" shown on the graph relates to system performance primarily under N-1-1 or N-2 contingency conditions as required by federal mandates. After my colleagues met with John Merrill and Steve O'Donnell some time ago, you even acknowledged your understanding of this in emails you exchanged with us.

The system capacity range of 688 MW to 708 MW is based on power flow studies. PSE's power flow studies are conducted pursuant to mandatory federal regulations with the assistance of nationally recognized system planning experts using industry established study protocols. There is no simple "adding" of nameplate capacities of transformers in power flows studies. Power flow equations are non-linear which requires a numerical iterative solution to solve such equations. The equations use complex numbers (vectors), which include magnitudes and phase angles in determining the power flows.

Also, your continued insistence that PSE can eliminate the power flows to Canada shows your misunderstanding of electric system planning and its mandatory regulations. All regional power flows are included in the base cases from WECC and ColumbiaGrid. They are required to be included in PSE's load flow studies, as the electrical system serving the Eastside is part of the regionally integrated electric system. It is not optional. We have explained this to you numerous times and FERC agreed with our methodology in dismissing your complaint regarding our planning process.

Question 2: "...is about the "Customer Demand" level shown at approximately 580 MW in 2014. Is this number based on a measurement of the demand on the two transformers calculated by a load flow simulation of the N-1-1 contingency? Or is it the summation of loads on individual Eastside substations?"

ANSWER: The 2014 customer demand value is NOT based on loads on the remaining two 230 kV transformers or the summation of loads on substation transformers. Customer Demand value is a **forecasted** value; please note the chart is labeled as "Customer Demand Forecast." As we have explained multiple times, PSE's corporate load forecast process has been performed for many years and the results have served PSE customers well. Our forecasts are a complex econometric model that takes into account not just historical data but a variety of other inputs, such as information about regional and national economic growth, demographic changes, weather, prices, seasonality, and other customer usage and behavior factors. Growth data used in the studies were primarily provided by **third party agencies**, such as the PSRC and Eastside jurisdictions. The usage data appropriate to producing a valid electric load forecast is incorporated, along with all other appropriate forecasting data, in the PSE load forecast. The same data has been reviewed by Bellevue's consultant, Utility System Efficiencies, Inc. (USE), as part of the "Independent Technical Analysis of Energize Eastside" commissioned by Bellevue for reviewing the project. The result of their analysis is consistent with PSE's load forecasts and confirmed the need for the project.

To explain further, the data is split: Actuals in winter 2013-14 and Forecasted in winter 2014-15. You can see this more clearly in USE's report, page 33, Figure 6.19. Due to the split, PSE considers the graph you have attached for 2014 Customer Demand Forecast as a **Forecast**, and is labeled as such. To clarify

further, actuals for 2013 and before are noted in USE's Report on page 33. It is the actual peak loadings of substations on the Eastside. The specific list of substations and their peak loadings is confidential.

I cannot emphasize enough, the Forecasted customer demand is what we are required to use in meeting our mandatory federal planning requirements. Your list of questions regarding electric system planning and customer demand forecast leads me to believe you misunderstand the regulatory requirements regarding how utilities study and plan electric power systems. You appear to be confusing the operation of the electric system with planning of the electric system. PSE is required to comply with mandatory planning standards, which includes planning to **Forecasted numbers**. Independently, PSE's electrical operations department operates the system on a day-to-day basis based on actual conditions and expected load levels.

Regarding your request for experts to see the data and results, this has been accomplished. Multiple experts in power system engineering and transmission planning have reviewed, studied and confirmed the need for this project. Five total studies have been completed, three of which were publically funded. USE, Bellevue's analyst, was one of those five and not only reviewed PSE's studies (as mentioned previously in this response) but also performed studies of their own which showed there was a clear need for the project, and even if you change some of the assumptions, there are still overloads.

As previously stated, the Federal Energy Regulatory Commission (FERC), dismissed your complaint and determined that PSE complied with the mandatory federal requirements in evaluating the Energize Eastside project. In short, the experts have reviewed the studies and confirmed that the project is needed.

I truly hope this provides some clarity for you.

Sincerely,

Jens

Jens Nedrud, P.E.

Senior Project Manager

energizeEASTSIDE

PUGET SOUND ENERGY

PO Box 97034, EST03W, Bellevue, WA 98009

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From: Don Marsh [<mailto:don.m.marsh@hotmail.com>]

Sent: Tuesday, January 26, 2016 10:11 AM

To: Nedrud, Jens V; Pravitz, Keri

Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov

Subject: RE: Two questions regarding Eastside need

Dear Jens,

Your reply did not answer our specific questions.

We are asking to what extent the system capacity line is determined by the ratings of the two operational transformers. We are also asking what the **2014** customer demand value is based on: loads on the remaining two 230 kV transformers or the summation of loads on substation transformers?

The answers to these questions are not contained in your previous replies or the studies you mentioned. Bellevue's analyst, USE, performed a load flow study that showed four of the five overloads identified in the Quanta study were eliminated if 1,500 MW of energy transmitted to Canada were removed from the study assumptions. Other than that interesting finding, USE only examined the *process* used to produce the Eastside Needs Assessment, not the underlying *data*. Stantec performed no independent analysis of the data, but again rubber-stamped the process.

The questions we ask are practically the most basic questions that one can ask about this graph. They should not be hard to answer.

The ratepayers who will pay nearly a billion dollars for this project over the next 40 years deserve to understand the case you are making for the need. If you believe the data and the methodology are too complex for us to understand, you must allow our experts to verify that.

Please respond more precisely or grant our experts clearance to see your data.

Sincerely,
Don Marsh

From: Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]
Sent: Monday, January 25, 2016 12:43 PM
To: 'Don Marsh'; Pravitz, Keri
Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov
Subject: RE: Two questions regarding Eastside need

Don,

Perfect timing, I was just hitting send on my response. Regarding your latest inquiry, our team has provided responses to these same questions for you in the past; the answers have not changed.

As we previously told you, the "system capacity" or "level of concern" shown on the graph relates to system performance primarily under N-1-1 or N-2 conditions as required as part of the federal mandates. The N-1-1 and N-2 system capacity level is dependent on system conditions and system topology as it is anticipated to exist at the time of modeled contingencies. This is explained in the Needs Assessment. The usage data appropriate to producing a valid electric load forecast is incorporated, along with all other appropriate forecasting data, in the PSE load forecast. The same data has been reviewed by Bellevue's consultant U.S.E. as part of the "Independent Technical Analysis of Energize Eastside" commissioned by Bellevue for reviewing the project. The result of their analysis is consistent with PSE's load forecasts and confirmed the need for the project.

And, as we have previously advised you many times, the customer demand you ask about is "Customer Demand Forecast." PSE's corporate load forecast process has been performed for many years and the results have served PSE customers well. As we have discussed before, the process utilizes historic data and the latest information available at the time as well as captures achievable conservation potential. Growth data used in the studies were primarily provided by third party agencies, such as the PSRC and Eastside jurisdictions. PSE's studies are conducted pursuant to mandatory federal regulations with the assistance of nationally recognized system planning experts using industry established study protocols. As you also may know, the Federal Energy Regulatory Commission confirmed this in its ruling in dismissing CENSE's complaint and stating PSE complied with the transmission planning responsibilities in proposing and evaluating the Energize Eastside Project.

The need for Energize Eastside has not changed; the need is driven by PSE's responsibility to comply with federal rules. Five studies have been completed – two by PSE and three by independent consultants – that all confirm the need for the Energize Eastside project.

Respectfully,

Jens

Jens Nedrud, P.E.

Senior Project Manager

energizeEASTSIDE

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From: Don Marsh [<mailto:don.m.marsh@hotmail.com>]

Sent: Monday, January 25, 2016 12:39 PM

To: Nedrud, Jens V; Pravitz, Keri

Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov

Subject: RE: Two questions regarding Eastside need

Dear Jens and Energize Eastside team,

Seven days ago, I sent you two basic questions about a graph showing the Eastside Customer Demand Forecast. This is the graph PSE has been used to illustrate the need for Energize Eastside for the past two years. It still appears on the Energize Eastside website today: <http://www.energizeeastside.com/need>.

I am puzzled why I haven't received a response. No acknowledgment of my email. No estimate of when you will provide answers. Just silence.

Since this graph is fundamental to our understanding of the project need, it is important for people to know what they're looking at. We need a level of transparency and critical review that has not yet happened. We have asked PSE to allow well-qualified industry experts engaged by CENSE to examine your data and verify that the need exists. Only then can we be satisfied that this project (or a less expensive, less damaging alternative) benefits the Eastside.

Sincerely,

Don Marsh, President
CENSE.org

From: Don Marsh [<mailto:don.m.marsh@hotmail.com>]

Sent: Monday, January 18, 2016 8:49 AM

To: 'Nedrud, Jens V'; 'Pravitz, Keri'

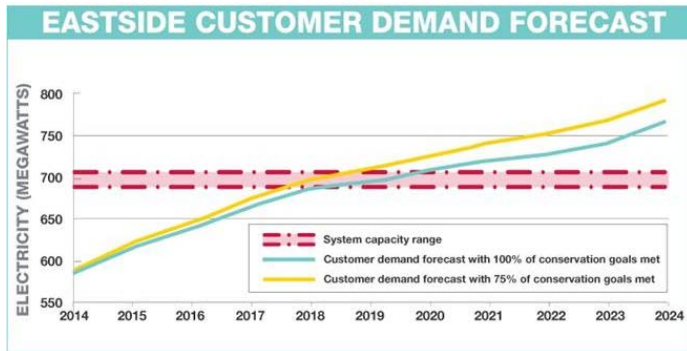
Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov

Subject: Two questions regarding Eastside need

Dear Jens and Energize Eastside team,

In preparation for the release of the Draft EIS later this week, we have two basic questions regarding the Eastside Customer Demand Forecast. I am copying council members and the city manager on this email, so we can all appreciate the timeliness and thoroughness of your response.

Our first question is about the "System Capacity" line shown at approximately 700 MW in this graph:



Is this capacity determined by adding the capacities of the two 230/115 kV transformers that would serve the Eastside in the event of an N-1-1 outage of the other two transformers?

Our second question is about the “Customer Demand” level shown at approximately 580 MW in 2014. Is this number based on a measurement of the demand on the two transformers calculated by a load flow simulation of the N-1-1 contingency? Or is it the summation of loads on individual Eastside substations? If so, which substations were included in this summation? Were those loads measured on a particular date, or calculated as a peak or average of some number of samples?

We seek timely answers to these questions of methodology because we have a limited time to comment on the Draft EIS after it is issued this week. As you know, this phase of the EIS establishes the need for the project and the viability and desirability of project alternatives. Transparent information is needed so that all stakeholders can be sure we are appropriately addressing our need for reliable power and properly evaluating solutions that maximize cost effectiveness and environmental responsibility.

Sincerely,

Don Marsh, President
CENSE.org

Submitted at
Kirkland public
hearing 2-22-16.

From: Loretta Lopez
Sent: Friday, February 19, 2016 11:01 AM
To: CHelland@bellevuewa.gov
Subject: PSE Refusal to provide information

Carol,

Don Marsh has repeatedly asked for information from PSE. See the stream of email messages below. PSE has not provided the information.

The information Don Marsh is requesting is necessary for citizens to understand the basis of PSE's assertions. The City has a responsibility to require PSE to provide information to support its position that there is a need for the proposed project.

PSE refusal to respond to Don's question is unacceptable. PSE cannot assert that its position is true and expect citizens to accept without question.

We request that you, as the Environmental Coordinator for this EIS, require PSE to respond to Don's requests.

Thank you.

Loretta

From: Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]
Sent: Thursday, February 11, 2016 11:19 AM
To: 'Don Marsh' <don.m.marsh@hotmail.com>; Pravitz, Keri <Keri.Pravitz@pse.com>
Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov
Subject: RE: Two questions regarding Eastside need

Don -

It is apparent from your response that we are at a point where continued email exchanges are not helpful. I have done my best to explain complex issues in a way that you can understand, and clearly that is not working. All the experts agree that the need has been established.


On other issues you may wish to engage in the public process - currently there is a public comment period for Phase I of the Draft Environmental Impact Statement in which you can participate - please see the cities' EnergizeEastsideEIS.org website.

Sincerely,
Jens

O3-B -1 See responses for Key Theme OBJ-2 and Key Theme EIS-2.

O3-B-1

Jens Nedrud, P.E.

Senior Project Manager

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3. Was the system capacity determined by the worst case you observed, or did you combine some number of cases to calculate the capacity?
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2

Your answers to these questions are important, because neither PSE, Quanta, Utility System Efficiencies, nor Stantec has described the methodology used to produce the result. If the need for the project is as obvious as you claim, and if the methodology is as solid as you imply, then we should be satisfied as soon as we know these details.

We seem to have different interpretations of the FERC ruling on our complaint. You have focused on one part of FERC's ruling, but we think the following conclusion is important: "The record before us shows that the Energize Eastside Project is located completely within Puget Sound's service territory, ... and that neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation; therefore, the project is not subject to the Order No. 1000 regional approval process." In other words, FERC dismissed the case at least partly because the commission lacked jurisdiction. FERC did not say PSE is correct in its assertion that it must transmit electricity to Canada under all conditions. In fact, FERC seems to think that the project will play no significant role in regional transmission.

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Don Marsh

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Sent: Thursday, January 28, 2016 4:24 PM

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Don,

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Question 1: "Is this capacity determined by adding the capacities of the two 230/115 kV transformers that would serve the Eastside in the event of an N-1-1 outage of the other two transformers?"

3

ANSWER: The simple, non-technical answer is No. The system capacity lines on the graph were NOT determined by the ratings of the two 230 kV transformers. They were determined from power flow studies as a result of simulating approximately 6.25 million contingencies. As we have previously discussed, the “system capacity” or “level of concern” shown on the graph relates to system performance primarily under N-1-1 or N-2 contingency conditions as required by federal mandates. After my colleagues met with John Merrill and Steve O’Donnell some time ago, you even acknowledged your understanding of this in emails you exchanged with us.

The system capacity range of 688 MW to 708 MW is based on power flow studies. PSE’s power flow studies are conducted pursuant to mandatory federal regulations with the assistance of nationally recognized system planning experts using industry established study protocols. There is no simple “adding” of nameplate capacities of transformers in power flows studies. Power flow equations are non-linear which requires a numerical iterative solution to solve such equations. The equations use complex numbers (vectors), which include magnitudes and phase angles in determining the power flows.

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ANSWER: The 2014 customer demand value is NOT based on loads on the remaining two 230 kV transformers or the summation of loads on substation transformers. Customer Demand value is a forecasted value; please note the chart is labeled as “Customer Demand Forecast.” As we have explained multiple times, PSE’s corporate load forecast process has been performed for many years and the results have served PSE customers well. Our forecasts are a complex econometric model that takes into account not just historical data but a variety of other inputs, such as information about regional and national economic growth, demographic changes, weather, prices, seasonality, and other customer usage and behavior factors. Growth data used in the studies were primarily provided by **third party agencies**, such as the PSRC and Eastside jurisdictions. The usage data appropriate to producing a valid electric load forecast is incorporated, along with all other appropriate forecasting data, in the PSE load forecast. The same data has been reviewed by Bellevue’s consultant, Utility System Efficiencies, Inc. (USE), as part of the “Independent Technical Analysis of Energize Eastside” commissioned by Bellevue for reviewing the project. The result of their analysis is consistent with PSE’s load forecasts and confirmed the need for the project.

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As previously stated, the Federal Energy Regulatory Commission (FERC), dismissed your complaint and determined that PSE complied with the mandatory federal requirements in evaluating the Energize Eastside project. In short, the experts have reviewed the studies and confirmed that the project is needed.

I truly hope this provides some clarity for you.

Sincerely,

Jens

Jens Nedrud, P.E.

Senior Project Manager

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Sent: Tuesday, January 26, 2016 10:11 AM

5

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Sincerely,

Don Marsh

From: Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]
Sent: Monday, January 25, 2016 12:43 PM
To: 'Don Marsh'; Pravitz, Keri
Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov
Subject: RE: Two questions regarding Eastside need

Don,

Perfect timing, I was just hitting send on my response. Regarding your latest inquiry, our team has provided responses to these same questions for you in the past; the answers have not changed.

As we previously told you, the "system capacity" or "level of concern" shown on the graph relates to system performance primarily under N-1-1 or N-2 conditions as required as part of the federal mandates. The N-1-1 and N-2 system capacity level is dependent on system conditions and system topology as it is anticipated to exist at the time of modeled contingencies. This is explained in the Needs Assessment. The usage data appropriate to producing a valid electric load forecast is incorporated,

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along with all other appropriate forecasting data, in the PSE load forecast. The same data has been reviewed by Bellevue's consultant U.S.E. as part of the "Independent Technical Analysis of Energize Eastside" commissioned by Bellevue for reviewing the project. The result of their analysis is consistent with PSE's load forecasts and confirmed the need for the project.

And, as we have previously advised you many times, the customer demand you ask about is "Customer Demand Forecast." PSE's corporate load forecast process has been performed for many years and the results have served PSE customers well. As we have discussed before, the process utilizes historic data and the latest information available at the time as well as captures achievable conservation potential. Growth data used in the studies were primarily provided by third party agencies, such as the PSRC and Eastside jurisdictions. PSE's studies are conducted pursuant to mandatory federal regulations with the assistance of nationally recognized system planning experts using industry established study protocols. As you also may know, the Federal Energy Regulatory Commission confirmed this in its ruling in dismissing CENSE's complaint and stating PSE complied with the transmission planning responsibilities in proposing and evaluating the Energize Eastside Project.

The need for Energize Eastside has not changed; the need is driven by PSE's responsibility to comply with federal rules. Five studies have been completed – two by PSE and three by independent consultants – that all confirm the need for the Energize Eastside project.

Respectfully,

Jens

Jens Nedrud, P.E.

Senior Project Manager

energize EASTSIDE

PUGET SOUND ENERGY

PO Box 97034, EST03W, Bellevue, WA 98009

d (425) 462-3818 | c (425) 533-5307 | jens.nedrud@pse.com

The Energize Eastside project is undergoing environmental review, which includes preparation of a Washington State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS). The City of Bellevue is leading the EIS process in cooperation with Kirkland, Newcastle, Redmond and Renton. For more information on the EIS, please visit EnergizeEastsideEIS.org.

Please note: Inquiries made to Puget Sound Energy will not be included as part of the EIS process.

From: Don Marsh [<mailto:don.m.marsh@hotmail.com>]

Sent: Monday, January 25, 2016 12:39 PM

To: Nedrud, Jens V; Pravitz, Keri

Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov

Subject: RE: Two questions regarding Eastside need

Dear Jens and Energize Eastside team,

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Seven days ago, I sent you two basic questions about a graph showing the Eastside Customer Demand Forecast. This is the graph PSE has been used to illustrate the need for Energize Eastside for the past two years. It still appears on the Energize Eastside website today:
<http://www.energizeeastside.com/need>.

I am puzzled why I haven't received a response. No acknowledgment of my email. No estimate of when you will provide answers. Just silence.

Since this graph is fundamental to our understanding of the project need, it is important for people to know what they're looking at. We need a level of transparency and critical review that has not yet happened. We have asked PSE to allow well-qualified industry experts engaged by CENSE to examine your data and verify that the need exists. Only then can we be satisfied that this project (or a less expensive, less damaging alternative) benefits the Eastside.

Sincerely,

Don Marsh, President
CENSE.org

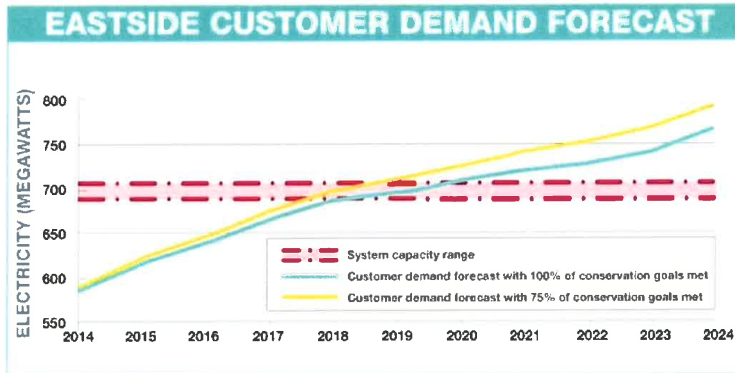
From: Don Marsh [<mailto:don.m.marsh@hotmail.com>]
Sent: Monday, January 18, 2016 8:49 AM
To: 'Nedrud, Jens V'; 'Pravitz, Keri'
Cc: council@bellevuewa.gov; BMiyake@bellevuewa.gov; MKBerens@bellevuewa.gov
Subject: Two questions regarding Eastside need

Dear Jens and Energize Eastside team,

In preparation for the release of the Draft EIS later this week, we have two basic questions regarding the Eastside Customer Demand Forecast. I am copying council members and the city manager on this email, so we can all appreciate the timeliness and thoroughness of your response.

Our first question is about the "System Capacity" line shown at approximately 700 MW in this graph:

8



Is this capacity determined by adding the capacities of the two 230/115 kV transformers that would serve the Eastside in the event of an N-1-1 outage of the other two transformers?

Our second question is about the "Customer Demand" level shown at approximately 580 MW in 2014. Is this number based on a measurement of the demand on the two transformers calculated by a load flow simulation of the N-1-1 contingency? Or is it the summation of loads on individual Eastside substations? If so, which substations were included in this summation? Were those loads measured on a particular date, or calculated as a peak or average of some number of samples?

We seek timely answers to these questions of methodology because we have a limited time to comment on the Draft EIS after it is issued this week. As you know, this phase of the EIS establishes the need for the project and the viability and desirability of project alternatives. Transparent information is needed so that all stakeholders can be sure we are appropriately addressing our need for reliable power and properly evaluating solutions that maximize cost effectiveness and environmental responsibility.

Sincerely,

Don Marsh, President
CENSE.org

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COMMENT

RESPONSE

*Speaker #6 Public Hearing Phase 1 DEIS
Bellevue 3.1.16*

March 1, 2016
Comments on Energize Eastside EIS
To: Heidi Bedwell, Program Manager
From: **Lindy Bruce**

I am Lindy Bruce, 13624 SE 18th St., Bellevue 98005 speaking tonight on behalf of the Sunset Community Assn. , which has six neighborhoods that border PSE's right-of-way in central Bellevue. I was an alternate to PSE's CAG and currently serve on the board of CENSE.

I wholeheartedly endorse the comments and recommendations of CENSE president, Don Marsh. While PSE consistently refused the CAG and the DEIS to consider need, we now have studies and comments suggesting fundamental questions of need, reliability and appropriate solutions have not been adequately addressed.

More specifically, I would like you to address some of the construction issues that will affect our neighborhoods if PSE's preferred Alternative 1A were to proceed. Here are a few facts for Segment E which runs through our neighborhoods:

O4-A-1

1. The City of Bellevue Critical Hazards Map shows the ROW from SE 24th St. north to SE 2nd St as a Very Severe Soil Erosion Hazard. We already know that the neighborhoods lowest down the hill deal with underground streams that percolate down College Hill towards Richards Creek. These streams produced huge quantities of mud when Parkland Estates was built a few years ago.

O4-A-2

2. The ROW is already occupied by Olympic Pipeline's 20" and 16" pipes that carry millions of gallons of jet and gasoline fuels per day to Seattle and Portland airports. Olympic Pipeline is currently under a Final Order to rectify deficiencies in their corrosion control program. PSE's 230kv lines produce EMF's that accelerate corrosion. [See Dr. Frank Cheng's comments "Safety of Co-location of Electric Power Lines and Pipelines" at CENSE.org. See DEIS Ch. 16.3.7]

O4-A-3

3. When PSE rolled out Energize Eastside, they told us that the two sets of "H" poles would be replaced by a single monopole. Much later, they admitted one set of "H" poles might be retained. Later yet, at a neighborhood meeting, PSE's expert from Power Rangers Utility Consultants told us that wherever the pipeline is in the middle of the ROW, they would need a tandem set of the tall monopoles. The pipeline is in the middle of much of the ROW. BPA recommends poles should be at least 50' from pipelines

4. During construction, PSE must retain both sets of "H" poles to continue distributing electricity in Bellevue. So we will have 4 65-foot wooden poles, 2 85-135-foot steel poles and excavating equipment building cement support

- O4-A -1 See response for Key Theme EARTH-4.
- O4-A -2 See responses for Key Themes PLS-3 and PLS-5.
- O4-A -3 See response for Key Theme PLS-3.



O4-A-4

bases for the poles. All this in an area with an aging, corroding pipeline and sodden soils, as well as homes and our neighborhood park. [See DEIS Ch. 16.6.1.3 See also DEIS Ch. 5.5.3.1.6 See also DEIS Ch. 11.6.3.5.3]. We don't yet know where they will stage all the materials and vehicles, but there's limited street access to the ROW.

5. For safety reasons, some parts of the entire ROW will have to be expanded by as much as 50 feet. Some homeowners have already been advised that their houses may be condemned or parts of their property will have to be added to the ROW. Uses on property near the 230kv lines can be restricted – again, for safety reasons. [See DEIS Ch. 10.7.3.1.2 See also Ch. 11.6.3.5.1]

O4-A-5

6. The cause of the 1999 Olympic Pipeline explosion in Bellingham was traced to a 1 mm chip out of the pipe that occurred when a maintenance truck hit the pipe 5 years before the explosion. Our corridor will be crowded with poles, excavating machinery, construction equipment and pipelines. How long will we have to wait before we feel safe? [The Bellingham Herald, June 7, 2009]

Energize Eastside is a massive infrastructure project with enormous impacts for its 18-mile length. Even good intentions, careful engineering and adherence to code haven't prevented Brightwater, Bertha or even Sound Transit's tunnel digger, Pamela, from causing soil subsidence, gaping sinkholes and huge delays.

O4-A-6

Are we really ready for those possibilities when our new information suggests that Alternative 2 can provide electrical reliability for less cost, has almost no adverse impacts on land use, housing, tree canopy, parks and schools, and has no new safety risks? [See DEIS Ch. 10.7.1].

I would like to see a specific study of all construction-related issues and any precedents for overburdening the ROW in a dense urban corridor as Alternative 1A would most certainly do.

Thank you.

- O4-A -4 See response for Key Theme LU-2.
- O4-A -5 See responses for Key Themes PLS-1 and PLS-2.
- O4-A -6 See responses for Key Theme ECON-3 and Key Theme LU-4. Additional information on construction impacts is included in the Phase 2 Draft EIS (Chapter 4) and the Final EIS (Chapter 5).

COMMENT

RESPONSE

*Speaker #1 Bellevue Public Hearing
Phase 1 DEIS 3.1.16*

MY NAME IS WARREN HALVERSON AND I RESIDE AT 13701 NE 32ND PLACE.
TONIGHT, I AM REPRESENTING THE CANTERGREENS HOMEOWNERS
ASSOCIATION.

LET ME BEGIN BY ASKING A QUESTION: "WOULD YOU PURCHASE A
PRODUCT IF YOU DIDN'T KNOW WHY YOU NEEDED IT OR WHAT IT
WOULD COST?" WELL, WELCOME TO THE WORLD OF PUGET SOUND
ENERGY AND THEIR PRODUCT "ENERGIZE EASTSIDE".

MY PURPOSE TONIGHT IS TO TALK ABOUT ECONOMICS AND THE COST OF
THIS PROJECT. AS NOTED IN THE SCOPING PROCESS, THIS IS A MAJOR
CONCERN OF THE COMMUNITY. IT IS AN ENVIRONMENTAL FACTOR UNTO
ITSELF AND IMPACTFUL TO OTHER ELEMENTS OF THE ENVIRONMENT
CONSIDERED IN THE DEIS.

WHILE THE DEIS DOES NOT COMPARE ALTERNATIVES BASED UPON COST,
THE COSTS OF THESE ALTERNATIVES ARE DRAMATICALLY DIFFERENT.
FOR EXAMPLE, ALTERNATIVE 1a IS ESTIMATED TO COST \$250 MILLION
DOLLARS WITH A LIFE TIME COST OF NEARLY \$1.4 BILLION. NO OTHER
ALTERNATIVE COMES CLOSE TO THIS COST YET WE ARE GOING TO HAVE
TO PAY FOR THIS. THIS IS SHOCKING ENOUGH BUT A TRULY THOROUGH
ANALYSIS WOULD NOT STOP HERE. IN EXAMINING THE ALTERNATIVES,
ALTERNATIVE 1a IS THE MOST MITIGATED AND WHILE MITIGATION
SUPPOSEDLY REDUCES THE ENVIRONMENTAL IMPACTS THERE IS NO

O5-A-1

O5-A -1 See responses for Key Themes ECON-3 and ECON-4, Key Theme VR-3,
and Key Theme VR-5.

O5-A-1

PAGE 2 – W. HALVERSON DEIS COMMENTS- BELLEVUE

MENTION OF THOSE COSTS. THROUGHOUT THE DEIS THERE ARE MITIGATION ACTIVITIES BUT THERE COSTS ARE NOT MENTIONED AMONG THESE WOULD BE REPLACEMENT OF VEGETATION AND TREES; MORE POLES THAN ANTICIPATED DUE TO NARROW CORRIDORS; WIDENING CORRIDORS TO 150'; CLEARING AND GRADING FOR 'CLEAR ZONES' AND ACCESS ROADS; AND EVEN THE USE OF EMINANT DOMAINE TO BUY HOUSES. THEN THERE ARE THE COSTS ASSOCIATED WITH GAS EMISSIONS, AIR QUALITY, STORM WATER CONTROL AND SUCH.

DON'T BE SURPRISED YOU WILL HAVE TO PAY A LOT MORE THAN WHAT YOU ARE BEING TOLD. ALTERNATIVE 1a HAS EXCESSIVE MEDIATION AND WILL COST MORE. ALTERNATIVE 2 HAS LITTLE MEDIATION. NEVERTHELESS ALL THIS SHOULD BE PRICED OUT. LET'S CALL THIS A GREAT OMISSION BECAUSE YOU REALLY CANNOT COMPARE ALTERNATIVES UNLESS YOU HAVE EQUAL DETAIL.

O5-A-2

LET ME TURN NOW TO TWO COSTS IDENTIFIED IN THE DEIS: FIRST, PROPERTY VALUES—TUCKED AWAY UNDER "VIEWS AND VISUAL RESOURCES" AND "LAND USE AND HOUSING CHAPTERS" AND SECONDLY TAX BASE (SEE THE PUBLIC SERVICES CHAPTER 11.6.1.4 9 PG 29-30.). QUOTING NATIONAL STUDIES, THERE ARE BASICALLY TWO MAJOR CONCLUSIONS ABOUT THE IMPACTS OF POLE LINES ON PROPERTY

O5-A -2 See responses for Key Themes ECON-1 and ECON-2.

O5-A-2

PAGE 3 – W HALVERSON DEIS COMMENTS – BELLEVUE

VALUES: FIRST, WITHIN THE CHAPTER ON “VIEWS AND VISUAL RESOURCES (AND I QUOTE): “IT IS REASONABLE TO ASSUME THAT SOME EXISTING PROPERTIES WOULD HAVE LOWER PROPERTY VALUES”. THE SECOND CONCLUSION IS: “THE EFFECTS OF A TRANSMISSION LINE ON SALES PRICES OF PROPERTIES DIMINSH OVER TIME AND ALL BUT DISAPPEAR IN FIVE YEARS” (SEE LAND USE AND HOUSING CHAPTER 10.7.1.4 (pg 10-22). SO ON A MILLION DOLLAR HOUSE THAT LOSES VALUE OF \$60,000 - \$200,000 +/- APPRECIATION WILL CATCH YOU UP IN 5 YEARS. REALLY! WHAT ABOUT THE \$200,000 THAT I LOST INITIALLY. OTHER STATEMENTS ARE: “...IMPACTS COULD BE 1-20% BUT AVERAGE 6.2% BASED UPON ASSESSED VALUD, NOT MARKET VALUE”; IN 11.1.2 (Pg 11-2); “ ... THE IMPACT ON PROPERTY VALUES IS 3-6% WHICH “DISSIPATES 200-300 FEET AWAY”; AND, “...DATA WERE INONCLUSIVE AS TO WHETHER THE REASON PARCELS WERE VALUED DIFFERENTLY WAS BECAUSE OF USE RESTRICTIONS WITHIN A POWER LINE EASEMENT, BECAUSE OF VISUAL IMPACTS OR FOR SOME OTHER REASON” . REALLY, TRY THAT ONE ON OUR FRIENDS FROM SOMERSET.

P. 3 – W. HALVERSON DEIS COMMENTS – BELLEVUE

REGARDING PROPERTY TAX REVENUES 15.6.4.5 , IT WOULD APPEAR THAT THE MAJOR CONCLUSION IS: “ THE IMPACT OF ALTERNATIVE 1a ON BELLEVUE’S \$35 MILLION DOLLAR BUDGET IS SMALL AND WOULD NOT AFFECT THE CITIES ABILITY TO ADEQUATELY FUND PUBLIC SERVICES.” THIS IS BASED UPON A REDUCTION OF PROPERTY TAXES OF \$10,000,000 WHICH EQUATES TO A REDUCTION OF \$9800 IN TAX REVENUES. THIS APPEARS TO BE FUZZY MATH. THE IMPACT OF ALTERNATIVE 1a IS MORE LIKE \$100,000 TO \$200,000 PER YEAR, EVERY YEAR. CONVERSELY, ALTERNATIVE 2 HAS LITTLE IMPACT ON PROPERTY VALUES OR TAX REVENUES

O5-A-2

IN SUMMARY, THE DEIS PROPERTY VALUE ASSESSMENT INFORMATION IS ALL BASED UPON CAREFULLY SELECTED NATIONAL STUDIES, ONE OF WHICH IS SPONSORED BY THE PUBLIC UTILITIES INDUSTRY. SINCE THE IMPACTS ON PROPERTY VALUES AND TAXES ONLY RELATES PRIMARILY TO 1A – NOT AT ALL TO 2 – IT IS TROUBLESOME THAT THESE IMPACTS ARE MINIMIZED TO SUCH A DEGREE AND SEEMS TO SLANT AND BIAS COMPARISON OF ALTERNATIVES.

O5-A-3

P.4 – W. HALVERSON DEIS COMMENTS – BELLEVUE

MY FINAL COMMENT IS ABOUT OPPORTUNITY COSTS. WHAT DO WE FORGO BY SPENDING \$1.4 BILLION DOLLARS. PSE'S 18 MILES OF TRANSMISSION LINES AND A SUBSTATION WILL COST AT A MINIMUM \$250 MILLION DOLLARS AND OVER THE LIFE OF THE PROJECT \$1.4 BILLION. THINK ABOUT IT. WITH A BILLION DOLLAR COMMITMENT (INCIDENTLY EARNING 9.8 – 10.2% FOR FOREIGN INVESTORS) HOW LIKELY ARE YOU TO CHANGE, INNOVATE, PROVIDE NEW OFFERINGS: LIKE ENERGY EFFICIENCY COMPONENTS; DEMAND RESPONSE; DISTRIBUTED GENERATION; ENERGY STORAGE; PEAK POWER GENERATION AND WHO KNOWS WHAT ELSE IN THE NEXT FEW YEARS. THE COST OF OLD TECHNOLOGY AND SUBSTATIONS WILL CERTAINLY REDUCE THOSE OPPORTUNITIES FOR THE FUTURE.

IN CONCLUSION, THE CURRENT DEIS NEEDS TO ACCOUNT FOR ALL COSTS AND RISKS OF THIS PROJECT SO THAT ALTERNATIVES CAN BE FULLY COMPARED. THIS SHOULD BE DONE BY UNBIASED LOCAL RESOURCES FOCUSED UPON BELLEVUE.

WARREN E. HALVERSON
13701 NE 32ND PL
BELLEVUE, WASHINGTON

O5-A -3 See responses for Key Themes ECON-3 and ECON-4.



Heidi Bedwell
Development Services Department
450 110th Avenue NE
Bellevue, WA 98004

March 7, 2016

Re: Comments for Energize Eastside Phase 1 Draft EIS

Dear Ms. Bedwell,

On behalf of the Bellevue Family and Coal Creek Family YMCAs serving the cities of Redmond, Kirkland, Bellevue, Newcastle, and Renton, we are writing to share comments for Energize Eastside Phase 1 Draft EIS.

The Y is a cause-driven organization that is for youth development, for healthy living, and for social responsibility. A strong community can only be achieved when we invest in our kids, our health, and our neighbors. At the Y, strengthening community is our cause. We welcome women, men, boys, and girls of all ages, races, ethnicities, religions, abilities, sexual orientations and financial circumstances. The Y is committed to serving the Eastside and our local communities with quality and affordable programs.

O6-A-1

The primary purpose of the YMCA is building community. Any efforts geared towards that end for all of our members on the Eastside, including affordable and reliable power is welcomed. We will support any and all efforts that provide reliable and affordable power to our community.

We appreciate the opportunity to offer comments in Phase 1 of the draft EIS process.

Sincerely,

Marcia Isenberger
Regional Executive,
Eastside YMCAs
YMCA of Greater Seattle

Paul Lwali
Executive Director
Bellevue Family YMCA

BELLEVUE FAMILY YMCA
14230 Bel-Red Road Bellevue WA 98007
P 425 746 9900 bellevueymca.org

O6-A -1 See responses for Key Theme SVC-4 and and Key Theme ECON-4.



March 10, 2016

Heidi Bedwell
City of Bellevue
Development Services Department
450 110th Avenue NE
Bellevue, WA 98004

RE: Comments for Energize Eastside Phase 1 Draft EIS

Dear Ms. Bedwell:

On behalf of King County Public Hospital District #2, d/b/a/ EvergreenHealth, I am writing to share brief comments for the Energize Eastside Phase 1 Draft EIS.

We must have power available to meet both the immediate and long-term demands of our emergency, surgical, intensive care and records systems in order to provide quality medical care to the people of the Eastside.

O7-A-1

We ask you to review proven solutions that will ensure PSE can supply reliable electricity to serve our expanding Eastside region. As we have learned, PSE's infrastructure is not presently equipped to serve projected customer energy demands in Kirkland and throughout the Eastside, which will have a crippling effect on our ability to accommodate the health and safety needs of the local community. It becomes a major public safety issue if our hospitals and medical facilities are not powered in a consistent and reliable way. Every minute of every day, we depend on a steady delivery of power to our buildings, which cannot occur without reliable electrical infrastructure.

O7-A-2

We support proceeding with environmental review only of the alternatives that will solve the problem, specifically Alternative 1a. While we understand a review of "no action" is required, this alternative would significantly undermine our ability to continue to provide consistent and critical care to the Eastside community.

O7-A-3

We appreciate the opportunity to offer these comments and look forward to the process continuing into Phase 2 of the EIS in a timely manner.

Sincerely,

Jeff Friedman
Vice-President, Professional Services

Administration

evergreenhealth.com

12040 NE 128th Street
Kirkland, WA 98034-3098

Phone: 425.899.1000 Fax: 425.899.2624

- O7-A -1 See response for Key Theme SVC-4.
- O7-A -2 See response for Key Theme EIS-1.
- O7-A -3 Comment noted.





3000 Landerholm Circle SE · Bellevue, WA 98007-6484 · www.bellevuecollege.edu

March 10th, 2016

Heidi Bedwell
 Energize Eastside EIS Program Manager
 City of Bellevue Office of Planning & Community Development
 450 110th Ave NE
 Bellevue, WA 98004

RE: Comments on Energize Eastside Draft EIS

Dear Ms. Bedwell:

On behalf of Bellevue College, I would like to thank you for the opportunity to submit comments for the Energize Eastside Phase 1 Draft Environmental Impact Statement (EIS). After reviewing the research, studies, and proposals, we support Alternative 1 as the only viable choice.

O8-A-1

Bellevue College's customers – our students – cannot be effectively served without a dependable power structure. The college provides services to more than seven thousand students on a daily basis – services which require dependence on technology and on consistent and reliable power. In 2015, a total of 32,725 students enrolled in courses with Bellevue College. Fifty-six percent of those students live in the Eastside corridor. For that population, not only would their school lives be impacted, but so would their home lives. Disruptions to students' personal lives affect their ability to succeed in college courses. Moving forward with Alternative 1 without delay will be a significant factor in successful completion of their individual goals.

O8-A-2

The No Action Alternative is not a viable solution for BC as it would cripple our ability to deliver education. Rolling blackouts would be detrimental to providing our wide scope of educational services. Physical classrooms are dependent on electricity for heating, ventilation, and cooling (HVAC), lights, and classroom technology. Students enrolled in distance education courses would encounter delays in receiving materials because instructors would be unable to access and disseminate college resources on demand. How could Bellevue College effectively schedule classes and deliver course materials when faced with major gaps in the ability to do so?

Additionally, the college risks losing business from regional companies renting event space on a regular basis. Funds earned from space rentals and providing catering services feeds money in to serving our students. Loss of revenue in any

Become Exceptional

O8-A -1 Comment noted.
 O8-A -2 Comment noted.

O8-A-2 | area has the potential to lead to layoffs, affecting the quality and quantity of services the college can offer to prospective and current students.

O8-A-3 | Of the proposed options, Alternative 1 is the only solution that will actively prevent the aforementioned breakdowns in serving our community. Our hope is that there is strong enough support for it so that the impact on the college is a positive one.

Sincerely,



Ray E. White
Vice President of Administrative Services
Bellevue College

cc: Bellevue City Council

O8-A -3 Comment noted.

Become Exceptional

From: SJNunnelee@bellevuewa.gov
To: CHolland@bellevuewa.gov; info@energizeeastsideis.org
Subject: FW: Support for Energize Eastside
Date: Thursday, March 10, 2016 2:29:20 PM
Attachments: [20160309171140203.pdf](#)

FYI

Sandra Nunnelee

Executive Assistant to the City Council
 450 110th AVE NE
 Bellevue, WA 98004
 425.452.4088 Direct Line
sjnunnelee@bellevuewa.gov
www.bellevuewa.gov

From: Vicky Baxter [mailto:vbaxter@gorenton.com]
Sent: Thursday, March 10, 2016 10:55
To: Council <Council@bellevuewa.gov>
Cc: Joe Kiley <Kileyj@FNWB.com>; 'Brent Camann' <bcamann@secodev.com>
Subject: Support for Energize Eastside

Dear Bellevue City Councilmembers,

Attached please find the letter of support to move forward for the Energize Eastside project from the Renton Chamber of Commerce Board of Directors. The consensus from the board is that we must ensure that we have continuous, reliable power to support current and future business growth in our community.

Sincerely,

Vicky Baxter
 CEO
 625 S 4th Street
 Renton, WA 98057
 Office 425-226-4560



www.GoRenton.com

Renton's largest business network



February 18, 2016

Dear Ms. Bedwell,

The Renton Chamber's mission is to improve business and economic conditions, and the general welfare of the community. For more than 76 years the Chamber has been a leader in networking opportunities, advocacy, leadership development and promoting business prosperity. Our member businesses along with our non-profit and government partners play a significant role in building prosperity, excellence in education, wellness and healthcare along with a genuine good quality of life for the residents of Renton.

We must weigh in on issues that contribute to a consistent quality of life and prosperity for present and future generations. These issues include transportation, wages, education, business stability/vitality which involve improved infrastructure for a growing city.

O9-A-1 Much of the new growth comes through manufacturing, hospitality, healthcare and service businesses that support our already established companies. According to the Puget Sound Regional Council, between 2010 and 2040, Renton's population is expected to grow 31 percent, and employment is expected to grow more than 50 percent. While this growth ensures the continued prosperity of Eastside cities and communities, it must be supported by suitable infrastructure.

O9-A-2 We are also concerned with the public safety risks related to the "No Action" alternative outlined in the Draft EIS. Our community's firefighters, police and hospitals depend on reliable power to respond to and care for those in need. Additionally, a heat wave, severe cold spell, car accident, act of God, etc., can tax an electric system, causing outages particularly when customers use their air conditioning or heating around the clock. For our manufacturing businesses a power outage can ruin a "just in time" production schedule and end up costing the company millions of dollars.

O9-A-3 Without adequate investments in our electric infrastructure, businesses and residents in Renton and across the Eastside will be at risk of power outages. Existing businesses cannot afford the loss of productivity and revenue resulting from power outages and new businesses will not locate here without a robust electric system. Our jobs, families and communities need dependable power in order to thrive.

O9-A-4 Many solutions have been considered as part of the EIS process, but we need a solution that is proven, dependable and technically feasible. Betting on untested technologies is too big of a risk. The Eastside needs a solution that is viable and stands the test of time. **The Renton Chamber supports moving forward with the Energize Eastside project (as proposed by PSE, Alternative 1(a) in the Draft EIS) to ensure that we have continuous, reliable power to support current and future business growth in our community.**

Sincerely,

Vicky Baxter
CEO

Renton Chamber of Commerce
Cc: Executive Board: Joe Kiley, Chairman; Brent Camann, Past Chair

Cc Renton City Council

Cc Bellevue City Council

625 So. 4th Street • Renton, WA 98057 • 425.226.4560 • fax: 425.226.4287 • email: info@GoRenton.com • www.GoRenton.com

- O9-A -1 Comment noted.
- O9-A -2 See response for Key Theme SVC-1.
- O9-A -3 Comment noted.
- O9-A -4 Comment noted.



February 18, 2016

Dear Ms. Bedwell,

O9-B-1

The Renton Chamber's mission is to improve business and economic conditions, and the general welfare of the community. For more than 76 years the Chamber has been a leader in networking opportunities, advocacy, leadership development and promoting business prosperity. Our member businesses along with our non-profit and government partners play a significant role in building prosperity, excellence in education, wellness and healthcare along with a genuine good quality of life for the residents of Renton.

We must weigh in on issues that contribute to a consistent quality of life and prosperity for present and future generations. These issues include transportation, wages, education, business stability/vitality which involve improved infrastructure for a growing city.

Much of the new growth comes through manufacturing, hospitality, healthcare and service businesses that support our already established companies. According to the Puget Sound Regional Council, between 2010 and 2040, Renton's population is expected to grow 31 percent, and employment is expected to grow more than 50 percent. While this growth ensures the continued prosperity of Eastside cities and communities, it must be supported by suitable infrastructure.

O9-B-2

We are also concerned with the public safety risks related to the "No Action" alternative outlined in the Draft EIS. Our community's firefighters, police and hospitals depend on reliable power to respond to and care for those in need. Additionally, a heat wave, severe cold spell, car accident, act of God, etc., can tax an electric system, causing outages particularly when customers use their air conditioning or heating around the clock. For our manufacturing businesses a power outage can ruin a "just in time" production schedule and end up costing the company millions of dollars.

O9-B-3

Without adequate investments in our electric infrastructure, businesses and residents in Renton and across the Eastside will be at risk of power outages. Existing businesses cannot afford the loss of productivity and revenue resulting from power outages and new businesses will not locate here without a robust electric system. Our jobs, families and communities need dependable power in order to thrive.

O9-B-4

Many solutions have been considered as part of the EIS process, but we need a solution that is proven, dependable and technically feasible. Betting on untested technologies is too big of a risk. The Eastside needs a solution that is viable and stands the test of time. **The Renton Chamber supports moving forward with the Energize Eastside project (as proposed by PSE, Alternative 1(a) in the Draft EIS) to ensure that we have continuous, reliable power to support current and future business growth in our community.**

Sincerely,

Vicky Baxter
Vicky Baxter
CEO

Renton Chamber of Commerce
Cc: Executive Board: Joe Kiley, Chairman; Brent Camann, Past Chair

Cc Renton City Council

Cc Bellevue City Council

625 So. 4th Street • Renton, WA 98057 • 425.226.4560 • fax: 425.226.4287 • email: info@GoRenton.com • www.GoRenton.com

- O9-B -1 Comment noted.
- O9-B -2 See response for Key Theme SVC-4.
- O9-B -3 See response for Key Theme OBJ-1.
- O9-B -4 Comment noted.



March 11, 2016

Heidi Bedwell
 Energize Eastside EIS Program Manager
 City of Bellevue Office of Planning & Community Development
 450 110th Ave NE
 Bellevue, WA 98004

RE: Energize Eastside DEIS Comments

Dear Heidi:

On behalf of the Meydenbauer Center, thank you for the opportunity to submit comments for the Energize Eastside Phase I DEIS.

As I mentioned in our scoping letter, Meydenbauer Center is Bellevue and the Eastside region's primary convention facility serving a wide array of clients including major local corporations, associations and the local community. The Center includes 54,000 square-feet of event space including 36,000 square foot Center Hall, and nine meeting rooms totaling 12,000 square-feet. Also included is a 2,500 square-foot Executive Conference Suite as well as a 410 seat performing arts theatre. The primary purpose of this facility is to assist in building, growing and sustaining Bellevue's economic vitality. In 2015 Meydenbauer Center hosted 302 conventions and events which brought in 159,400 attendees and provided \$44.5 million in economic impact to the community. This past summer we invested \$12.5 million to renovate the center inside and out, including significant technological upgrades.

Our customers – the hotel community on the Eastside, community organizations, corporations and arts groups – rely on us to provide the highest in customer service and quality in the work we do and the events we host. To do that it is essential we have full confidence in our ability to provide reliable power for all of these events.

As you evaluate the solutions discussed in the DEIS, it is most important to us that you only continue to study solutions that will actually meet the need for this project as defined by both PSE and the City in its most recent Independent Technical Analysis and by Stantec through the DEIS. From our vantage point that looks to be Alternative 1a. Additionally, we urge the city and the EIS team to continue to move the project forward. Projects like this take a long time to study, permit and build and our business cannot afford any delay that could lead to future blackouts, mandatory shutting off of power, or significant loss of power. **We plan years in advance when booking conventions and events and we need to be able to communicate to our customers with 100% certainty that they will have everything they need if they choose our facility – including reliable power.** With that in mind, the no action alternative will not in our estimation serve the needs of our facility and our customers. This project, unlike the light rail issue we have been involved with over the past 6 years, is not optional. We cannot choose alternatives that are not guaranteed to meet the need we face now. Reliable power is not optional.

1100 NE 6th Street | Bellevue, Washington 98004 | 425.637.1020 | meydenbauer.com

Welcome.

- O10-A -1 Comment noted.
- O10-A -2 Comment noted.

O10-A-1

O10-A-2

O10-A

COMMENT

RESPONSE



O10-A-3

We urge the EIS team to complete both phases of the EIS with no delay so that we can be sure to get the project built in a timely manner. The 2017/2018 timeframe is just around the corner and we need to be able to provide our customers with assurances that our facility will be able to serve their needs.

Thank you again for the opportunity to provide comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Stacy Graven'.

Stacy Graven
Executive Director
Meydenbauer Center

cc: Bellevue Convention Center Authority, Board of Directors
Bellevue City Council
Brad Miyake, Bellevue City Manager

O10-A -3 Comment noted.

1100 NE 6th Street | Bellevue, Washington 98004 | 425.637.1020 | meydenbauer.com

Welcome.

Somerset Recreation Club
 4445 Somerset Blvd SE, Bellevue, WA 98006
 March 10, 2016

City of Bellevue
 Development Services Department
 450 110th Ave NE
 Bellevue, WA 98004

Attn: Heidi Bedwell

The Somerset Recreation Club (SRC), has been a community hub for Somerset and surrounding neighborhoods since 1963. We have been following the Energize Eastside (EE) project closely since its inception and are trying to determine the impacts on SRC if the new high voltage lines are installed along the existing PSE corridor. The current PSE power lines bisect the northwest corner of our property and are directly over our 2 tennis courts. Additionally, there are 4 PSE poles (in pairs of two) located on our property that support the current power lines.

O11-A-1

Somerset Recreation Club is concerned about the contents of the DEIS not addressing the significant environmental and operational impacts of the PSE proposed project, especially Alternative 1, on the club. It should also be noted that there were no mitigation measures that will provide significant solutions to SRC for both short term construction and long term location and operational/maintenance impacts due to the potential removal of the 115kv poles and/or transmission lines, and replacement with 230kv poles and transmission lines.

O11-A-2

As a result, we have reviewed the Phase 1 Draft EIS and are providing the City of Bellevue and PSE with our comments (see below) on the documents for the key and relevant sections of the DEIS, as they pertain to SRC.

Alternative 1- Location of the proposed new powerline upgrade through the Somerset Residential Neighborhood

O11-A-3

We would like to know more details on PSE's preferred alternative (Alternative 1) and the specific plans with regard to locating the 85' to 130' poles that would support the new, higher voltage power lines. Specifically, where precisely the poles would be located (vis-a-vis the existing PSE power poles on SRC property). Will the existing poles be removed or retained? If so, how much more of our property would be taken and/or what effect would the larger poles/wires have on our Clubhouse/pool? Can our existing tennis courts stay below the new, higher voltage lines? According to the DEIS in Chapter 12. Recreation (Section 12.5.3.1), the new higher voltage power lines will require a widening of the existing corridor by as much as 50' and that no buildings or houses will be allowed within the easement and/or below the lines.

O11-A-4

If this is true, then the Somerset Recreation Club, a recreation facility that has been in use for more than 50 years, may literally have to close its doors, because we would not be able to

- O11-A -1 See response for Key Theme REC-3.
- O11-A -2 See response for Key Theme REC-3.
- O11-A -3 See response for Key Theme ALT-1.
- O11-A -4 See response for Key Theme REC-3.

O11-A-4 | comply with the new expanded corridor requirements as our current clubhouse, tennis courts and possibly our pool would sit below these lines. As a result of these impacts to SRC, what mitigation will you provide?

Chapter 1 Section 2.3

O11-A-5 | In Section 2.3, the alternatives were presented and the overhead transmission lines and pole location were discussed. The DEIS did not mention ways to mitigate through design, location, and/or minimize the impacts associated with the removal of the 115 kV system and upgrading it to 230kv. This upgrade has significant impacts such as: the foundation location and size and the pole height on the SRC which is located in the existing transmission corridor.

The following are comments on each of the following Elements of the Environment that are included or should have been included in the DEIS.

ELEMENTS OF THE ENVIRONMENT

**Natural Environment
Chapter 3. Earth**

O11-A-6 | SRC (and the Somerset Community) is on a steep hill and adjacent to the Fault that is located along I-90. Based on our review of this element, the DEIS does not identify major issues nor provide significant mitigation measures to prevent damage to the SRC facility from poles and powerlines collapsing and the Olympic pipeline breaking due to significant seismic and/or storm events. In addition, construction impacts due to removing the old poles, the access to locations where the poles are located, and replacing them in the same location may adversely impact the SRC property/facility. Since SRC was not mentioned as a key facility in the region, no proposed mitigation measures were offered. Vibration (e.g. air and ground vibration) is a significant issue, due to the proximity of the poles to all the SRC structures (buildings, pool, and tennis courts). Also, the underground gas pipeline could be affected. The DEIS stated on page 3-14 that "no potentially significant adverse impacts related to work near pipelines are expected under any of the alternatives". This seems to be an inaccurate statement, since the location of SRC is both near the Olympic pipeline and along the PSE corridor. We should be protected from immediate construction impacts, as well as any future impacts as a result of the construction activities, such as: the relocated poles (e.g. removing old poles and/or locating new poles, expanding the foundation of the new poles, easement encroachment, etc.).

Chapter 5. Water Resources

O11-A -5 | See response for Key Theme ALT-2. See the Phase 2 Draft EIS and Final EIS for project-level analysis and mitigation measures.

O11-A -6 | See response for Key Theme EARTH-3.

O11-A-7 SRC has been impacted by a significant amount of storm water runoff from the hill/roadway along Somerset Blvd. This issue has undermined the SRC facility (e.g. Tennis Courts) and potentially the pole/pipelines that exist in close proximity to the facility. It may also adversely impact the potential location of the new and larger poles that may be placed adjacent to SRC. An analysis of this issue needs to be evaluated before any further action is taken.

Chapter 6. Plants and Animals

O11-A-8 The DEIS did not include an overview of the aquatic and terrestrial habitat within the entire study area. In addition, it failed to mention the impact of the potential removal of 8000 trees in the region due to the proposed action/alternatives. The SRC facility also has a number of mature trees around its perimeter that have been there for decades and would potentially be eliminated if the poles are removed and/or replaced. Historically, Bellevue has a problem with its canopy being reduced. As a result, PSE's actions should not contribute to this ongoing long term problem and it needs to enhance, not eliminate the tree canopy.

Chapter 7. Energy & Natural Resources

O11-A-9 Per the DEIS Section 7.2, it stated the "none of the study area communities have control over how PSE uses energy to provide power. However, all of the study area communities have comprehensive plan energy goals or policies that lead them to encourage, facilitate, promote, or participate in actions addressing climate change sustainability, or energy conservation and efficiency, or reduction of greenhouse gases". Since the City of Bellevue is the Lead Agency for the EIS process why are they allowing PSE to propose a project that has detrimental impacts on our individual and collective community. This project may eliminate the SRC facility or seriously impact it due to the size and location of the new power poles. As well as the adverse impacts or elimination of homes along the corridor in Somerset (thus reducing our overall membership base).

Lastly, the DEIS states that they anticipated no cumulative or significant adverse impacts (Section 7.8 and 7.9) to natural resources from any of the alternatives. This is incorrect and needs to be reevaluated, per the comments provided above.

**Built Environment
Chapter 8. Environmental Health**

O11-A-10 The environmental health for this proposed project includes Electric Magnetic Radiation, Hazardous Materials, Corona Ionization, and Noise. The DEIS concluded that there were "No cumulative adverse impacts to environmental health as anticipated" (page 8.46). However,

O11-A -7 See response for Key Theme WTR-2.
 O11-A -8 See responses for Key Themes P&A-1 and P&A-2.
 O11-A -9 See responses for Key Theme ALT-2, Key Theme REC-3, and Key Theme VR-5.
 O11-A -10 See responses for Key Themes EMF-1 and EMF-2.

O11-A -11 See response for Key Theme NOI-3.

based on the contents of this section, this statement is inconsistent and in opposition with the information provided.

The following sections will provide an overview of the impacts. These issues are of particular concern to SRC due to our proximity to the PSE corridor and the fact that SRC has a heated pool (adjacent to) and tennis courts (directly below) the existing corridor. The EIS does not cover this, but we believe the proximity to water may increase the diverse effects and enhance the health hazard.

Electric Magnetic Radiation (EMR)

The DEIS stated that epidemiological and other studies have reported an increased cancer risk associated with the estimates of magnetic field exposure. The EMR's, Noise and/or the Olympic Pipeline may have cumulative effects that caused these significant maladies.

Corona Ionization: The effects of corona ionization are also of particular concern for SRC, both physically and psychologically:

1) Given the humid air/rain in the PNW and the additional humidity provided by the heated pool area, the buildup and discharge of the corona ions as "static discharge" will most certainly have adverse impacts on SRC club members, in particular in an around the pool deck area.

2) The audible cracking and popping of the discharge along the lines and line-to-pole connections will also have negative impacts, as it should be obvious that electricity and water don't mix and therefore are important factors in how members enjoy their experience at the SRC.

3) It was also stated in the EIS that the corona ions adhere to other particles (airborne pollution, etc.) and can then be inhaled. Given the SRC pool and tennis courts are very near the power lines, these impacts most certainly apply.

Hazardous Materials: The Olympic Pipeline and its alignment with the transmission lines needs to be assessed to ensure that the pipelines is in good condition in Somerset and on/near SRC. Also, there is significant risk if the transmission lines through Somerset are upgraded. PSE and Olympic Pipeline must ensure that the residents are protected from construction and operation/maintenance impacts that may cause ruptures or damage to the pipeline and adjacent residences and facilities.

Chapter 9. Noise (Per SEPA, this Category should be listed under Environmental Health)

There is a significant noise issue ("it is not a relatively low noise level "per the DEIS) that is emitted from the PSE power lines. Members of the SRC (e.g. individuals using the SRC facility) and many of the residents that live along the corridor (who are also SRC members) often comment on the noise issue. The DEIS stated (page 1-33) that the existing transmission lines "may be audible...at adjacent sensitive land uses" such as homes and facilities, like SRC.

Chapter 10. Land Use & Housing

O11-A-10

O11-A-11

O11-A -12 See responses for Key Themes LU-3 and LU-4.

O11-A -13 See response for Key Theme VR-1.

As highlighted in the DEIS, the changes in Land Use in the proposed alignments will cause significant impacts in the region. As stated in other sections of this letter, there have been numerous erroneous statements, such as on Page1-36: “construction of action alternatives would be relatively short duration at any one location with negligible land use impacts”. The impacts maybe in short duration, but land use impacts could be significant if the new pole placement and supporting structures impede on the existing SRC pool and structures.

On page 10-18, it was stated that the study area communities would have to “determine whether to designate the project as an EPF (Essential Public Facility) as part of the project-specific application process”. Since this is the programmatic DEIS, it does not provide for a comprehensive analysis. However, we would like to state that based on contents of the DEIS and its attachments, and the information provided through community meetings, etc.; that the PSE’s proposed EE project is not needed nor required to sustain the energy requirements of the region and that the potential alignment through Somerset has significant, adverse, and permanent impacts to the community and they cannot be mitigated.

O11-A-12

On page 10-20, a discussion on the projects effect on land uses and housing would occur and “Specific designs for the project would need to be reviewed by each community to determine compliance with applicable zoning codes and regulations”. SRC and the community have already reviewed the preliminary design and relevant document for this project and its alternatives and we would like to state that they are not in compliance with the COB codes and regulations.

On page 10-26, it provides a list of Study area communities, but it does not include the City of Bellevue and states that if is not listed in the table it would “appear to either allow the alternative outright or as a conditional use in all zones”. Why was the COB’s information not included in this table since they are the Lead agency for this DEIS? What is the COB list of restrictions in the Somerset area?

Also, SRC is currently partnering with the Forest Ridge School of the Sacred Heart (FRS) (also located in the Somerset neighborhood) to completely renovate the SRC facility, and PSE/COB indicated through previous contacts with both entities that there would not be any problems with the SRC’s proposed architectural design for the renovation. However, based on the proposed action outlined in the DEIS, this now seems incorrect, and the \$7 - 10 million renovation jointly proposed by SRC and FRS may be in jeopardy if Alternative 1 (Energize Eastside) is chosen. This information has never been directly conveyed by PSE or COB to the Somerset Rec Club and/or the Forest Ridge School.

O11-A-13

Chapter 11. Views & Visual Resources

The Somerset Community was developed in the early 1960’s and the views of Mt. Rainier to the Cascades from the areas homes and SRC are significant. This view has attracted and helped retain members at SRC for decades. The view is one of the reasons why our facility is full on sunny days and evenings with beautiful sunsets. In Section 11.3.2, 11.3.3 and 11.3.4, a list of

O11-A-13

visual resources and key viewpoints are provided, but the Somerset community/SRC were not included and should have been mentioned in these sections. Also, the private views were probably not included for the Somerset area as noted in Figure 11-12. There are 100's of homes and SRC that have views on both side of the hill. Any view blockage at SRC would minimize our financial viability, which is an economic issue that can be quantified.

O11-A-14

On page 11-1- it stated that "the importance of visual resources is subjective, based on the viewer's perspective". Also, in Section 11.1.2- it stated that "differences in actual assessed values are not useful for this evaluation because the data were inconclusive as to whether the reason parcels were valued differently was because of use restrictions within a power line easement, because of visual impacts, or for some other reason." However, realtors in the area have information that they can provide COB about types of views in the area and the home values with full, partial views, views of the power lines, and without views. This difference is significant and also has an affect the property values too. The greater the price of the home the greater the property value and contribution to the region for school levies, road improvements, etc. This issues should be addressed in the Economic section of the future EIS.

O11-A-15

Chapter 12. Recreation
 SRC's facility and other key private/community recreation facilities were not included to avoid placing overhead lines in recreation sites. "The enjoyment of recreation sites can be linked to visual quality and natural resources". Based on this statement, the power lines across Somerset and SRC should not be permitted per the COB's policies. Section 12.6 stated that "new infrastructure is located within recreation sites ... it will reduce user enjoyment of a recreation site through noise or visual impacts or changes to the resource- changes in light and shade; access to a recreation site, or disruption of informal recreation activities". The DEIS stated that the Phase 2 EIS will address these impacts. However, SRC and even the Somerset community would like to request that since our facility and the community has been impacted by the existing power line system for over 53 years, any further expansion/upgrade to the system would a significant and adverse impact and no proposed mitigation could compensate for the cumulative impacts to date. Section 12.7.1 offers another option, it states that "if recreation sites are affected and cannot be restored, they would be relocated and replaced as required; for example property could be purchased and a new recreation facility created".

In Section 12.5.1, it stated that if SRC is "unusable or access is completely blocked during peak use, then impacts are considered significant". Based on our review of the DEIS, "significant" impact would occur for all construction activities between May and September that would generate noise and aesthetics issues (see Chapter 14 below). Furthermore, any construction taking place on SRC property during peak use months of May through September that would block use of the SRC in any way could result in a loss of membership, and a decline in membership for even one summer season would be deleterious to the SRC's future financial viability. The SRC cannot underscore enough the criticality that any construction on SRC property must be done when the SRC is not open for business.

O11-A -14 See responses for Key Themes ECON-1 and ECON-2.

O11-A -15 See response for Key Theme REC-1.

O11-A-16

Chapter 13. Historic & Cultural Resources

SRC was built in 1963, and therefore because it is over 50 years old, it should be considered as a historic structures per Washington State Department of Archaeology and Historic Preservation, King County Historic Preservation Program and the following registers: National Register of Historic Places, Washington Heritage Register, and King County Landmark. Per the DEIS, currently no structure in the Somerset area has been listed. In addition, per the DEIS (Section 13.7), if “operational impacts to above ground resources may include noise, vibration, and views... The impacts of each identified historic resource will need to be assessed individually to determine mitigation measures, which may include redesign options or measures to minimize noise and vibration impacts”. SRC and the Somerset Community will investigate further to determine the mitigation measures that would be proposed.

O11-A-17

Chapter 14. Transportation

SRC is located on Somerset Blvd. in the middle of the Somerset Community. The key potential transportation impacts to the SRC facility would be to access the facility and the parking lot(s). There is limited parking at our facility, so that potential construction impacts and long term operational impacts need to be reviewed and assessed to minimize impacts during our summer season and the swim team meets (There are often 100’s of people parking around the pool a day or two a week from May- July for these and other events.).

O11-A-18

Chapter 15. Public services

In order for SRC to operate per governmental requirements, Police, Fire, and Emergency Response services must be able to access SRC facilities. So any and all potential construction activities will have to ensure access to the site and the facility.

O11-A-19

Chapter 16. Utilities

The comments on the preceding Elements of the Environment cover our current basic issues and concerns. Both the existing transmission lines and proposed transmission line upgrade as well as the co-located Olympic Pipeline have to be evaluated further, with potential impacts/mitigation measures discussed. In addition, there is a telecommunications – Cell Tower (T-Mobile) on a PSE pole on SRC’s site and this system needs to be protected due to any proposed action, since it provides cell coverage in the area and rental income essential to SRC operations. The natural gas, other telecommunications systems, water, and wastewater utilities in the area have not been identified and will potentially be impacted.

O11-A-20

Elements of the Environment that were not included- Economics

Economic analysis is often included in a DEIS and is an allowed part of the SEPA process. The DEIS (Section 10.7.1.4) stated that “the effect of transmission lines on property values is an economic rather than environmental issue as defined by SEPA”. This implies that it is not a criterion that would be allowed in the SEPA process. This is incorrect; Economics is an Element of the Environment in many SEPA EIS’s.

O11-A -16 See response for Key Theme H&C-3.

O11-A -17 See response for Key Theme TRAN-1.

O11-A -18 See response for Key Theme SVC-3.

O11-A -19 See response for Key Theme UTL-1.

O11-A -20 See responses for Key Themes ECON-1, ECON-2, and ECON-3.

O11-A -21 See the Phase 2 Draft EIS and Final EIS for project-level discussion of mitigation.

Also, Section 11.6.14 stated that the data was inconclusive about the reasons for different valuations set by Assessors and the degree to which various factors negatively impacted the property assessment. These statements are incorrect and an economic analysis would provide accurate and proven conclusions based on similar studies performed in the west.

Due to the EE significant impacts, it is essential that COB include in an economic analysis in the next EIS. SRC is also concerned about the economic impact on our Club, if construction of EE takes place on our property during the summer months when we are open.

O11-A-20

The DEIS also does not accurately state how property values are assessed. King County's property tax assessment is based on the statute. However, the market value is dependent on the economy and what potential buyers are willing to pay. If 85-100 foot towers are placed in a property owner's back yard and possibly on two locations at SRC and they both block views and access to the property, then this will result in lower property values. It will also reduce SRC membership to a point that we may have to close the facility. In addition to the effects of the transmission line upgrade, EE is proposing to upgrade and co-locate the new towers with the Olympic Pipeline corridor and this may also affect our property values and a construction issue may result in a hazardous event in the community.

Additional note - Outreach and Coordination

O11-A-21

PSE has never met with the Somerset Rec Club's Board of Directors regarding EE's impact on our Club. It is a concern that due to the significant impact to SRC, we have not been given any information on the mitigation measures (e.g. potential reimbursement) that we would receive from PSE due to the impacts to our Club.

Thank you for reviewing this comment letter. We look forward to receiving comments through the EIS process that adequately address our questions and concerns.

Regards,

Somerset Recreational Club and its Members



March 14, 2016

City of Bellevue Development Services Department
 Attn: Heidi Bedwell
 450 110th Ave NE
 Bellevue, WA 98004

RE: Bellevue Downtown Association Comments on Energize Eastside Phase 1 Draft EIS

Dear Ms. Bedwell:

On behalf of the Bellevue Downtown Association (BDA), we are writing to share the organization's comments on the Energize Eastside Phase 1 Draft Environmental Impact Statement.

The Phase 1 Draft EIS evaluates impacts associated with a range of solutions to satisfy the transmission capacity and reliability need. Some of the alternatives (Option 1A included) deliver proven, tested technologies – at a range of costs and impacts. Other alternatives in the EIS are speculative and fail to offer feasible solutions for the reliable transmission of power on the Eastside.

We request that the Energize Eastside EIS process continue without delay in evaluating only proven transmission technologies that will deliver reliable electricity for our growing city and region. The process should also continue to evaluate specific mitigation measures to address and limit potential negative impacts to Eastside residents and businesses.

Puget Sound Energy has documented the need for additional transmission capacity and system reliability on the Eastside, and recent independent studies commissioned by the City of Bellevue have validated it. We conclude that the “no action” alternative is not an option. The existing transmission system is 50 years old and could result in significant losses of power if not upgraded.

Dependable power is vital for our regional economy. We can't afford to lose jobs or risk public safety because of forced power outages or rolling blackouts. The BDA is eager to send a very clear, positive message to our members about reliable power in the future. Improving the system in a timely manner with proven technology will build confidence in their ability to grow in this city.

Our members represent the Downtown community, including the city's major employers, small businesses across industry categories, property owners and investors, hotels, restaurants and retailers, and healthcare and non-profit organizations. They share in a mission to lead Downtown's evolution as the economic and cultural heart of the Eastside.

Thank you for the opportunity to provide these brief comments. We will continue to stay engaged and look forward to reviewing Phase 2 of the Draft EIS when it's ready.

Sincerely,

Susan Stead
 Chair, BDA Board of Directors

Patrick Baillon
 BDA President

Making A Great Place Together

400 108th Avenue NE, Suite 110 • Bellevue, WA 98004 • 425-453-1223 • Fax 425-646-6634 • www.bellevuedowntown.com

O12-A -1 See response for Key Theme ALT-1.

O12-A-1

COMMENT

RESPONSE

From: [Darius Richards](#)
To: info@energizeeastsideeis.org
Subject: Citizen Comment on DEIS - Energize Eastside Project
Date: Monday, March 14, 2016 9:15:35 PM

We are submitting this comment as residents and representatives of the Kennydale Neighborhood, which is located on the southeast shore of Lake Washington and within the north portion of the City of Renton.

O17-A-1

While we agree with the conclusion of the PSE Community Advisory Group (CAG) in 2014 that a new power transmission line through Kennydale and thence northward along the Lake Washington shoreline (the "L" Route) was not a good choice, we fully support the concept that no neighborhood should be subjected to the installation of tall transmission lines if there is no valid need and/or there are other alternatives.

O17-A-2

Accordingly, we support the concept of DEIS Alternative 2, the *Integrated Resource Approach*, with the caveat that work needs to be done on the DEIS to make this approach viable. Specifically, we are concerned that the analysis of integrated resources as presented in the DEIS is based on incorrect or obsolete information, making this option appear to be more expensive and less feasible than it actually is. We feel that Alternative 2 should be redesigned, using up-to-date and accurate information, and the guidance of credible experts in new technologies that prioritize *Demand Response* and *Electrical Efficiency* as the most important factors in planning the electrical grid for the Eastside's future.

We recommend that such a redesign be undertaken now, so that Alternative 2 will then be less prone to dismissal by PSE and others who would prefer to see the installation of unsightly and expensive new transmission lines, the cost of which will fall upon the backs of present and future Eastside ratepayers.

Thank you for providing this opportunity to comment.

Vicki L. Richards
 President, Kennydale Neighborhood Association

Darius F. Richards
 Treasurer, Kennydale Neighborhood Association
 and Kennydale Representative to the PSE CAG in 2014

Both residing at: 3605 Lake Wash. Blvd. N., Renton, WA 98056
 (425)430-4469 dariusvicki@msn.com

O17-A -1 See response for Key Theme OBJ-1.
 O17-A -2 See response for Key Theme ALT-1.



From: [Tanya Franzen \(Windermera\)](mailto:Tanya.Franzen@EnergizeEIS.org)
To: Info@EnergizeEIS.org
Subject: Somerset Community Assoc. - Comments Re: Energize Eastside File # 14-139122-LE
Date: Monday, March 14, 2016 2:14:23 PM
Attachments: [image001.png](#)
Importance: High



Somerset Community Association, 12819 SE 38th St. #191, Bellevue, WA 98006

Monday, March 14, 2016

City of Bellevue
 Development Services Department
Attn: Heidi M. Bedwell
 450 110th Avenue NE
 Bellevue, WA 98004

Re: PROJECT NAME: Energize Eastside
 FILE NUMBER: 14-139122-LE

The Somerset Community Association 'SCA' is a member of and agrees with all the points that the Coalition of Eastside Neighborhoods for Sensible Energy 'CENSE' at www.CENSE.org is making and has presented to the record and into the EIS process to date.

The SCA will be submitting comments into the record for Phase II with respect to the SEPA process and specifically with respect to Mitigations.

Following please find the SCA's comments for the DEIS.

O18-A-1

Somerset is a sensitive area with designated View Community and has View Corridors that must be protected from Significant Negative Impacts should the 'J' route be selected. The only way to properly mitigate those adverse visual impacts should the 'J' segment of the route be selected will be a requirement that the proponent underground the new conductors for approximately one mile through Somerset (from north of Tyee Middle School to south of Coal Creek Parkway). Another solution to not Industrially BLIGHT dozens of residential neighborhoods through five eastside cities directly effecting thousands of homes thus immediately and permanently degrading their property values would be to submarine the lines along the west side of Lake Sammamish, come west along I-90 and then south along the east side of Lake Washington to Renton.

O18-A-2

Note that the SCA would prefer Non-Wired Solutions (Demand Response/Conservation measures/Grid Battery Storage/Gas and/or Combined Cycle Peaker Plant(s)) for EE should the project go forward.

O18-A -1 See response for Key Theme VR-7.
 O18-A -2 See response for Key Theme ALT-1.

O18-A-3

Additionally, 'SCA' believes, based on the Lauckhart-Shiffman expert Load Flow Study, which has been submitted to your office for review, that this project is in fact ***not needed*** at this time and perhaps may very well not be needed for decades.

Tanya Franzen-Garrett

President | Somerset Community Association

Board of Directors

Ph: 206-226-3723

Tanya.Franzen@Comcast.net

O18-A -3 See response for Key Theme OBJ-3.



March 14, 2016

Re: Energize Eastside Phase 1 Draft EIS

City of Bellevue
 Development Services Department
 Attn: Heidi Bedwell
 450 110th Avenue NE
 Bellevue, WA 98004

Ms. Bedwell,

We appreciate the opportunity to submit comments on the Phase 1 Draft EIS for the Energize Eastside project. The Chamber is the voice of business in Bellevue and is working to expand business growth and economic opportunity throughout East King County. We speak for employers of all sizes, many of whom rely upon reasonably priced electricity as a competitive advantage, when determining whether or not to locate or remain in Bellevue, as well as when making hiring and business expansion decisions.

Projections from various sources, including the City of Bellevue and the Puget Sound Regional Council, show Bellevue and the Eastside growing at a remarkable rate in the decades to come. Similarly, job growth and economic expansion is steadily climbing. It is clear, as shown by the technical analysis conducted by Utility System Efficiencies and independently validated by the Stantec memo in the Draft EIS, that Bellevue and the Eastside need to upgrade our power infrastructure, to ensure reliability of the electrical grid for both the business community and residential neighborhoods.

More specifically, as stated in the Stantec memo:

“Because of the nature of expected development, PSE projects that electrical demand will grow at a rate of 2.4% annually. Without adding at least 74 MW of transmission capacity or local peak period generation to the Eastside, a deficiency could develop as early as winter of 2017 - 2018 or summer of 2018, putting customers at risk of load shedding (power outages).”

Moreover, we concur with the observation that PSE has already included conservation in its load growth projections and therefore, conservation alone will not be adequate to account for projected load demand or prevent transmission capacity deficiencies in the future.

O19-A -1 See response for Key Theme OBJ-1.

O19-A-1

COMMENT

RESPONSE

O19-A-2 Four alternatives have been considered as part of the Energize Eastside Draft EIS. We believe Alternative 1(a) – providing a new 230 kV transmission source that would improve reliability for the Eastside area – is the only alternative that provides the power infrastructure necessary to provide reliability to Bellevue businesses. Alternatives 2 and 3 fall short of providing certainty to the business community that its electric power needs will be provided, while Alternative 4 represents the status quo and poses unnecessary risk to Bellevue and surrounding Eastside cities.

O19-A-3

O19-A-4

O19-A-5 As of the third quarter 2015, there are 31 major development projects in review, under construction or in the pipeline in Downtown Bellevue and the Bel-Red District. Other urban and suburban cities and areas throughout the Eastside are undergoing similar commercial and residential growth. Safe, reliable, and redundant electrical transmission capacity is something we can no longer afford to take for granted. While we look forward to further opportunities for comment during Phase 2, we believe at present that Alternative 1(a) is the best choice to meet projected growth in demand for Bellevue and the Eastside.

Thank you,

Tanya Fraioli, Board Chair

Betty Capestany, President & CEO

Cc: Bellevue City Council
Brad Miyake, City Manager

O19-A -2 Comment noted.
 O19-A -3 Comment noted.
 O19-A -4 See response for Key Theme ALT-3.
 O19-A -5 Comment noted.

Ms. Heidi Bedwell, Senior Planner
Land Use Division – Development Services, City of Bellevue
450 110th Avenue NE
Bellevue, WA 98004

Dear Heidi,

I am submitting the attached comments to the Draft Environmental Impact Statement (DEIS) for the Energize Eastside (EE) Project on behalf of the Somerset Recreation Club. You may have received these comments in an e-mail but we wanted to also deliver them to you in written hard copy form.

Thank you for your consideration of our inputs and concerns regarding EE and its potential significant impacts to our recreation club.



Rick Gratzner – President
Somerset Recreation Club
4445 Somerset Blvd SE
Bellevue, WA 98004

City of Bellevue
MAR 14 2016
Service First Desk

1:08 PM / DS

Somerset Recreation Club
 4445 Somerset Blvd SE, Bellevue, WA 98006
 March 10, 2016

City of Bellevue
 Development Services Department
 450 110th Ave NE
 Bellevue, WA 98004

Attn: Heidi Bedwell

The Somerset Recreation Club (SRC), has been a community hub for Somerset and surrounding neighborhoods since 1963. We have been following the Energize Eastside (EE) project closely since its inception and are trying to determine the impacts on SRC if the new high voltage lines are installed along the existing PSE corridor. The current PSE power lines bisect the northwest corner of our property and are directly over our 2 tennis courts. Additionally, there are 4 PSE poles (in pairs of two) located on our property that support the current power lines.

O20-A-1

Somerset Recreation Club is concerned about the contents of the DEIS not addressing the significant environmental and operational impacts of the PSE proposed project, especially Alternative 1, on the club. It should also be noted that there were no mitigation measures that will provide significant solutions to SRC for both short term construction and long term location and operational/maintenance impacts due to the potential removal of the 115kv poles and/or transmission lines, and replacement with 230kv poles and transmission lines.

O20-A-2

As a result, we have reviewed the Phase 1 Draft EIS and are providing the City of Bellevue and PSE with our comments (see below) on the documents for the key and relevant sections of the DEIS, as they pertain to SRC.

Alternative 1- Location of the proposed new powerline upgrade through the Somerset Residential Neighborhood

We would like to know more details on PSE's preferred alternative (Alternative 1) and the specific plans with regard to locating the 85' to 130' poles that would support the new, higher voltage power lines. Specifically, where precisely the poles would be located (vis-a-vis the existing PSE power poles on SRC property). Will the existing poles be removed or retained? If so, how much more of our property would be taken and/or what effect would the larger poles/wires have on our Clubhouse/pool? Can our existing tennis courts stay below the new, higher voltage lines? According to the DEIS in Chapter 12. Recreation (Section 12.5.3.1), the new higher voltage power lines will require a widening of the existing corridor by as much as 50' and that no buildings or houses will be allowed within the easement and/or below the lines. If this is true, then the Somerset Recreation Club, a recreation facility that has been in use for more than 50 years, may literally have to close its doors, because we would not be able to

O20-A-3

O20-A-4

- O20-A -1 See response for Key Theme REC-3.
- O20-A -2 See response for Key Theme REC-3.
- O20-A -3 See response for Key Theme ALT-1.
- O20-A -4 See response for Key Theme REC-3.

O20-A-4 | comply with the new expanded corridor requirements as our current clubhouse, tennis courts and possibly our pool would sit below these lines. As a result of these impacts to SRC, what mitigation will you provide?

Chapter 1 Section 2.3

O20-A-5 | In Section 2.3, the alternatives were presented and the overhead transmission lines and pole location were discussed. The DEIS did not mention ways to mitigate through design, location, and/or minimize the impacts associated with the removal of the 115 kV system and upgrading it to 230kv. This upgrade has significant impacts such as: the foundation location and size and the pole height on the SRC which is located in the existing transmission corridor.

The following are comments on each of the following Elements of the Environment that are included or should have been included in the DEIS.

ELEMENTS OF THE ENVIRONMENT

**Natural Environment
Chapter 3. Earth**

O20-A-6 | SRC (and the Somerset Community) is on a steep hill and adjacent to the Fault that is located along I-90. Based on our review of this element, the DEIS does not identify major issues nor provide significant mitigation measures to prevent damage to the SRC facility from poles and powerlines collapsing and the Olympic pipeline breaking due to significant seismic and/or storm events. In addition, construction impacts due to removing the old poles, the access to locations where the poles are located, and replacing them in the same location may adversely impact the SRC property/facility. Since SRC was not mentioned as a key facility in the region, no proposed mitigation measures were offered. Vibration (e.g. air and ground vibration) is a significant issue, due to the proximity of the poles to all the SRC structures (buildings, pool, and tennis courts). Also, the underground gas pipeline could be affected. The DEIS stated on page 3-14 that “no potentially significant adverse impacts related to work near pipelines are expected under any of the alternatives”. This seems to be an inaccurate statement, since the location of SRC is both near the Olympic pipeline and along the PSE corridor. We should be protected from immediate construction impacts, as well as any future impacts as a result of the construction activities, such as: the relocated poles (e.g. removing old poles and/or locating new poles, expanding the foundation of the new poles, easement encroachment, etc.).

Chapter 5. Water Resources

O20-A -5 | For a discussion of construction methods for removal of existing wooden poles and conductors and installation of new steel poles, see Section 2.3.2 of the Phase 1 Draft EIS. For project-level analysis and mitigation, see the Phase 2 Draft EIS and Final EIS.
O20-A -6 | See response for Key Theme EARTH-3.

O20-A-7

SRC has been impacted by a significant amount of storm water runoff from the hill/roadway along Somerset Blvd. This issue has undermined the SRC facility (e.g. Tennis Courts) and potentially the pole/pipelines that exist in close proximity to the facility. It may also adversely impact the potential location of the new and larger poles that may be placed adjacent to SRC. An analysis of this issue needs to be evaluated before any further action is taken.

Chapter 6. Plants and Animals

O20-A-8

The DEIS did not include an overview of the aquatic and terrestrial habitat within the entire study area. In addition, it failed to mention the impact of the potential removal of 8000 trees in the region due to the proposed action/alternatives. The SRC facility also has a number of mature trees around its perimeter that have been there for decades and would potentially be eliminated if the poles are removed and/or replaced. Historically, Bellevue has a problem with its canopy being reduced. As a result, PSE's actions should not contribute to this ongoing long term problem and it needs to enhance, not eliminate the tree canopy.

Chapter 7. Energy & Natural Resources

O20-A-9

Per the DEIS Section 7.2, it stated the "none of the study area communities have control over how PSE uses energy to provide power. However, all of the study area communities have comprehensive plan energy goals or policies that lead them to encourage, facilitate, promote, or participate in actions addressing climate change sustainability, or energy conservation and efficiency, or reduction of greenhouse gases". Since the City of Bellevue is the Lead Agency for the EIS process why are they allowing PSE to propose a project that has detrimental impacts on our individual and collective community. This project may eliminate the SRC facility or seriously impact it due to the size and location of the new power poles. As well as the adverse impacts or elimination of homes along the corridor in Somerset (thus reducing our overall membership base).

Lastly, the DEIS states that they anticipated no cumulative or significant adverse impacts (Section 7.8 and 7.9) to natural resources from any of the alternatives. This is incorrect and needs to be reevaluated, per the comments provided above.

**Built Environment
Chapter 8. Environmental Health**

O20-A-10

The environmental health for this proposed project includes Electric Magnetic Radiation, Hazardous Materials, Corona Ionization, and Noise. The DEIS concluded that there were "No cumulative adverse impacts to environmental health as anticipated" (page 8.46). However,

- O20-A -7 See response for Key Theme WTR-2.
- O20-A -8 See responses for Key Themes P&A-1 and P&A-2.
- O20-A -9 See responses for Key Theme ALT-2, Key Theme REC-3, and Key Theme VR-5.
- O20-A -10 See responses for Key Themes EMF-1 and EMF-2.

based on the contents of this section, this statement is inconsistent and in opposition with the information provided.

The following sections will provide an overview of the impacts. These issues are of particular concern to SRC due to our proximity to the PSE corridor and the fact that SRC has a heated pool (adjacent to) and tennis courts (directly below) the existing corridor. The EIS does not cover this, but we believe the proximity to water may increase the diverse effects and enhance the health hazard.

O20-A -11 See response for Key Theme NOI-3.

O20-A-10

Electric Magnetic Radiation (EMR)

The DEIS stated that epidemiological and other studies have reported an increased cancer risk associated with the estimates of magnetic field exposure. The EMR's, Noise and/or the Olympic Pipeline may have cumulative effects that caused these significant maladies.

Corona Ionization: The effects of corona ionization are also of particular concern for SRC, both physically and psychologically:

- 1) Given the humid air/rain in the PNW and the additional humidity provided by the heated pool area, the buildup and discharge of the corona ions as "static discharge" will most certainly have adverse impacts on SRC club members, in particular in an around the pool deck area.
- 2) The audible cracking and popping of the discharge along the lines and line-to-pole connections will also have negative impacts, as it should be obvious that electricity and water don't mix and therefore are important factors in how members enjoy their experience at the SRC.
- 3) It was also stated in the EIS that the corona ions adhere to other particles (airborne pollution, etc.) and can then be inhaled. Given the SRC pool and tennis courts are very near the power lines, these impacts most certainly apply.

Hazardous Materials: The Olympic Pipeline and its alignment with the transmission lines needs to be assessed to ensure that the pipelines is in good condition in Somerset and on/near SRC. Also, there is significant risk if the transmission lines through Somerset are upgraded. PSE and Olympic Pipeline must ensure that the residents are protected from construction and operation/maintenance impacts that may cause ruptures or damage to the pipeline and adjacent residences and facilities.

O20-A-11

Chapter 9. Noise (Per SEPA, this Category should be listed under Environmental Health)
 There is a significant noise issue ("it is not a relatively low noise level "per the DEIS) that is emitted from the PSE power lines. Members of the SRC (e.g. individuals using the SRC facility) and many of the residents that live along the corridor (who are also SRC members) often comment on the noise issue. The DEIS stated (page 1-33) that the existing transmission lines "may be audible...at adjacent sensitive land uses" such as homes and facilities, like SRC.

Chapter 10. Land Use & Housing

O20-A -12 See responses for Key Themes LU-3 and LU-4.
 O20-A -13 See response for Key Theme VR-1.

O20-A-12

As highlighted in the DEIS, the changes in Land Use in the proposed alignments will cause significant impacts in the region. As stated in other sections of this letter, there have been numerous erroneous statements, such as on Page1-36: "construction of action alternatives would be relatively short duration at any one location with negligible land use impacts". The impacts maybe in short duration, but land use impacts could be significant if the new pole placement and supporting structures impede on the existing SRC pool and structures.

On page 10-18, it was stated that the study area communities would have to "determine whether to designate the project as an EPF (Essential Public Facility) as part of the project-specific application process". Since this is the programmatic DEIS, it does not provide for a comprehensive analysis. However, we would like to state that based on contents of the DEIS and its attachments, and the information provided through community meetings, etc.; that the PSE's proposed EE project is not needed nor required to sustain the energy requirements of the region and that the potential alignment through Somerset has significant, adverse, and permanent impacts to the community and they cannot be mitigated.

On page 10-20, a discussion on the projects effect on land uses and housing would occur and "Specific designs for the project would need to be reviewed by each community to determine compliance with applicable zoning codes and regulations". SRC and the community have already reviewed the preliminary design and relevant document for this project and its alternatives and we would like to state that they are not in compliance with the COB codes and regulations.

On page 10-26, it provides a list of Study area communities, but it does not include the City of Bellevue and states that if is not listed in the table it would "appear to either allow the alternative outright or as a conditional use in all zones". Why was the COB's information not included in this table since they are the Lead agency for this DEIS? What is the COB list of restrictions in the Somerset area?

Also, SRC is currently partnering with the Forest Ridge School of the Sacred Heart (FRS) (also located in the Somerset neighborhood) to completely renovate the SRC facility, and PSE/COB indicated through previous contacts with both entities that there would not be any problems with the SRC's proposed architectural design for the renovation. However, based on the proposed action outlined in the DEIS, this now seems incorrect, and the \$7 - 10 million renovation jointly proposed by SRC and FRS may be in jeopardy if Alternative 1 (Energize Eastside) is chosen. This information has never been directly conveyed by PSE or COB to the Somerset Rec Club and/or the Forest Ridge School.

O20-A-13

Chapter 11. Views & Visual Resources

The Somerset Community was developed in the early 1960's and the views of Mt. Rainier to the Cascades from the areas homes and SRC are significant. This view has attracted and helped retain members at SRC for decades. The view is one of the reasons why our facility is full on sunny days and evenings with beautiful sunsets. In Section 11.3.2, 11.3.3 and 11.3.4, a list of

O20-A-13

visual resources and key viewpoints are provided, but the Somerset community/SRC were not included and should have been mentioned in these sections. Also, the private views were probably not included for the Somerset area as noted in Figure 11-12. There are 100's of homes and SRC that have views on both side of the hill. Any view blockage at SRC would minimize our financial viability, which is an economic issue that can be quantified.

O20-A-14

On page 11-1- it stated that "the importance of visual resources is subjective, based on the viewer's perspective". Also, in Section 11.1.2- it stated that "differences in actual assessed values are not useful for this evaluation because the data were inconclusive as to whether the reason parcels were valued differently was because of use restrictions within a power line easement, because of visual impacts, or for some other reason." However, realtors in the area have information that they can provide COB about types of views in the area and the home values with full, partial views, views of the power lines, and without views. This difference is significant and also has an affect the property values too. The greater the price of the home the greater the property value and contribution to the region for school levies, road improvements, etc. This issues should be addressed in the Economic section of the future EIS.

O20-A-15

Chapter 12. Recreation
 SRC's facility and other key private/community recreation facilities were not included to avoid placing overhead lines in recreation sites. "The enjoyment of recreation sites can be linked to visual quality and natural resources". Based on this statement, the power lines across Somerset and SRC should not be permitted per the COB's policies. Section 12.6 stated that "new infrastructure is located within recreation sites ... it will reduce user enjoyment of a recreation site through noise or visual impacts or changes to the resource- changes in light and shade; access to a recreation site, or disruption of informal recreation activities". The DEIS stated that the Phase 2 EIS will address these impacts. However, SRC and even the Somerset community would like to request that since our facility and the community has been impacted by the existing power line system for over 53 years, any further expansion/upgrade to the system would a significant and adverse impact and no proposed mitigation could compensate for the cumulative impacts to date. Section 12.7.1 offers another option, it states that "if recreation sites are affected and cannot be restored, they would be relocated and replaced as required; for example property could be purchased and a new recreation facility created".

In Section 12.5.1, it stated that if SRC is "unusable or access is completely blocked during peak use, then impacts are considered significant". Based on our review of the DEIS, "significant" impact would occur for all construction activities between May and September that would generate noise and aesthetics issues (see Chapter 14 below). Furthermore, any construction taking place on SRC property during peak use months of May through September that would block use of the SRC in any way could result in a loss of membership, and a decline in membership for even one summer season would be deleterious to the SRC's future financial viability. The SRC cannot underscore enough the criticality that any construction on SRC property must be done when the SRC is not open for business.

O20-A -14 See responses for Key Themes ECON-1 and ECON-2.
 O20-A -15 See response for Key Theme REC-3.

O20-A-16 **Chapter 13. Historic & Cultural Resources**
 SRC was built in 1963, and therefore because it is over 50 years old, it should be considered as a historic structures per Washington State Department of Archaeology and Historic Preservation, King County Historic Preservation Program and the following registers: National Register of Historic Places, Washington Heritage Register, and King County Landmark. Per the DEIS, currently no structure in the Somerset area has been listed. In addition, per the DEIS (Section 13.7), if “operational impacts to above ground resources may include noise, vibration, and views... The impacts of each identified historic resource will need to be assessed individually to determine mitigation measures, which may include redesign options or measures to minimize noise and vibration impacts”. SRC and the Somerset Community will investigate further to determine the mitigation measures that would be proposed.

O20-A-17 **Chapter 14. Transportation**
 SRC is located on Somerset Blvd. in the middle of the Somerset Community. The key potential transportation impacts to the SRC facility would be to access the facility and the parking lot(s). There is limited parking at our facility, so that potential construction impacts and long term operational impacts need to be reviewed and assessed to minimize impacts during our summer season and the swim team meets (There are often 100’s of people parking around the pool a day or two a week from May- July for these and other events.).

O20-A-18 **Chapter 15. Public services**
 In order for SRC to operate per governmental requirements, Police, Fire, and Emergency Response services must be able to access SRC facilities. So any and all potential construction activities will have to ensure access to the site and the facility.

O20-A-19 **Chapter 16. Utilities**
 The comments on the preceding Elements of the Environment cover our current basic issues and concerns. Both the existing transmission lines and proposed transmission line upgrade as well as the co-located Olympic Pipeline have to be evaluated further, with potential impacts/mitigation measures discussed. In addition, there is a telecommunications – Cell Tower (T-Mobile) on a PSE pole on SRC’s site and this system needs to be protected due to any proposed action, since it provides cell coverage in the area and rental income essential to SRC operations. The natural gas, other telecommunications systems, water, and wastewater utilities in the area have not been identified and will potentially be impacted.

O20-A-20 **Elements of the Environment that were not included- Economics**
 Economic analysis is often included in a DEIS and is an allowed part of the SEPA process. The DEIS (Section 10.7.1.4) stated that “the effect of transmission lines on property values is an economic rather than environmental issue as defined by SEPA”. This implies that it is not a criterion that would be allowed in the SEPA process. This is incorrect; Economics is an Element of the Environment in many SEPA EIS’s.

- O20-A -16 See response for Key Theme H&C-3.
- O20-A -17 See response for Key Theme TRAN-1.
- O20-A -18 See response for Key Theme SVC-3.
- O20-A -19 See response for Key Theme UTL-1.
- O20-A -20 See responses for Key Themes ECON-1, ECON-2, and ECON-3.

O20-A -21 Comment noted.

Also, Section 11.6.14 stated that the data was inconclusive about the reasons for different valuations set by Assessors and the degree to which various factors negatively impacted the property assessment. These statements are incorrect and an economic analysis would provide accurate and proven conclusions based on similar studies performed in the west.

Due to the EE significant impacts, it is essential that COB include in an economic analysis in the next EIS. SRC is also concerned about the economic impact on our Club, if construction of EE takes place on our property during the summer months when we are open.

O20-A-20

The DEIS also does not accurately state how property values are assessed. King County's property tax assessment is based on the statute. However, the market value is dependent on the economy and what potential buyers are willing to pay. If 85-100 foot towers are placed in a property owner's back yard and possibly on two locations at SRC and they both block views and access to the property, then this will result in lower property values. It will also reduce SRC membership to a point that we may have to close the facility. In addition to the effects of the transmission line upgrade, EE is proposing to upgrade and co-locate the new towers with the Olympic Pipeline corridor and this may also affect our property values and a construction issue may result in a hazardous event in the community.

Additional note - Outreach and Coordination

PSE has never met with the Somerset Rec Club's Board of Directors regarding EE's impact on our Club. It is a concern that due to the significant impact to SRC, we have not been given any information on the mitigation measures (e.g. potential reimbursement) that we would receive from PSE due to the impacts to our Club.

O20-A-21

Thank you for reviewing this comment letter. We look forward to receiving comments through the EIS process that adequately address our questions and concerns.

Regards,

Somerset Recreational Club and its Members

From: [Aaron Hoard](mailto:Aaron.Hoard@energizeeastside.org)
 To: info@energizeeastside.org
 Cc: Council@bellevuewa.gov
 Subject: UW Comments for Energize Eastside Phase 1 Draft EIS
 Date: Monday, March 14, 2016 5:13:04 PM

March 14, 2016

Heidi Bedwell
 Energize Eastside EIS Program Manager
 City of Bellevue Office of Planning & Community Development
 PO Box 90012
 Bellevue, WA 98009

RE: UW Comments for Energize Eastside Phase 1 Draft EIS

Dear Ms. Bedwell:

The University of Washington appreciates the opportunity to provide input on the Draft Environmental Impact Statement (DEIS) for Puget Sound Energy's Energize Eastside project.

The University has a strong and growing presence on the Eastside for students and patients. Here are a few highlights:

- UW's Professional and Continuing Education Program offers 119 courses on the Eastside associated with 21 certificate programs and two graduate degrees. Last year, more than 600 students were served by these courses.
- UW Medicine Neighborhood Clinics are located in Bellevue, Issaquah, and Woodinville. These clinics served over 34,000 individual patients last year.
- UW Bothell has programs that serve more than 5,200 students in Bothell and Bellevue.
- The Foster School of Business operates an Eastside Executive Center located in Kirkland. More than 130 students are registered in the Technology Management MBA Program there.
- The new Global Innovation Exchange (GIX) in Bellevue will serve more than 3,000 students by 2025. This program will provide students with project-based learning through a pioneering new partnership established jointly by the University of Washington and Tsinghua University.

The need for reliable power in our region, especially on the Eastside, is essential for UW's educational access. The University prepares students for successful lives and contributions to the economy, expanding research and scholarship that will foster innovation in the Puget Sound. We can't do this without reliable power for our facilities.

As such, we request that Alternative 1a be taken forward for further study in Phase 2 of the DEIS. Alternatives that may lead to blackouts or create uncertainty are not

O21-A -1 Comment noted.

O21-A-1



O21-A

COMMENT

RESPONSE

O21-A-1

acceptable. We also request that the process continue to move forward with no delay as time is of the essence for ensuring the Eastside's ongoing electrical reliability.

Thank you for the opportunity to provide feedback on this critical infrastructure project.

Sincerely,

Randy Hodgins
Vice President for External Relations
University of Washington

Phil Akers
Vice Chancellor for Advancement and External Relations
University of Washington – Bothell



Ms. Heidi Bedwell, Senior Planner
 Land Use Division-Development Services
 City of Bellevue
 450 110th Avenue NE
 Bellevue, WA 98004

Dear Ms. Bedwell:

The following comments are intended to represent the interests of residents in the Olympus neighborhood of Newcastle. As you know, a number of our residents are extremely concerned about environmental/safety impacts of the potential installation of 230 kV transmission lines through our neighborhood, which are currently identified as “Negligible to Minor” in the Phase I report (pages 1-50 and 1-53). We are concerned that this is dramatically understating the risks involved. Some municipalities “have policies or regulations that could specifically prohibit combining new or expanded transmission lines with hazardous material pipelines” (page 10-25). We also have concerns with the housing and visual impacts, both having potentially significant impact in the Phase I report. Olympus residents are particularly interested in a thorough, detailed, and objective evaluation of these risks and impacts.

O22-A-1

Alternative 1A would have significantly greater construction and operational impacts than other alternatives, including risk of explosion or hazardous emissions if the new transmission line were constructed adjacent to the existing fuel pipeline through Olympus. Given the high level of concern in Olympus about fuel pipeline safety, we believe specific and detailed measures that would be taken to prevent a pipeline rupture or to prevent hazardous emissions or explosion if a rupture occurred inadvertently, should be discussed, since these are potential significant impacts of Alternative 1A. (WAC 197-11-794(2) states: “An impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred.”) We believe these important safety issues (prevention and mitigation) need to be addressed in detail the Phase 2 EIS to include vibration, corrosion, earthquakes, and lightning strikes.

O22-A-2

Alternative 1A would also have potentially significant housing and view impacts. First, in order to construct the towers in a safe manner, a clear zone approximately 120 to 150 feet wide may be necessary (page 2-23). The current easement in the Olympus neighborhood would not be sufficient to meet those standards so homes would likely be eliminated as well as additional land needed for clear zones in this project. While costs may be outside the scope of the EIS process, PSE objectives state that costs should be “reasonable” (page 1-16), and the cost of “relocation assistance”, and the purchasing of necessary homes and land for clear zones, should be included in the evaluation of this project. Second, the views in the Olympus neighborhood (including Mt. Rainier) of a substantial amount of homes would be impacted which currently are unobstructed from the current height of the towers. This seems inconsistent with the desire to preserve “Visual Character” on the eastside.

O22-A-3

O22-A-4

O22-A-5

Third, we believe that the degradation to home values would be significantly affected even outside the view area due to the “comps” valuation method that realtors utilize in determining purchase prices. The above three impacts should be specifically quantified in the phase 2 report.

- O22-A -1 See responses for Key Theme PLS-3 and Key Theme PLS-4.
- O22-A -2 See response for Key Theme LU-5.
- O22-A -3 See response for Key Theme VR-5.
- O22-A -4 See responses for Key Themes VR-1 and VR-5.
- O22-A -5 See response for Key Theme ECON-3.



birding
conservation
education

11 March 2016

Development Services Department
Att'n: Heidi Bedwell, Energize Eastside EIS Project Manager
City of Bellevue
450 10th Ave. NE
Bellevue, WA 98004

Subject: Comments on Phase 1 Draft EIS, Energize Eastside Project

Dear Ms. Bedwell:

We are writing to offer some comments and questions on the Phase 1 document. As this phase is programmatic rather than site-specific, our comments are fairly general in nature. We expect to have more detailed ones for the Phase 2 project-level DEIS. For now, we are seeking to become part of the project record and obtain standing to participate in later phases.

Eastside Audubon is a chapter of the National Audubon Society, with approximately 1100 members living in east King County. Many of our members live near the transmission lines being considered in the DEIS. Some of them have participated in the public workshops PSE conducted over the past two years for this project.

We understand that public comments on a DEIS are intended to clarify the draft document, suggest additional ways to mitigate impacts, and possibly to help narrow down the alternatives. If indeed there is a need to increase power supplies in east King County, we would likely prefer the alternatives with the fewest new towers and transmission lines, such as the underground lines in

O23-A-1

308 Fourth Avenue S.
Kirkland, WA 98033
P.O. Box 3115
Kirkland, WA 98083-3115
phone 425.576.8805
eastsideaudubon.org
facebook.com/eastsideaudubon

O23-A -1 See response for Key Theme ALT-1.

O23-A-1

Alternative 1 C or the Integrated Resource Approach in Alternative 2. These would seem to least disturb the existing habitat for birds and wildlife.

The balance of this letter focuses on the following aspects of the Phase 1 document:

- Project Alternatives and Options
- Electromagnetic Radiation, EMF impacts
- Impacts on Plants and Animals
- Impacts on Recreation

Clarification of Alternatives and Options

Alternative 1, Option B, is described as using 15 miles of Seattle City Light's 230 KV overhead transmission lines through the Eastside study area. Page 2-26 says PSE has explored the idea of using this Seattle City Light corridor, although PSE does not own it. SCL has stated it needs the line to serve its customers. This would appear to be a deal-breaker, but the option is included in the DEIS"....so that, if conditions change, this option will remain open....."

It is hard to see if it is a serious alternative worth spending time to understand, or just a "straw man" sort of option being proposed just so it can be described in negative terms and then eliminated. What seems to be missing here is some idea of what might allow or cause conditions to change. Adding 230 KV lines and towers in an existing corridor that is already established through the service area seems so intuitively sensible, the reader wonders why PSE didn't probe the idea further. Is there a way to make the idea more appealing to SCL? Is there some kind of legal precedent for making greater use of an existing corridor? Could the PSE lines and towers be constructed in the SCL corridor without interrupting SCL's continued use?

O23-A-2

Section 2.3.2.3.1 says the replacement line may need to be constructed adjacent to the existing [SCL] line and placed into service prior to removing the existing structures and conductor. Does this suggest a possibility that with some widening of the existing corridor that both SCL and PSE transmission lines might co-exist in the existing corridor for the longer-term future? Would a change to state or city statutes make the deal more feasible, if the environmental benefits were substantial?

The 4th paragraph in Section 2.3.2.3 on page 2-26 says the re-build of the SCL line was estimated "...to provide sufficient capacity for a period of less than 10 years ...but it could otherwise attain or approximate PSE's objectives...." Does this mean that a whole different project would then need to be located somewhere else to serve growing power needs, or could further capacity be developed in the same SCL corridor? The DEIS should be clarified to explain whether Alternate 1, Option B is just a short-term temporary fix, or whether it could serve in the longer term.

O23-A -2 See response for Key Theme ALT-1.

O23-A-3	<p>Electromagnetic Radiation, EMF</p> <p>One power line effect that could vary between alternatives is electromagnetic radiation (EMF). Chapter 8 of the DEIS describes the many years of research that have been invested to determine if transmission lines actually have EMF-related health effects (e.g. childhood leukemia) on nearby residents. Chapter 8 of the DEIS conclusively states that “no impacts are anticipated from EMF or Corona Ionization”. But the text of Chapter 8 describes decades of research that does not unanimously support that statement. Since Alternative 1/Option A would introduce 18 more miles of <u>new</u> transmission lines than Option B, the DEIS should be modified to point out that if EMF hazards are ever verified, then Option A would have a greater adverse impact than Option B. The same comment applies to the 4th alternative that would introduce 60 miles of new 115KV transmission lines and towers more widely throughout the service area.</p> <p>PSE cannot just conclude that decades of EMF research have been decided in its favor, without at least clearly acknowledging that EMF hazards, if verified, would be higher with its Proposed Action, and with the 4th alternative mentioned in the above paragraph.</p>
O23-A-4	<p>Impacts on Plants and Animals</p> <p>The text on page 1-28 says overhead transmission lines under both Options A and B of Alternative 1 could result in significant impacts to threatened or endangered species or species of concern from collisions or electrocution. While the differences between Options A and B may be spelled out more completely elsewhere in the document, readers of this passage could easily get the impression that both options are very similar. But in fact PSE’s preferred Option A would introduce approximately 18 miles of <u>new</u> towers and 230 KV transmission lines, while Option B would utilize or replace Seattle City Light’s existing facilities, therefore introducing little or no new bird collision or electrocution hazards.</p>
O23-A-5	<p>Impacts on Recreation</p> <p>The overview of recreation on pages 1-39 and 12-3 lists a number of opportunities that can be enjoyed in the study area’s 235 recreation sites. In addition to the activities listed such as hiking, biking, horseback riding, etc., we suggest the addition of <u>birding</u>. The Phase 1 DEIS authors may have assumed birding is part of the “nature viewing” category, but it is different in important ways.</p> <p>This suggestion is not merely because birding is Eastside Audubon’s main interest, but because the Energize Eastside project consists of 18 miles of towers and lines at a typical height of 85 to 100 feet. Therefore birds are particularly affected by the project, as are the recreation and educational pursuits related to them. In this respect they are quite different from activities like</p>

- O23-A -3 See responses for Key Themes EMF-1 and EMF-2.
O23-A -4 See response for Key Theme P&A-6.
O23-A -5 See response for Key Theme REC-2.

O23-A-5

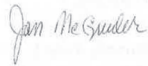
hiking, biking and horseback riding which could coexist with the project, though perhaps at some diminished level of enjoyment. Bird impacts, on the other hand, could be much more negative in the vicinity of the transmission lines and towers. For this reason we think the Phase 2 DEIS recreation impacts should highlight birding as a distinctive subject of concern.

Table 12-2 on page 12-6 listing recreation sites in various jurisdictions could be made more complete by adding the Cross Kirkland Trail to Kirkland's inventory. The same can be said about the full length of the Eastside Rail Corridor that King County is now planning and for which a Draft EIS is in public review. In the Phase 2 DEIS where site-specific impacts will be discussed, these linear open space corridors will be important. The corridors are bordered by some high-quality woodlands and wetlands, so any habitat fragmentation caused by transmission facilities could be significant.

Conclusion

Thank you for the opportunity to comment on the Phase 1 DEIS. Please keep us informed of future public meetings, project reports, and publication of the Phase 2 document. If you have any question about the comments in this letter, please contact us at (425) 576-8805.

Sincerely,



Jan McGruder, President



Peter Marshall, Conservation Chair



March 11, 2016

Heidi Bedwell
 City of Bellevue
 Development Services Department
 450 110th Avenue NE
 Bellevue, WA 98004

RE: Comments for Energize Eastside Phase 1 Draft EIS

Dear Ms. Bedwell:

On behalf of the Bellevue Medical District, we are writing to share brief comments for the Energize Eastside Phase 1 Draft EIS.

We must have power available to meet both the immediate and long-term demands of our emergency, surgical, intensive care and records systems in order to provide quality medical care to the people of the Eastside.

O24-A-1

We ask you to review proven solutions that will ensure PSE can supply reliable electricity to serve our expanding Eastside region. As we have learned, PSE's infrastructure is not presently equipped to serve projected customer energy demands in Bellevue and throughout the Eastside, which will have a crippling effect on our ability to accommodate the health and safety needs of the local community. It becomes a major public safety issue if our hospitals and medical facilities are not powered in a consistent and reliable way. Every minute of every day, we depend on a steady delivery of power to our buildings, which cannot occur without reliable electrical infrastructure.

O24-A-2

We support proceeding with environmental review only of the alternatives that will solve the problem, specifically Alternative 1a. While we understand a review of "no action" is required, this alternative would significantly undermine our ability to continue to provide consistent and critical care to the Eastside community.

We appreciate the opportunity to offer these comments and look forward to the process continuing into Phase 2 of the EIS in a timely manner.

Sincerely,

T. D. Sam Baxter
 Vice President of Professional Services
 Overlake Medical Center

Bill Biggs
 Vice President, Administrative Services
 Group Health Cooperative

Todd Johnson
 Vice President of Facilities and Supply Chain
 Seattle Children's

O24-A -1 See response for Key Theme SVC-4.

O24-A -2 Comment noted.



March 4, 2016

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 Peggy VanDusen

Heidi Bedwell
 City of Bellevue Development Services Department
 450 110th Avenue NE
 Bellevue, WA 98004

Re: Comments for Energize Eastside Phase 1 Draft EIS

Dear Ms. Bedwell:

On behalf of Bellevue LifeSpring, I am writing to submit comment on the Energize Eastside Phase 1 Draft EIS.

O25-A-1

Bellevue LifeSpring serves children and their families living in poverty in Bellevue. We provide emergency crisis support for families when they are threatened with having their utilities cut off due to an inability to pay. We know that there are families here that are living paycheck to paycheck and are having to make decisions between paying rent and feeding their children. For this reason, it is important to keep the costs of developing this project in mind.

O25-A-2

I urge you and the Development Services Department to consider the most affordable option for residents when making the decision on this project. Alternative 1a, using existing technology along an existing corridor, seems to be the most affordable option for our community. Alternative 2 relies on unproven new technologies that will undoubtedly come with significant costs.

O25-A-3

Alternative 3, proposing over 60 miles of new lines (where there currently aren't any), would come with high construction and property acquisition costs. Finally, a no action alternative puts our most vulnerable population at even more risk with the potential for rolling blackouts.

O25-A-4

O25-A-5

O25-A-6

We know that the goal of Energize Eastside is to improve reliability and dependability of the system while improving capacity to accommodate growth in our area. We just ask that you keep in mind that any significant increase in utility bills can adversely impact our low-income community.

Thank you for the opportunity to address our concerns.

Sincerely,

Jennifer Fischer
 Executive Director

Office: P.O. Box 53203
 Bellevue, WA 98015 – 3203
 Thrift Shop: 167 Bellevue Square
 Bellevue, WA 98004

Tel: 425.451.1175
 Fax: 425.451.1088

www.bellevuelifespring.org
 info@bellevuelifespring.org

- O25-A -1 See response for Key Theme ECON-4.
- O25-A -2 See responses for Key Themes ECON-3 and ECON-4.
- O25-A -3 See response for Key Theme ECON-3.
- O25-A -4 See response for Key Theme ECON-3.
- O25-A -5 Comment noted. Also see response for Key Theme OBJ-1.
- O25-A -6 See response for Key Theme ECON-4.



OneRedmond

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Nicole Yurchak
Investor Relations
Swedish Medical Group

2/25/2016

City of Bellevue
Development Services Department
Attn: Heidi Bedwell
450 110th Ave NE
Bellevue, WA 98004

Thank you for the opportunity to comment on the project scoping Draft EIS for Energize Eastside. OneRedmond is a public private partnership with a mission to expand and retain local employers, attract new companies and create community vitality in Redmond and the Eastside. We were an active participant in the Energize Eastside process that evaluated alternatives for providing power to the region.

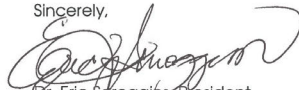
OneRedmond continues to strongly support 'Alternative 1- New Transformer and Transmission' Alternative 1(a) in the Draft EIS. It is the only alternative being considered that ensures that businesses in the PSE service area will have adequate, quality and reliable power for their needs. It is the only alternative that should be considered in Phase 2 of the EIS.

None of the information presented during the Energize Eastside Draft EIS process supports the viability of any of the other options considered. The businesses that are driving the regional economy and those that we seek to grow cannot operate in an environment without a quality power supply and delivery system.

OneRedmond is concerned that delay of this project coupled with the current robust economic growth that electric demand will outstrip supply before the project is completed. Additionally, the No Action alternative would have a devastating economic impact on Redmond and this region. A timely completion of the EIS and the overall project is therefore imperative.

Thank you for your consideration of this input.

Sincerely,



Dr. Eric Scroggins, President

O26-A -1 Comment noted.

O26-A -2 Comment noted.

From: [Claire Hoffman](#)
To: [Karmen Martin](#)
Subject: FW: Eastside Energize EIS Comments... Gas Turbines
Date: Monday, February 01, 2016 1:56:40 PM

From: Keith Watts [mailto:tango_zulu@hotmail.com]
Sent: Friday, January 29, 2016 1:23 PM
To: Info@EnergizeEastsideEIS.org
Subject: Eastside Energize EIS Comments... Gas Turbines

To whom it may concern,

It is not my first choice to install gas turbines, micro-turbines or reciprocating engines for peak power generation in the study area described in Alternative 2. However, if gas turbines enable Alternative 2 to be a viable option and buys time to find a lower GHG replacement for the gas turbines than I might support that.

I1-A-1

Reasons include:

1. extra GHG emissions.
2. air quality issues, stagnant trapped air (due to temperature inversions), cold snaps that could last 5 days or more.
3. increased demand on existing natural gas and water supplies requiring major upgrades.
4. is opposite the cities goals sited in section 4.2.4.

Details:

Regarding Section 2.3.3 Alternative 2 Integrated Resource Approach... Section 2.3.3.3.1 Page 2-39 Gas Turbines.

I1-A-2

I am concerned that running three 20MW gas turbines near downtown Bellevue during a peak load event in the winter during a 5 day cold snap usually accompanied by a burn ban, **stagnant air** and a **temperature inversion layer**. This is like having a cruise ship or destroyer parked in Meydenbauer Bay stationary running its engines full speed for 5 days. This seems it would have an inverse impact on air quality and noise in the Bellevue Area. The same goes for micro-turbines and reciprocating engines. I am concerned about the emissions of GHG.

Regarding section 4.5.1

which defines Moderate emissions of Green House Gases as... greater than 10000 metric tons per year threshold **with best practices**. I didn't see a definition of "best practices" referenced but it seems that running three 20MW turbines is not a best practice in the context of reducing GHG. Is "best practices" referring to "engineering controls and purchase of offsets" referenced in Section 4.9? Is this the same as "**mitigation**" referred to in section 4.6.4.4? Emitting 10000 metric tons of carbon per year seems unnecessary considering we

I1-A -1 See responses for Key Themes ALT-1 and ALT-3.

I1-A -2 See response for Key Theme GHG-2.

I1-A-2

live in a state that produces an excess of hydroelectric power just 150 miles away at the Columbia River. Surely we should not be creating more carbon emission sources. I am concerned they will run more than just at peak load times.

Regarding section 4.6.4.4, second paragraph, last sentence...
It states that running three 20MW gas turbines would have a **moderate** Green House Gas impact warranting **mitigation**. How does one mitigate 10000 metric tons of carbon emissions per year? Is it by using "a combination of **engineering controls** and **the purchase of offsets** (section 4.9)? What are engineering controls? Some of us are trying to reduce our carbon footprint by driving plug-in cars, buying efficient natural gas furnaces, using mass transit, using led bulbs at additional personal expense. I am a participant of the PSE Green Power Program. Wouldn't this undo my efforts?

Regarding Section 4.9,
Section 4.9 makes a good argument for Alternative 1 a,b,c,d or Alternative 3 regarding GHG emissions versus Alternative 2. Also on page 1-49 Summary of Impacts by Alternative 2 states that.... **increased demand for natural gas** and water to supply simple-cycle generators could require upgrades to major gas and water supplies. Wouldn't this require a whole new project with a whole new set of impacts, a whole new EIS?

I1-A-3

Regarding Section 9.6.4.1 Noise
Section 4.9 talks about the noise of generating peak power. The EIS doesn't specify the type of equipment to be selected in order to go into detail in order to describe the noise levels during stagnant air conditions as those found during 5 day cold snaps in winter. I found a brochure for a Siemens Peak Power Gas Turbine Engine which says its noise level is 85 db which is higher than the 65 db stated in the EIS.
<http://www.energy.siemens.com/us/pool/hq/power-generation/gas-turbines/SGT-400/Brochure%20Gas%20Turbine%20SGT-400%20for%20Power%20Generation.pdf>

I1-A-4

I haven't found a discussion in the document about estimating air pollution to the local area from the gas turbines. I must have missed it.

Summary... installing gas turbines seems opposite to the cities goals reducing carbon emissions referred to in Section 4.2.4. However, If gas turbines enable Alternative 2 to be a viable option and buys time to find a lower GHG replacement for the gas turbines than I might support that.

I am still reviewing the EIS. For the most part, I like the detail and discussion of alternatives. Wow!

Thank you... to the EIS and energize eastside team... for all their hard work.

I1-A -3 See response for Key Theme NOI-2.
I1-A -4 See response for Key Theme GHG-1.

I1-A

COMMENT

RESPONSE

Keith H. Watts
5635 178th Ave SE
Bellevue, WA 98006
425-505-4057
1/29/2016



COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
I1-B-1	<p>"50,000 EV's by 2020"??? It is possible. We should consider the impact the Washington EV Action Plan 2014 will have on electricity demand on the Eastside. I have not heard this mentioned in the EIS. The WA EV Action Plan states... "This plan is intended to inform policy-makers, elected officials, and local leaders about the electric vehicle landscape in Washington, and identify actions that would drive further electric vehicle adoption. This plan sets forth actions that will ensure we continue our momentum, and achieve the state's goal of 50,000 EVs by 2020" It goes on to say.. "Creating a robust market for electric vehicles will help:</p> <ul style="list-style-type: none"> • Meet state goals to reduce greenhouse gas emissions. • Protect public health and air quality. • Promote economic growth. • Save drivers money." <p>The WA electric car adoption study does not mention the need to upgrade the grid infrastructure to handle it. Perhaps it should. I couldn't find anywhere in the EIS phase 1 that mentions the impact of additional electric car adoption. Would the additional demand caused by electric car adoption offset (cancel out) conservation efforts described in Alternative 2?</p>	3/6/2016 19:36:11	Keith	Watts
I1-B-2				

I1-B -1 See response for Key Theme EIS-3.
 I1-B -2 See response for Key Theme EIS-3.

From: [Claire Hoffman](#)
To: [Karmen Martin](#)
Subject: FW: DEIS Public Comments
Date: Monday, February 01, 2016 1:56:35 PM

From: Russell Borgmann [mailto:rborgmann@hotmail.com]
Sent: Friday, January 29, 2016 6:19 PM
To: info@energizeeastsideEIS.org
Cc: rborgmann
Subject: DEIS Public Comments

The following DEIS comments address the failure to include reasonable alternatives to the proposal, and the need for additional studies. My comments also address EIS process concerns that were raised during the first Open Comment Period and have not yet been addressed.

Where are the independent data for this Programmatic EIS that ascertains the validity of the first Project Objective, "Address PSE's identified deficiency in transmission capacity"? The Programmatic DEIS must independently determine there is indeed a transmission capacity deficiency. The City of Bellevue, and other jurisdictions, are not permitted to take PSE's premise at face value. Our cities are held to a higher standard and are bound by a broader, sworn responsibility to "work for the Common Good, recognizing that stewardship of the public interest must be their primary concern".

The U.S.E. Report, the Quanta Study, and the StanTec Report only verified PSE's process. Those reports did NOT independently analyze the underlying raw data. Those reports merely 'rubber-stamped' PSE's process without providing any independent analysis of the raw data to determine if a transmission capacity deficiency even exists in the foreseeable two decades or beyond.

Depending on circumstances and their audience, PSE has alternately portrayed the proposed Energize Eastside project is needed based on "growth" vs. "reliability". Growth vs. Peak Demand (reliability) is like comparing apples to oranges. Plenty of factual data are available to contradict PSE's premise. Load growth is declining. Peak Load demand is declining.

Growth: PSE tells the public that there will be "cascading blackouts" and the "lights will go out" due to increasing "demand" from significant population growth and employment growth. Example: One of PSE's recent banner ads state, "When will Eastside growth overload the electric grid? It could happen as soon as 2017."

The **U.S. Energy Information Administration** has proven over the last decade that there is no longer a 1-to-1 correlation between employment/population growth and electricity usage. Now only a TENUOUS connection exists between employment/population growth and the possibility of increased peak moments, due to more efficient appliances, energy efficient buildings, renewable energy sources, co-generation, demand-side response programs, and conservation. *"...the long-run trend of slowing growth in electricity use relative to economic growth will also continue: the rate of projected growth in electricity use will be less than half the rate of economic growth..."*.

I2-A -1 See response for Key Theme EIS-1.

I2-A-1

References: <http://www.eia.gov/todayinenergy/detail.cfm?id=10491>
www.ci.bellevue.wa.us/pdf/Manager/Final_Electrical_Reliability_Study_Phase_II_Report_2012.pdf (pgs 49, 89, 90)
<http://blogs.barrons.com/incomeinvesting/2014/05/23/barclays-downgrades-electric-utility-bonds-ssees-viable-solar-competition/>

PSE's own 10Q financial filings state the same conclusion: ***"PSE also expects energy usage by both residential electric and natural gas customers to continue a long-term trend of slow decline primarily due to continued energy efficiency improvements."***

<http://www.sec.gov/Archives/edgar/data/81100/000108539214000021/pe-2014630x10q.htm#sECFFE0B0BBD3FE26F216FC9CD7981795> (pg 37, under heading **Customer Demand**)

Peak Demand: PSE regulatory filings describe a very specific peak demand RELIABILITY problem that occurs under very specific, rare, and simultaneous conditions: an extremely cold (<23F) winter weekday (M-F) around 6-9am or 5-8pm, 2-of-4 eastside transformers are offline, 6-of-8 western WA emergency generation plants are offline, huge amounts of electricity are flowing Canada, AND an additional outage hits a radial line between Renton and Sammamish. NINE simultaneous events.

Peak Demand (reliability) is addressable via better solutions than a new transmission line. Combinations of solutions can be achieved at a lower cost, with higher reliability, and with less environmental impact. PSE is mixing apples and oranges – Growth vs. Peak – depending on what's convenient in an attempt to sell their case. **Growth vs. Peak Demand (reliability) are two separate problems - measured and addressable via different solutions.**

Customers are being asked to overpay for reliability to falsely insure against an extremely unlikely climax of events - NINE events occurring simultaneously, N-9. FERC and NERC require infrastructure investments to avoid N-2 situations. Before PSE electricity customers are required to pay nearly \$1billion dollars over 40 years for Energize Eastside, PSE must numerically articulate precisely how many fewer outages the Eastside can expect to see. Numerically, how much will reliability increase?

- Peak Load hours occur during a 6-hour period (6am-9am and 5pm-8pm)
- Over the past 16-year period, the region's temperature dipped to 23F, or below, on 70 days.
- Of those 70 days, only 44 days occurred on weekday work days (non-weekend, non-holiday).
- 44 days x 6 hours = 264 hours vulnerable to Peak Demand outages, worst case.
- During that same 16-year period, 139,992 hours are not vulnerable to Peak Demand outages.
- Assuming Energize Eastside avoided a power outage during every peak usage hour (264 hrs), **Energize Eastside provides a maximum reliability improvement of 0.2%.** (264hrs / 139,992 hrs).
- This does not include the remote probability of a simultaneous failure of 2 major transformers, which further decreases the reliability improvement that Energize Eastside

could provide.

- Assuming PSE's worst case scenario, 30,000 customers could lose power - 2.7% of PSE's 1.1 million electricity customers. All 1.1 million PSE electricity customers will pay for Energize Eastside—a project that at best might benefit 2.7% of PSE's customers.
- In reality, PSE enacts Corrective Action Plans (CAPs) to ensure those 30,000 customers will not lose power due to Peak Demand, as required by NERC and FERC. The existing Bulk Electric System is set-up to handle Peak Demand situations without any transformers exceeding their winter emergency ratings. PSE erroneously used summer emergency ratings in their power flow simulations, even though this region's peak demand situations occur in winter.

Is it worth \$1billion dollars for such a nominal increase in reliability? Before we pay \$1billion dollars for a hypothetical miniscule improvement in reliability, the City of Bellevue, and other eastside jurisdictions must analyze and assess how we can make measureable, meaningful improvements to the electricity grid for a fraction of the cost. It is their fiduciary duty to its citizens.

It is of utmost importance that the Programmatic Phase 1 EIS accurately, and **independently**, analyze **TYPE of NEED** (Growth? Reliability/Peak Demand?), the **SIZE of the need**, and the **TIMING of the need**, before discussing right-sized implementation of mixed alternatives and/or mitigations.

One must also ask **is it within the realm of possibility** that the following individuals:

Andrew Chapman (Sr. Managing Director of Macquarie Infrastructure (Australian hedge fund and PSE joint owner); also PSE Board Director)

Alan James (Sr. Managing Director of Macquarie Infrastructure and PSE Board Director)

Christopher Leslie (Sr. Managing Director of Macquarie Infrastructure and PSE Board Director)

Daniel Fetter (Sr. Principal of Canadian Pension Plan Investment Board (PSE's Canadian joint owner); also PSE Board Director)

Daniel Doyle (PSE Sr. VP and Chief Financial Officer, and former executive of ATC)

Mark Williamson (PSE consultant/lobbyist, and former executive at ATC)

have **devised a financial scheme exploiting questionable legal loopholes to achieve the profit needs of PSE's private equity shareholders** (PSE's joint owners - the Australian hedge fund, Macquarie, and the Canadian Pension Plan), at the expense of 1.1 million unwitting PSE electricity customers?

References: <http://www.wsj.com/articles/utilities-profit-recipe-spend-more-1429567463>

<http://wolfstreet.com/2016/01/01/happy-new-year-americas-largest-utility-jacks-up-rates-the-most-since-2006/>

[despite-total-collapse-of-natural-gas-prices/](#)

<http://www.sightline.org/2012/04/19/pse-should-do-the-math-and-show-its-work/>

<http://www.abc.net.au/pm/content/2007/s1938221.htm>

<http://www.sec.gov/Archives/edgar/data/81100/000108539214000021/pse-2014630x10q.htm#sECFEF0B0BD3EE26F216FC9CD7981795> (pg 32: "PSE's credit facilities expire in 2019 and Puget Energy's senior secured credit facility expires in 2018.")

<http://www.zerohedge.com/news/2014-12-10/here-are-americas-most-levered-energy-companies>

(line #5, Macquarie Infrastructure Company, 5th most leveraged energy company in U.S.)

<http://isthmus.com/news/cover-story/atc-has-the-power/>

<http://www.wsn.org/energy/ArrowheadWestonsandal.pdf>

<http://www.wetmachine.com/inventing-the-future/nimby-indeed/> (Wisconsin AG investigating role that ATC and its corruption have had in increasing rates for other state's citizens)

The financial motives, incentives, and objectives for the proposed Energize Eastside project are clearly identifiable. Energize Eastside will cost 1.1 million electricity customers close to \$1billion dollars over the next 40 years. PSE has successfully petitioned the WUTC to grant a 10.3% Rate of Return on this project.

http://www.oaitoasis.com/PSE/PSE/docs/Formula_Rate_Settlement_Package.pdf (bottom of pg 4, top of pg 5)

There are billion-dollar-reasons why Energize Eastside makes sense; however, the TECHNICAL DEMAND and the TECHNICAL NEED for Energize Eastside are far from conclusive. The City of Bellevue and other jurisdictions are obligated to its citizens to conduct truly independent analyses of the NEED, PURPOSE, and ALTERNATIVES in this Phase 1 Programmatic DEIS. The current Draft EIS falls well short of that objective.

Sincerely,

Russell Borgmann

2100 120th Place SE

Bellevue WA 98005

rborgmann@hotmail.com

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideeis.org
Cc: borgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments
Date: Wednesday, February 03, 2016 9:18:17 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

The following questions are directed at the DEIS "Alternatives" category, particularly related to **economic impact**. I do not see a relative comparison of costs nor an analysis of the economic impact of Energize Eastside discussed in the DEIS. The programmatic DEIS must examine the most cost-effective and most fair cost-allocation of alternatives. As part of the public record for the Energize Eastside EIS process, I submit the following questions and information.

In a recent complaint to FERC regarding Energize Eastside, FERC ruled, "*The record before us shows that the Energize Eastside Project is located completely within Puget Sound's service territory, ... and that neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation; therefore, the project is not subject to the Order No. 1000 regional approval process.*"

Previous Memoranda of Agreement between Bonneville Power Administration (BPA), Seattle City Light (SCL), and Puget Sound Energy (PSE) have shown that the three entities were working together to address more power delivery to Canada:

<http://clerk.ci.seattle.wa.us/~scripts/uph-bps.exe?i=C&OR&s1=123779.ordn.&Sscfg=HTDTEF&l=20&p=1&u=-/public/chorL.htm&r=1&f=G>
<https://www.bpa.gov/news/pubs/FactSheets/fs200709>
[BPA%20to%20automate%20transmission%20curtailment%20procedure%20for%20the%20Puget%20Sound%20Area.pdf](http://www.energizeeastsideeis.org/uploads/4/7/3/1/47314045/2015-06-01_moa_with_bpa-seattlecitylight-pse.pdf)
http://www.energizeeastsideeis.org/uploads/4/7/3/1/47314045/2015-06-01_moa_with_bpa-seattlecitylight-pse.pdf

Subsequently, in the **Puget Sound Area Study Team (PSAST)** Report, PSE offered to build the Energize Eastside project (nee: Sammamish-Lakeside-Talbot project). That report acknowledged additional 230/115kV transformation for the eastside as well as satisfied the BPA/PSE/SCL goal of delivering more power to Canada: "*A major benefit of the Sammamish-Lakeside-Talbot option is that it would provide necessary load service to Lakeside Substation which the Maple Valley-SnoKing options would not. It would also provide two new north-south, high capacity 230kV parallel circuits, strengthening the grid underlying the single Monroe-Echo Lake 500 kV line. Pursuing the Sammamish-Lakeside-Talbot option at this time does not preclude reconductoring the Maple Valley-SnoKing lines at a later time.*" (pg 15 of 21)
<https://www.columbiagrid.org/download.cfm?DVID=2157>

PSE's Sr. Project Manager for Energize Eastside, Jens Nedrud, stated in email on January 28, 2016 that power flows to Canada "are **required** to be included in the PSE load flow studies, as the electrical system serving the Eastside is part of the regionally integrated electric system. It is not optional."

Power transfer to Canada is one of the 6 key assumptions in PSE's **Needs Assessment Report**: "*Winter electricity transfer between the USA and Canada were assumed to be 1,500 megawatts (MWs) flowing from the USA to Canada.*" (bottom of pg 3)

I2-B -1 See response for Key Theme ECON-3.

I2-B-1

http://www.energizeeastside.com/Media/Default/Library/EastsideNeedsAssesmenReportTransmissionSystem-final_v2.pdf
 Public Records searches have found no evidence of the USA ever actually supplying power to Canada remotely close to the magnitude of 1,500MW. **Please ask PSE to validate this key assumption and provide evidence of 1,500MW having ever been actually supplied from the USA to Canada, or provide documentation showing why PSE is REQUIRED to model 1,500MW of power flow from the USA to Canada.** BPA states no such contractual requirement exists.

As FERC states above, PSE did NOT request “to have Energize Eastside selected in the regional transmission plan for purposes of cost allocation.” It is apparent that PSE is willing to have its own customers pay the entire cost of this Bulk Electric System enhancement. PSE clearly could have, **AND SHOULD HAVE**, requested that Energize Eastside be selected in the regional transmission plan for appropriate cost allocation to other entities besides PSE electricity customers, solely.

I2-B-2

PSE’s power flow modeling to Canada were assumed, **NOT required**. PSE **electd** NOT to have Energize Eastside selected in the regional transmission plan. PSE has simply chosen to have Energize Eastside accomplish the goal of permitting more transmission capacity to Canada without asking for cost contributions from BPA, SCL and others. If PSE is required to include Canadian Entitlement power in their load flow studies, then PSE should also be required to submit the Energize Eastside project as part of the regional transmission plan for cost allocation purposes. **PSE can’t have it both ways – claim it is required to include Canadian Entitlement power in load flow studies, then turn around and elect to have Energize Eastside OMITTED from regional transmission planning for cost allocation purposes.** By electing not to include the Energize Eastside project in the regional transmission plan, PSE avoids FERC Order 1000 compliance and side-steps NEPA review. It further begs the question: How much will PSE profit from power wheeling excess power to/from Canada through the proposed Energize Eastside transmission path?

I2-B-3

The City of Bellevue and other eastside jurisdictions have a fiduciary duty to its citizens to investigate and provide the most cost-effective improvements to the electricity grid. PSE’s risky behavior of telling half-truths, duping citizens, and misleading eastside jurisdictions via actions that could be construed as bait-and-switch fraud, are worthy of WUTC and Attorney General investigations. PSE is not acting in the citizens’ best interests. PSE, a private investor-owned utility, has a stated goal to grow revenue and maximize profit. The City of Bellevue must act in the best interests of its citizens. The DEIS is woefully inadequate in assessing the **TYPE of NEED** (Growth? Reliability/Peak Demand?), the **SIZE of that need**, the **TIMING of that need**, as well as the **economic impacts** and **relative comparison of costs of viable alternatives**.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue, WA 98005
rborgmann@hotmail.com

- I2-B -2 See response for Key Theme ECON-4.
- I2-B -3 See responses for Key Theme EIS-1 and Key Theme ECON-3.

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastside.org)
To: info@energizeeastside.org
Cc: rborgmann@hotmail.com; stokes@bellevuewa.gov; jchelninjak@bellevuewa.gov; jrobertson@bellevuewa.gov; robinson@bellevuewa.gov; clis@bellevuewa.gov; knwallace@bellevuewa.gov; ysalter@bellevuewa.gov; cheland@bellevuewa.gov; hmiyake@bellevuewa.gov; hbedwell@bellevuewa.gov; rkouchi@utc.wa.gov; arendahl@utc.wa.gov; simon@atq.wa.gov
Subject: Energize Eastside DEIS Public Comments: Reliability vs. Cost
Date: Monday, February 08, 2016 2:21:09 PM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding a comparison of the increased reliability vs. comparable costs of the Energize Eastside project. The DEIS should include a numerical analysis of the expected increase in reliability vs. the relative cost of each alternative. I would expect to see a table, similar to this:

Alternative	Environmental Impact	Calculated Increase in Reliability	Estimated Cost to Customers
1 Energize Eastside	Greatest land use and housing impacts (DEIS chapter 10-1)	0.2%	Approx. \$1 billion over 40yrs
2 Integrated Resource Approach	Fewest land use and housing impacts (DEIS chapter 10-1)	Incrementally increases based on need	Incrementally implemented depending on demand
3 New 115kV Lines & Transformers		?	?

The proposed **Energize Eastside** project **provides** a theoretical **maximum reliability improvement of 0.2%**, yet it will cost customers approximately **\$1 billion** over 40 years:

- Peak Load hours occur during a 6-hour period (6am-9am and 5pm-8pm)
- Over the past 16-year period, the region’s temperature dipped to 23F, or below, on 70 days.
- Of those 70 days, only 44 days occurred on weekday work days (non-weekend, non-holiday).
- 44 days x 6 hours = 264 hours vulnerable to Peak Demand outages, worst case.
- During that same 16-year period, 139,992 hours are not vulnerable to Peak Demand outages.
- Assuming Energize Eastside avoided a power outage during every peak usage hour, which is

I2-C -1 See response for Key Theme ECON-3.

I2-C-1

unlikely (264 hrs), **Energize Eastside provides a maximum reliability improvement of 0.2%**. (264hrs / 139,992 hrs). In reality, the increase in reliability will be even less.

- PSE has successfully petitioned the WUTC to grant a 10.3% Rate of Return on this project, which will cost customers approximately \$1 billion over 40 years.

http://www.oatloasis.com/PSEI/PSEIdocs/Formula_Rate_Settlement_Package.pdf (bottom of pg 4, top of pg 5)

Is it worth \$1billion for such a nominal increase in reliability?

The City of Bellevue has a fiduciary duty to its citizens to explore all viable alternatives for reliable, affordable electricity. The Programmatic EIS does not adequately address reliability vs. cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives.

City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs. Before we pay \$1billion for a miniscule improvement in reliability, please analyze and assess how we can make measureable, meaningful improvements to the electricity grid for a fraction of the cost. It is the City's fiduciary duty to its citizens.

Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

I2-C-2

I2-C -2 See responses for Key Theme OBJ-1 and Key Theme ALT-1.

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: Info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com; [Elbert UJ Stockberger](mailto:Elbert_UJ@Stockberger.com); jhelminiak@bellevuewa.gov; jrobertson@bellevuewa.gov; robinson@bellevuewa.gov; clse@bellevuewa.gov; kwallace@bellevuewa.gov; ysalter@bellevuewa.gov; cheland@bellevuewa.gov; hmiyake@bellevuewa.gov; hbedwell@bellevuewa.gov; rkouchi@utc.wa.gov; arendahl@utc.wa.gov; simon@atq.wa.gov
Subject: Energize Eastside DEIS Public Comments: Cost Allocations Concerns
Date: Tuesday, February 09, 2016 11:02:20 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS process. The DEIS Process does not adequately address questions surrounding appropriate cost allocation of the proposed Energize Eastside project.

How much will PSE profit from “power wheeling” electricity through the proposed Energize Eastside transmission lines? Power wheeling is the practice of allowing electricity, generated by others, to flow through transmission lines owned by another utility. With PSE installing flow gates on the Energize Eastside terminus, it collects a toll on the electrons as they flow by on their way up and down the western seaboard, from Canada to California. Think of power wheeling as a toll on the electrical grid highway.

Since the electricity grid is interconnected, the Western Electricity Coordinating Council (WECC) shows approximately 1/3 of the heavy winter base case flowing through the one of the proposed Energize Eastside 230kV transmission lines. PSE has refused to share their power flow studies with independent experts. Why?

How much will PSE benefit/profit from power-wheeling? Has PSE made a quid pro quo arrangement with Bonneville Power Administration (BPA) and ColumbiaGrid at the sole expense of PSE customers? If BPA is not involved, why are there BPA Memoranda of Agreement (MOA) included on the City of Bellevue EIS Scoping website?

http://www.energizeeastsideeis.org/uploads/4/7/3/1/47314045/2015-06-01_moa_with_bpa-seattlecitylight-pse.pdf

- The MOA (amended April 2015, see link above) states, “Concerning the Puget Preferred Plan Projects identified in Section 3(b) of the MOA, the parties agree that the **BPA funding originally intended for these projects** will instead be directed under separate agreement to PSE’s Whatcom County Transformer project. Accordingly, the parties acknowledge that BPA is not involved in any manner or capacity in PSE’s Sammamish to Lakeside to Talbot Rebuild Project or its Lakeside 230 kV Transformer Addition Project.” (aka: Energize Eastside)
- This MOA goes out of its way in having BPA disavow any association with Energize Eastside, yet, it also clearly states that BPA funding was, in fact, originally intended for the Energize Eastside project.
- In that same MOA, paragraph 3(a), “Upon completion of the Puget projects, PSE shall submit an invoice or payment to SCL for the SCL cost obligations associated with construction of the Puget Preferred Plan Projects.” Seattle City Light is involved in the shell game and may be required to pay PSE, so that BPA can no longer appear to have any financial obligation. Why would Seattle City Light pay PSE, if Energize Eastside is solely to address Puget Sound eastside (local) load growth? BPA is going out of its way to misdirect and divert funds from a broader

I2-D -1 See response for Key Theme OBJ-1.

I2-D-1

I2-D-2

REGIONAL project to address west coast grid enhancements (Energize Eastside) to circumvent compliance with FERC Order 1000 and avoid a NEPA review.

BPA is diverting payment for Energize Eastside to another project – the Whatcom County Transformer project. This is a maneuver for Energize Eastside to avoid FERC Order 1000 cost allocation requirements. This maneuver is also avoids triggering a NEPA review. BPA and PSE are playing a financial shell game that involves Seattle City Light, and possibly ColumbiaGrid, and FERC.

While PSE customers pay for Energize Eastside, does PSE benefit from selling power upstream and downstream? Is it only a matter of time before other utilities, especially investor-owned utilities, start lining up for a piece of the financial action as well?

I2-D-3

The City of Bellevue has a fiduciary duty to its citizens to explore all viable alternatives for reliable, affordable electricity. The Programmatic EIS does not adequately address appropriate cost allocation for this project. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives.

City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs. Before customers pay \$1billion for a project with questionable benefits, please analyze and assess how we can make measureable, meaningful improvements to the electricity grid for a fraction of the cost. It is the City's fiduciary duty to its citizens.

Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

I2-D -2 See response for Key Theme OBJ-1.

I2-D -3 See responses for Key Theme OBJ-1 and Key Theme ALT-1.

From: [Energize Eastside EIS](#)
To: [Jessica Conquest](#)
Subject: Fwd: Energize Eastside DEIS Public Comments: Process Modifications
Date: Wednesday, February 17, 2016 7:25:06 AM

----- Forwarded message -----

From: Russell Borgmann <rborgmann@hotmail.com>
Date: Tue, Feb 16, 2016 at 11:37 AM
Subject: Energize Eastside DEIS Public Comments: Process Modifications
To: "info@energizeeastsideEIS.org" <info@energizeeastsideeis.org>
Cc: "rborgmann@hotmail.com" <rborgmann@hotmail.com>

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS process. The DEIS Process is missing crucial steps. At the end of Phase 1, a final EIS should be issued. The Final Phase 1 EIS should be reviewed by a Hearing Examiner. Only then should a Phase 2 "Project" EIS be initiated, if necessary.

I2-E-1

The City of Bellevue is giving the perception of trying to rush through the EIS process to approve the Energize Eastside project. What is there in WA State statute that dictates the necessity of the current process? The programmatic EIS process that includes a Final Phase 1 EIS and Hearing Examiner Review is a more prudent, measured, methodical, and reasonable approach that will yield better results, and in the end could save taxpayer dollars. It is not a foregone conclusion that a Phase 2 Project EIS is even necessary. The City of Bellevue **should issue a final Phase 1 "Programmatic" EIS and submit to the Hearing Examiner for approval,** BEFORE proceeding to the Phase 2 "Project" EIS. Instead, the City has implemented a PROCESS that moves immediately into the Phase 2 EIS before a Hearing Examiner can review/approve the Phase 1 EIS.

Sincerely,

Russell Borgmann
 2100 120th Place SE
 Bellevue, WA 98005
rborgmann@hotmail.com

I2-E -1 See response for Key Theme EIS-2.

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Conflating Peak Demand with Load Growth
Date: Tuesday, February 16, 2016 3:26:45 PM

PSE has positioned Energize Eastside as a PEAK DEMAND issue in their formal filings. PEAK DEMAND is very specifically defined. PSE is using PEAK DEMAND ASSUMPTIONS and DEFINITIONS to justify Energize Eastside.

PSE has quickly confused the issue by shifting the discussion to "load growth". PSE subtly conflates the discussion to a "transmission capacity deficiency for the eastside". Yet PSE's data describe PEAK DEMAND concerns. These are two separate problems, addressable via separate solutions.

I2-F-1

Where are the independent studies that relate Peak Demand to Load Growth? Is there really growth in Peak Demand? Is the City of Bellevue taking PSE's word for it, at face value? IOUs are not the only experts at forecasting growth in Peak Demand. Public utilities, like Seattle City Light, are subject to the same regional growth patterns, yet SCL's forecast for demand growth is **0.5%** annually through 2034. PSE's own projections are over 4 TIMES that, **2.4%** (DEIS pg1-6).

PSE's own 10Q financial filings forecast a DECLINE in load growth, ***"PSE also expects energy usage by both residential electric and natural gas customers to continue a long-term trend of slow decline primarily due to continued energy efficiency improvements."***

<http://www.sec.gov/Archives/edgar/data/81100/000108539214000021/pse-2014630x10a.htm#FCF0808803E76F216FC0CD7981795> (pg.37, under heading **Customer Demand**)
 The DEIS must look at all viable alternatives. Conflating load growth with Peak Demand assumptions is limiting the alternatives that the DEIS is examining.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue, WA 98005
rborgmann@hotmail.com

I2-F -1 See response for Key Theme OBJ-1.

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastsideEIS.org)
To: Info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com; stokes@bellevuewa.gov; jchelmniak@bellevuewa.gov; j.robertson@bellevuewa.gov; robinson@bellevuewa.gov; clax@bellevuewa.gov; knwallace@bellevuewa.gov; yslatfer@bellevuewa.gov; rheland@bellevuewa.gov; hmiyake@bellevuewa.gov; hbedwell@bellevuewa.gov; rkouchi@utc.wa.gov; arendahl@utc.wa.gov; simon@atg.wa.gov
Subject: Energize Eastside DEIS Public Comments: How Does Alternative #3 Help?
Date: Friday, February 19, 2016 8:06:18 AM

A map of the lines and transformers for Alternative #3 is shown in **DEIS pg 2-44 (Figure 2-25)**. These public comments address the viability of Alternative #3 as well as explore the true need and purpose of the proposed Energize Eastside project.

I2-G-1

Far to the east, this DEIS map shows **one proposed long transmission line extending from south of Lake Tradition to the north, to Novelty Hill.**

This seems odd. If Energize Eastside is intended to address local load growth on the eastside, as well as Block Loads from PSE’s largest customers, how does a line this far east help? If Energize Eastside is largely driven by Bellevue’s rapid growth, as we’ve been repeatedly told by PSE, a line this far from the high-density **source of the loads** does not make any sense.

This line looks similar to the original proposed line by ColumbiaGrid to enhance the BPA 500kV corridor from Echo Lake to Monroe. In the ColumbiaGrid PSAST Report, it describes the need to enhance that corridor.
<https://www.columbiagrid.org/download.cfm?DVID=2157>

In the PSAST Report, please look at the data tables (**page 19**). The BEST technical, and most reliable solution is the **Monroe-Echo Lake #2** option, **Study 41** (bottom of page). It has the lowest risk (smallest Total Curtailment Risk Measure, TRCM) and highest transfer capacity (highest TTC). A clear win-win solution. However on **page 16** of this report, they state that they have chosen the “Sammamish-Lakeside-Talbot” solution (aka: Energize Eastside) because of COST. This solution has 2.5X more risk (higher TCRM) and only 76% of the carrying capacity (lower TTC) compared to the Monroe-Echo Lake #2 solution (reference pg 19, Study 49).

I2-G-2

DEIS Alternative #3 appears to describe and depict the extended need and purpose of Energize Eastside: To facilitate north-south flow of electricity in support of BPA, at the cost of PSE customers solely.

Has PSE made a quid pro quo arrangement with Bonneville Power Administration (BPA) and ColumbiaGrid at the sole expense of PSE customers? If BPA is not involved, why are there BPA Memoranda of Agreement (MOA) included on the City of Bellevue EIS Scoping website?

- http://www.energizeeastsideeis.org/uploads/4/7/3/1/47314045/2015-06-01_moa_with_boa-seattlecitylight-pse.pdf
 The MOA (amended April 2015, see link above) states, “Concerning the Puget Preferred Plan Projects identified in Section 3(b) of the MOA, the parties agree that the **BPA funding**

I2-G -1 See response for Key Theme ALT-1. [placeholder- not sure this is addressed in summary- fix in v2]

I2-G -2 See responses for Key Themes OBJ-1 and OBJ-4.

originally intended for these projects will instead be directed under separate agreement to PSE's Whatcom County Transformer project. Accordingly, the parties acknowledge that BPA is not involved in any manner or capacity in PSE's Sammamish to Lakeside to Talbot Rebuild Project or its Lakeside 230 kV Transformer Addition Project." (aka: Energize Eastside)

- This MOA goes out of its way in having BPA disavow any association with Energize Eastside, yet, it also clearly states that BPA funding was, in fact, originally intended for the Energize Eastside project.
- In that same MOA, paragraph 3(a), "Upon completion of the Puget projects, PSE shall submit an invoice or payment to SCL for the SCL cost obligations associated with construction of the Puget Preferred Plan Projects." Seattle City Light is involved in the shell game and may be required to pay PSE, so that BPA can no longer appear to have any financial obligation. Why would Seattle City Light pay PSE, if Energize Eastside is solely to address Puget Sound eastside (local) load growth? BPA is going out of its way to misdirect and divert funds from a broader REGIONAL project to address west coast grid enhancements (Energize Eastside) to circumvent compliance with FERC Order 1000 and avoid a NEPA review.

BPA is diverting payment for Energize Eastside to another project – the Whatcom County Transformer project. This is a maneuver for Energize Eastside to avoid FERC Order 1000 cost allocation requirements. This maneuver is also avoids triggering a NEPA review. BPA and PSE are playing a financial shell game that involves Seattle City Light, and possibly ColumbiaGrid, and FERC.

DEIS Alternative #3 exposes this charade.

While PSE customers pay for Energize Eastside, does PSE benefit from selling power upstream and downstream on a line that runs from south of Lake Tradition to north of Novelty Hill?

The City of Bellevue has a fiduciary duty to its citizens to explore all viable alternatives for reliable, affordable electricity. The Programmatic EIS does not adequately address appropriate cost allocation for this project. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives.

City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs. Before customers pay \$1billion for a project with questionable benefits, please analyze and assess how we can make measureable, meaningful improvements to the electricity grid for a fraction of the cost that truly benefit local PSE customers. It is the City's fiduciary duty to its citizens.

Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

I2-G -3 See response for Key Theme OBJ-1.

I2-G -4 See response for Key Theme EIS-1.

I2-G-3

I2-G-4

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastsideEIS.org)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com; stokes@bellevuewa.gov; jchelniniak@bellevuewa.gov; jrobertson@bellevuewa.gov; robinson@bellevuewa.gov; clan@bellevuewa.gov; knwallace@bellevuewa.gov; yslatfer@bellevuewa.gov; cheland@bellevuewa.gov; hmiyake@bellevuewa.gov; hbedwell@bellevuewa.gov; rkouchi@utc.wa.gov; arendahl@utc.wa.gov; simon@atq.wa.gov
Subject: Energize Eastside DEIS Public Comments: Cost/Benefit Analysis
Date: Monday, February 22, 2016 12:47:01 PM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Alternatives. The DEIS appears to be missing crucial information to make an adequate cost/benefit analysis of the alternatives.

I2-H-1

PSE says an N-1 failure could cause a max of 16,500 PSE customers (1.5%) to lose power. An N-2 failure could cause a max of 33,000 PSE customers to lose power (3%). Assuming PSE's worst case scenario, 3% of PSE's 1.1 million electricity customers might lose power. http://energizeeastside.com/Media/Default/Library/Reports/Eastside_Needs_Assessment_Final_Draft_10-31-2013v2/REDACTEDR1.pdf (pg 10-11, 34-36)

Energize Eastside might serve 3% (at most) of PSE's customers.
All 1.1 million PSE customers will pay \$1 billion over the next 40 years.

To be clear, in reality PSE enacts Corrective Action Plans (CAPs) to ensure customers will not lose power due to Peak Demand, as required by NERC and FERC. The existing Bulk Electric System is set-up to handle Peak Demand situations without any transformers exceeding their winter emergency ratings. If our local region needs more power during peak demand periods, Bonneville Power Administration (BPA) curtails power flow to Canada to support domestic needs. BPA has already been doing this for several years. Note: PSE erroneously used summer emergency ratings in their power flow simulations, even though this region's peak demand situations occur in winter.

PSE has successfully petitioned the WUTC to grant a 10.3% Rate of Return on this project. http://www.oatioasis.com/PSE/PSE/docs/Formula_Rate_Settlement_Package.pdf (bottom of pg 4, top of pg 5)

Energize Eastside will cost 1.1 million electricity customers approximately **\$1 billion** over the next 40 years. Is it worth paying a billion dollars for a miniscule increase in reliability that might only serve a small percentage of customers?

I2-H-2

Before we pay \$1 billion for a project with questionable benefits, the City of Bellevue (and other eastside jurisdictions) must analyze and assess how we can make measurable, meaningful improvements to the electricity grid for a fraction of the cost.

The City of Bellevue has a fiduciary duty to its citizens to explore all viable alternatives for reliable, affordable electricity. The Programmatic EIS does not adequately address an appropriate cost/benefit analysis. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more reliable, more energy-efficient, and less

I2-H -1 See response for Key Theme ECON-3.

I2-H -2 See response for Key Theme EIS-2.

12-H-2

damaging to the environment. The Programmatic DEIS must include those alternatives.

City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs.

Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

From: Russell Borgmann
To: info@energizeeastside.org
Cc: rborgmann@hotmail.com; jstokes@bellevuewa.gov; jchelminiak@bellevuewa.gov; j.robertson@bellevuewa.gov; lrobinson@bellevuewa.gov; clee@bellevuewa.gov; kwallace@bellevuewa.gov; vslatton@bellevuewa.gov; chelland@bellevuewa.gov; kmlyake@bellevuewa.gov; hbedwell@bellevuewa.gov; kberens@bellevuewa.gov; rkouch@utc.wa.gov; arendahl@utc.wa.gov; simon@atg.wa.gov; eis@cense.org
Subject: Energize Eastside DEIS Public Comments: Comparison of Annual Growth Rates
Date: Tuesday, February 23, 2016 9:50:44 AM
Attachments: Image5276.png

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Alternatives. The DEIS appears to use inaccurate growth rates that limit evaluation of viable alternatives.

Comparison of Annual Growth Projections

Northwest Power and Conservation Council	0.4%
Seattle City Light	0.5%
Energy Information Administration	0.6% - 0.9%
Puget Sound Regional Council	1.2%
Sound Transit East Link Expansion	33% by 2040 = 1.3% per year
Puget Sound Energy	2.4%

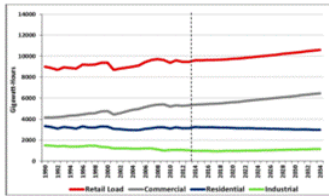
http://www.seattle.gov/light/news/issues/rfp/docs/SeattleCityLight2014_IRPIUpdateandProgressReport.pdf (pg 12)
http://www.nycouncil.org/news/press-releases/2016-02-10_7th_plan_adopted/
<http://www.eia.gov/todayinenergy/detail.cfm?id=10491>
<http://www.seattletimes.com/business/energy-of-downtown-seattle-grows-ever-stronger/>

Is the eastside really growing almost 5 TIMES as fast as Seattle? NO. Much of Bellevue's growth is energy-efficient new construction. Seattle has a higher number of older, less efficient buildings still in need of energy-efficient retrofitting, in addition to extensive new growth. Seattle's high-density in-fill and South Lake Union expansion are significant, yet Seattle City Light's growth forecast is closely aligned with EIA estimates. It stands to reason that Seattle's growth in Peak Demand would be HIGHER than the eastside.

12-1-1

12-1 -1 See responses for Key Themes OBJ-1 and OBJ-2.

History and Forecast Electricity Demand by Sector

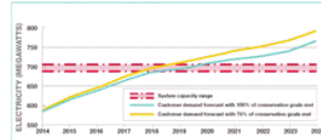


Overall demand growth is forecast to average 0.5% annually from 2014 to 2034. 1

http://www.seattle.gov/light/news/issues/irp/docs/SeattleCityLight2014_IRPUpdateandProgressReport.pdf

Seattle City Light Growth Projections
Integrated Resource Plan, pg 12

Figure 1-2. Eastside Customer Demand Forecast



Source: Gentile et al., 2015.

Energize Eastside Draft EIS, pg 1-6

Puget Sound Energy Growth Projections
Draft EIS, pg 1-6

The slope of the curve is important. PSE has artificially inflated growth predictions to justify Energize Eastside. When realistic growth forecasts are used (0.5% to 1.2%), the Puget Sound eastside will not experience a “deficiency in transmission capacity” for decades. PSE has not provided independent evidence or justification for using a growth rate of 2.4%. Instead PSE has provided “internal forecasting conducted by PSE”, national demographic data “with adjustments for PSE’s service territory”, and “**PSE has projected** that electrical demand will grow at an annual rate of 2.4 percent.” (DEIS pgs 1-5, 1-6). Instead of forecasting an emergency in 2018, the Puget Sound eastside has time to plan and implement 21st century solutions to be ready by 2035 to 2040 when multiple independent data sources indicate a potential for transmission deficiency.

As recently as February 10, 2016, The Northwest Power and Conservation Council stated, “By maximizing cost-effective energy efficiency, the plan projects that the region’s electricity loads can be maintained at the current level of about 20,000 average megawatts, sustaining a 20-year trend of low load growth. Since 1995, annual energy loads grew at an average rate of **only 0.40 percent**, thanks to the region’s investment in efficiency.”

https://www.nwccouncil.org/news/press-releases/2016-02-10_7th_plan_adopted/

PSE’s false advertising inaccurately claims that infrastructure has not been updated in 50 years. In the past 50 years, **PSE has built 3 additional north-south high voltage transmission lines**, increasing the eastside’s capacity from 2 lines to 5 lines. Public records searches with the City of Bellevue show that 3 of the 5 transmission lines running north-south through Bellevue were built over time during the last 30 years, at least one as recently as 1997.

Block Loads. PSE states that their growth rate forecast accounts for “expected ‘block load’ growth that PSE is aware will be coming in the next 10 years.” (DEIS pg 1-6) Block loads are energy demands from PSE’s largest customers. If there are large customers driving block load demand, the DEIS should clearly identify the sources of the forecast block load demands. Seattle City Light is subject to the same block load growth (Amazon, Boeing, Expedia (future), Expeditors International, F5 Networks, Fred Hutchinson, Pike Place Market (tourism & cruise ships), Port of Seattle, Russell Investments, Starbucks, UW, Vulcan, Weyerhaeuser (future), Zillow - to name a few), yet SCL has found a way to manage block loads in a way that forecasts electricity demand

I2-1 -2 See response for Key Theme OBJ-2.

I2-1-2

12-1-2 growth of 0.5% annually.

12-1-2 City Planners know that an annualized growth rate of 2.4% is unsustainable. Other critical city infrastructure (water, transportation, etc.) would strain to the point of failure before the region experiences an electricity transmission capacity deficiency. It's time for officials overseeing approval of this project to ask critical questions and carefully examine fundamental assumptions underlying Energize Eastside.

12-1-3 The DEIS appears to skim the surface of several important topics: expected increase in reliability, cost/benefit analyses of alternatives, independent analysis of need, cost allocation, and effects of Demand Side Resources, to name a few. Are we merely going through the motions, or are we really critically examining how to meet the future electricity needs of the eastside?

12-1-3 The City of Bellevue has a fiduciary duty to its citizens to explore all viable alternatives for reliable, affordable electricity. The Programmatic EIS does not adequately analyze the annualized growth rate for the region which is limiting evaluation of viable alternatives. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives.

12-1-3 City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs.
Sincerely,

12-1-3 Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

12-1 -3 See response for Key Theme EIS-2.

COMMENT

RESPONSE

From: CHelland@bellevuewa.gov
To: rborgmann@hotmail.com; jstokes@bellevuewa.gov; jchelminiak@bellevuewa.gov; jrobertson@bellevuewa.gov; CLee@bellevuewa.gov; lrobinson@bellevuewa.gov; KRWallace@bellevuewa.gov; VSlatter@bellevuewa.gov; BMiyake@bellevuewa.gov; NMatz@bellevuewa.gov
Cc: rmurray@soundpublishing.com; info@EnergizeEastsideEIS.org; HBedwell@bellevuewa.gov
Subject: RE: Energize Eastside DEIS: How Does Alternative #3 Help?
Date: Wednesday, February 24, 2016 9:52:08 AM

Russell – By this email, I am acknowledging receipt of this information. I see that this email did not include the EnergizeEastsideEIS.org portal that we are using to collect comments for response as part of the EIS process. By this email, I am forwarding this to the comment collection portal. Thank you for your comments.

Carol Helland

From: Russell Borgmann [mailto:rborgmann@hotmail.com]
Sent: Wednesday, February 24, 2016 9:03 AM
To: Stokes, John <jstokes@bellevuewa.gov>; Chelminiak, John <jchelminiak@bellevuewa.gov>; Robertson, Jennifer S. <j.robertson@bellevuewa.gov>; Lee, Conrad <CLee@bellevuewa.gov>; Robinson, Lynne <lrobinson@bellevuewa.gov>; Wallace, Kevin R <KRWallace@bellevuewa.gov>; Slatter, Vandana <VSlatter@bellevuewa.gov>; Helland, Carol <CHelland@bellevuewa.gov>; Miyake, Brad <BMiyake@bellevuewa.gov>; Matz, Nicholas <NMatz@bellevuewa.gov>
Cc: rborgmann@hotmail.com; rmurray@soundpublishing.com
Subject: Energize Eastside DEIS: How Does Alternative #3 Help?

Esteemed City Council and City Staff,
“Currently, 230 kV lines (which are the best method of transmitting high power over long distances) skirt the city of Bellevue, heading around Lake Sammamish. The huge amount of power Downtown Bellevue sucks up is unsustainable using the current lines based miles away, the utility company said.” <http://www.bellevuereporter.com/news/369900191.html>

I2-J-1 If the problem that PSE is facing is delivery, how does DEIS Alternative #3 help? Alternative #3 shows a long transmission line that runs from south of Lake Tradition north to Novelty Hill - well EAST of the “huge amount of power Downtown Bellevue sucks up”.

“It raises a huge red flag for us about the study,” she said. “We see concerns about more generation. That’s not the issue. There are more than enough electrons to power our customers. The problem we are facing is delivery.” <http://www.bellevuereporter.com/news/369900191.html>

I2-J-2 The DEIS (pg 1-6) states PSE has a **74MW** transmission capacity shortfall for local peak periods in the Eastside as early as the winter of 2017-2018. PSE own IRP forecasts a generation shortfall (unmet capacity) in their 2018 base cases:
http://pse.com/aboutpse/EnergySupply/Documents/IRP_2013_Appendices.pdf (Figure G-12 “Unmet Capacity”, pg G-25)

I2-J -1 See response for Key Theme ALT-1.
 I2-J -2 See response for Key Theme OBJ-1.



COMMENT

RESPONSE

I2-J-2 | The DEIS actually highlights an electricity generation shortfall, not a transmission problem.

I2-J-3 | A map of the lines and transformers for Alternative #3 is shown in **DEIS pg 2-44 (Figure 2-25)**. If Energize Eastside is intended to address local load growth, as well as Block loads from PSE’s largest customers, how does this line, far to the east, help ease Downtown Bellevue power needs, as PSE describes? A line this far from the **high-density source of the loads** does not make sense, and is highly inefficient.

I2-J-3 | Alternative #3 seems to expose this charade: Energize Eastside is providing a high capacity north-south transmission line to help facilitate power flow along the west coast, from Canada to California. The DEIS (pg 1-6) states PSE has a 74MW transmission capacity shortfall for local peak periods. Energize Eastside is capable of conservatively transmitting over 1,000MW. That’s like providing a firehose to water a daisy.

I2-J-4 | The Programmatic EIS does not adequately address appropriate cost allocation for this project, across the tens of millions of ratepayers in BPA’s 8-state territory that stand to benefit from the Energize Eastside project.
Sincerely,
Russell Borgmann
Woodridge Neighborhood
Bellevue, WA 98005
rborgmann@hotmail.com


I2-J -3 | See response for Key Theme ALT-1. [placeholder- not sure this is addressed in summary- address in v2]

I2-J -4 | See responses for Key Themes ECON-3 and ECON-4.

I2-K-1

Dear Elected Councilmember,

The current EIS process is flawed. The City of Bellevue may feel pressure to avoid a NEPA review and "shortcut" the path to issuing permits for Energize Eastside. The PROCESS yields the opportunity for misappropriation and perceptions of impropriety. The PROCESS puts one individual in a difficult, and potentially compromising, position—to make a SEPA-only determination on the side-stepping NEPA review, providing an opportunity for the Bellevue Development Services Department to fund the budget to the tune of millions of dollars in permit fees. Shouldn't the PROCESS be changed to allow for more transparency and independent assessment? For a project of this size and scope of Energize Eastside, SEPA vs. NEPA review must be determined by an independent panel/commission that includes detailed local, state, and federal review.

Sincerely,

 Russell Borzmann
 Mayor

RECEIVED
 FEB 2 2016
 CITY COUNCIL

Councilmember
 Kevin Wallace
 110th Ave. NE
 P.O. Box 90012
 Bellevue, WA
 98009

Did You Know?
 Bellevue's Development Services Department is funded from permit fees, not from tax revenues? The Development Services Department stands to generate significant review from the issuance of permit fees for the Energize Eastside project.

Sadly, the EIS PROCESS is deeply flawed.
 The City should issue a Final Decision on the Phase 1 "Programmatic" EIS and submit to the Hearing Examiner BEFORE proceeding to a Phase 2 "Project" EIS.

"Energize Eastside" is NOT A Done Deal
 Voice Your Concerns to
 BELLEVUE CITY COUNCIL

I2-K-1 See response for Key Theme OBJ-1.

Dear Elected Councilmember, *and 2/14/16*

By electing NOT to include the Energize Eastside project in the regional transmission plan, PSE avoids FERC Order 1000 compliance and side-steps NEPA review.

PSE has simply chosen to have Energize Eastside accomplish the goal of permitting more transmission capacity to Canada without asking for cost contributions from BPA, SCL, and others. If PSE is required to include Canadian Entitlement power in their load flow studies, then shouldn't PSE also be required to submit the Energize Eastside project as part of the regional transmission plan for cost allocation purposes? <http://www.columbiarid.org/download.cfm?DVID=2152> (pg 15 of 21)

Why are PSE customers being asked to solely pay for electricity grid enhancements? Sincerely,

JOANNE SCOMMELL
BOULE TRAILS



TO: Mayor John Stokes
450 110th Ave. NE
P.O. Box 90012
Bellevue, WA
98009

Did You Know?

Can PSE have it both ways—claim it is required to include Canadian Entitlement electricity in power flow studies, then turn around and elect to have Energize Eastside OMITTED from regional transmission planning for cost allocation purposes?

Power flows to Canada "are required to be included in the PSE load flow studies.... It is not optional." (PSE)

"...neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation...." (FERC ruling)

"Energize Eastside" Is NOT A Done Deal
Voice Your Concerns to
BELLEVUE CITY COUNCIL

Did You Know?

Are PSE customers being asked to overpay for reliability to falsely insure against an improbable climax of events—NINE events occurring simultaneously (N 9)? FERC and NERC require infrastructure investments to avoid N-2 situations. In reality, how much will Energize Eastside actually increase our reliability?

Energize Eastside provides a theoretical maximum reliability improvement of 0.2%

Energize Eastside will cost customers close to \$1 billion over 40 years

"Energize Eastside" Is NOT A Done Deal
Voice Your Concerns to
BELLEVUE CITY COUNCIL

12-L-1

Dear Elected Councilmember, *and 2/10/16*

Peak Load hours occur during a 6-hour period (6am-9am and 5pm-8pm)

Over the past 16-year period, the region's temperature dipped to 23F, or below, on 70 days

Of those 70 days, only 44 days occurred on weekday work days (non-weekend, non-holiday)

44 days x 6 hours = 264 hours vulnerable to Peak Demand outages, worst case

During that same 16-year period, 139,992 hours are not vulnerable to Peak Demand outages

Assuming Energize Eastside avoided a power outage during every peak usage hour (264 hrs), Energize Eastside provides a maximum reliability improvement of 0.2% (264hrs / 139,992 hrs). The City of Bellevue has a fiduciary duty to its citizens to analyze how to make measurable, meaningful improvements to the electricity grid. Sincerely,

WOODRIDGE



TO: Councilmember
John Chelminiak
450 110th Ave. NE
P.O. Box 90012
Bellevue, WA
98009

RECEIVED
FEB 20 10 51 AM '16
BELLEVUE CITY COUNCIL

12-L-1 See response for Key Theme OBJ-2.

From: [Russell Borgmann](#)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Heavy Equipment to Build 230kV Transmission Lines
Date: Tuesday, March 01, 2016 10:15:22 PM
Attachments: [Energize Eastside - An Environmental Disaster.pdf](#)

I2-M-1

Attached is a document I submitted during the first EIS Open Comment Period (May/June 2015). Please watch the video below for what is involved to install a 230kV line:

<https://www.youtube.com/watch?v=WSV3L481mow>

Think about how PSE will build this in an urban corridor. NOTE: the video below is in rural Douglas County - no houses to be seen for miles. How/Where are they going to stage all of the equipment to install this thing? The DEIS does not address the environmental impact of project staging.

Russell Borgmann
2100 120th Place SE
Bellevue WA 98005
rborgmann@hotmail.com

I2-M -1 See response for Key Theme EIS-2.

From: [Russell Borgmann](#)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Pipeline Safety Concerns
Date: Tuesday, March 01, 2016 10:18:06 PM
Attachments: [Energize Eastside - An Environmental Disaster.pdf](#)

I2-N-1

Attached is a document I submitted during the first EIS Open Comment Period (May/June 2015). Please watch this **video of a pipeline explosion** that occurred in rural TX, while they were installing a high voltage transmission line.
<https://www.youtube.com/watch?v=RSCz-35M9hA>

Think what would have happened if this explosion had occurred in an urban area.

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

I2-N -1 Comment noted. The video referenced was a natural gas pipeline.

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com; jstokes@bellevuewa.gov; jhelminiak@bellevuewa.gov; j.robertson@bellevuewa.gov; robinson@bellevuewa.gov; cles@bellevuewa.gov; kwallace@bellevuewa.gov; ysalter@bellevuewa.gov; cheland@bellevuewa.gov; hmvake@bellevuewa.gov; hbedwell@bellevuewa.gov; rkouchi@utc.wa.gov; arendahl@utc.wa.gov; simon@atq.wa.gov; eis@cense.org
Subject: Energize Eastside DEIS Public Comments: Cite Specific Federal Reliability Standards
Date: Tuesday, March 01, 2016 11:17:01 PM

PSE Says: Our hands are tied – we must meet Federal Reliability Standards.

Citizens Say: If Energize Eastside is so clearly needed, please cite the specific Federal regulations that compel building Energize Eastside. It should be simple to produce the federally mandated regulations.

12-O-1 | Sadly, PSE does not cite specific mandatory Federal Reliability Standards to support the need for Energize Eastside.

PSE says: The Lauckhart-Schiffman Study raises red flags because it did not mention federally mandated standards which became more stringent in 2007.

Citizens Say: Quote the 2007 federally mandated standards - Chapter and Verse - that require PSE to supply 1,500MW of power to Canada during peak load events? Where is the federally mandated standard that says to reduce local west side gas generation by turning off emergency generation plants during peak load events? Where specifically are those requirements mandated federally?

Our region’s electricity reliability and efficiency planning is performed by an organization called **ColumbiaGrid**. Here’s what the **ColumbiaGrid 2013 System Assessment Report** says: *“...The Northwest to British Columbia transfer was increased to 1500MW and the West of Cascades North transfer was increased to near its limit (10,200 MW) by reducing local west side gas generation. This case is being studied for information purposes and mitigation is not required as it goes beyond what is required in the NERC Reliability Standards.”*
<https://www.columbiagrid.org/client/pdfs/2013SAForweb7.1.13FINAL.pdf> (2017-18HW2, pg 12, PDF pg 17 of 92)

12-O-2 | So, ColumbiaGrid conducted an **informational study** which exported 1,500MW to Canada and turned off local generation plants. These are precisely the same assumptions PSE is using to justify the need for Energize Eastside in PSE’s **Eastside Needs Assessment Report**. This was a hypothetical situation – **“for information purposes”**, **“Mitigation is not required.”** **“It goes beyond what is required in the NERC Reliability Standards.”**

Note: PSE does not dispute the facts presented in the independent Lauckhart-Schiffman Study.

Note: PSE has not cited specific mandatory Federal Reliability Standards.

And **ColumbiaGrid** asserts:

- **No Federal regulation violation** if 1,500MW is NOT sent to Canada during peak load events
- **No Federal regulation violation** if all Puget Sound gas-fired emergency generation plants are turned ON during peak load events
- **No Federal regulation violation** if heavy winter emergency loading on a transformer exceeds the **summer** normal rating of that transformer. **Winter transformer ratings** are to be used

12-O -1 See response for Key Theme OBJ-3.

12-O -2 See responses for Key Themes OBJ-3 and OBJ-4.

12-O-2 when assessing **winter peak loads**. NOTE: PSE mistakenly used SUMMER transformer ratings in their load flow studies, when this region experiences WINTER peak loads.

The **ColumbiaGrid 2013 System Assessment** Report undeniably contradicts PSE’s key assumptions for building Energize Eastside as stated in PSE’s **Eastside Needs Assessment Report**.
http://energizeeastside.com/Media/Default/Library/Reports/Eastside_Needs_Assessment_Final_Draft_10-31-2013v2REDACTEDR1.pdf

12-O-3 **City of Bellevue, please RE-START a transparent process to determine the Eastside’s future electricity needs.** Please analyze and assess how to make measureable, meaningful improvements to the electricity grid for a fraction of the cost of Energize Eastside. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives.

12-O-4 **City Council, please require the City of Bellevue to issue a Final EIS at the end of the Phase 1 “Programmatic” EIS.** Issue a Final Phase 1 EIS. Submit the Phase 1 EIS to a Hearing Examiner for review/approval. Then, and only then, proceed to a Phase 2 “Project” EIS if, and only if, the proposed Energize Eastside project is found necessary.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-O -3 See response for Key Theme EIS-2.
 I2-O -4 See response for Key Theme EIS-2.



From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Aesthetics
Date: Wednesday, March 02, 2016 10:15:21 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Aesthetics".

Aesthetics

- Aesthetic concerns are best explained by example: The City of Renton is now experiences irreversible environmental impact by a significant "industrial" look and feel (see the 600 block of South Grady Way, near downtown Renton). City Planners know there are numerous studies citing a self-fulfilling destiny: Large overhead transmission lines beget an unspoken, but noticeable "industrial" feel. This leads to less desirable neighborhood/community character, which begets declining property pride-in-ownership, which begets declining property values, begetting declining tax revenues, begetting more industrialization to compensate for declining tax revenues. The downward spiral continues (industry jargon refers to this as a "death spiral"). Where does it end? Will Bellevue experience its own death spiral? Think of cities like Detroit - once a shining beacon of mid-20th century technology and innovation, and now sadly an impoverished, crime-ridden city mired in bankruptcy?
- Bellevue is French for "beautiful view". Isn't it ironic that Bellevue is contemplating a project that will cause irreversible environmental impact to the Puget Sound eastside for generations to come? Bellevue can have both: the energy needed for viable, sustainable growth and maintain the beauty and character of the Puget Sound eastside.
- Bellevue theme is a "City In a Park". Energize Eastside will result in the destruction of 8,000 mature trees and other vegetation crucial for maintaining a clean air supply. The eastside's tree canopy is essential for health as well as aesthetics. Bellevue already has the lowest remaining tree canopy in the Puget Sound eastside (declined to approximately 36%). Energize Eastside will contribute to this rapidly dwindling tree canopy.
http://www.ci.bellevue.wa.us/pdf/Manager/Urban_Ecosystem_Analysis.pdf
- Energize Eastside would install a SECOND 230kV transmission line running parallel within 0.8 miles of an existing line (the Seattle City Light transmission lines). Depending on the routing, these two lines could run within 1,000 feet of each other, on either side of Newport High School.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-P -1 See responses for Topic VR, and Key Themes ECON-1 and ECON-2.

I2-P-1

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastsideEIS.org)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmlyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Built Environment
Date: Wednesday, March 02, 2016 10:18:05 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Built Environment".

Built Environment

I2-Q-1

- Currently there are no WA state regulations for siting 230kV transmission lines in urban areas. This is the result of tacit oversight, NOT explicit approval. When WA state legislature addresses 230kV transmission line regulations, will Energize Eastside be retroactively subject to those regulations?
- State laws and regulations for 230kV High Voltage Transmission Lines (HVTL) don't exist, because decades ago, when the 230kV lines were being erected, HVTL spanned rural countryside. Back then, it wasn't even considered that HVTL should co-exist in a dense urban corridor that has now built up around the existing lines. New High Voltage Transmission Lines must be built well away from urban centers.

I2-Q-2

- There are substantial Safety Issues with digging 15ft to 30ft deep holes for monopoles right next to 2 gas pipelines. Vertical boring of these holes cause significant vibration which can cause settlement damage to nearby house foundations. Additionally, the vibration can damage aging fuel pipelines located within the selected transmission line corridor. Vibration stress fractures and damage can ultimately lead to pipeline rupture days/weeks/months after transmission line construction is complete.

I2-Q-3

- How is the "fall-zone" of 130-ft tall monopoles accounted for in the Right of Way? Many houses are closer than 130 feet to the monopole sites. If a monopole were to fall (e.g. in an earthquake), it could hit houses. The selected corridor crosses the Seattle Fault, a shallow fault capable of earthquakes in excess of 7+. The Cascadia Subduction Zone ties to the Seattle Fault and is capable of earthquakes in excess of 9 on the Richter Scale. The Cascadia Subduction Zone is on a periodicity of 300 to 500 years, and the last major seismic event was January 26, 1700 (315 years ago). The Axial Seamount (underwater volcano) began eruptions April 30, 2015. These volcanic eruptions could add to the pressure along the Cascadia Subduction Zone, and by extension, the Seattle Fault.
- How is the "fall-zone" of 130-ft tall monopoles accounted for in the Right of Way if a monopole were to fall due to sustained high winds, like the Chanukah Eve Storm, December 2007?

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

- I2-Q -1 See response for Key Theme LU-2.
- I2-Q -2 See response for Key Theme PLS-1.
- I2-Q -3 See response for Key Theme EARTH-2.



From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Economic Impact
Date: Wednesday, March 02, 2016 10:22:03 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Economic Impact".

Economic Impact

- PSE website says that Energize Eastside will increase each customers' bill by \$1 to \$2 per month. Estimated cost to all PSE ratepayers: \$2/mo x 12mo x 40 years x 1.1M customers = **\$1.056BILLION**
- All PSE customers rates are guaranteed to increase due to Energize Eastside. As such, all PSE customers must be notified of the Energize Eastside EIS.
- Data from Realtors indicate a 10% to 30% decrease in property values near High Voltage Transmission Lines (HVTL)
- Energize Eastside will increase costs in at least two ways: 1. electricity rates will increase for ALL PSE ratepayers; and 2. residents can expect an increase in local taxes to offset the decrease in the local property tax base from declining property values
- PSE customers and all taxpayers should decide how to best spend up to \$1 BILLION dollars. Are PSE customers getting the very best value, and the most reliable solution, for our money? Is PSE doing everything it can to maintain reliable electricity at the lowest costs for its customers? Why hasn't PSE implemented recommendations from their own consultants, E3 and The Cadmus Group, contained in Appendix N of PSE's IRP?
- Current (outdated) WA state legislation actually REWARDS PSE for over-building infrastructure.
- The (wealthy) Bellevue west of I-405 boasts few overhead power lines. The Bellevue east of I-405 is beginning to resemble downtown Renton – unfortunately, large transmission lines are springing up piecemeal across east Bellevue (latest example: Phantom Lake-Lake Hills overhead transmission line project that was recently rejected by EBCC). Sadly, it appears that issues of socio-economic inequality are developing in Bellevue. Important decisions appear to be made based on which ZIP code you happen to be fortunate enough to live in. Do we really want a divided Bellevue? Is this the future we want to build for Bellevue? Is this the legacy we want to leave our city for decades and generations to come?

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-R -1 See responses for Topic ECON.

I2-R-1

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Environmental Health
Date: Wednesday, March 02, 2016 10:24:21 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Environmental Health".

Environmental Health

- High Voltage Transmission Lines are 50% thicker than typical distribution lines and operate at much higher temperatures, causing endangerment to native and migratory bird species, flying insects (like bees) necessary for pollination, and other plant and animal species sensitive to heat and nighttime light emissions. HVTL produce ultra-violet (UV) flashes that are invisible to humans. HVTL produce nighttime UV flashes that affect the vision of all mammals (except humans). <http://www.bbc.com/news/26548483>
- Corona emissions produce audible snaps, crackles, and pops that are disruptive to humans and animals. This noise intensifies when it rains (which occurs frequently in the rainy Northwest). When water droplets hit [high temperature transmission lines which are rated to 400°F](#) (during full load), [raindrops sizzle](#). Birds are forced to fly well clear of HVTL. Human hair can stand on end when walking underneath these lines. (Example: walk underneath the Seattle City Light transmission lines near Norwood Swimming Pool when SCL/BPA conduct full-load tests on a misty day or a cold morning).
- EMF/Corona have further unknown impact on insects (e.g. bees, necessary for food production), wildlife, endangered plant/animal species.
- Energize Eastside will result in the destruction of 8,000 mature trees and other vegetation crucial for maintaining a clean air supply. The eastside's tree canopy is essential for human health as well as environmental health. Trees, especially on [slopes](#), are essential for [erosion](#) abatement in the rainy Northwest. Bellevue's tree canopy has already declined to 36%. Energize Eastside will contribute to this rapidly [dwindling tree canopy](#). http://www.ci.bellevue.wa.us/pdf/Manager/Urban_Ecosystem_Analysis.pdf

Sincerely,

Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-S -1 See response for Key Theme P&A-3.

I2-S-1

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Health
Date: Wednesday, March 02, 2016 10:27:13 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Health".

Health: Releases or Potential Release to the Environment Affecting Public Health (such as toxic or hazardous materials)

- High Voltage Transmission Lines release **charged particles (corona)**
- Draper Study (2005) found **that corona can drift** in the wind much farther than anticipated, in excess of 600m (**2,000 ft**). As such, all residents living at a minimum of 2,000 feet from the selected route should be notified of the Energize Eastside EIS.
- **Corona Discharge is positively linked to an increase in air pollution.** Air quality is degraded near High Voltage Transmission Lines and is especially problematic for those prone to respiratory illnesses and diseases (asthma, etc.). Henshaw/Fews Study, 2001.
- Henshaw/Fews 2001 Study (Univ. of Bristol, Human Radiation Effects Group, www.electric-fields.bris.ac.uk/) showed a 20-60% increase in deposition of airborne pollutants in close proximity to High Voltage Transmission Lines. **Corona** attach to whatever is available—car exhaust, radon, radon progeny (radioactive alpha emitters) and other pollutants that are known carcinogens. These airborne pollutants are then inhaled and retained on skin. There is greater risk of impact to the lungs. The British Government National Radiological Protection Board says power line generated **corona** may result in excess cases of lung cancer. Airborne pollutants from corona drift in the wind, and deposit on the skin and in the lungs.
- Multiple medical studies over the past 40 years show an increased risk in lymphatic and hematopoietic cancers especially among children living near High Voltage Transmission lines (HVTL)
 - 1979, Wertheimer & Leeper Study (1950-1973) **2.11 times increased risk for all childhood cancers, 3.09 times increased risk for children living entire life** in a high current environment
 - 1979 Cohort Mortality Study (Mortality in Aluminum Reduction Plant Workers)
 - Leukemia Mortality in Washington State Electrical Workers
 - 1988 Savitz, et. al. (1976 – 1983) **1.53 times increased risk for all childhood cancers, 1.78 times increased risk if child spent 90% of life** in a high current environment, **5.22 times increased risk if child lived in a very high current environment**
 - 1992 Feychting and Ahlbom Study (1960-1985) **2.7 times increased risk if 2 milligauss or more, 3.8 times increased risk if 3 milligauss or more, 5.6 times increased risk if one-family homes over 2 milligauss**
 - 1997 Theriault and Li Meta Data Analysis: Increased leukemia for both children & adults **living between <25 and <50 meters from powerlines >49kV**

I2-T-1

I2-T -1 See responses for Key Themes EMF-1 through EMF-4.

I2-T-1

1998 Li and Lin Taiwan Study: 2.5 times increased leukemia risk for children living <100 meters from HVTL vs. leukemia risk of children living >100 meters from HVTL

- 2005 Draper, et. al. UK Study (1962-1995) Leukemia RR of 1.69 for children living <200 meters from HVTL; Leukemia RR of 1.23 for children living 200-600 meters from HVTL
- 2007 Lowenthal et al. Tasmania Study (1972 – 1980) 3 times increased risk of adult cancer living <300 meters from HVTL during first 15 years of life; Children age 0-5 had a 5 fold increase risk in lymphatic and hematopoietic cancers. Residence near HVTL, especially early in life increases subsequent development of lymphatic and hematopoietic cancer
- Putting a SECOND 230kV transmission line running parallel within 0.8 miles of an existing line (the Seattle City Light transmission lines) poses exponentially higher health risks, especially to children. Depending on the routing, these two transmission lines could run within 1,000 feet of one another, on either side of Newport High School posing elevated health risks to school age children and public employees (teachers, staff, coaches) that spend extended periods of outdoor time near these transmission lines.

Sincerely,
Russell Borgmann
2100 120th Place SE
Bellevue WA 98005
rborgmann@hotmail.com

COMMENT

RESPONSE

From: [Russell Borgmann](#)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Housing
Date: Wednesday, March 02, 2016 10:30:40 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Housing".

Housing

I2-U-1

- Data from Realtors indicate a 10% to 30% decrease in property values near High Voltage Transmission Lines (HVTL)

I2-U-2

- There are substantial Safety Issues with digging 15ft to 30ft deep holes for monopoles. Vertical boring of these holes cause significant vibration which can cause settlement damage to nearby house foundations.

I2-U-3

- Before the City of Bellevue might issue Construction Permits (after the EIS and after Conditional Use Permits could be issued), PSE must demonstrate control over all property. This includes heavy equipment access right-of-way. The DEIS indicates that PSE will exercise Eminent Domain, condemning or making compulsory purchases of valuable housing, expropriating housing cheaply, so that they can demonstrate control over all property along the entire transmission line corridor.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

- I2-U -1 See response for Key Theme ECON-1.
- I2-U -2 See response for Key Theme EARTH-2.
- I2-U -3 See response for Key Theme LU-1.

From: [Russell Borgmann](#)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; rholland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Relationship to Existing Land Use Plans and to Estimated Population
Date: Wednesday, March 02, 2016 10:33:33 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Relationship to Existing Land Use Plans and to Estimated Population".

Relationship to Existing Land Use Plans and to Estimated Population

- Putting a SECOND 230kV transmission line running parallel within 0.8 miles of an existing line (the Seattle City Light transmission lines) affects existing land use plans, aesthetics, and elevates health risks. Depending on Energize Eastside routing, these two lines could run within 1,000 feet of each other, on either side of Newport High School, posing concerns for the existing Newport High School land use (e.g. outdoor sports fields and elevated health risks to the youth and staff that use these fields, as well as aesthetic issues to the surrounding neighborhood).

I2-V-1

I2-V-2

The environmental impact of TWO 230kV lines, operated by 2 different utilities, running so close together has not been assessed in the DEIS.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

- I2-V -1 See response for Key Theme LU-5.
- I2-V -2 The prospect of PSE and Seattle City Light sharing a corridor with two 230 kV lines was addressed in the Phase 1 Draft EIS, Alternative 1B.

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastside.org)
To: info@energizeeastside.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; tmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Land and Shoreline Use
Date: Wednesday, March 02, 2016 10:37:48 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Land and Shoreline Use".
[Land and Shoreline Use](#)

I2-W-1

- Currently there are no WA state regulations for siting 230kV transmission lines in urban areas. This is the result of tacit oversight, NOT explicit approval. When WA state legislature addresses 230kV transmission line regulations, will Energize Eastside be retroactively subject to those regulations?
- State laws and regulations for 230kV High Voltage Transmission Lines (HVTL) don't exist, because decades ago, when the 230kV lines were being erected, HVTL spanned rural countryside. Back then, it wasn't even considered that HVTL should co-exist in a dense urban corridor that has now built up around the existing lines. New High Voltage Transmission Lines must be built well away from urban centers.

I2-W-2

- There are substantial [Safety Issues](#) with digging 15ft to 30ft deep holes for monopoles right next to 2 gas pipelines. Vertical boring of these holes cause significant vibration which can cause settlement damage to nearby house foundations. Additionally, the vibration can damage aging fuel pipelines located within the selected transmission line corridor. Vibration stress fractures and damage can ultimately lead to pipeline rupture days/weeks/months after transmission line construction is complete.

I2-W-3

- How is the "fall-zone" of 130-ft tall monopoles accounted for in the Right of Way? Many houses are closer than 130 feet to the monopole sites. If a monopole were to fall (e.g. in an [earthquake](#)), it could hit houses. The selected corridor crosses the Seattle Fault, a shallow fault capable of earthquakes in excess of 7+. The Cascadia Subduction Zone ties to the Seattle Fault and is capable of earthquakes in excess of 9 on the Richter Scale. The Cascadia Subduction Zone is on a periodicity of 300 to 500 years, and the last major seismic event was January 26, 1700 (315 years ago). The Axial Seamount (underwater volcano) began eruptions April 30, 2015. These volcanic eruptions could add to the pressure along the Cascadia Subduction Zone, and by extension, the Seattle Fault.

I2-W-4

- How is the "fall-zone" of 130-ft tall monopoles accounted for in the Right of Way if a monopole were to fall due to [sustained high winds](#), like the Chanukah Eve Storm, December 2007?
- Non-wired Alternatives
 - Only 20% of the need for Energize Eastside is attributed to local load growth. Only ONE (1) transformer overload condition exists in power flow simulations when Canadian Entitlement electricity is removed from the power flow simulations. This single overload condition could be addressed via an [additional transformer at the Talbot Hill](#)

- I2-W -1 See response for Key Theme LU-2.
- I2-W -2 See response for Key Theme PLS-1.
- I2-W -3 See response for Key Theme EARTH-2.
- I2-W -4 See responses for Key Themes OBJ-2 and OBJ-3.

I2-W-4

- station.
- **Install a Small Natural Gas-Fired Peaker Plant**, possibly located in the corridor between Lakeside substation and the City of Bellevue Waste Transfer Station. The size of this gas peaker plant can be minimized for rare PEAK loads, not for daily 230kV transmission.
 - PSE *did* in fact study a solution to build a 300MW natural gas-fired peaker plant to address power generation west of the Cascades and solve peak power problems in lieu of Energize Eastside. PSE's studies explored the Cedar Hills location (east of Renton, south of Issaquah). PSE's studies found that this was a viable option to Energize Eastside, when power flows northward to Canada were excluded from PSE's power flow studies. For economic reasons important only to PSE, PSE's current power flow models include northward power flow to Canada (Canadian Entitlement) in order to justify the excessive capacity of Energize Eastside. PSE states they abandoned the natural gas-fired peaker plant allegedly because it posed "permitting problems". Are those "permitting problems" more problematic than the serious challenges associated with permitting Energize Eastside, a project with much more far-reaching environmental impact?
 - **Distributed generation**: Why can't PSE build a scalable, reliable, distributed solution for the Puget Sound eastside that is sized for Bellevue's needs, at a cost lower than Energize Eastside to keep our electricity rates down? These alternatives could be installed close to the anticipated downtown Bellevue load growth (per the USE report), at the Bellevue Substation near the corner of 116th Ave NE and NE 4th St. or near the Lakeside Substation off of Kamber Road.
 - **Batteries**: Has the City of Bellevue and PSE kept abreast of technology advances that supply grid battery technology for peak load situations? Other cities are finding batteries to be a viable, affordable means of addressing peak load issues. Grid battery solutions do not need to be sized to address a full-time 230kV load. Grid batteries only need to be sized to address short-term emergency peak load situations. Battery containers could be located close to the anticipated downtown Bellevue load growth (per the USE report), at the Bellevue Substation near the corner of 116th Ave NE and NE 4th St. (Center Substation) or near the Lakeside Substation off of Kamber Road.
 - Wired Alternatives
 - **Reconductor 115kV lines** to improve transmission efficiencies.
 - **SCL Loopback**: Add a new 230/115kV transformer at Lakeside Substation. Loop the existing Seattle City Light double circuit 230kV line through the Lakeside Substation. Route the line east along I-90 then turn north to the Lakeside Substation. Continue along the existing PSE right-of-way north of the Lakeside Substation. Turn west near the Lake Hills Connector until the SCL lines are once again intercepted. This has significantly less environmental impact than 1.8 miles of new transmission lines. This could have the added benefit of removing 230kV SCL lines that currently run over the top of the Woodridge neighborhood – over the top of a public elementary school and two community swimming pools.
 - **Lake Tradition Option**: Re-evaluate PSE's plan-of-record until approximately 2011 to route power from Lake Tradition along I-90 to the Lakeside Substation.
 - **Monroe-Echo Lake #2**: Re-evaluate BPA's best technical solution (lowest risk, TCRM,

I2-W-4

- and highest transfer capacity, TTC) by building a second Monroe-Echo Lake transmission line, to address Canadian Entitlement electricity delivery.
- Underground installation of portions of the line through dense urban areas
- Submerging the line if a route under Lake Washington can be found viable

Sincerely,
Russell Borgmann
2100 120th Place SE
Bellevue WA 98005
rborgmann@hotmail.com

From: [Russell Borgmann](#)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; rholland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Light and Glare
Date: Wednesday, March 02, 2016 10:40:18 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Light and Glare".

Light and Glare

- Will 130ft poles require flashing beacons to alert low flying private aircraft of tall aerial obstructions, especially in areas that cross I-90 or over Somerset?
- Energize Eastside will result in the destruction of 8,000 mature trees and other crucial vegetation. The eastside's tree canopy is essential for health as well as the reduction of light and glare, especially nighttime light pollution. Bellevue's tree canopy has already decreased to 36%, the lowest along the Puget Sound eastside. Energize Eastside will contribute to this rapidly dwindling tree canopy.

http://www.ci.bellevue.wa.us/pdf/Manager/Urban_Ecosystem_Analysis.pdf

The DEIS does not adequately address the environmental impact of Light and Glare.

Sincerely,

Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-X-1

I2-X -1 See responses for Key Themes VR-6 and VR-3.

From: [Russell Borgmann](#)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; tmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Noise
Date: Wednesday, March 02, 2016 10:42:43 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Noise".

Noise

- Corona emissions produce audible noise - snaps, crackles, and pops. How will this noise be mitigated in urban areas? This audible noise is disruptive to humans and animals, and this noise intensifies when it rains (which occurs frequently in the rainy Northwest). When water droplets hit high temperature transmission lines which are rated to 400°F (during full load), raindrops sizzle. Birds steer a wide berth. Human hair can stand on end when walking underneath these lines (example: walk underneath the Seattle City Light transmission lines near Norwood Swimming Pool when SCL/BPA conduct full-load tests on a misty day or cold morning).
- **Corona** can extend 2,000 feet and will cause electronic noise interference with emergency 911 back-up communication, e.g. HAM radio communication - crucial radio broadcasting capabilities during times of natural disasters, like earthquakes.

Additionally, the DEIS does not address the environmental impact of noise during the staging and construction of Energize Eastside. This should be studied as well as the environmental impact of Energize Eastside once installed.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

- I2-Y -1 See response for Key Theme NOI-1.
- I2-Y -2 See response for Key Theme SVC-2.
- I2-Y -3 See response for Key Theme NOI-2.

I2-Y-1

I2-Y-2

I2-Y-3

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; tmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Pipeline Safety
Date: Wednesday, March 02, 2016 10:46:00 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Pipeline Safety".

Pipeline Safety

- There are substantial Safety Issues with digging at least 12ft diameter holes, 15ft to 30ft deep, to install/pour monopoles concrete bases right next to 2 gas pipelines and an existing 115kV line. This is an environmental disaster waiting to happen in a narrow, crowded corridor with houses in close proximity on both sides. Vertical boring of these holes cause significant vibration. This vibration can damage aging fuel pipelines located within the selected transmission line corridor. Vibration stress fractures and damage can ultimately lead to pipeline rupture days/weeks/months after transmission line construction is complete.
- Vibration stress fractures and damage to aging pipelines are exacerbated by natural disasters, like earthquakes and high winds (e.g. the Chanukah Eve Storm, December 2007). These pipelines cross the Seattle Fault, a shallow fault capable of earthquakes in excess of 7+. The Cascadia Subduction Zone ties to the Seattle Fault and is capable of earthquakes in excess of 9 on the Richter Scale. The Cascadia Subduction Zone is on a periodicity of 300 to 500 years, and the last major seismic event was January 26, 1700 (315 years ago). The Axial Seamount (underwater volcano) began eruptions April 30, 2015. These volcanic eruptions could add to the pressure along the Cascadia Subduction Zone, and by extension, the Seattle Fault, making the pipelines vulnerable. Digging near the pipelines exacerbates pipeline susceptibility to damage.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-Z-1

I2-Z -1 See responses for Key Themes PLS-1 and PLS-2 and Key Theme EARTH-1.

From: [Russell Borgmann](#)
 To: info@energizeeastsideEIS.org
 Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
 Subject: Energize Eastside DEIS Public Comments: Public Outreach
 Date: Wednesday, March 02, 2016 10:48:32 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Public Outreach".

Public Outreach

- Draper Study (medical study published in 2005) found that corona can drift in the wind much farther than anticipated, in excess of 600m (**2,000 ft**)
- Based on the Draper study, please recommend that EIS notices be sent out to all affected residents a minimum of a 2,000 feet radius along the selected route. The current EIS notification range of 500 feet is arbitrary and can be changed.
- Since all PSE customers are affected by an anticipated rate increase, request that PSE send out EIS notification to ALL customers via printed notifications in all customers' electricity bills and solicit comments from ALL PSE customers.
- How does a PSE customer in Whatcom County benefit from Energize Eastside, when they are also required to pay for the project?

Sincerely,

Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-AA-1

I2-AA-2

- I2-AA -1 See response for Key Theme EIS-2.
- I2-AA -2 See response for Key Theme ECON-4.

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Risk of Explosion
Date: Wednesday, March 02, 2016 10:52:01 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Risk of Explosion".

Risk of Explosion

- There are substantial Safety Issues with digging 12ft diameter holes, 15ft to 30ft deep, for monopoles right next to 2 gas pipelines and an existing 115kV line.
- Remember the Olympic Pipeline explosion in Bellingham in 1999?
<https://www.youtube.com/watch?v=AJRwePrctGw>
- Remember the San Bruno, CA gas pipeline explosion in 2010?
http://www.mercurynews.com/business/ci_27880159/san-bruno-pg-e-faces-record-penalty-punishment
- Remember the Texas gas pipeline explosion caused by installing HVTL in 2010?
<https://www.youtube.com/watch?v=RSCz-35M9hA>
- **Puget Sound Energy has experience with filing fraudulent gas pipeline inspection records:**
<http://www.seattletimes.com/seattle-news/puget-sound-energy-to-pay-125-million-fine-for-falsifying-inspection-records/>

The DEIS does not do an adequate job of assessing the environmental impact of the very real probability of this risk.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-BB -1 See responses for Key Themes PLS-1, PLS-2 and PLS-5.

I2-BB-1

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmlyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Scenic Resources
Date: Wednesday, March 02, 2016 10:53:51 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Element "Scenic Resources".

Scenic Resources

- Aesthetic concerns are best explained by example: The City of Renton is now experiences irreversible environmental impact by a significant "industrial" look and feel (see the 600 block of South Grady Way, near downtown Renton). City Planners know there are numerous studies citing a self-fulfilling destiny: Large overhead transmission lines beget an unspoken, but noticeable "industrial" feel. This leads to less desirable neighborhood/community character, which begets declining property pride-in-ownership, which begets declining property values, begetting declining tax revenues, begetting more industrialization to compensate for declining tax revenues. The downward spiral continues (industry jargon refers to this as a "death spiral"). Where does it end? Will Bellevue experience its own death spiral? Think of cities like Detroit - once a shining beacon of mid-20th century technology and innovation, and now sadly an impoverished, crime-ridden city mired in bankruptcy?
- Bellevue is French for "beautiful view". Isn't it ironic that Bellevue is contemplating a project that will cause irreversible environmental impact to the Puget Sound eastside for generations to come? Bellevue can have both: the energy needed for viable, sustainable growth and maintain the beauty and character of the Puget Sound eastside.
- Bellevue theme is a "City In a Park". Energize Eastside will result in the destruction of 8,000 mature trees and other vegetation crucial for maintaining a clean air supply. The eastside's tree canopy is essential for health as well as aesthetics. Bellevue already has the lowest remaining tree canopy in the Puget Sound eastside (declined to approximately 36%). Energize Eastside will contribute to this rapidly dwindling tree canopy.
http://www.ci.bellevue.wa.us/pdf/Manager/Urban_Ecosystem_Analysis.pdf
- Energize Eastside would install a SECOND 230kV transmission line running parallel within 0.8 miles of an existing line (the Seattle City Light transmission lines). Depending on the routing, these two lines could run within 1,000 feet of each other, on either side of Newport High School.

The DEIS does not adequately address the environmental impact of scenic resources.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-CC -1 See responses for Topic VR, and Key Themes ECON-1 and ECON-2.

I2-CC-1

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Alternatives
Date: Wednesday, March 02, 2016 11:00:32 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Alternatives.

- Non-wired Alternatives
 - Only 20% of the need for Energize Eastside is attributed to local load growth. Only ONE (1) transformer overload condition exists in power flow simulations when Canadian Entitlement electricity is removed from the power flow simulations. This single overload condition could be addressed via an [additional transformer at the Talbot Hill station](#).
 - [Install a Small Natural Gas-Fired Peaker Plant](#), possibly located in the corridor between Lakeside substation and the City of Bellevue Waste Transfer Station. The size of this gas peaker plant can be minimized for rare PEAK loads, not for daily 230kV transmission.
 - PSE [did](#) in fact study a solution to build a 300MW natural gas-fired peaker plant to address power generation west of the Cascades and solve peak power problems in lieu of Energize Eastside. PSE's studies explored the Cedar Hills location (east of Renton, south of Issaquah). PSE's studies found that [this was a viable option to Energize Eastside, when power flows northward to Canada were excluded from PSE's power flow studies](#). For economic reasons important only to PSE, [PSE's current power flow models include northward power flow to Canada](#) (Canadian Entitlement) in order to justify the excessive capacity of Energize Eastside. [PSE states they abandoned the natural gas-fired peaker plant allegedly because it posed "permitting problems"](#). Are those "permitting problems" more problematic than the serious challenges associated with permitting Energize Eastside, a project with much more far-reaching environmental impact?
 - [Distributed generation](#): Why can't PSE build a scalable, reliable, distributed solution for the Puget Sound eastside that is sized for Bellevue's needs, at a cost lower than Energize Eastside to keep our electricity rates down? These alternatives could be installed close to the anticipated downtown Bellevue load growth (per the USE report), at the Bellevue Substation near the corner of 116th Ave NE and NE 4th St. or near the Lakeside Substation off of Kamber Road. The DEIS needs to more fully, and accurately, assess Alternative 2. The current DEIS language is too dismissive of Alternative 2.
 - [Batteries](#): Has the City of Bellevue and PSE kept abreast of technology advances that supply grid battery technology for peak load situations? Other cities are finding batteries to be a viable, affordable means of addressing peak load issues. Grid battery solutions do not need to be sized to address a full-time 230kV load. [Grid batteries only need to be sized to address short-term emergency peak load situations](#). Battery

I2-DD -1 See responses for Key Theme OBJ-1 and Key Theme ALT-1.

I2-DD-1

I2-DD-1

containers could be located close to the anticipated downtown Bellevue load growth (per the USE report), at the Bellevue Substation near the corner of 116th Ave NE and NE 4th St. (Center Substation) or near the Lakeside Substation off of Kamber Road.

- Wired Alternatives
 - [Reconductor 115kV lines](#) to improve transmission efficiencies.
 - [SCL Loopback](#): Add a new 230/115kV transformer at Lakeside Substation. Loop the existing Seattle City Light double circuit 230kV line through the Lakeside Substation. Route the line east along I-90 then turn north to the Lakeside Substation. Continue along the existing PSE right-of-way north of the Lakeside Substation. Turn west near the Lake Hills Connector until the SCL lines are once again intercepted. This has significantly less environmental impact than 18 miles of new transmission lines. This could have the added benefit of removing 230kV SCL lines that currently run over the top of the Woodridge neighborhood – over the top of a public elementary school and two community swimming pools.
 - [Lake Tradition Option](#): Re-evaluate PSE’s plan-of-record until approximately 2011 to route power from Lake Tradition along I-90 to the Lakeside Substation.
 - [Monroe-Echo Lake #2](#): Re-evaluate BPA’s best technical solution (lowest risk, TCRM, and highest transfer capacity, TTC) by building a second Monroe-Echo Lake transmission line, to address Canadian Entitlement electricity delivery.
 - Underground installation of portions of the line through dense urban areas
 - Submerging the line if a route under Lake Washington can be found viable

I2-DD-2

The DEIS must more fully, and accurately, assess Alternative 2. The current DEIS language is too dismissive of Alternative 2. Additionally the DEIS eliminated other wired alternatives prematurely with invalid assumptions, distorted facts, and lack of independent verification of PSE modeling and forecasting.

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue WA 98005
rborgmann@hotmail.com

I2-DD -2 See responses for Key Theme EIS-3 and Key Theme ALT-1.

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastsideEIS.org)
To: info@energizeeastsideEIS.org
Cc: hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; tmiyake@bellevuewa.gov; rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Process
Date: Wednesday, March 02, 2016 11:32:35 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the DEIS Process.

PROCESS

I2-EE-1

- The City of Bellevue has deemed Energize Eastside an "Essential Public Facility" (EPF). The independent USE Report says that load growth is only needed in the downtown Bellevue corridor. How can Energize Eastside be deemed an EPF when it has been independently shown NOT to be essential to other directly affected jurisdictions (Renton, Newcastle, Redmond, and Kirkland)? Other less costly measures (e.g. a natural-gas fired peaker plant located close to the load in Bellevue) could more easily satisfy this need, on the rare peak occasions it may become necessary
- **Energize Eastside does NOT meet the definition of an EPF.** Per the City of Bellevue's Comprehensive Plan, "the Growth Management Act defines essential public facilities as those "that are typically difficult to site, such as airports, state education facilities and state or regional transportation facilities as defined in RCW 47.06.140, state and local correctional facilities, solid waste handling facilities, and in-patient facilities including substance abuse facilities mental health facilities, group homes, and secure community transition facilities as defined in RCW 71.090.020." **"The Comprehensive Plan has benefits including minimizing difficulties in the siting process and addressing local impacts equitably."**
 pg. 81, [http://www.bellevuewa.gov/pdf/PCD/05.CapitalFacilities02\(3\).pdf](http://www.bellevuewa.gov/pdf/PCD/05.CapitalFacilities02(3).pdf)
- PSE's Load Flow Studies (**Eastside Needs Assessment Report**) and ColumbiaGrid (**ColumbiaGrid 2013 System Assessment Report**) contradict one another. PSE's load flow studies are based on a case that was studied **"for information purposes and mitigation is not required as it goes beyond what is required in the NERC Reliability Standards."**
<https://www.columbiagrid.org/client/pdfs/2013SAforweb7.1.13FINAL.pdf> (2017-18HW2, pg 12, PDF pg 17 of 92)

I2-EE-2

- The DEIS process during this "Programmatic" phase 1 has not adequately assessed if Energize Eastside is duplicative, less efficient, and more costly than better alternatives that have been suppressed?
- PSE and ColumbiaGrid studies did not reflect the Remedial Action Schemes (RAS) and Schedule Adjustment Schemes that have been put in place for Northern Intertie schedules.
- Contrived power flow studies and simulations include Canadian Entitlement electricity.
- Contrived power flow studies and simulations turned OFF all PSE-controlled emergency generation facilities west of the Cascades (facilities specifically intended to address peak load issues).
- FERC rules require Bulk Electric System projects, like Energize Eastside, to be competitively bid.

- I2-EE -1 See response for Key Theme LU-4.
- I2-EE -2 See responses for Key Themes OBJ-2 and OBJ-3.

I2-EE-2

- In PSE's 2013 IRP, PSE indicates a 1,500MW generation shortfall forecast (unmet capacity, Figure G-12 on page G-25). PSE has not presented any plans to address not having enough electrons to flow through the Energize Eastside transmission lines. Building an electricity transmission pipeline the size of Energize Eastside will do no good, if PSE and others cannot produce enough electricity to flow through that transmission line (e.g. a bridge to nowhere).
- Energize Eastside transmission lines would depend upon PSE's ability to sufficiently generate electricity or buy electricity generation. Where will PSE obtain a new electricity supply to cover peak load with the pending shutdown of Colstrip? This planning must be part of the EIS process.
- Any significant change (decrease) in electricity generation capacity, like the retirement of Colstrip, must be included in the overall Environmental Impact Study for Energize Eastside.
- U.S.E. did not independently analyze PSE's load forecast. U.S.E. accepted PSE's inputs as fact and verified that PSE had followed an industry-standard process. Yet faulty assumptions lead to erroneous results: garbage in, garbage out.
- Why didn't USE obtain independent data from unbiased third-parties, rather than rely strictly on data provided by PSE?
- Did USE compare PSE's data against ColumbiaGrid and/or BPA data to verify its authenticity? PSE cites a load growth forecast of 2.4% annually in the DEIS. The data that PSE supplied to the Western Electricity Coordinating Council (WECC) cites a load growth forecast of 0.5% annually. A 0.5% growth rate closely correlated with other independent data from the Puget Sound Regional Council, Seattle City Light, the Northwest Power and Conservation Council, the Energy Information Administration, Sound Transit East Link Expansion, and others. The eastside is NOT growing nearly 5 TIMES as fast as Seattle. Seattle City Light cites a load growth forecast of 0.5% in their IRP.
- Did U.S.E. verify and validate that there are no software errors in PSE's load forecasting algorithms?
- How does PSE verify and validate its software algorithms, particularly for load forecasting?
- When was the last time changes were made to PSE's software algorithms and how were those software changes validated and verified before the software was used to create meaningful, actual load forecasts? (Page H-16, Loss Factors, indicates that the software was changed to adjust the loss factor. What other changes might have been made and how were those software changes validated and verified?)
 - **Example:** PSE admitted a calculation error of Bainbridge Island's energy threshold. <http://www.insidebainbridge.com/tag/linda-streissguth/>
 - **Example:** Recently Avista admitted that software changes to their rate-charging algorithms resulted in overcharging customers. <http://www.spokesman.com/stories/2015/may/04/software-error-caused-avista-overestimate-rate-req/>
 - Should PSE's forecasting model be taken at face value? Is there an opportunity for software errors to produce forecasting errors that indicate an excessive demand/need/growth beyond what is truly warranted?

I2-EE-3

- **Bonneville Power Administration documentation (in addition to Memoranda of Agreement) states that all Lakeside Transformer (Bellevue) 230kV activities fall under NEPA.** Please re-evaluate all documentation from multiple sources, including BPA and FERC. Has the City of Bellevue overlooked crucial binding documentation requiring Energize Eastside

I2-EE -3 See responses for Key Themes OBJ-1 and OBJ-2.

I2-EE-3

to submit for NEPA review?

- Mr. Pyle (City of Bellevue's former Sr. Environmental/Land Use Planner charged with the Energize Eastside EIS) said that BPA has provided a letter stating that BPA is not involved with the Energize Eastside project (aka: Sammamish-Lakeside-Talbot project). If BPA is not involved, why are there BPA Memoranda of Agreement (MOA) included on the City of Bellevue EIS scoping website?

http://www.energizeeastsideeis.org/uploads/4/7/3/1/47314045/2015-06-01_moa_with_bpa-seattlecitylight-pse.pdf

- On the City of Bellevue EIS Scoping website, a MOA (amended April 2015, link included above) states, "Concerning the Puget Preferred Plan Projects identified in Section 3(b) of the MOA, the parties agree that the **BPA funding originally intended for these projects** will instead be directed under separate agreement to PSE's Whatcom County Transformer project. Accordingly, the parties acknowledge that BPA is not involved in any manner or capacity in PSE's Sammamish to Lakeside to Talbot Rebuild Project or its Lakeside 230 kV Transformer Addition Project."
- This MOA goes out of its way for BPA to disavow any association with Energize Eastside, yet, it also clearly states that **BPA funding was, in fact, originally intended for this project.**
- **BPA is merely diverting payment for Energize Eastside to another project** in Whatcom County. This is a maneuver **to avoid FERC Order 1000 cost allocation requirements.** This maneuver is also an **attempt to avoid triggering a NEPA review.** BPA is obviously playing a financial shell game. ANALOGY: To avoid me paying sales tax when buying your car, you sign the car over to me. Then I'll give you money so you can go buy a new bicycle. We complete the transaction and pretend that I never really paid you for the car.
- In that same MOA, paragraph 3(a), "Upon completion of the Puget projects, PSE shall submit an invoice or payment to SCL for the SCL cost obligations associated with construction of the Puget Preferred Plan Projects." Seattle City Light is involved in the shell game and forced to pay PSE, so that BPA can no longer appear to have any financial obligation. **Why would Seattle City Light pay PSE, if Energize Eastside is solely to address Puget Sound eastside (local) load growth?** BPA is going out of its way to misdirect and divert funds from a broader REGIONAL project to address west coast grid reinforcement (Energize Eastside) to avoid a NEPA review and circumvent compliance with FERC Order 1000.
- The Mid-West Electric Consumers Association states on their *Funding the Federal Power Program* fact sheet, "...due to **ongoing federal budget crisis, appropriations from the U.S. Treasury will not be available to fund** capital programs such as new construction and replacement or **rehabilitation of existing facilities**...For two decades, administrations' Budget Requests for funding of the federal power program have steadily decreased...**Customer funding has become an important funding source...**" Translation: Local ratepayers (like PSE customers) are being forced to finance new construction, replacement, and rehabilitation of electrical infrastructure that provides benefits to a substantially larger base of beneficiaries throughout the west coast region. Electricity grid reinforcement is paramount to our national security and economic wellbeing. However, implementation is being abused. Some U.S. **utilities**

I2-EE-3

(like PSE) are “gold-plating” their infrastructure projects to qualify for higher rates of Return On Equity. The Federal Power Program is leveraging individual utilities to address grid reinforcement. FERC has programs that provide EXTRA incentive (a higher rate of Return On Equity, ROE) to reward utilities for infrastructure investment that reinforces the electrical grid. In turn, those individual utilities get to charge their local customers for projects that have more far-reaching goals beyond just benefitting local ratepayers. Current WA state legislation actually REWARDS PSE for over-building infrastructure.

<http://meconsumers.com/wp-content/uploads/2013/02/Funding-Federal-Power-2013.pdf>

<http://www.wsj.com/articles/utilities-profit-recipe-spend-more-1429567463>

- o The BPA News (Jan 24, 2012) has much to say about Energize Eastside: “When large amounts of energy are being delivered to the Puget Sound area through the Northern Intertie to Canada, transmission lines become congested...The projects being announced today will significantly expand system capacity and minimize the need for curtailments....”

<http://www.bpa.gov/news/newsroom/releases/Documents/20120124-PR-5-12-Joint-transmission-system-projects-to-improve-system-reliability.pdf>

- SEPA/NEPA determination must be determined by an independent panel/commission that includes detailed local, state, and federal legal review.

Since our electricity grid is interconnected, the Western Electricity Coordinating Council (WECC) shows approximately 1/3 of the heavy winter base case flowing through the one of the proposed Energize Eastside 230kV transmission lines. The proposed Energize Eastside has more than enough capacity to facilitate the transfer of excess oversupply of hydropower. PSE forecasts a **74MW** transmission capacity shortfall for local peak periods in the Eastside as early as the winter of 2017-2018 (DEIS pg 1-6). Energize Eastside is capable of conservatively transmitting over **1,000MW** on one line. That’s like providing a firehose to water a daisy.

BPA is diverting payment for Energize Eastside to another project – the Whatcom County Transformer project. This is a maneuver for Energize Eastside to avoid FERC Order 1000 cost allocation requirements and also avoids triggering a NEPA review. BPA and PSE are playing a financial shell game that involves Seattle City Light, and possibly ColumbiaGrid, and FERC.

Citizens will not stand for PROCESS shenanigans. Based on the information provided above, I have multiple reasons to believe these **Energize Eastside EIS PROCESS** questions and concerns are legitimate, worthy of serious consideration, and appropriate for inclusion in the Draft Programmatic EIS.

Sincerely,
Russell Borgmann
2100 120th Place SE
Bellevue WA 98005
rborgmann@hotmail.com

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastsideEIS.org)
To: Info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com; bstokes@bellevuewa.gov; jchelminiak@bellevuewa.gov; jrobertson@bellevuewa.gov; trobinson@bellevuewa.gov; claw@bellevuewa.gov; kwallace@bellevuewa.gov; vsfalter@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; hbedtwel@bellevuewa.gov
Subject: Energize Eastside DEIS Public Comments: Generation vs. Transmission
Date: Tuesday, March 08, 2016 10:40:55 AM

The DEIS (pg 1-6) states PSE has a **74MW** transmission capacity shortfall for local peak periods in the Eastside as early as the winter of 2017-2018. PSE own IRP forecasts a generation shortfall (unmet capacity) in their 2018 base cases:

http://pse.com/aboutpse/EnergySupply/Documents/IRP_2013_Appendices.pdf (Figure G-12 "Unmet Capacity", pg G-25)

Energize Eastside is capable of conservatively transmitting **over 1,000MW**, when the long-range forecast is 74MW (likely over-estimated).

That's like providing a firehose to water a daisy. Overkill?

The DEIS appears to highlight a generation problem, not a transmission problem. In 1997, PSE profitably sold the Shuffleton Generation Plant to land developers and the plant was demolished in 2001 – without WUTC or public input/approval. Shuffleton was a local emergency electricity generation plant capable of providing 88 MW during peak load periods. Did PSE create the 74 MW electricity generation shortfall that is now forecast? Where did the money go from the sale of Shuffleton? PSE never replaced that emergency electricity generation source. Ironically, the Shuffleton Plant was located in Renton, the same place where transformer overloads are now forecast to occur.

PSE is planning to make-up the shortfall of electricity generation by buying electricity on the daily open spot market – potentially buying at high prices when electricity demand is high and we have nowhere else to turn. This is an expensive, and risky, strategy exposing customers to unexpected rate hikes.

The Mid-West Electric Consumers Association states on their *Funding the Federal Power Program* fact sheet, "...due to ongoing federal budget crisis, appropriations from the U.S. Treasury will not be available to fund capital programs such as new construction and replacement or rehabilitation of existing facilities...For two decades, administrations' Budget Requests for funding of the federal power program have steadily decreased...Customer funding has become an important funding source..." **Translation:** Local ratepayers (like PSE customers) are being forced to finance new construction, replacement, and rehabilitation of electrical infrastructure that provides benefits to a substantially larger base of beneficiaries throughout the west coast region (tens of millions of ratepayers in BPA's 8-state territory).

While electricity grid reinforcement is paramount to our national security and economic wellbeing, implementation is being abused. Some utilities (like investor-owned PSE) are "gold-plating" infrastructure projects to qualify for higher rates of Return-On-Equity (ROE). The Federal Power

I2-FF -1 See response for Key Theme OBJ-2.
 I2-FF -2 See response for Key Theme ECON-4.

I2-FF-1

I2-FF-2



I2-FF-2

Program is leveraging individual utilities to address grid enhancement. FERC has programs that provide EXTRA incentive (a higher rate of ROE) to reward utilities for infrastructure investment that reinforces the electrical grid. In turn, those individual utilities get to charge their local customers for projects that have more far-reaching goals beyond just benefitting local ratepayers. Current weak WA state legislation actually REWARDS PSE for over-building infrastructure.

I2-FF-3

City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs. Before we build an oversized transmission line and overpay for electricity on the open spot market, please analyze and assess how to make measureable, meaningful improvements to the electricity grid for a fraction of the cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives. It is the City's fiduciary duty to its citizens.

Sincerely,

Russell Borgmann

2100 120th Place SE

Bellevue, WA 98005

rborgmann@hotmail.com

I2-FF -3 See responses for Key Themes EIS-2 and EIS-3.

From: [Russell Borgmann](#)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com; afiman@utc.wa.gov; simon@atq.wa.gov; bferguson@atq.wa.gov; rferguson@atq.wa.gov
Subject: Energize Eastside DEIS Public Comments: Lines HAVE Been Upgraded in Past 50 Years
Date: Wednesday, March 09, 2016 11:38:58 AM

I am deeply concerned that advertising claims made during the development of the Energize Eastside EIS do not accurately reflect the facts and are tainting the Draft EIS Process. As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

The following questions are directed at the DEIS "Process". Of particular concern is how the purpose and process are being subverted by false advertising claims, and [how false advertising is interfering with the EIS process](#).

What has Puget Sound Energy been doing for 50 years? Collecting money from hard-working customers while not maintaining a reliable source of electricity? PSE advertising says, "We haven't upgraded the grid since man first walked on the moon."

Are PSE's claims that the eastside's electric grid hasn't been updated in over 50 years accurate? Each year, PSE is required to review our electricity infrastructure, identify risks, and update the system. In the past 50 years, **PSE has built 3 additional north-south high voltage transmission lines (HVTLS)**, increasing the eastside's capacity from 2 lines to 5 lines. Public Records searches with the City of Bellevue show 3 of the 5 HVTLS running north-south through Bellevue were built over time during the last 30 years, at least one as recently as 1997. Had PSE NOT upgraded the system in the past 50 years, PSE would be derelict in their regulated duty to provide reliable, affordable power to our region. Have PSE and the WUTC been asleep at the switch for the past 50 years?

If Energize Eastside is so obviously needed, why is PSE engaging in a big-time sales job that includes obnoxious online banner ads, misleading print ads, and political lobbying? These ads are designed to prey on our fears of "rolling blackouts", which are not supported by the facts and are misleading.

How is all of this advertising paid for – by further increases to our electricity rates? We can only hope the WUTC disallows these PSE advertising costs from being billed back to hard-working PSE customers. PSE is a monopoly. It's not like we can buy our electricity elsewhere. Or can we?

City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs. Please analyze and assess how to make measurable, meaningful improvements to the electricity grid for a fraction of the cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives. It is the City's fiduciary duty to its citizens.

In the short-term the City of Bellevue has no option but to choose the NO ACTION Alternative. In the longer-term, the City of Bellevue must more fully vet Alternative 2 (Integrated Resource Approach) with up-to-date information. And the Attorney General's office should investigate PSE for misleading advertising claims, especially during the ongoing development of the EIS.

Sincerely,

Russell Borgmann
 2100 120th Place SE
 Bellevue, WA 98005
rborgmann@hotmail.com

- I2-GG -1 See response for Key Theme EIS-1.
- I2-GG -2 See response for Key Theme ALT-1.
- I2-GG -3 Comment noted.
- I2-GG -4 See response for Key Theme ALT-1.
- I2-GG -5 Comment noted.

I2-GG-1

I2-GG-2

I2-GG-3

I2-GG-4

I2-GG-5



From: [Russell Borgmann](#)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Adverse Economic Impact
Date: Thursday, March 10, 2016 11:43:28 AM

As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

As part of the public record for the Energize Eastside project, I submit the following questions and information regarding the lack of assessment of the economic impact within the DEIS.

PSE's proposed Energize Eastside project will result in higher electricity rates for ALL business and residential customers. High electricity rates disproportionately hurts those on a fixed income. High electricity rates place affordable housing further out of reach for hard-working families on the eastside. High electricity rates are a careful consideration when a business decides to start or re-locate to the eastside. The DEIS does not examine a long-term projection on suppressed economic activity as a result of high energy prices.

Bellevue City Council and City Staff own a solemn duty and responsibility for multi-jurisdictional decisions that will affect 1.1 Million citizens, from Thurston County to Whatcom County, from Kitsap County to Kittitas County. PSE's website states that all 1.1M customers will pay for Energize Eastside. Bellevue City Council and City Staff have an obligation to 1.1 million citizens, especially to those less fortunate, to first evaluate ALL viable alternatives for reliable, affordable electricity.

PSE customers already pay some of the highest electricity rates in WA State. Energize Eastside is a losing outcome for all of our communities, the Puget Sound eastside, and Washington as a whole. **The high price of Energize Eastside will ultimately LIMIT growth and expansion as businesses and families seek other places to re-locate due to high energy costs.**

City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs. Please analyze and assess how to make measureable, meaningful improvements to the electricity grid for a fraction of the cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives. It is the City's fiduciary duty to its citizens.

In the short-term the City of Bellevue has no option but to choose the NO ACTION Alternative. In the longer-term, the City of Bellevue must more fully analyze Alternative 2 (Integrated Resource Approach) with up-to-date information.
Sincerely,

Russell Borgmann
 2100 120th Place SE
 Bellevue, WA 98005
rborgmann@hotmail.com

- I2-HH -1 See response for Key Theme ECON-4
- I2-HH -2 See response for Key Theme ALT-1.
- I2-HH -3 Comment noted.
- I2-HH -4 See response for Key Theme ALT-1.

I2-HH-1

I2-HH-2

I2-HH-3

I2-HH-4



From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com; eis@cense.org
Subject: Energize Eastside DEIS Public Comments: Pipeline Safety
Date: Thursday, March 10, 2016 9:55:46 AM

The recent natural gas explosion in Seattle's Greenwood neighborhood is a reminder not to take pipeline safety lightly.

The Olympic Pipeline traverses 16 miles of the proposed Energize Eastside route. This pipeline carries jet fuel, which is substantially more volatile (requires less oxygen and ignites at a lower temperature) than natural gas. In the case of the Greenwood explosion, it took PSE **OVER 5 HOURS** to locate all of the gas shutoff valves and get the gas fully shut-off to the region.

I contrast this to recent comments that Mr. Mark Williamson made to the Newcastle Planning Commission. Mr. Williamson, one of PSE's lead consultants for Energize Eastside, stated, "You don't need to do any engineering studies. [25 feet of separation is] far enough that **you can just be laissez-faire and let it go.**" (February 2, 2016)

I wish I could say that Mr. Williamson was kidding. Sadly, he was not. On frequent other occasions, when questioned about the proximity of Energize Eastside to high-pressure jet fuel pipelines, PSE has said, "Don't worry. We are a pipeline company. We know what we are doing." **Really? Let's examine PSE's record:**

"...In 2005, an anonymous caller alerted state regulators that a PSE contractor was falsifying records related to inspecting natural-gas leaks.... And in 2008, **PSE paid a \$1.25 million fine for the fraudulent gas-leak reports**, the largest penalty the state has imposed on a natural-gas distributor...."

"...a September 2004 blast in Bellevue incinerated a home and killed the owner. [PSE] **settled** with her family **for \$8 million.**"

"...In 2003, state pipeline officials inspected PSE's facilities in King and Pierce counties and found numerous violations of requirements to inspect and replace corroded pipelines. In 2004, a badly corroded pipeline operated by the utility leaked gas that filled the Bellevue home of Frances Schmitz, 68, and ignited, killing her...."

"...[PSE] **reported 872 hazardous gas leaks** on service lines that connect to homes and businesses in 2014, the most recent year available..."

"... "I know they had some problems," Carl Weimer, executive director of the **Pipeline Safety Trust**, in Bellingham, said of PSE...."

"...After a **2011 pipeline explosion in the Pinehurst neighborhood** destroyed a home and injured the couple inside, **state regulators fined PSE \$275,000** and required it to evaluate its public-awareness program and emergency plans for gas leaks...."

"...In a **September [2015] inspection report**, the Utilities and Transportation Commission

12-II -1 See response for Key Theme PLS-2.

12-II-1

COMMENT

RESPONSE

identified four probable violations and another area of concern....The **state also identified problems with PSE's maps, gas-leak documentation and other records** — issues the company was working to correct....”

<http://www.seattletimes.com/seattle-news/under-close-watch-puget-sound-energy-has-worked-to-improve-safety/>

12-FII-2 | PSE does NOT instill confidence in their pipeline safety record. Their track record with gas pipeline safety speaks for itself - the examples above are only a sampling of their shortcomings and violations.

12-II-3 | In the short-term, the City of Bellevue has no option but to choose the NO ACTION Alternative. In the longer-term, the City of Bellevue must more fully analyze Alternative 2 (Integrated Resource Approach) with up-to-date information. The DEIS uses outdated information for Alternative 2, which renders the DEIS inadequate to make an accurate assessment of the merits of Alternative 2.

12-II-4 | Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

12-II -2 See response for Key Theme PLS-5.

12-II -3 Comment noted.

12-II -4 See response for Key Theme ALT-1.

From: HBedwell@bellevuewa.gov
To: info@energizeeastsideeis.org
Subject: FW: Energize Eastside: Adverse Economic Impact
Date: Friday, March 11, 2016 8:48:23 AM

From: Russell Borgmann [mailto:rborghmann@hotmail.com]
Sent: Thursday, March 10, 2016 12:04 PM
To: Stokes, John <JStokes@bellevuewa.gov>; Chelminiak, John <JChelminiak@bellevuewa.gov>; Robertson, Jennifer S. <j.robertson@bellevuewa.gov>; Lee, Conrad <CLee@bellevuewa.gov>; Robinson, Lynne <LRobinson@bellevuewa.gov>; Wallace, Kevin R <KRWallace@bellevuewa.gov>; Slatter, Vandana <VSlatter@bellevuewa.gov>; Miyake, Brad <BMiyake@bellevuewa.gov>; Helland, Carol <CHelland@bellevuewa.gov>; Bedwell, Heidi <HBedwell@bellevuewa.gov>
Cc: rborghmann@hotmail.com
Subject: Energize Eastside: Adverse Economic Impact

Esteemed City Council and City Staff,

As part of the public record for the Energize Eastside project, I have submit information regarding the lack of an economic impact assessment within the DEIS.

PSE's proposed Energize Eastside project will result in higher electricity rates for ALL business and residential customers. High electricity rates disproportionately hurts those on a fixed income. High electricity rates place affordable housing further out of reach for hard-working families on the eastside. High electricity rates are a careful consideration when a business chooses to start or re-locate to the eastside.

In 2014, a study was conducted to compare the impact of electricity prices on economic growth, as measured by Gross State Product (GSP). ***“Two important conclusions emerge. First, GSP is very sensitive to changes in electric prices over time. Second, it is clear the correlation between high electric prices and lower or negative economic growth is statistically significant.”***

<http://www.insidesources.com/high-electric-prices-hurt-economic-growth/>

I would expect the Phase 1 “Programmatic” EIS to contain a similar analysis of how high electricity prices might suppress regional economic activity, business growth, and business development on the eastside and greater Puget Sound. Why is no such analysis found in the DEIS?

Bellevue City Council and City Staff own a solemn duty and responsibility for multi-jurisdictional decisions that will affect 1.1 Million citizens, from Thurston County to Whatcom County, from Kitsap County to Kittitas County. PSE’s website states that all 1.1M customers will pay for Energize Eastside. Bellevue City Council and City Staff have an obligation to 1.1 million citizens, businesses, and to those less fortunate, to first evaluate ALL viable alternatives for reliable, affordable electricity.

PSE customers already pay some of the highest electricity rates in WA State. Energize Eastside is a

I2-JJ -1 See responses for Key Themes ECON-3 and ECON-4.

I2-JJ-1

COMMENT

RESPONSE

I2-JJ-1 | losing outcome for all of our communities, the Puget Sound eastside, and Washington as a whole.
The high price of Energize Eastside will ultimately LIMIT growth and expansion as businesses and families choose other places to re-locate due to high energy costs.

I2-JJ-2 | City of Bellevue, please RE-START a transparent process to determine the Eastside’s future electricity needs. Please analyze and assess how to make measurable, meaningful improvements to the electricity grid for a fraction of the cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives. It is the City’s fiduciary duty to its citizens.

I2-JJ-3 | In the short-term the City of Bellevue must choose the NO ACTION Alternative. In the longer-term, the City of Bellevue must more fully analyze Alternative 2 (Integrated Resource Approach) with up-to-date information, before any decision can be made to proceed with a Phase 2 “Project” EIS.

I2-JJ-4 | Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue, WA 98005
rborgmann@hotmail.com

I2-JJ -2 See response for Key Theme EIS-2.
 I2-JJ -3 Comment noted.
 I2-JJ -4 See response for Key Theme ALT-1.

From: [Russell Borgmann](mailto:Russell.Borgmann)
 To: info@energizeeastsideEIS.org
 Cc: rborgmann@hotmail.com; rmurray@soundpublishing.com; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; jstokes@bellevuewa.gov
 Subject: Energize Eastside DEIS Public Comments: Cost/Benefit Analysis and Economic Impact
 Date: Friday, March 11, 2016 9:11:14 AM
 Attachments: [Image2146.png](#)

Per the SEPA Handbook (pg 57, Section 3.3.5) a **cost/benefit analysis** may be included in the EIS if the lead agency (Bellevue) determines this information would be helpful in evaluating the proposal.

Where is a **Cost/Benefit Analysis** similar to this study performed in 2014 (see URL below)? In 2014, a study was conducted to compare the impact of electricity prices on economic growth, as measured by Gross State Product (GSP). **“Two important conclusions emerge. First, GSP is very sensitive to changes in electric prices over time. Second, it is clear the correlation between high electric prices and lower or negative economic growth is statistically significant.”**

<http://www.insidesources.com/high-electric-prices-hurt-economic-growth/>

Simple elasticity of GDP Growth with Respect to Electricity Prices

US	se	15.78 (2.25)	-7.23 * LOG(US Price) (1.29)
	t	(7.00)	(-5.57)
DELAWARE	se	9.99 (4.28)	-3.76 * LOG(DE Price) (2.25)
	t	(2.34)	(-1.67)
MARYLAND	se	10.08 (1.51)	-3.66 * LOG(MD Price) (0.79)
	t	(6.62)	(-4.62)
NEW JERSEY	se	15.88 (5.93)	-6.10 * LOG(NJ Price) (2.63)
	t	(2.67)	(2.32)
PENNSYLVANIA	se	11.25 (3.08)	-4.85 * LOG(PA Price) (1.66)
	t	(3.66)	(-2.91)

Source: BEA and US Energy Information Administration
 se = standard error t = value for student's "t" test

Why is no such analysis found in the DEIS? One would expect the Phase 1 “Programmatic” EIS to contain a similar analysis of how high electricity prices might suppress regional economic activity, business growth, and business development on the eastside and greater Puget Sound.

PSE customers already pay some of the highest electricity rates in WA State. PSE’s proposed Energize Eastside project will result in higher electricity rates for ALL business and residential customers.

What are PSE customers getting for the money? One would also expect the DEIS to include a numerical analysis of the expected increase in reliability vs. the relative cost of each alternative. Why is there no chart in the DEIS similar to this?

Alternative	Environmental Impact	Calculated Increase	Estimated Cost
-------------	----------------------	---------------------	----------------

I2-KK -1 See responses for Key Themes ECON-3 and ECON-4.

I2-KK-1

		in Reliability	to Customers
1 Energize Eastside	Greatest land use and housing impacts (DEIS chapter 10-1)	0.2%	Approx. \$1 billion over 40yrs
2 Integrated Resource Approach	Fewest land use and housing impacts (DEIS chapter 10-1)	Incrementally increases based on need	Incrementally implemented depending on demand
3 New 115kV Lines & Transformers		?	?

Bellevue's reliability is more than 3 TIMES BETTER than the WUTC goals.

	Frequency of Outages Per Customer	Duration of Outage
Bellevue	0.44	66 minutes
WUTC Goal	1.3	320 minutes

Bellevue's electricity reliability was reviewed in 2012. "The overall system in Bellevue is reliable...reliability in Bellevue measured 0.44 (frequency of outages per customer) and 66 minutes (length of outage)...Bellevue has significantly BETTER reliability performance than PSE's overall system reliability for its total service area." (pgs 1, 14 EXPONENT Report, 2012). PSE has repeated stated that Energize Eastside is a "LOCAL" project that will benefit Bellevue because "...the huge amounts of power Downtown Bellevue sucks up is unsustainable..." (Bellevue Reporter Feb 26, 2016). PSE's most recent advertising claims, "Is the [Energize Eastside] project **needed to address reliability** of the electric grid on the Eastside? Yes". **If Bellevue's reliability is already more than 3 TIMES better than the WUTC goals, what are customers getting for the money?**

I2-KK-2

The high price of Energize Eastside will ultimately LIMIT growth as businesses and families relocate to other regions to live and expand due to high energy costs. Energize Eastside is a losing outcome for all of our communities, the Puget Sound eastside, and Washington as a whole.

I2-KK-3

Please analyze and assess how to make measureable, meaningful improvements to the electricity grid for a fraction of the cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. **The Programmatic DEIS must include those alternatives.**

I2-KK-4

Until the DEIS can accurately assess the advantages and disadvantages of this proposed project, the City of Bellevue must choose the NO ACTION Alternative.

Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

- I2-KK -2 See response for Key Theme OBJ-2.
- I2-KK -3 See responses for Key Themes ECON-3 and ECON-4.
- I2-KK -4 See response for Key Theme EIS-1.

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastside.org)
To: info@energizeeastside.org
Cc: rborgmann@hotmail.com; hbedwell@bellevuewa.gov; chelland@bellevuewa.gov; bmiyake@bellevuewa.gov; ajlman@utc.wa.gov; pjones@utc.wa.gov; simon@ata.wa.gov
Subject: Energize Eastside DEIS Public Comments: Please Present Unbiased Analyses of ALL Alternatives
Date: Friday, March 11, 2016 12:55:42 PM

I2-LL-1

Puget Sound Energy claims they have performed thousands of power flow studies. The ColumbiaGrid Puget Sound Area Study Team **Updated Transmission Expansion Plan for the Puget Sound Area to Support Winter South-to-North Transfers** (Final Report approved April 25, 2011) summarizes 45 of those studies. In their final report:

1. Twenty-two (22) of the solutions don't require new transmission lines routed through four Puget Sound eastside cities
2. Of those 22, seven (7) have lower curtailment risk & higher transfer capacity than the proposed Energize Eastside project (lower risk + higher transfer are BEST CASE solutions)
3. Of those 7, six (6) are less expensive than Energize Eastside

Six solutions are demonstrably better than Energize Eastside and cost PSE customers less money. <https://www.columbiagrid.org/download.cfm?DVID=2157>

PSE says, "Energize Eastside is the only way." Data shows otherwise.

<http://www.bellevuereporter.com/opinion/286418321.html#>

Energize Eastside is an inferior technical solution and an expensive compromise. The proposed Energize Eastside project (Alternative 1) undeniably contradicts the **ColumbiaGrid 2013 System Assessment** Report which says, "...The Northwest to British Columbia transfer was **increased to 1500MW** and the West of Cascades North transfer was increased to near its limit (10,200 MW) by **reducing local west side gas generation. This case is being studied for information purposes and mitigation is not required as it goes beyond what is required in the NERC Reliability Standards.**"

[https://www.columbiagrid.org/client/pdfs/2013SAforweb\(7.1.13\)FINAL.pdf](https://www.columbiagrid.org/client/pdfs/2013SAforweb(7.1.13)FINAL.pdf) (2017-18HW2, pg 12, PDF pg 17 of 92)

I2-LL-2

ColumbiaGrid conducted an **informational study** which exported 1,500MW to Canada and turned off local generation plants. These are **precisely the same assumptions** PSE is using to justify the need for Energize Eastside in PSE's **Eastside Needs Assessment Report**.

http://energizeeastside.com/Media/Default/Library/Reports/Eastside_Needs_Assessment_Final_Draft_10-31-2013v2REDACTEDR1.pdf (see key assumptions)

This was a **hypothetical situation – "for information purposes". "Mitigation is not required." "It goes beyond what is required in the NERC Reliability Standards."**

I2-LL-3

Please analyze and assess how to make measureable, meaningful improvements to the electricity grid for a fraction of the cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. **The Programmatic DEIS must include those alternatives.**

- I2-LL -1 See response for Key Theme EIS-2.
- I2-LL -2 See responses for Key Themes OBJ-2 and OBJ-3.
- I2-LL -3 See response for Key Theme EIS-2.

I2-LL-4

Energize Eastside is NOT the only way; however, the DEIS shows a high degree of bias towards PSE's preferred alternative, Alternative 1. Until the DEIS can accurately assess the advantages and disadvantages with an honest assessment of ALL alternatives, the City of Bellevue must choose the NO ACTION Alternative.
Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

I2-LL -4 See response for Key Theme EIS-1.

From: [Russell Bergmann](mailto:Russell.Bergmann@energizeeastsideEIS.org)
 To: info@energizeeastsideEIS.org
 Cc: rbergmann@hotmail.com
 Subject: [SPAM] Energize Eastside DEIS Public Comments: DEIS Process Questions
 Date: Saturday, March 12, 2016 8:05:11 AM
 Importance: Low

I am deeply concerned that questions posed during the first EIS Scoping Public Comment Period were not accurately reflected, summarized, or addressed in the Draft EIS. As I understand the EIS process, the public is permitted to comment on:

- EIS Elements (per WAC 197-11-444)
- Alternatives
- Process

The following questions are directed at the DEIS "Process". Of particular concern is the **need for a NEPA review**, and how the EIS PROCESS could impede an objective analysis of the need for a NEPA review. As part of the public record for the Energize Eastside EIS process, I submit the following questions and information to provide further detail and context regarding **Energize Eastside EIS PROCESS concerns**:

1. Citizens have raised concerns about the involvement of Puget Sound Energy's consultants, especially Mr. Mark Williamson, from the firm, PRW. According to Mr. Williamson's website, "*Williamson has developed a strategic communications technique patterned on "election campaigning" – polling, message development and communication – tools that he employs, and has for years, to get utility projects approved, sited, built and on-line..... Williamson has been associated with **American Transmission Company (ATC)** since its inception in 2001. He initially served on ATC's board of directors representing Madison Gas & Electric Company.... PRW has a winning strategy – getting your projects "elected" to office...." http://prwcomm.com/now/?page_id=71 http://prwcomm.com/now/?page_id=657. Citizens are concerned about Mr. Williamson's potential financial and political influence on the Energize Eastside Project. Those concerns are warranted due to prior activities by Mr. Williamson on other projects:

 - a. "*Last year <2002>, a Waunakee <WI> resident sent an email to a neighborhood listserv formed to discuss the power line. The email questioned Williamson's role in a scandal surrounding former state Sen. Chuck Chvala, who was convicted and jailed for misconduct in public office and circumventing election laws. In 2002, Williamson had testified that Chvala asked him to send campaign donations from Madison Gas & Electric to the Kansas Democratic Party. Kansas allows direct campaign contributions from corporations; Wisconsin does not. From 1998 to 2001, MGE and its subsidiaries sent at least \$170,000. Money from Kansas was then sent back to Wisconsin, to a group run by Chvala. The resident wrote of Williamson, "It seems he may be the guy who paid some of the bribes to which state Sen. Chuck Chvala has pleaded guilty of accepting." Shortly afterward, the activist received a "cease-and-desist letter" from Williamson's attorney, hand-delivered to him at work. The activist, who has obligingly ceased all his work on the ATC issue, is now so fearful of the company that he doesn't want his name used. Williamson would do it again. "Some guy was slandering me!" he exclaims. "* <http://www.isthmus.com/news/cover-story/atc-has-the-power/#sthash.G7daBqQi.dpuf>
 - b. "*The Journal Sentinel reported Wednesday that the utility gave \$20,000 more to the Kansas Democratic Party than the \$25,000 that was disclosed in the complaint against Chvala. The MG&E statement said its former vice president, Mark Williamson, told prosecutors that the payments to the Kansas Democrats totaled \$45,000....The complaint says MG&E knew the political contributions were made after Chvala told the utility's lobbyists that the donation would be "helpful" to the majority leader. Benkley declined to comment on whether the prosecution is considering charges against MG&E....Wisconsin law prohibits corporate contributions to candidates and political parties. Kansas law does not. Chvala is accused of creating phony independent groups to get around those Wisconsin laws." <https://news.google.com/newspapers?nid=1683&dat=20021024&id=H7lqAAAIBAJ&sjid=FEFAAAIBAJ&pg=6713,7484136&hl=en>*
 - c. "*Before Enron fell, Reliability 2000 allowed for the formation of the **American Transmission Company****

I2-MM -1 See response for Key Theme EIS-1.

I2-MM-1

(ATC). "The transmission company" authorized by "Reliability 2000" is merely a sham or artifice which is perpetrated to smuggle through a public utility in the sheep's clothing of a budget bill. The true purpose of the bill is private enterprise in the guise of a public utility. It's purpose is to vest control over the transmission facilities of the "public utility affiliates" in a single company to be owned by themselves thereby retaining the advantages of such controls in pricing wholesale and retail electricity. "Reliability 2000" is so called deregulation legislation under a unique scheme within Wisconsin; the first of its kind in the United States. Under no other deregulation scheme does utility deregulation vest control over the transmission facilities in a single utility-owned private company..... Madison Gas and Electric (MGE), along with Wisconsin Public Service (WPS) became founding members in the ATC, MGE employed Mark Williamson at the time of his "donations". A Milwaukee Journal Sentinel article Oct. 24, 2002 states MGE "made two payments totaling \$125,000 to a political group set up by Sen. Chuck Chvala shortly before lawmakers took up key pieces of legislation sought by the utility, prosecutors allege in the criminal complaint against Chvala.". One of those pieces of legislation is Reliability 2000. The criminal complaint clearly states **"Mr. Williamson knows corporate coffers contributions to political candidates are forbidden by law within the State of Wisconsin."**... Reliability 2000 included the legalized "bribes" Mark Williamson is now dangling in front of local government officials (mostly in private non-open meetings). As part of that legislation the money was authorized as "impact fees" to county and local governments but included no "impact fees" for landowners who can simply be condemned. These legalized bribes were also made recoverable through rate increases to Wisconsin's electrical customers..... One begins to question the honesty of this former MG&E lobbyist now hired as a lobbyist by the American Transmission Company to put a happy face on the disastrous Arrowhead/Weston transmission line and sell it to officials in Northern Wisconsin."

<http://www.wsn.org/energy/ArrowheadWestonscandal.pdf>

- d. "Ben Fischer's fine [March 19th business story](#) featured ATC's Mark Williamson as chief apologist for his company's operations as a state-created, unregulated, for-profit monopoly that is guaranteed above-industry profits from electric rate-payers on all its unchecked transmission-line construction. The article enumerated a small fraction of the connections between the company and the political process that created it. Williamson's theme is that this is all ok because his actions must be transparent... [Public court documents](#), in the Chuck Chvala case state that Williamson testified that he offered to "route money to the Kansas Democratic Party, and that such contributions would be 'helpful' to [Chvala]." The court documents say that Williamson produced the checks to show that he had acted on this plan, knowing that direct "corporate coffer contributions to political candidates and political committees are forbidden by law within the State of Wisconsin." On reading this, I [wrote to a private mailing list](#) for those concerned with a power line that ATC is attempting to run through our neighborhood. I cited the sources and asked if anyone knew more about this. Williamson's lawyers then threatened legal action for my question, without any explanation other than that "Mr. Williamson never engaged in any such activity." I'd love to know whether the lawyers feel that the court reporter was lying, or whether Williamson's testimony against Chvala was a lie.... [the Wisconsin Attorney General's office is now investigating complaints from other states regarding the role that ATC and its corruption have had in increasing rates for other state's citizens](#). I would like an explanation of the process by which our own rates have, on Williamson's watch, gone from being the cheapest in the Midwest to being the most expensive. Or of how ATC's profit margin is more than three times higher than the oil companies' returns." <http://www.wetmachine.com/inventing-the-future/nimby-indeed/>
2. PSE's Sr. Vice President and Chief Financial Officer, Mr. Dan Doyle, and Mr. Williamson have known each other a long time and have long history together at **American Transmission Company**. Does Energize Eastside have potential financial ulterior motives that have not been disclosed to the public? With all of the PR capability and talent available in Seattle and the greater Puget Sound area, why did PSE need to hire a PR consultant and lobbyist from Wisconsin? See photo on the fifth page: http://www.atclc.com/wp-content/uploads/2011/05/2003_ATC-Annual_Report.pdf
 3. Are Puget Sound politicians and Bellevue City Staff engaging with Mr. Williamson to the point of PSE and Mr. Williamson having undue influence on, and interfering with, the EIS public process for Energize Eastside? Do PSE and their consultants hold political and/or financial sway over Energize Eastside public decision-makers?

12-MM-1

I2-MM-1

4. Are Bellevue City Staff, WUTC regulatory officials, and WA State politicians aware of Mr. Williamson's pattern of behavior? Why did Mr. Williamson, a known political lobbyist, willingly testify against Sen. Chvala? Was Mr. Williamson offered a deal to avoid prosecution, or otherwise induced, in exchange for testifying against Sen. Chvala? Has Mr. Williamson become *persona non grata* in Wisconsin, so he is now engaging in the fine State of Washington?
5. Have PSE and their consultant's inaccurate responses to the public clouded the EIS process, when the public is seeking the WHOLE truth (not half-truths) about Energize Eastside? Example: In recorded testimony before the Newcastle City Council Planning Commission, Mr. Williamson and Mr. Dan Koch (PSE Director of Operations) stated that if PSE wanted to send power to Canada, it would not be through this area. *"Another important thing to note, if you look at the map, if we're going to build a project to deliver power to Canada, you wouldn't choose to run this through the eastside...it's simply not true that this project is to deliver power to Canada"*. Yet in PSE's own Energize Eastside assumptions it states, *"Winter electricity transfer between the USA and Canada were assumed to be 1,500 megawatts (MWs) flowing from the USA to Canada."* http://www.energizeeastside.com/Media/Default/Library/EastsideNeedsAssesmenReportTransmissionSystemFinal_v2.pdf (bottom of pg 3)
6. Previous EIS comments submitted during the EIS Scoping Public Comment Period alerted Ms. Carol Helland (City of Bellevue Land Use Director, Development Service Department) to potential financial and political impropriety, and how PSE and its consultant's undue influence and half-truths may affect the SEPA vs. NEPA review of the Energize Eastside project. Bellevue's Development Services Department is funded from permit fees, not from tax revenues. The Development Services Department stands to generate significant revenue from the issuance of permit fees for Energize Eastside, crucial funding for Ms. Helland's department. This could create **a potential conflict of interest for Ms. Helland, as she may feel pressured to avoid a NEPA review** and "shortcut" the path to issuing permits for Energize Eastside. Bellevue's Development Services Department's integrity will fall into question, because the PROCESS yields the opportunity for misappropriation and perceptions of impropriety. The PROCESS puts one individual (Ms. Helland) in a difficult, and potentially compromising, position - to make a SEPA-only determination, side-stepping NEPA review, and providing an opportunity for Bellevue Development Services Department to fund their budget to the tune of millions of dollars in permit fees. The PROCESS must be changed to be allow for more transparency and independent assessment. **For a project of the size and scope of Energize Eastside, the determination for SEPA vs. NEPA review should be determined by an independent panel/commission that includes detailed local, state, and federal legal review.**
7. The City of Bellevue's Development Services Department, under the guidance of Ms. Carol Helland, is giving the appearance of rushing to approve the Energize Eastside project and is bypassing crucial steps: The City of Bellevue **should issue a Final Phase 1 "Programmatic" EIS and submit to a Hearing Examiner for review and approval**, BEFORE proceeding to the Phase 2 "Project EIS". It is NOT a foregone conclusion that a Phase 2 EIS is necessary. Instead, the City implemented a PROCESS that moves immediately into the Phase 2 EIS before a Hearing Examiner can evaluate the Phase 1 EIS. Many have commented that in over 35 years, they have never seen an EIS process like this one. **Why is Energize Eastside being treated differently?** Actions by the City of Bellevue are leaving the perception that the Energize Eastside EIS process is tainted instead of transparent.

Based on the information provided above, I have multiple reasons to believe these **Energize Eastside EIS PROCESS** questions and concerns are legitimate, worthy of serious consideration, and appropriate for inclusion in the Draft Programmatic EIS.

To avoid a biased EIS process as the result of information tampering and tainted, or falsified, data, I again urge the City of Bellevue to take the following steps:

1. STOP at the end of the Phase 1 "Programmatic" EIS
2. Identify an independent panel to review the entire EIS record, particularly with respect for the need for a NEPA review
3. Submit the Phase 1 EIS to an impartial Hearing Examiner for review and approval

I2-MM-1

4. Depending on the Hearing Examiner's findings, submit the project to EFSEC for a thorough and transparent final decision. **Why did PSE avoid submitting the Energize Eastside proposal to EFSEC?**

The mountain of evidence stacked against Energize Eastside is simply too substantial to ignore. The tone of the Phase 1 EIS is clearly biased toward PSE, performed by consultants with strong ties to PSE. These consultants are afraid to contradict PSE for fear of never securing another contract with PSE. They answer to PSE instead of customers and citizens. When the consultants have been criticized publically, they bluster that their credibility and reputation are on the line. However, they have no reputation to protect with the general public. They are only concerned with their credibility and reputation with utilities – the entities that will hire them for their next project. **How are PSE and its consultants bound to act in the best interests of customers, when weak WA regulation only allows for a WUTC prudency review AFTER the project is built?**

The questions I submitted throughout the DEIS Public Comment period are NOT rhetorical questions. As required by the SEPA Handbook, I expect my questions to be treated seriously, to be analyzed, and questions to be answered thoroughly and transparently before a Final EIS is issued. Sadly most of my questions submitted during the EIS Scoping Public Comment period were NOT answered, or even addressed, as evidenced by the lack of answers supplied in the DEIS. The EIS is NOT merely a formality. It is intended to be treated as a serious evaluation and “impartial discussion of significant environmental impacts and reasonable alternatives and mitigation measures that avoid or minimize adverse environmental impacts.” (SEPA Handbook, pg 51) The current DEIS is woefully lacking in this regard.

Instead of the EIS being an impartial document, why does it shower a great deal of favoritism on Energize Eastside Alternative 1 (PSE's preferred alternative), while short-changing, or ignoring, other valid alternatives? The process itself is highly unusual and biased toward PSE, by rolling straight into a Phase 2 “Project” EIS without approving the findings of the Phase 1 “Programmatic” EIS. **Is this the result of PSE, its consultants, and lobbyists interfering and tampering with a public EIS process?**

STOP. We are not in imminent danger of the lights going out despite PSE's scare tactics. If we were, then steps should have been taken long before now. If the situation were so dire, then PSE has been asleep at the switch for years and we need another utility company to lead the Puget Sound region.

LOOK at the complete record, including financial incentives, and take deliberate, measured action that is transparent to all.

Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

From: CHelland@bellevuewa.gov
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com; HBedwell@bellevuewa.gov
Subject: FW: Energize Eastside: Adverse Economic Impact
Date: Sunday, March 13, 2016 4:02:06 PM

Russell – by this email, I am forwarding your comments to the info@energizeeastsideEIS.org website for inclusion in the EIS record.

Thank you for your comments.

Carol Helland, Land Use Director
 Development Services Department
 425-452-2724

From: Russell Borgmann [mailto:rborgmann@hotmail.com]
Sent: Thursday, March 10, 2016 12:04 PM
To: Stokes, John; Chelminiak, John; Robertson, Jennifer S.; Lee, Conrad; Robinson, Lynne; Wallace, Kevin R; Slatter, Vandana; Miyake, Brad; Helland, Carol; Bedwell, Heidi
Cc: rborgmann@hotmail.com
Subject: Energize Eastside: Adverse Economic Impact

Esteemed City Council and City Staff,
 As part of the public record for the Energize Eastside project, I have submit information regarding the lack of an economic impact assessment within the DEIS.

PSE's proposed Energize Eastside project will result in higher electricity rates for ALL business and residential customers. High electricity rates disproportionately hurts those on a fixed income. High electricity rates place affordable housing further out of reach for hard-working families on the eastside. High electricity rates are a careful consideration when a business chooses to start or re-locate to the eastside.

In 2014, a study was conducted to compare the impact of electricity prices on economic growth, as measured by Gross State Product (GSP). ***“Two important conclusions emerge. First, GSP is very sensitive to changes in electric prices over time. Second, it is clear the correlation between high electric prices and lower or negative economic growth is statistically significant.”***

<http://www.insidesources.com/high-electric-prices-hurt-economic-growth/>

I would expect the Phase 1 “Programmatic” EIS to contain a similar analysis of how high electricity prices might suppress regional economic activity, business growth, and business development on the eastside and greater Puget Sound. Why is no such analysis found in the DEIS?

Bellevue City Council and City Staff own a solemn duty and responsibility for multi-jurisdictional decisions that will affect 1.1 Million citizens, from Thurston County to Whatcom County, from Kitsap

I2-NN -1 See responses for Key Themes ECON-3 and ECON-4.

I2-NN-1

I2-NN-1

County to Kittitas County. PSE’s website states that all 1.1M customers will pay for Energize Eastside. Bellevue City Council and City Staff have an obligation to 1.1 million citizens, businesses, and to those less fortunate, to first evaluate ALL viable alternatives for reliable, affordable electricity.

PSE customers already pay some of the highest electricity rates in WA State. Energize Eastside is a losing outcome for all of our communities, the Puget Sound eastside, and Washington as a whole. **The high price of Energize Eastside will ultimately LIMIT growth and expansion as businesses and families choose other places to re-locate due to high energy costs.**

I2-NN-2

City of Bellevue, please RE-START a transparent process to determine the Eastside’s future electricity needs. Please analyze and assess how to make measureable, meaningful improvements to the electricity grid for a fraction of the cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives. It is the City’s fiduciary duty to its citizens.

I2-NN-3

In the short-term the City of Bellevue must choose the NO ACTION Alternative. In the longer-term, the City of Bellevue must more fully analyze Alternative 2 (Integrated Resource Approach) with up-to-date information, before any decision can be made to proceed with a Phase 2 “Project” EIS.

I2-NN-4

Sincerely,
 Russell Borgmann
 2100 120th Place SE
 Bellevue, WA 98005
rborgmann@hotmail.com

- I2-NN -2 See response for Key Theme ALT-1.
- I2-NN -3 Comment noted.
- I2-NN -4 See response for Key Theme ALT-1.

From: CHelland@bellevuewa.gov
To: info@energizeeastsideeis.org
Cc: rborgmann@hotmail.com; HBedwell@bellevuewa.gov
Subject: FW: Energize Eastside: Adverse Economic Impact
Date: Sunday, March 13, 2016 4:02:06 PM

Russell – by this email , I am forwarding your comments to the info@energizeeastsideeis.org website for inclusion in the EIS record.

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Carol Helland, Land Use Director
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 425-452-2724

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Sent: Thursday, March 10, 2016 12:04 PM
To: Stokes, John; Chelminiak, John; Robertson, Jennifer S.; Lee, Conrad; Robinson, Lynne; Wallace, Kevin R; Slatter, Vandana; Miyake, Brad; Helland, Carol; Bedwell, Heidi
Cc: rborgmann@hotmail.com
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In 2014, a study was conducted to compare the impact of electricity prices on economic growth, as measured by Gross State Product (GSP). ***“Two important conclusions emerge. First, GSP is very sensitive to changes in electric prices over time. Second, it is clear the correlation between high electric prices and lower or negative economic growth is statistically significant.”***
<http://www.insidesources.com/high-electric-prices-hurt-economic-growth/>

I would expect the Phase 1 “Programmatic” EIS to contain a similar analysis of how high electricity prices might suppress regional economic activity, business growth, and business development on the eastside and greater Puget Sound. Why is no such analysis found in the DEIS?

Bellevue City Council and City Staff own a solemn duty and responsibility for multi-jurisdictional decisions that will affect 1.1 Million citizens, from Thurston County to Whatcom County, from Kitsap

I2-00 -1 See responses for Key Themes ECON-3 and ECON-4.

I2-00-1



12-00

COMMENT

RESPONSE

12-00-1 County to Kittitas County. PSE's website states that all 1.1M customers will pay for Energize Eastside. Bellevue City Council and City Staff have an obligation to 1.1 million citizens, businesses, and to those less fortunate, to first evaluate ALL viable alternatives for reliable, affordable electricity.

12-00-1 PSE customers already pay some of the highest electricity rates in WA State. Energize Eastside is a losing outcome for all of our communities, the Puget Sound eastside, and Washington as a whole. **The high price of Energize Eastside will ultimately LIMIT growth and expansion as businesses and families choose other places to re-locate due to high energy costs.**

12-00-2 City of Bellevue, please RE-START a transparent process to determine the Eastside's future electricity needs. Please analyze and assess how to make measureable, meaningful improvements to the electricity grid for a fraction of the cost. Better alternatives have been identified that promote smart, sustainable growth and are more cost-effective, more scalable, more reliable, more energy-efficient, and less damaging to the environment. The Programmatic DEIS must include those alternatives. It is the City's fiduciary duty to its citizens.

12-00-3 In the short-term the City of Bellevue must choose the NO ACTION Alternative. In the longer-term, the City of Bellevue must more fully analyze Alternative 2 (Integrated Resource Approach) with up-to-date information, before any decision can be made to proceed with a Phase 2 "Project" EIS.
Sincerely,
Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

12-00 -2 See response for Key Theme EIS-2.

12-00 -3 Comment noted.

From: [Russell Borgmann](mailto:Russell.Borgmann@energizeeastsideEIS.org)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com
Subject: [SPAM] Energize Eastside DEIS Public Comments: PSE Financial Incentives
Date: Monday, March 14, 2016 2:52:12 PM
Attachments: [Utilities Profit Recipe - Spend More - WSJ.pdf](#)
[Utilities for dummies.docx](#)
[Energize Eastside Revenue Projection.pdf](#)
Importance: Low

I2-PP-1 **Why would a utility build something that isn't in the public's best interests and isn't needed?** The attached articles paint a generalized picture of how utilities (especially Investor-Owned Utilities, IOUs, like PSE) generate revenue. Looking specifically at Puget Sound Energy and their proposed Energize Eastside project, it is easy to see how this project fits into their revenue generation model.

I2-PP-2 **Puget Sound Energy is regulated, right?** Yes, they are regulated monopoly with a captive customer base, protected from competition, charge government-approved prices, and receive guaranteed returns. They are not subject to free market competition that continually offers better value propositions - better products at competitive prices. **In Washington state, the WUTC only reviews and approves infrastructure projects AFTER they are built - not before.**

I2-PP-3 **Why does the City of Bellevue seem so invested in Energize Eastside, and why don't they carefully review and approve the Phase 1 "Programmatic" Environmental Impact Statement before proceeding on to a Phase 2 "Project" EIS?** No one is willing to say for certain why the City of Bellevue appears so intent on seeing Energize Eastside built. One thing we know for certain is that Bellevue's Department of Development Services is funded from permit fees, not tax revenue. Issuing permits for Energize Eastside would generate millions of dollars in permit fees.

I2-PP-4 **Are utilities, including PSE, supporting conservation and distributed generation, like rooftop solar?** There are many examples of utilities protecting their profits at the expense of progressive energy policy reform and implementation of renewable energy sources. PSE lobbyists are introducing measures to INHIBIT the adoption of green, renewable resources.

- <http://www.marketplace.org/2016/02/23/world/nevada-solar> "Nevada shows how utilities are learning to protect their profits from rooftop solar."
- <http://www.pbs.org/newshour/bb/gridlocked-power-grid-hawaii-solar-energy-industry-crossroads/>
- https://www.washingtonpost.com/national/health-science/utilities-sensing-threat-put-squeeze-on-booming-solar-roof-industry/2015/03/07/2d916f88-c1c9-11e4-ad5c-3b8ce89f1b89_story.html
- <http://thinkprogress.org/climate/2015/02/27/3627891/arizona-utility-adds-50-dollar-rooftop-solar-fee/>

I2-PP -1 See response for Key Theme OBJ-1.
 I2-PP -2 Comment noted.
 I2-PP -3 See response for Key Theme OBJ-1.
 I2-PP -4 See response for Key Theme EGY-3.

COMMENT

RESPONSE

- I2-PP-4
- <http://www.wsj.com/articles/how-utilities-team-up-with-greens-against-consumers-1456530275>
- The link below hits close to home, right here in Seattle. This program was so successful - they decided to terminate it. Is this a step in the right direction? For our communities? For our environment?
- http://capitolhillecodistrict.org/community-solar-one-year-later/?utm_source=BB+Feb+2016&utm_campaign=BB+Feb+2016&utm_medium=email
- I2-PP-5
- Are utilities influencing our energy policy in a sustainable direction?
Are utilities willing to adapt to new business models that are more inclusive of renewable energy sources?
- I2-PP-6
- Are utilities willing to wean themselves off of burning fossil fuels that create greenhouse gases that contribute to climate concerns?
- I2-PP-6
- The NO ACTION Alternative is the right choice for the Energize Eastside Phase 1 "Programmatic" DEIS.
- Sincerely,
Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com

- I2-PP -5 See response for Key Theme GHG-3.
I2-PP -6 Comment noted.

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com
Subject: Energize Eastside DEIS Public Comments: Ludicrous Logic
Date: Monday, March 14, 2016 4:52:24 PM

The Puget Sound eastside is one of the most innovative and technology savvy regions in the U.S. Just because PSE has manipulated regulations and stacked the deck in their favor, doesn't mean that we—the residents of Puget Sound—don't have a voice. The proposed Energize Eastside project demonstrates ludicrous logic:

PSE: We need substantial electric infrastructure upgrades.

Why?

PSE: Demand for reliable electricity will exceed capacity in the near future.

Why?

PSE: Our own proprietary complicated algorithms and forecasting software indicate we cannot support the projected growth.

Why?

PSE: Because we are your power company, and we know what's best. It's too complicated to expect simple residents to understand. Trust us.

Why?

PSE: Because we can hold you hostage, and you can't stop us.

Why?

PSE: Because our lobbyists re-wrote the WUTC regulations. The WUTC only approves the prudence of the project AFTER it is built. And we are financially rewarded to over-build infrastructure.

Why?

PSE: Because our foreign hedge fund owners need to sell their PSE investment in the next few years, and we need to capitalize infrastructure so we look good to potential buyers. Fortunately Energize Eastside is a great alternative to prop-up declining electricity revenues. The icing on the cake is that our customers will reimburse us for the project costs PLUS a WUTC-authorized rate of return (about 10% annually) over the next 40+ years via electricity rate increases.

Does Macquarie/PSE really think the residents of Puget Sound are that gullible? It's time to stand-up to a foreign Investor-Owned Utility and do what's right for Puget Sound. Bellevue City Council, please RE-START a transparent process to determine the Eastside's future electricity needs. The logical DEIS choice is the NO ACTION Alternative.
 Sincerely,

Russell Borgmann
 2100 120th Place SE
 Bellevue, WA 98005
rborgmann@hotmail.com

I2-QQ -1 See response for Key Theme OBJ-1.

I2-QQ -2 Comment noted.

I2-QQ-1

I2-QQ-2

COMMENT

RESPONSE

From: [Russell Borgmann](mailto:Russell.Borgmann)
To: info@energizeeastsideEIS.org
Cc: rborgmann@hotmail.com
Subject: [SPAM] Energize Eastside DEIS Public Comments: What We Know
Date: Monday, March 14, 2016 5:07:45 PM
Importance: Low

Esteemed City Council and City Staff,
 We come to the close of the Energize Eastside EIS Open Comment Period. **What do we know?**

I2-RR-1

We know PSE used a 2.4% growth rate in the DEIS and Seattle City Light forecasts a growth rate of 0.5%. Is the eastside growing nearly 5 TIMES as fast as Seattle? NO.

We know from the DEIS that PSE has assumed 1,500MW is being transferred to Canada and emergency generation facilities have been turned OFF – all during a winter peak load event. We know PSE assumed only 500MW flowing to Canada in their WECC submissions. What we don't know is WHY? What specific federally mandated regulation dictates these assumptions? And why is there a discrepancy?

We know PSE profited from the sale and demolition of the Shuffleton Plant in Renton – the very area where PSE is now forecasting transformer overloads. Where did that money go?

We know PSE says the project will only cost customers \$1 to \$2 a month. That's \$1 to \$2 per month for the next 40 to 50 years. Multiplied over 1.1M customers, PSE will generate about \$1.5 BILLION in revenue from Energize Eastside.

We know that ALL PSE customers will pay for Energize Eastside. PSE customers from Whatcom County to Thurston County, from Kitsap County to Kittitas County, will pay for Energize Eastside.

We know PSE has repeatedly said that this is solely a "LOCAL" project. How do PSE customers in Bellingham benefit from Energize Eastside? They haven't even been made aware of the project! How are serious problems with the cost allocation of this project, as well as providing adequate notification to those affected by Energize Eastside, being addressed?

We know the EIS lacks a Cost/Benefit Analysis. Energize Eastside will cost all customers about \$1.5 BILLION, yet MIGHT only serve up to 3% of PSE customers. Why does the EIS not include a Cost/Benefit Analysis?

I2-RR-2

We know the DEIS does not adequately assess alternatives. What are customers getting for the money? How much will our electricity reliability increase? The EXPONENT Report says that Bellevue's electricity reliability is already 3 TIMES better than the WUTC goals (SAIDI - duration of outages, and SAIFI -frequency of outages).

I2-RR-3

We know from PSE's IRP that additional emergency generation – NOT transmission – is needed soon. Is PSE focusing on the wrong problem with Energize Eastside?

I2-RR-4

We know that 35% of PSE's power comes from dirty coal-generating plants, owned by PSE, in Colstrip, MT. Energize Eastside does nothing to wean PSE off of burning greenhouse-gas emitting fossil fuels.

- I2-RR -1 See responses for Key Theme OBJ-3, and Key Themes ECON-4 and ECON-3.
- I2-RR -2 See responses for Key Themes ALT-1 and ALT-2.
- I2-RR -3 See response for Key Theme OBJ-1.
- I2-RR -4 See response for Key Theme GHG-3.

I2-RR-12

The list goes on – Pipeline Safety concerns, Health Effects, bypassing NEPA and FERC Order 1000 requirements, conflating Peak Load with Load Growth, EFSEC avoidance, Essential Public Facility designation, and many more - but we are out of time.

I2-RR-13

We cannot afford to take a narrow bureaucratic view of Energize Eastside. Is this project for the common good of our communities? Is this project for the common good of our environment? Energize Eastside is a bad deal for all of our communities and all of Puget Sound.

I leave you with these challenging words from Margaret Meade: *"Never believe that a few caring people can't change the world. For, indeed, that's all who ever have....We have nowhere else to go... this is all we have."*

In closing, I submit this Haiku:
Dear City Council,
Our City rests in your hands.
Please make the best choice.

"The path of least resistance leads to crooked rivers and crooked men." Henry David Thoreau
"An error does not become a mistake until you refuse to correct it." Orlando Battista
"When you come to a fork in the road, choose the harder path." Tibetan Proverb
Sincerely,

Russell Borgmann
2100 120th Place SE
Bellevue, WA 98005
rborgmann@hotmail.com
425.445.4298

I2-RR -12 See responses for Topic PLS, Key Theme EMF-1, Key Theme OBJ-1, and Key Theme LU-3.

I2-RR -13 Comment noted.

COMMENT

RESPONSE

I3-A-1

Comment	Timestamp	First Name	Last Name
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This document seems lengthy, in fact almost endless, to me. Would you please direct me to the sections and exact pages where i might find useful maps of exactly where each Option would have construction impact. In other words, what neighborhoods would be impacted by each Option.	1/28/2016 20:19:11	Linda	Porter
---	-----------------------	-------	--------

Thank you.

I3-A -1 See response for Key Theme EIS-2.

COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
I4-A-1	<p>It appears that the energy company has done very little to promote real alternatives to these extremely tall and dense power poles on primarily private property. If we conserve properly, the power company doesn't stand to profit unless they can send our unused energy to Canada, where its owners are headquartered.</p> <p>The power company should have to rise to a certain level of green energy success before it can ever be allowed to make such dramatic changes to the power system, people's private property, and the number of trees along the pathway.</p>	1/29/2016 10:21:40	Suzi	Beerman
I4-A-2	<p>Safety has not been addressed sufficiently where those towers are being built directly on top of the fragile jet fuel pipeline under the current power lines.</p>			

- I4-A -1 See responses for Key Themes ALT-1 and ALT-3, and Key Theme OBJ-1.
- I4-A -2 See response for Key Theme PLS-2.

COMMENT

RESPONSE

I5-A-1

Comment	Timestamp	First Name	Last Name
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Chestnut Hill Academy, a private elementary school, is located directly adjacent to the current Lakeside substation. While it is an industrial land use zone, it is still a school filled with hundreds of young children.	1/29/2016 11:14:02	Michael	Hafken
--	-----------------------	---------	--------

Section 10.7.3 lists the Lakeside substation as a potential location for a new 230 kV to 115 kV transformer but the school is not mentioned as being nearby. Table 10-1. SHOULD list an elementary school as being around the Lakeside substation as it is literally 100-150 feet away from the school.

Studies have shown an increase in risks of leukemia to children who are exposed to average levels of magnetic fields above 3 or 4 mG. What impact, if any, would an expansion of Lakeside have on levels of EMF at this school?

Regardless of what zone a school is in, the health and safety of children should be taken into consideration in any expansion of the Lakeside substation.

I5-A -1 See response for Key Theme EMF-3.

COMMENT

RESPONSE

I6-A-1

Comment	Timestamp	First Name	Last Name
I am absolutely 100% opposed to the installation of replacement high transmission lines in populated areas for Energize Eastside. I won't be satisfied until an alternative that includes underground lines is fully explored and presented as a viable option by PSE. The current lack of this alternative is unacceptable and is anathema to the needs of the communities and the property values of Eastside residents.	1/29/2016 12:17:11	Nathan	Hoff
<p>Nathan Hoff Somerset Neighborhood Bellevue, WA 98006</p>			

I6-A -1 See responses for Key Themes ALT-1 and ALT-3.

COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
17-A-1	Of the alternative routes for the proposed power lines, I support underground and possibly underwater. The large towers have a wide negative influence on neighbors and business.	1/30/2016 17:51:10	Richard	McNeill
17-A-2	Before any permit is given, please verify that the Eastside will need more energy than what is available now. The claim is in dispute. PSE, opponents say, needs the lines to expand its capacity for power to Canada. Please review the claims PSE is making in its ads. And do not allow PSE to put its profits over the appearance and livability of our community. Thank you very much.			

17-A -1 See responses for Key Themes ALT-1 and OBJ-1.
17-A -2 See response for Key Theme OBJ-2.

COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
18-A-1	<p>Electricity users have not been asked to do enough to partner in solving the capacity issue. Alternatives 1 and 3 can always be deployed if Alternative 2 does not end up yielding the kind of demand and supply side expectations needed to meet the forecasted need. In addition, none of us can accurately predict the future. The 'dire' circumstances predicted may well not come to pass. Technological innovations may arise that end up addressing the capacity issues (like, for example, Tesla's home battery solution).</p> <p>Continuing to increase capacity also encourages the seemingly insatiable hunger for more and more electricity by the communities. The only way to really rein in GHGs and carbon impacts is to constrain the supply.</p> <p>Therefore, I advocate pursuing Alternative 2 as the first thing we try. We all need to pitch in here and simply adding more and more capacity is not the solution.</p>	1/31/2016 8:53:51	Raymond	Silverstein
18-A-2	<p>One minor note: page 1-54 shows the Recreation impact as 'minor to significant' across the board for Alternative 2. This is misleading based on the findings. Also, I think it is misleading to color 'minor to significant' as red. It should be yellow.</p>			

18-A -1 See responses for Key Theme ALT-1 and Key Theme OBJ-2.
 18-A -2 See response for Key Theme REC-5.

COMMENT

RESPONSE

I9-A-1

Comment	Timestamp	First Name	Last Name
I have been following PSE's proposal for building new power lines on the Eastside. I support Alternative 2. Its flexibility, its respect for the residents of our city and for their property values, its lower cost, its lower vulnerability to damage from storms, fires, and terrorism, clearly make it the best choice. I have noticed and resent PSE's many misrepresentations and steamroller approach. I, for one, have learned not to trust them. Please support Alternative 2.	2/5/2016 10:10:12	Alice	Evans

I9-A -1 See response for Key Theme ALT-1.

COMMENT

RESPONSE

I10-A-1

Comment	Timestamp	First Name	Last Name
As a "local need", paid for through our local fees, this project need not include Canadian needs. Please "proper-size" this project, using appropriate data that serves our community needs. The objectives of EE can be met through Alternative 2 without compromising our "City in a Park".	2/5/2016 10:10:38	Margaret	Niendorff

I10-A -1 See response for Key Theme ALT-1.

I11-A

COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
I11-A-1	Alternative 2 or bury the lines	2/5/2016 10:31:15	Mike	Roser

I11-A -1 Comment noted.

COMMENT

RESPONSE

I12-A-1

Comment	Timestamp	First Name	Last Name
Do the right thing- new forward thinking technology, citizen friendly, in Alternative 2 vs older, uglier, less safe, and neighborhood value declines in overhead transmission lines.	2/6/2016 11:59:36	jeff	Callison

I12-A -1 See responses for Key Theme ALT-1 and Key Theme ECON-1.

COMMENT

RESPONSE

I13-A-1

Comment	Timestamp	First Name	Last Name
<p>Hello, I'm a Bellevue resident of over two decades writing in support of Alternative 2.</p> <p>After having attended a PSE open house, where I spoke with multiple PSE engineers and representatives, read most/all information presented by CENSE, and spoken with neighbors also tracking Energize Eastside, it is not at all convincing that new overhead transmission lines are necessary for Bellevue and other Eastside cities to continue thriving and sustainably progress.</p> <p>In fact, it seems even more likely to me that further incentivizing PSE, developers, and residents to embrace alternative power infrastructure options would be an even healthier path for all of our communities, and our country overall. This is an opportunity for us to show leadership and innovation, propelling the energy solutions necessary to evolve to a more managed, thoughtful approach to growth and development, that America and the world so sorely needs.</p> <p>Building 18 miles of bigger, uglier, potentially risky transmission lines is mid-twentieth century thinking, serving only the narrow economic interests of the utility, its shareholders, and the non-local customers who'll also benefit from them. Forward thinking communities such as ours need to think beyond expediency, towards what will truly advantage our lifestyles and values.</p> <p>Please scrutinize and consider all alternatives before allowing major new transmission lines to be built.</p>	2/8/2016 15:08:22	Keith	Laepple

I13-A -1 See responses for Key Theme ALT-1 and Key Theme OBJ-1.

COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
I14-A-1	As a forty year resident and Bellevue construction business owner I strongly support Action Alternative 1 A. I have carefully read the Phase One Environmental review and believe that the technical information provided strongly supports this alternative as the most predictable and cost effective method of constructing the electrical transmission lines we must have to support population and business growth in the future.	2/12/2016 16:03:13	Roger	Anderson
I14-A-2	Alternative 1 B (SCL corridor) would also have my support for further study in the Phase Two and Final EIS process. If co-ordination with SCL is not immediately assured or creates schedule uncertainties time should not be wasted on further effort in this direction. Moving this process as quickly as possible is of paramount interest to citizens of the Eastside. Rolling Outages for any period of time or for any process purpose is not an acceptable alternative.			

I14-A -1 Comment noted.
 I14-A -2 See response for Key Theme ALT-1.

COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
I15-A-1	I have been a resident of Bellevue for over 43 years and for the last 40 have lived along the power line easement. When I purchased the lot my home is built on, I knew about the power lines and I was able to make an informed decision about buying with the powerlines running right through my back yard. Now I am faced with having much higher voltage power lines running over my back yard and the possibility of a large tower built on my property. I am very concerned tht these lines are being contemplated along the Olympic Pipe Line route. I am very concerned about the decrease in the value of my home. I believe it will be significantly higher than Puget Power estimates. I believe the project is unnecessary to provide power to our east side communities and do not believe we should be blighting our neighborhoods and increasing our risk to our community unless there is no reasonable alternative.	2/14/2016 10:24:46	Deandra	Bishop
I15-A-2				
I15-A-3				
I15-A-4				

Please do everything in your power to stop this project and please pass a city ordinance prohibiting additional high power lines coexisting above the Olympic Pipe Line.

- I15-A -1 See responses for Key Theme LU-1 and Key Theme PLS-1.
- I15-A -2 See response for Key Theme ECON-1.
- I15-A -3 See response for Key Theme OBJ-1.
- I15-A -4 Comment noted.

From: [Energize Eastside EIS](#)
 To: [Jessica Conquest](#)
 Subject: Fwd: One Tower Up Total Opposition
 Date: Thursday, February 04, 2016 3:10:16 PM

----- Forwarded message -----
 From: VON WILL <vonwill@gmail.com>
 Date: Mon, Feb 1, 2016 at 5:25 AM
 Subject: Re: One Tower Up Total Opposition
 To: info@energizeeastsideeis.org

Dear. Ms, Heidi Bedwell,

I16-A-1

Energize Eastside Project is primarily a money making scheme. It's a regressive engineering concept and a foreign owned project forcing 'growth projections' already negated by traffic woes. But it's strange how PSE does not care to construct a transparent rational argument to justify its method as opposed to alternative methods. The argument flows between profit for investors in Australia, power for Canada and demand for energy in a future time that transportation woes will not support. But once one tower is put up people will be shocked at the monstrosity! Like in Northern California, one tower goes up people will rise up and stop it. Moreover, the project will fell 8,000 trees we need for the heavy traffic we have now. Many of these trees are hundreds of year's old, massive filters vital to clean air. And we need these trees to protect us from the new onslaught of pollution from China coming over in the jet stream. Trees are going too fast. Over 300,000 acres of trees burnt last summer in Washington State! I flew to Hong Kong one week ago and traveled over land up through BC, Alaska and down through Siberia and China. It was daylight the whole time and I had a window seat. It was shocking to see the logging and absence of trees.

I16-A-2

I16-A-3

I16-A-4

I16-A-5

Energize Eastside Project is extortion and will stain the company and all associated with it for an indefinite period of time. PSE does not entertain sophisticated technological solutions, they think like Bolsheviks when it comes to alternatives. This power line will look hideous and make the skyline of Bellevue look industrial, total dystopia. Bellevue was named the number two city to live in America by the WSJ (last year). It truly is the city in a park. One must really understand how special this area is by going to other areas in the world and then one is shocked by our oasis. Anyone associated with this project will be ugly for life. Energize Eastside is a traitor to our community. It's surprising that a multinational can push such bad engineering and technology forward in a sophisticated technological hub. This must be stopped.

Thank you for your kind attention.

Sincerely,

Julian von Will, Ph.D.

Bellevue

- I16-A -1 See response for Key Theme OBJ-1.
- I16-A -2 See response for Key Theme GHG-2.
- I16-A -3 Comment noted.
- I16-A -4 See response for Key Theme VR-4.
- I16-A -5 Comment noted.

To: The Mayor and Council Members of the City of Bellevue.

February 8, 2016

Subject: A summarized concern about renewal of the B P Olympic Pipeline easement and its co-residence with the Puget Sound Energy 18 mile 'Energize Eastside' project.

My name is Ronald Bromwell, I moved with my family to Bellevue in 1966 and for the past 31 years we have lived in the Bridle Trails area in a home sharing our back yard with seven Puget Sound Energy electric cables and two B P Olympic pressurized gasoline pipes, one 16 inches and one 20 inches in diameter. The two energy utilities share a 100 foot easement to the west of our home, the pipeline sub-leases 15 feet along the western edge of the easement.

However: "PSE holds senior property rights for much of the shared corridor (including the 18 mile segment at issue) and may attempt to pursue certain legal remedies to request that Olympic relocate the pipelines if they interfere with PSE's legitimate project requirements" as stated in a letter from Donald W. Porter, President of BP Pipelines (North America) Inc. June 2015.

As a result of the planned Puget Sound Energy 'Energize Eastside' project we have written to express our concern for the danger implied by the co-existence of high voltage electricity and pressurized gasoline to a number of interested parties including: BP Olympic Pipeline, The Seattle Times, The King County Executive and the Mayors of each of the five cities included in the project. Copies of the letters are attached to this summary.

Our concerns are as follows:

1. The easement location is a wind tunnel during winter months as it is contained in a channel within trees as high as 140 feet or more. Cables have been broken due to wind damage and fallen to touch the ground which when wet conducts electricity.
2. The proposed replacement cables will be carrying High Voltage electricity at an increased height from the present 40 feet to perhaps 120 feet, this will increase the wind effect and add to vibration at ground level. There will be a need to locate the poles in large concrete foundations and to bury the grounding cables for several hundred feet within the easement to absorb lightning strikes and short circuiting.
3. BP Olympic Pipeline Company in its 'Important Safety Information' brochure contains the following messages; "Because even relatively minor excavation activities like landscaping or fencing can cause damage to a pipeline, its protective casing and/or buried utility lines"... and, "Even a small disturbance to a pipeline's integrity may cause a future leak due to subsequent corrosion. A gouge, scrape, dent or crease is cause enough for the company to inspect and repair the damage".

Note: A local event was reported on May 24, 2004, that: "A pinhole-sized leak caused by wear, unleashed thousands of gallons of gasoline that fueled the Olympic Pipeline fire and explosion near Bellingham, Washington, causing three deaths and considerable damage".

4. PSE has only 85 feet of easement to work in which means that the new poles or towers, with their associated cables may be located within only 40 feet or so of the pipelines. At an estimated spacing of ¼ mile between towers this means that 72 construction sites will be needed for the 18 miles of the PSE project, each one creating potential for an immediate or future accident.

Note: Bonneville Power Administration bans any construction within 50 feet of an energy Right of Way - "Pipes and cables should not be installed closer than 50 feet to a BPA tower, any associated guy wires or grounding systems. These grounding systems are long, buried wires that are sometimes attached to the structures and can run up to 300 feet along the right-of-way."

5. Earthquake potential in the Pacific Sound area has recently become a serious topic for discussion. Sandi Doughton, Science Reporter for the Seattle times has described the potential in her book 'Full-Rip 9.0' THE NEXT BIG EARTHQUAKE IN THE PACIFIC NORTHWEST. It does not bear thinking about the catastrophic result of mixing high voltage electricity and gasoline in even a minor earthquake situation.

Your attention to these concerns will be much appreciated by many residents of the five cities included in this review.
Thank you, Barbara, Joanne & Ron Bromwell

I17-A -1 See responses for Key Themes PLS-2 and PLS-3, and Key Theme EARTH-1.

I17-A-1



**Call before you dig
IT'S FREE, AND IT'S THE LAW!**

811 is a federally-mandated number designated by the FCC to consolidate all local "Call Before You Dig" numbers and help save lives by minimizing damages to underground utilities. One easy phone call to 811 starts the process to get your underground pipelines and utility lines marked for FREE. When you call 811 from anywhere in the country, your call will be routed to your state One-Call Center. Once your underground lines have been marked for your project, you will know the approximate location of your pipelines and utility lines, and can dig safely. More information regarding 811 can be found at www.call811.com.



Because even relatively minor excavation activities like landscaping or fencing can cause damage to a pipeline, its protective casing and/or buried utility lines, always contact your state One-Call Center before engaging in any construction or digging activities on your property. In fact, most serious damage done to pipelines is done when a third party inadvertently excavates, blasts or drills within a pipeline right-of-way. By simply contacting the One-Call Center first, this type of damage can be prevented. Once the One-Call Center has been contacted, local pipeline and utility operators will come out to locate and properly mark their pipelines at the excavation site.



For more information regarding pipeline safety and an overview of the pipeline industry please visit the following Web sites:

Pipeline Resources and Information

- Pipeline 101 - www.pipeline101.com
- Association of Oil Pipe Lines (AOP) - www.aop.org
- American Petroleum Institute (API) - www.api.org
- In the Pipes - Newsletter from the Oil Pipeline Industry - www.enebuilder.net/aopl/
- Interstate Natural Gas Association of America (INGAA) - www.ingaa.org
- American Gas Association (AGA) - www.aga.org
- Dig Safely - www.digsafely.com
- Common Ground Alliance (CGA) - www.commongroundalliance.com

Regulatory Agencies

- Department of Transportation (DOT) - www.dot.gov
- DOT Research and Special Programs Administration (RSPA) - www.dot.gov/affairs/rspaind.htm
- Office of Pipeline Safety (OPS) - phmsa.dot.gov
- National Transportation and Safety Board (NTSB) - www.ntsb.gov
- Federal Energy Regulatory Commission (FERC) - www.ferc.gov
- Federal Energy Regulatory Commission (FERC - Oil Pipelines) - www.ferc.gov/industries/oil.asp
- Occupational Safety & Health Administration (OSHA) - www.osha.gov
- National Fire Protection Association (NFPA) - www.nfpa.org

To view this information on the Web or to take our online survey, go to www.pipelinesafetyinfo.com

The information provided in this brochure, including but not limited to, One-Call center information, Web sites, state laws, regulatory agencies, has been gathered using the most up to date information available, and provided for informational purposes only. All matter is subject to change without notice. The Paradigm Pipeline Institute made an attempt to verify all information contained herein as to its accuracy, and is not liable

How would you recognize a pipeline leak?

Although pipeline leaks are rare, knowing how to recognize and respond to a possible leak is a key component in pipeline safety. Trust your senses. You may recognize a pipeline leak by:

- **Sight:** Liquid pools, discolored or abnormally dry soil/vegetation, continuous bubbling in wet or flooded areas, an oily sheen on water surfaces, and vaporous fogs or blowing dirt around a pipeline area can all be indicative of a pipeline leak. Dead or discolored plants in an otherwise healthy area of vegetation or frozen ground in warm weather are other possible signs.
- **Sound:** Volume can range from a quiet hissing to a loud roar depending on the size of the leak.
 - An unusual smell, petroleum odor, or gaseous odor will sometimes accompany pipeline leaks.
 - Gas transmission/gas gathering pipelines are odorless, but may contain a hydrocarbon smell.
 - Highly Volatile Liquids (HVL's) can be odorless and colorless in their natural state and most are considered irritants to eyes and nose. Commercial odorants are added to many HVL's to assist in detection of a leak.
 - Gas distribution systems are odorized with the chemical Mercaptan or other similar chemicals. Mercaptan is a harmless non-toxic chemical that is added to make it easier to detect a gas leak due to its skunk-like odor.
 - Landfill gas, which is becoming a popular source of natural gas, has a more pungent and unpleasant odor similar to the smell of rotting garbage.

What to do in the event a leak were to occur

The following guidelines are designed to ensure your safety and the safety of those in the area if a petroleum product or natural gas pipeline leak is suspected or detected:

- **Leave the area by foot immediately.** Try to direct any other bystanders or unsuspecting individuals to leave the area. Attempt to stay upwind.
 - HVL vapors are heavier than air and can collect in low areas such as ditches, sewers, etc.
- If known, from a safe location, notify the pipeline operator immediately and call 911 or your local emergency response number. The operator will need your name, your phone number, a brief description of the incident, and the location so the proper response can be initiated.
- **Turn off** any equipment and eliminate any ignition source, if able to do so without risk of injury.

What not to do in the event a leak were to occur

- **DO NOT** come into direct contact with any escaping liquids or gas.
- **DO NOT** attempt to operate any pipeline valves yourself. You may inadvertently route more product to the leak or cause a secondary incident.
- **DO NOT** cause any open flame or other potential source of ignition such as an electrical switch, vehicle ignition, light a match, etc. Do not start motor vehicles or electrical equipment. Do not ring doorbells to notify others of the leak. Knock with your hand to avoid potential sparks from knockers.
- **DO NOT** drive into a leak or vapor cloud while leaving the area.
- **DO NOT** attempt to extinguish a petroleum product or natural gas fire. Wait for local firemen and other professionals trained to deal with such emergencies.

13650 NE 34th Place, Bellevue, WA 98005

425 883 165

Chief Executive Officer

May 26, 2015

B P Pipelines (North America)

150 W. West Warrenton Road,
Naperville, IL 60563).

Subject: Potentially hazardous development at Olympic Pipeline location

Dear Sir:

The residents of five cities in Washington State have been asked for input in the form of an EIS (Environmental Impact Statement), on the significant environmental issues which will be affected by an 18 mile new energy development being promoted by Puget Sound Energy (PSE). The project will install high voltage power lines and share an easement with the existing Olympic Pipelines dual gasoline pipes which are located in the area.

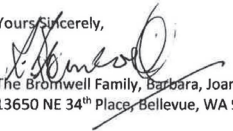
We are sharing this information with you as we have not seen or heard representatives from Olympic Pipelines at the various meetings which have been taking place. The safety of the pipeline is of vital importance to many residents in the five cities along the route of the projected development as in many cases it runs very close to their homes, less than 50 feet in cases. Therefore, we wish to have an opinion from your company concerning the safety of the pipelines considering the major construction which will take place to install many large towers 100 feet or more in height, with associated very large concrete foundations, then the on-going vibration and earth movements caused by strong wind factors, and possible lightning strikes.

This project known as Energize Eastside has created a major wave of objections for a number of reasons, but the strongest critics have been speakers with knowledge of geological issues relating to earthquake and other earth movement factors who cited the extreme dangers of installing such a project across a known earthquake fault line and within feet of a major gasoline pipeline.

We bring this matter to your attention in the hope that your company will understand this development as potential for a disaster in the making and will insist that the Energize Eastside project be subjected to a re-evaluation with particular relevance to pipeline safety. At the very least we expect that a different route will be selected. We have provided additional details as an attachment to this letter.

A timely response will be much appreciated and your assistance in providing clarification on the steps contemplated by Olympic Pipeline to avoid potential dangers resulting from the subject Energize Eastside project will be welcomed by a large number of residents of the five cities affected.

Yours Sincerely,


The Bromwell Family, Barbara, Joanne and Ronald
13650 NE 34th Place, Bellevue, WA 98004

BP Pipelines (North America)

Page 2

Background to EIS response - Energize Eastside.

On Tuesday, May 7 2015 a meeting was held at the City Hall, City of Bellevue, Washington; more than 200 people were present to participate in the first phase of an EIS (Environmental Impact Statement) relating to the proposed PSE project known as 'Energize Eastside'. Bellevue is the lead city in the development being the largest of the five cities and has 9 of the 18 miles of construction to deal with.

At the meeting many speakers representing opposition to this project questioned the need for the project including the major disruption it will cause in the loss of several thousand trees, the installation of giant poles with associated cables up to 100 feet in height, and the financial cost to the local community when it seems to many that the real motive is to serve out of state customers in Canada and California; and to develop income for PSE from state infrastructure incentives. It was also made clear that new alternative power sources are rapidly coming on-line which will make additional grid development unnecessary.

Despite the fact that many very large concrete piers will need to be constructed within feet of the pipeline to support the towers there has been no visible effort on the part of Olympic Pipeline to be present at the many meetings which have been held, therefore we question if Olympic is fully aware of the project or, it may imply that Olympic agrees with PSE that no danger is to be expected from heavy construction activity along the 18 mile section, when even at a spacing of say 300 yards between towers almost 100 towers would need to be constructed, or that the ongoing presence of high voltage power cables suspended at 100 feet could cause vibration from wind issues or other earth movement.

For clarification purposes the Olympic Pipeline was constructed in 1973, it is 42 years of age and has received no visible maintenance during the past 30 years according to residents in the area. It is located within an easement of 100 feet shared with PSE. The pipes are located less than 50 feet from the center of the easement with currently only a 16 feet set-back from the first electrical cable. The combined easement forms a narrow corridor lined on both sides by homes or buildings and in some areas by very large trees many of which are over 100 feet high; resulting in the creation of a wind tunnel effect during winter storms when trees and branches are frequently blown down and cause power outages, even a recent cable breakage. (See plat diagram enclosed).

The pipes are buried in the ground but only at a shallow level of three or four feet, their location is marked with posts bearing notices not to dig **"Because even relatively minor excavation activities like landscaping or fencing can cause damage to a pipeline, it's protective casing and / or buried utility lines"** as it says in the Olympic Pipelines safety brochure.

Residents of this area are very much aware of pipeline infrastructure problems such as a local event on May 24, 2004 – It was reported that: **"A pinhole-sized leak caused by wear, unleashed thousands of gallons of gasoline that fueled the Olympic Pipeline fire and explosion near Bellingham, Washington"**; this accident caused three deaths and considerable danger and damage. It was one of many such accidents in recent years. Wikipedia, the free Internet encyclopedia has documented a list of 503 pipeline accidents and failures which have occurred in the United States in the last 15 years, not including the latest disaster of May 20, 2015, in Santa Barbara, California.

We note that the business statement of BP Pipelines states - **"We strive to be an operationally excellent organization that has the right resources, skills, processes and tools to consistently deliver best-in-class performance."** We sincerely hope that this Modus Operandi will be demonstrated in the resolution of this event.

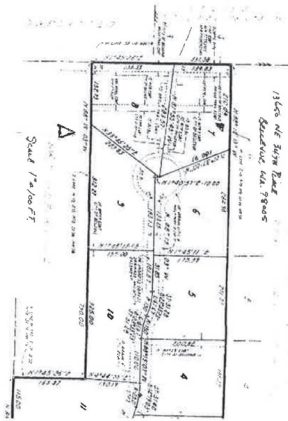
BP Pipelines (North America)
Page 3

Major public protests against this development are recorded at a local website <Cense.org> (Coalition for Eastside Neighborhoods for Sensible Energy). (See brochure enclosed).

In order to ensure that this project is fully investigated by the appropriate organizations responsible for the oversight of pipeline safety copies of this letter have been sent to the following regulatory agencies listed in the Olympic Pipelines safety brochure:

Pipeline and Hazardous Material Safety Administration (PHMSA)

Federal Energy Regulatory Commission (FERC).



sdoughton@seattletimes.com<sdoughton@seattletimes.com>;

Earthquakes, gasoline under pressure and high voltage electricity; a witches' brew?

My family lives in Bellevue within a few feet of the PSE/Olympic Pipeline - it goes right through our backyard. Having read of your interest and study of earthquakes we thought we would seek your advice on preventing a potential catastrophe if Puget Sound Energy has its way and builds 'Energize Eastside' a new high voltage electric power line within the same narrow 100 foot easement as the existing double-pipe Olympic gasoline pipeline.

As you may be aware the Energize Eastside project is causing great concern to many residents in each of the five cities which will be affected if the project is permitted to continue. Puget Sound Energy (PSE) has done an admirable job of selling the thought that a major effort is needed to cope with the anticipated increase in power required as the population rises, but there are many who believe there are better ways to solve this problem as technology is rapidly overtaking the old solutions of more and more cables and poles. At this very time there are major local developments promoting solar energy, back-up power cells, improved 'Peak load' mitigation techniques, and the simple promotion of large scale implementation of LED lamps which reduce electric consumption by an astonishing 84%?

Another major reason to 're-think' the project is safety. PSE has shown us maps and declared them to be the result of community advisory groups. However; they have not discussed the fact that a principal path for the new H V (high voltage) cables requires them to be installed side by side with the Olympic Pipeline gasoline pipes which carry aircraft fuel under pressure to SeaTac Airport. It appears that the existing easement is attractive to PSE because it is cheaper than a new route and Olympic Pipeline holds only a subordinate role in the easement and cannot protest the dangers without having to consider a re-location. The pipes are buried in the ground but only at a shallow level of three or four feet, their location is marked with posts bearing notices not to dig **"Because even relatively minor excavation activities like landscaping or fencing can cause damage to a pipeline, it's protective casing and / or buried utility lines"** as it says in the Olympic Pipelines safety brochure.

Residents of this area are very much aware of pipeline infrastructure problems such as a local event on May 24, 2004 – It was reported that: **"A pinhole-sized leak caused by wear, unleashed thousands of gallons of gasoline that fueled the Olympic Pipeline fire and explosion near Bellingham, Washington"**; this accident caused three deaths and considerable danger and damage. It was one of many such accidents in recent years. Wikipedia, the free Internet encyclopedia has documented a list of 503 pipeline accidents and failures which have occurred in the United States in the last 15 years, not including the latest disaster of May 20, 2015, in Santa Barbara, California.

Despite this background PSE plans to dig large holes using heavy equipment within about 40 feet of the pipeline, the combined easement is 100 feet wide.

Over the 18 miles of construction it will be necessary to install a large number of poles or towers, perhaps as many as 72 at ¼ mile spacing, or even more. To help visualize the effort and vibration involved please watch this short video of the installation of poles of similar height, about 120 feet, used in windmill construction.


https://www.youtube.com/embed/84BeVq2Jm88?feature=player_detailpage

Yes, windmills need to be very strong and stable, but so do power poles carrying the weight of heavy cables at 70 to 100 feet above the ground, which are subject to strong wind pressure during several months of the year. There are the problems of lightning strikes with electrical surges being conducted down the poles into trailing grounding cables buried in the soil for several hundred feet adjacent to the pipelines. The combined easement forms a narrow corridor lined on both sides by homes or buildings and in some areas by very large trees many of which are over 100 feet high; resulting in the creation of a wind tunnel effect during winter storms when trees and branches are frequently blown down and cause power outages, even a recent cable breakage. (See plat diagram enclosed). And then there is the fear of earthquakes, the Pacific Northwest is considered to be a significant earthquake danger zone.

Clearly the planned Olympic Pipeline / PSE easement is not the place for the location of high voltage power lines. Even if the project could be installed without damage the ongoing fear of a major catastrophic event and the potential for serious damage to homes, businesses and even lives is almost beyond imagination.

If this subject is of interest to you please contact Cense.org 'Coalition of Eastside Neighborhoods for Sensible Energy' a website set up to educate elected officials and the public with reference to the PSE Energize Eastside project.

Sincerely,


Barbara, Joanne & Ron Bromwell

13650 NE 34th Place, Bellevue, WA 98005

425 883 1655 rbromwell13650@hotmail.com

Mr. Dow Constantine,
King County Executive
401 5th Avenue, Suite 800,
Seattle, WA 98104

July 30, 2015

Subject: Earthquake, gasoline and High Voltage electricity, a toxic mix.

Dear Executive Constantine:

I am sending this letter to you and to the Mayors of the five King County cities which are involved in the 'Energize Eastside' proposal from Puget Sound Energy (PSE). You are surely aware that this high voltage power project is causing great concern to many residents in each of the five cities which will be affected if this plan is permitted to continue as currently proposed. PSE has done an admirable job of selling the thought that a major effort is needed to cope with the anticipated increase in electrical power required as the population rises, but there are many who believe there are better ways to solve this problem as technology is rapidly overtaking the old solutions of more and more cables and poles. At this very time there are local developments at the state and city levels promoting solar energy, there is the availability of new back-up power cells, improved 'Peak load' mitigation techniques, and the simple promotion of large scale implementation of LED lamps which alone reduce electric consumption by an astonishing 84%.

The facts show major expense to the customers of PSE along with an unsightly forest of more high towers and cables are probably not needed at this time.

Another significant reason to 'Re-think' the project is safety. PSE has shown us maps and declared them to be the result of community advisory groups. However, they have not discussed the fact that a principal path for the new H V (high voltage) poles and cables requires them to be installed alongside two Olympic Pipeline gasoline pipes, each approximately 16 inches in diameter, which carry aircraft fuel under pressure to SeaTac Airport. It appears that the existing easement is attractive to PSE because it is cheaper than a new route and as Olympic Pipeline holds only a subordinate role in the easement 'Right of Way' it cannot protest the dangers without having to consider a re-location. Olympic Pipelines has published the fact that pipe lines are very sensitive to vibration "*even digging for a fencepost can cause problems*". The local Bellingham pipeline explosion which killed three people was reportedly caused by "*a pin-hole leak caused by abrasion*".

Over the 18 miles of construction it will be necessary to install a large number of poles or towers, perhaps as many as 72 at ¼ mile spacing, or even more, using heavy equipment within about 40 feet of the pipeline, the combined easement is only 100 feet wide, and cannot be widened due to the close proximity of homes and buildings. My family knows this because it runs through our backyard.

Page 2

To help visualize the effort and vibration involved please watch this short video of the installation of poles of similar height, about 100-120 feet, used in windmill construction.

https://www.youtube.com/embed/84BeVq2Jm88?feature=player_detailpage

Yes, windmills need to be very strong and stable, but so do power poles to resist vibration causing earth movement and to carry the weight of heavy cables which are subject to strong wind pressure at 70 to 100 feet above the ground. Then there are the problems of lightning strikes with the electrical surge being conducted down the poles into trailing grounding cables buried in the soil for several hundred feet adjacent to the pipelines. Another factor is trees in our neighborhood reach 140 feet high and have been known to fall on the existing power lines. Finally, we are currently hearing about the Cascadian Fault a major earthquake zone adjacent to the Puget Sound area with a suspected fault line along the Interstate 90 freeway route.

Clearly, the planned Olympic Pipeline / PSE easement is not the place for the addition of high voltage power lines. Even if the project could be installed without damage the ongoing fear of a major catastrophic event would destroy the value of homes and increase the insurance premiums of businesses along the route.

The Olympic pipe line is 40 years old and the history of pipe lines is not without blemish as there have been 504 incidents of pipe line safety across the country over the past 15 years. Pressurized gasoline and high voltage electricity are not compatible and it is surely a dangerous decision to risk the consequences of even a 'small' event.

Please consider the safety of your citizens and the economic consequences of a disaster waiting to happen by taking steps to stop this project being built in the proposed location. More information may be obtained at CENSE.org (Coalition of Eastside Neighborhoods for Sensible Energy).

Sincerely,



Ron Bromwell

Cc Mayor of Kirkland, Mayor of Redmond, Mayor of Bellevue, Mayor of Newcastle, Mayor of Renton.

From: [Energize Eastside EIS](#)
 To: [Jessica Conquest](#)
 Subject: Fwd: Information on Reliability
 Date: Wednesday, February 17, 2016 7:23:23 AM

----- Forwarded message -----

From: **Plummer David F.** <pdf3@comcast.net>
 Date: Thu, Feb 11, 2016 at 6:48 PM
 Subject: Information on Reliability
 To: Carol Carol Helland <chelland@bellevuewa.gov>
 Cc: "info@EnergizeEastsideEIS.org" <info@energizeeastsideeis.org>

Hello Ms. Helland!

I emailed the question below to Ms. Bedwell, but she is apparently not in the office until next week. Can you provide an answer, or direct me to someone who can answer my question?

I18-A-1

Is there some place in the Phase 1 DEIS that sets forth a reasonably detailed description/discussion of PSE's system-level reliability measures being considered in the evaluation of the proposed project? For example, what is/are the measures/metrics of PSE's electrical system-level reliability; what are the quantitative impacts of the proposed alternatives and the no-action alternative on these measures/metrics; etc.?

(I have reviewed the DEIS, but not in detail, but can find no information/discussion of this aspect of Energize Eastside.)

Any help/suggestions would certainly be appreciated.

RSVP,

David Plummer

I18-A-2

(BTW: the email address for Ms. Bedwell given in the City's 28 January 2016 DEIS 'Notice' is incorrect - *it has one too many 'periods in it*; maybe someone should correct this.)

I18-A -1 See response for Key Theme ALT-2.

I18-A -2 Comment noted.

1 March 2016

Ms. Heidi Bedwell
 Energize Eastside EIS Program Manager
 Land Use Division, Development Services
 City of Bellevue
 450 110th Avenue NE
 Bellevue, WA 98004

Subject: Comments on Draft Environmental Impact Statement
 for "Energize Eastside"

Hello Ms. Bedwell:

Following are my comments on the DEIS for PSE's proposed 'Energize Eastside' project:

I18-B-1

1. The DEIS lacks sufficient detail and specificity in the descriptions of the alternatives and options; absence of this information prevents a reasonable evaluation of the alternatives and options, especially their environmental and economic impacts. This deficiency should be corrected by including more precise information about each alternative/option, including (where appropriate) a preliminary one-line diagram, and a reasonably exhaustive list of major components.

I18-B-2

2. For each alternative/option considered, there should be a preliminary quantitative assessment of the impact on PSE's tariff(s) and rate schedules.

3. For each alternative/option considered, there should be a preliminary life cycle cost estimate for their acquisition and ownership. Such estimates should be based on the same economic/financial bases, and expressed in the same-year dollars.

I18-B-3

4. The discussion of 'distributed generation' (DG) option (para. 2.3.3.3) does not explain who pays for the acquisition and ownership of possible resources required (gas turbines, microturbines, fuel cells, etc.), and how such payments would be made. Also lacking is any description of how electrical output would be delivered to loads in the DG service area, and how such output would be priced. In addition, there is no description of the

- I18-B -1 See responses for Key Themes EIS-1 and EIS-2.
- I18-B -2 See response for Key Theme ECON-3.
- I18-B -3 See response for Key Theme ALT-1.

I18-B-3

operating/dispatch protocols for DG generation centers, nor how many of each type would be required to satisfy the peak load demands. A generalized map is also needed to give some indication of the geographical location(s) for the different types of DG considered.

I request that my comments be include in the record of comments for the DEIS.

Sincerely yours,



David F. Plummer

14414 NE 14th Place
Bellevue, WA 98004-4001

COMMENT

RESPONSE

From: [Energize Eastside EIS](#)
To: [Jessica Conquest](#)
Subject: Fwd: Energize Eastside EIS Comments
Date: Wednesday, February 17, 2016 7:24:06 AM

----- Forwarded message -----

From: Barbara Braun <bbraun@stratery.com>
Date: Tue, Feb 16, 2016 at 9:35 AM
Subject: Energize Eastside EIS Comments
To: "info@EnergizeEastsideEIS.org" <info@energizeeastsideeis.org>
Cc: Barbara Braun <bbraun@stratery.com>

Barbara Braun

13609 SE 43rd Place

Bellevue WA 98006

bbraun@stratery.com

Feb 2016

I19-A-1

1. Include Olympic Pipeline in the EIS. Make all decisions with Olympic at the table. Please include an evaluation of the safety issues of both the construction in the Olympic pipeline easement, but also the maintenance in the easement. Please do a survey of the history of human caused accidents and consequences by these 2 companies as well as similar projects around the world by all companies. <https://hip.phmsa.dot.gov>. Please also include weather related and seismic related accidents and dangers. Insure a truly independent assessment of both PSE and Olympic findings, calculations and recommendations. Both are huge multinational for profit identities that don't necessarily represent local community interests. Clearly both companies have a reputation for accidents and lack of proper safety measures and practices. Both companies have a history of unconcern for communities and the environment. Thank you!

I19-A-2

2. What is the operating plan for the Olympic Pipeline during construction? How will ALL safety risks be mitigated? How will BP be included in this project? Thank you!

I19-A-3

3. Please add to the EIS a more careful analysis of the need for the project. There has been a cursory review of prior studies by a firm called Stantec, but no new or independent analysis is done. Questions raised by CENSE about the amount of electricity sent to Canada and local generation being turned off have been ignored. Thank you!

I19-A-4

4. I am disappointed that the EIS evaluates a number of alternatives that aren't realistic, but no indication of the viability of each option is given. For example, the EIS studies

- I19-A -1 See responses for Key Themes PLS-5 and PLS-6 and Key Theme EARTH-1.
- I19-A -2 See response for Key Theme PLS-6.
- I19-A -3 See responses for Key Themes OBJ-1 and OBJ-2.
- I19-A -4 See response for Key Theme EIS-3.



I19-A-4 underground and submerged lines that are cost prohibitive due to state regulations. There are only two realistic alternatives: the overhead transmission line proposed by PSE, and Alternative 2, a solution using smart technology and energy policies. There is no justification for the overhead transmission line proposed by PSE. The State has concluded that these solutions are obsolete and not needed in the next 20 years anywhere in the state. Alternative 2, as presented by CENSE president Don Marsh explained to the Bellevue City Council on Feb 1, 2016 is the right alternative.

I19-A-5 5. Include a thorough seismic evaluation in all alternatives. The EIS provides very cursory and says everything will be better because it will be built to new standards. Does thin include a retrofit of the aging Olympic Pipeline? We will not be safer with this aging pipeline sitting next to bulk power lines. Bellevue should actually require the removal of all existing power lines in the pipeline corridor and the upgrading of the Olympic pipeline to insure the safety of its community and citizens from the massive earthquake we are going to have. Thank you!

I19-A-6 6. Make the cutting of trees an off limits criterion for any alternative. We cannot replace the climate protection capacity of 8000 trees with new seedlings. We cannot wait 100 years for this to be restored. This is antiquated thinking. The trees should be given higher value and weighting in any analysis. Thank you!

I19-A-7 7. We should pursue Alternative 2 by making Bellevue and the other eastside communities national leaders in energy conservation and management. We should upgrade our city codes, ordinances, building standards and zoning rules for both commercial and residential. For example, implementing LEED standards for ALL new construction. Requiring buildings to retrofit. Requiring retrofits and remodels to comply with LEED or other energy conservation and management standards. Requiring all new construction to be net zero construction. Bellevue could lead the country and the world for the most net zero energy buildings! Be leaders in innovation and creativity not installers of antiquated technology. Thank you!

I19-A-8 8. Why has the City of Bellevue not gotten a truly independent view of the demand forecast? Will this be done? We cannot passively stand by and let PSE tell us we have already validated the demand numbers. WE HAVE NOT! The consultants retained by Bellevue DID NOT conduct an independent review of demand. They simply said PSE didn't make any math errors in their calculations. Bellevue can do better than this. Please stand up and represent your citizens as you are elected and/or employed to do. Thank you!

I19-A-9 9. I hate to say this, but it appears Bellevue and the other municipalities are in collusion with PSE. Bellevue city representatives – elected and employed, need to be accountable to the citizens of Bellevue and represent our interests, not PSE's or any corporation's interests. The city elected and employed representatives, and their hired consultants, need to firewall themselves from these conflicts of interest. We need to be transparent in how we're doing this. We need to recuse those who receive any moneys – directly or indirectly from PSE. The citizenry needed to have an explicit review of how we are maintaining impartiality during this process. Thank you!

I19-A-10 10. The Bellevue citizens have spent countless hours and their own money analyze this project. Please listen to them. Please engage them and other experts in helping to develop plans for alternative 2 if we cannot rely on PSE to do this for us. Thank you!

I19-A -5 See responses for Key Themes PLS-2, PLS-6, and EARTH-2.
 I19-A -6 See response for Key Theme P&A-5.
 I19-A -7 See responses for Key Themes ALT-1 and ALT-2.
 I19-A -8 See response for Key Theme OBJ-2.
 I19-A -9 See response for Key Theme EIS-1.
 I19-A -10 Comment noted.

- I19-A-11

11. All EIS alternatives need to fully assess, address and mitigate carbon emission and sequestration issues. Not only should NO trees be cut for this project (i.e. we must insure NO net reduction in carbon sequestration capacity in our city), but we need to require carbon offsets for all incremental fossil fuel based power that flows through our community. We should in fact require that all new projects provide carbon offsets in "arrears" for all *existing* fossil fuel power flowing through our community as a requirement to implement any incremental fossil fuel projects. Let's lead the nation in being a green city!
- I19-A-12

12. There have been repeated requests for unbiased evaluation of the needs and the development of alternatives by the citizens of Bellevue as well as the citizens of the other eastside communities. Consultants hired to date have not completed an independent evaluation of load demand, nor have they developed alternatives to PSE's proposal. When will this happen? When are we going to seriously review the demand and develop alternatives? Where in the process does this happen? We need to understand these issues and clearly establish plans and dates for these things.
- I19-A-13

13. We need to do a side by side comparison of all alternatives. Apples to apples. We need to actually evaluate the alternatives, which has not been done. We need to insure the evaluation of alternatives have a clearly established, transparent and complete set of criteria for evaluation including – economics, property values, climate change, environment, safety, seismic, aesthetics, etc. We need to do this at a regional, national and international level, not a PSE or local only level.
- I19-A-14

14. We need a fully transparent decision making process and timeline. We need to understand who is creating alternatives, who is evaluating them, what decisions are being made, who are the decision makers, what is the timeline for decision making, specific dates and public participation for each decision, what recourse citizens will have, etc.
- I19-A-15

15. High power overhead transmission lines have no place in residential areas. They create visual blight. They are noisy. They enable the spread of invasive species. The argument that recreational opportunities will be enhanced by powerlines is bogus. I have been all over this state and find the environmental destruction from transmission lines horrific. I don't want to ski, hike or bike near more transmission lines. The amount we already have is shameful and embarrassing.
- I19-A-16

16. Why does the Bellevue City Council want Alternative 1 as part of their legacy? To be one of the last cities in America to approved an antiquated power solution? Are the council members so influenced by PSE money that they are willing to have this on their hands?

Barbara Braun
bbraun@stratery.com
 206.280.7308

- I19-A -11 See response for Key Theme GHG-1.
- I19-A -12 See response for Key Theme EIS-1.
- I19-A -13 See response for Key Theme ALT-2.
- I19-A -14 See response for Key Theme EIS-1.
- I19-A -15 Comment noted.
- I19-A -16 Comment noted.

COMMENT

RESPONSE

I19-B-1

Comment	Timestamp	First Name	Last Name
New information coming to light from the independent load flow study completed by respected industry experts Rich Lauckhart and Roger Schiffman show the PSE needs analysis and conclusion for this project are not only flawed but likely fraudulent. This independent analysis was completed by these experts with CEII clearance and using PSE data provided by the WECC Base Cases from FERC. Their conclusion: PSE is using an impossible load scenario to try to scare residents into funding a billion-dollar project.	2/20/2016 7:32:19	Barbara	Braun

I19-B -1 See response for Key Theme OBJ-3.

COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
I19-C-1	16. The EIS provides does not question the need to the project. The City of Bellevue and PSE say they have done all the needs analyses that are going to be done, case closed. In fact the Lauckhart/Schiffman analysis suggests that the No Acton alternative is the one to select at this time because we have no immediate need for additional power. In the future, Alternative #2 would be the alternative to pursue as new technologies become more viable and cost effective. Alternative #2 is more scalable, more reliable and more cost effective. The EIS analysis of Alternative #2 is based on outdated data and needs to be revisited by people with the right expertise, not by PSE who has every motivation to maintain status quo, antiquated solutions.	2/20/2016 7:33:50	Barbara	Braun
I19-C-2				

I19-C -1 See response for Key Theme OBJ-3.
 I19-C -2 See response for Key Theme ALT-1.

I19-D-1

Comment	Timestamp	First Name	Last Name
<p>17. The Bellevue City Council, along with all the city organizations, should pause the EIS process and truly review the need for this project by either accepting the Lauckhart/Schiffman analysis or contracting for a truly independent study that includes an honest, transparent and verifiable load flow study. The Council needs to either use the services of CENSE or some other truly independent counsel to insure they get unbiased modeling and analysis. This has not happened to date. The independent studies have either not run their own load flow studies or have used the flawed (impossible scenario) assumptions provided by PSE. The Council should agree with the base case scenario and assumptions being used in any independent load flow analysis. It should also get an independent assessment of the demand forecast as the PSE demand forecast also looks to be flawed – overstated and with incorrect assumptions. PSE used forecast growth of 2.4% per year to justify the project. PSE sent WECC a forecast of only 0.5% per year. Can this discrepancy be explained? If you use PSE's own forecast to WECC, it clearly indicates the project is not needed. The Council has the authority to require a pause in the EIS and to get an independent assessment done. The Council should partner with the other cities to do this and to get them to participate. The Council should not shirk their duty on this.</p>	2/20/2016 7:34:53	Barbara	Braun

I19-D -1 See response for Key Theme OBJ-2.

COMMENT

RESPONSE

I19-E-1

Comment	Timestamp	First Name	Last Name
Energize Eastside is a needless waste of ratepayer funds, to the Eastside and the environment, not the best solution for reliability or safety, is motivated to maximize investor returns.	2/20/2016 7:35:40	Barbara	Braun

I19-E -1 See response for Key Theme ECON-4.

COMMENT

RESPONSE

I19-F-1

Comment	Timestamp	First Name	Last Name
PSE also states there are no issues with co-locating HVAC in a pipeline right of way. (Mark Williamson said, "You don't need to do any engineering studies. [25 feet of separation is] far enough that you can just be laissez-faire and let it go."). CENSE investigated this and finds the logic highly suspect. In looking at "Criteria for Pipelines Co-Existing with Electric Power Lines," prepared by DNV-GL, October 2015, Energize Eastside looks to be extremely high risk. They contacted Dr. Frank Cheng, a recognized pipeline safety expert, who concluded "HVAC affects adversely the integrity and safety of buried pipelines that are collocated with electric power lines right-of-way and that "... a comprehensive study program would be developed prior to construction of the power lines."	2/20/2016 7:36:57	Barbara	Braun

I19-F -1 See response for Key Theme PLS-3.

COMMENT

RESPONSE

I19-G-1

Comment	Timestamp	First Name	Last Name
In fact, it looks as if the current power lines in this right of way are very high risk and should be removed to improve the safety of the community, especially since the City of Bellevue just signed a 10-year agreement with Olympic Pipeline.	2/20/2016 7:38:08	Barbara	Braun

I19-G -1 The level of risk is described in greater detail in the Phase 2 Draft EIS and the Final EIS.

I19-H-1

Comment	Timestamp	First Name	Last Name
The City of Bellevue should complete an independent study to dismantle the current power poles that run in the right of way and remove them from the grid altogether. I suspect that an independent study would reveal that given the collective capacity already running through the eastside, from all providers, provides more than enough power to meet future demand. The antiquated poles should be removed and no transmission lines should ever be put through that corridor. This is a basic safety need of the community. The City of Bellevue should pass a resolution to put a moratorium on construction of anything in the pipeline right of way.	2/20/2016 7:39:09	Barbara	Braun

I19-H -1 Comment noted.

COMMENT

RESPONSE

I19-I-1

Comment	Timestamp	First Name	Last Name
The final version of the Seventh Power Plan from the Northwest Power and Conservation Council will be released in late February. They are concluding Energy Eastside is not needed. Why would we put our head in the sand and ignore the evidence that is all around us? This project is not needed.	2/20/2016 7:40:13	Barbara	Braun

I19-I -1 See response for Key Theme OBJ-2.

COMMENT

RESPONSE

	<u>Comment</u>	<u>Timestamp</u>	<u>First Name</u>	<u>Last Name</u>
I19-J-1	We need to take PSE out of private sector and make it a public utility district.	2/20/2016 7:41:13	Barbara	Braun

I19-J -1 Comment noted.

COMMENT

RESPONSE

	Comment	Timestamp	First Name	Last Name
I19-K-1	If the City of Bellevue allows this project to proceed without question and there are accidents or even cost overruns. What will this say about City officials? Will the City be negligent? PSE will certainly be found negligent. Just think of the countless pipeline accidents. Think of Bellingham. Why are we being dismissive and irresponsible about our own safety? Does Bellevue want to be known for blatantly exposing it's citizenry to off the charts safety risks? Like Flint Michigan? Think of the highway tunneling project in Seattle. Does Bellevue want to be known for costing rate payers billions of dollars? Think about it.	2/20/2016 7:42:12	Barbara	Braun
I19-K-2				

I19-K -1 See response for Key Theme PLS-2.
 I19-K -2 See response for Key Theme ECON-4.

I19-M -1 See response for Key Theme EIS-2.

Comment	Timestamp	First Name	Last Name
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Subject: Energize Eastside Call to Action	2/24/2016 16:09:01	Barbara	Braun
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As a citizen who has watched the City Council in action regarding PSE projects for the last couple of years, I am stuck by the level of passivity the Council has and is exhibiting concerning one of the largest, most impactful projects facing our city.

As CENSE and other community organizations have demonstrated, the citizens are gravely concerned about the need for and the trajectory this project is taking, and that no one but the citizens are investigating alternatives in any serious way. Many citizens are putting a lot of time and personal money into this. Why isn't the Council reciprocating?

I would like to sound a CALL TO ACTION for the City Council to get proactively involved in questioning the need for this project and for insuring that our energy future is both responsible and forward looking by pursuing Alternative 2 – The Integrated Resource Approach, incrementally, over time, and as it is needed.

The claim that the Council's hands are tied is bogus. Note the council played this card on the Lake Hills/Phantom Lake Transmission project and said there was nothing they could do. Thankfully the East Bellevue Community Council stepped up to do the right thing and they prevailed! With Energize Eastside being so blatantly flawed and unnecessary, it seems patently negligent for the Council to passively sit by and let this project steamroll through our community.

What can and should the Council do? Here are some suggestions:

1. Get a lawyer! Obtain a thorough independent legal opinion on your rights and jurisdiction as Council Members;

I19-M-1

I19-M-1

Comment	Timestamp	First Name	Last Name
<p>2. Provide full comments on EIS 1 stating 1) the need for the project is not adequately established; 2) Alternative 2 is not fully developed or vetted by independent experts; 3) the criteria for selecting alternatives and decision making in this process is not clear and transparent; 4) require PSE to share ALL their data and analysis, including their load flow data with the public; and 5) require an independent study of pipeline safety and mitigation requirements be done.</p> <p>3. Do not allow the EIS process to move forward with PSE selecting the wrong alternative. Pause after EIS 1 and revisit the need for this project. Require that Alternative 2 be studied in depth and demonstrate how it CAN meet our energy future needs. Make sure independent industry experts assess Alternative 2, not PSE who doesn't have the expertise or motivation to properly vet this option;</p> <p>4. Build a coalition of independent advisors and get the expert advice you need to help you understand this project. Require Stantec, or another more independent third party, to run the load flow study using PSE data. Engage State and Federal agencies with expertise to review the need for this project and its alternatives;</p> <p>5. Pass ordinances strengthening safety regulations and setbacks around the Olympic Pipeline in accordance with the latest pipeline/electrical transmission colocation studies. Insure our earthquake risks are accommodated;</p> <p>6. Prepare to refuse permits to PSE. Investigate and develop a plan for this. Warn PSE that you will not be issuing permits; and</p> <p>7. Conduct a ballot measure to move PSE to a Public Utility District so citizens can insure this utility is</p>			

	<u>Comment</u>	<u>Timestamp</u>	<u>First Name</u>	<u>Last Name</u>
I19-M-1	managed in a way that best benefits the community, not a private, for-profit company. There are many in our state, and it may be time for us to join them.			

*Submitted a Renton Phase 1
DEIS publichearing 2.25.16
Feb 25, 2016*

Barbara Braun
13609 SE 43rd Place
Bellevue WA 98006

Subject: Energize Eastside Public Hearings
Renton City Hall – 6:00 PM - 8:00 PM
1055 S Grady Way
Renton, WA 98057
Thursday, February 25

Energize Eastside Call to Action

- I19-P-1 1. The need for the project and ANY alternative is not established. The fact that the EIS ignores this is an EIS process oversight and should be re-visited. The independent “determination of need” run by Stantec did not run load flow studies and merely concluded that PSE study was conducted “according to industry standards.” The load flow analysis done by Lauckhart and Schiffman calls in to question (in a big way) the need for the project. If the city of Bellevue felt like they got an unbiased assessment from Stantec, they are mistaken and the citizens know it. The cities should band together to acquire a thorough independent and auditable assessment of need. The conclusions should be audited by unbiased experts.
- I19-P-1 2. Further the assumption that we need to ship 1500MW to Canada during a temporary power shortage seems downright dishonest. If we actually experienced this scenario, we would decrease the flow to Canada temporarily and avoid the problem. This therefore eliminates the need for the project. The EIS process should clearly establish the facts about what we need to ship to Canada and the commitments around that.
- I19-P-2 3. The EIS process should assume the Do Nothing Alternative is the right and preferred alternative and prove beyond a shadow of a doubt with facts and data all interested parties can see and verify if this is not the case.
- I19-P-3 4. Assuming there is a need for this project at all, if we pursue Alternative 1 as PSE wishes, the cost to our communities and to our environment outweigh any benefit to the communities it serves. Examples
 - I19-P-4 a. Astronomically increasing the risk of pipeline explosions and accidents
 - I19-P-3 b. Condemning of homes to erect unneeded industrial blight that will last several generations
 - I19-P-4 c. Huge climate impact by cutting 1000s of tree and proliferating a carbon based electricity solution for the next 50-65 years.
 - I19-P-5 d. Lastly the sheer cost of the project only benefits the PSE and it's shareholders and does not provide a good ROI for the citizens.
- I19-P-6 We simply cannot afford the cost of the project – in our communities, in our country, in the world.
- I19-P-6 5. Alternative 2 – The Integrated Resource study is not scoped or assessed properly. It does not use the appropriate “need” assumptions. It does not use the latest available technologies. It does not use the latest or future cost projections. For example, we need to include advanced solutions such as the Ambri and Eos Energy Storage aimed of bringing storage costs down significantly for utilities (\$150/kWh).
- I19-P-7 6. If any alternative is pursued, and frankly even if we adopt the Do Nothing Alternative, there are studies out assessing the safety of co-locating powerlines with hazardous materials pipelines. The risk we face currently, with our existing powerlines, is very high to high, using the “Criteria for Pipelines Co-Existing with Electric Power Lines” study prepared by DNV-GL, October 2015. Part of ANY PSE plan should be to permanently remove ALL powerlines in the pipeline corridor. This should be a base requirement of all the cities involved. Ordinances should be passed to insure this. Otherwise the city governments could be found negligent in their duty to protect the safety of their communities.

- I19-P -1 See responses for Key Themes OBJ-2 and OBJ-3.
- I19-P -2 See response for Key Theme PLS-3.
- I19-P -3 See response for Key Theme VR-5.
- I19-P -4 See response for Key Theme GHG-2.
- I19-P -5 See responses for Key Theme ECON-4 and Key Theme OBJ-1.
- I19-P -6 See response for Key Theme EIS-3.
- I19-P -7 See responses for Key Themes PLS-2 and PLS-3.

From: [Barbara Braun](#)
To: info@energize-eastsideeis.org
Cc: eis@cense.org; [Barbara Braun](#)
Subject: Energy Eastside DEIS Comments
Date: Saturday, March 12, 2016 8:11:46 AM
Attachments: [image004.png](#)
[DEIS Comment - Chap 2.5 Benefits and Disadvantages of Delaying the Propo...pdf](#)
[The Best Alternative 2.pdf](#)
[Lifetime Cost.pdf](#)

Barbara Braun
 CENSE Member
 13609 SE 43rd Place
 Bellevue WA 98006

Note this document was submitted to info@energize-eastsideeis.org on March 12 2016 in email text with attached file formats. Two supporting files were also attached for the public record. Both files contain a "sticky note" with my name and physical address to assure these documents are added to the public record:

- [The Best Alternative 2.pdf](#)
- [Lifetime Cost.pdf](#)

The following comments will address **Chapter 2.5 Benefits and Disadvantages of Delaying the Proposal**:

The DEIS fails to adequately quantify the benefits and disadvantages of delaying the proposal but rather makes unsubstantiated qualitative generalizations. Further the DEIS fails to adequately value the impact of the benefits and disadvantages of delaying the proposal and does not factor these items into its evaluation of the alternatives. The DEIS needs to make these corrections and fill these gaps in the report.

Delaying the project for 2-5 years would have tremendous benefits that need to be fully evaluated and factored in. The DEIS needs to parse each statement of benefit it's made and deep dive into the facts AND actually include these facts in the assessment of the Alternatives.

1. Delaying the project would have the benefit of avoiding the impacts in the near future for the action alternatives described in the EIS.
2. It is possible that by delaying the project, some of the expanded conservation measures described in Alternative 2 would be incorporated into development, reducing energy demand further than PSE has projected.
3. Additional conservation could have the benefit of reducing greenhouse gas generation from electrical consumption on the Eastside.
4. Delaying the project could allow technological advancements to occur in areas such as battery storage or generation, providing additional feasible alternatives to increased transmission capacity in the near term.
5. The disadvantages of delaying the project are that the risks of power outages (described in Chapter 1) that would be associated with the No Action Alternative could develop over time.
6. It is also possible that the awareness of such risks would discourage development within the Eastside.

Alternative 1A is a very expensive and "significant" impact solution to a "negligible" risk of power outages according to the independent [Lauckhart-Schiffman Load Flow Study](#) (previously submitted to the public record) as well as the presentation of the analysis of energy flows to Canada (below), both presented to the Bellevue City Council by CENSE President Don Marsh.

Delaying the implementation of Alternative 1A will delay and perhaps eliminate the need of the community to fund the lifetime cost of \$1.4 - \$2.0 billion (from the Jeffrey King economic analysis study attached below in file and text formats). A delay would allow more time for a realistic and less expensive Alternative 2 to be planned and implemented. The DEIS needs to study the risk/benefit of this delay. For example, the communities along the corridor would likely accept the negligible risk of a peak load winter power outage AND likely participate in Alternative 2 demand response and efficiency programs as a way to delay and possibly eliminate the need for this massive cost as well as to delay or eliminate the need for the massively significant cost to our communities by having 300+ homes destroyed, 8000+ trees eliminated and significant industrial blight added to the eastside.

- I19-Q -1 See response for Key Theme EIS-2.
 I19-Q -2 See responses for Key Themes OBJ-1 and OBJ-2.

I19-Q-1

I19-Q-2

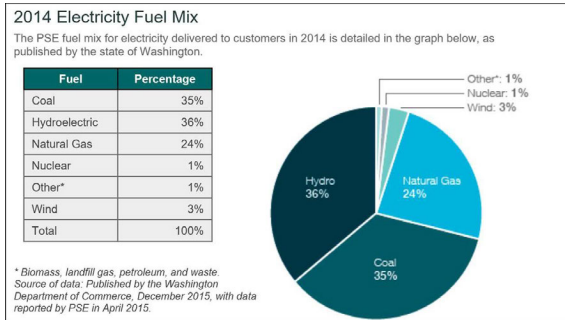
To test to see if in fact there is any disadvantage to a delay, the DEIS process should bring this choice to the voters rather than dismiss this risk/benefit out of hand with no evidence or facts behind such a decision.

Delaying the implementation of Alternative 1A would allow time to determine if Alternative 2 demand response and efficiency programs can partially address or eliminate the risk problem. At minimum, the DEIS needs to study how a project delay of 2-5 years along with an implementation of Alternative 2 demand response and efficiency programs will reshape the requirement for Alternative 1A or its derivatives.

Further the DEIS should include an analysis for how the feasibility of Alternative 2 will improve over the next 2-5 years. Delaying the project to allow this would be an INVALUABLE benefit by enabling eastside cities to begin to move away from the carbon based energy system of the current electrical grid. (Currently 59% of PSE energy is coming from carbon sources – a large coal-fired generating facility in eastern Montana, and the natural-gas-fired power plants in the Puget Sound region (below).) PSE should have as its highest priority the move away from fossil fuels and toward conservation and renewable sources. In addition, the improved economics of Alternative 2 that will come into play in the next 2-5 years needs to be studied and factored into the analysis of alternative. The benefits of these items should lead to the conclusion that delaying the project in favor of pursuing an improved Alternative 2 in the near future (2-5 years) is the best solution for rate payers. (See the EQL Energy Analysis of Alternatives below in both text and file attached).

Adding the benefit of carbon reductions, using carbon credit analysis, as an estimate of economic benefit should be factored into the benefits of a delay and a move to Alternative 2 implementation as described above.

I19-Q-2



Lastly, the statement that "It is also possible that the awareness of such risks would discourage development within the Eastside." Is conjecture at best. What evidence or facts does the DEIS present to substantiate such a claim?

SUPPORT DATA and INFROMATION:

March 8, 2016

Dear council members,

CENSE would like the opportunity to dispute some of the "facts" stated by PSE representative Keri Pravitz before the Bellevue City Council on March 7, 2016.

1. "1,500 MW EXPORTED TO CANADA IS A NORMAL PLANNING REQUIREMENT FOR NORTHWEST UTILITIES."
There are many times of year when 1,500 MW can be transmitted to Canada without a problem. However, this level of flow is **not required during peak consumption**. This is clear from the Memorandum of Agreement signed by PSE, BPA, and Seattle City Light in January 2012: "When large amounts of energy are being delivered [from] the Puget Sound area through the Northern Inlet to Canada, transmission lines at times become congested. To relieve this congestion and avoid unplanned power

interruptions to customers, **BPA currently limits or curtails** the amount of energy Puget Sound-area utilities and Canadian utilities can deliver across certain transmission lines.”

This quote mentions a curtailment solution that BPA has used for nearly a decade: reduced energy flow to Canada. If BPA and PSE want to avoid such curtailments, PSE’s customers should not have to bear the entire cost. There are many less expensive solutions to our local needs that don’t require a 230 kV line to be constructed through heavily residential areas.

Further, the Lauckhart-Schiffman study clearly shows that it would take an additional line across the Cascades to deliver 1,500 MW to Canada on a cold winter day. There are no plans to build such a line.

2. *THE 1,500 MW DOESN’T FLOW THROUGH BELLEVUE.*

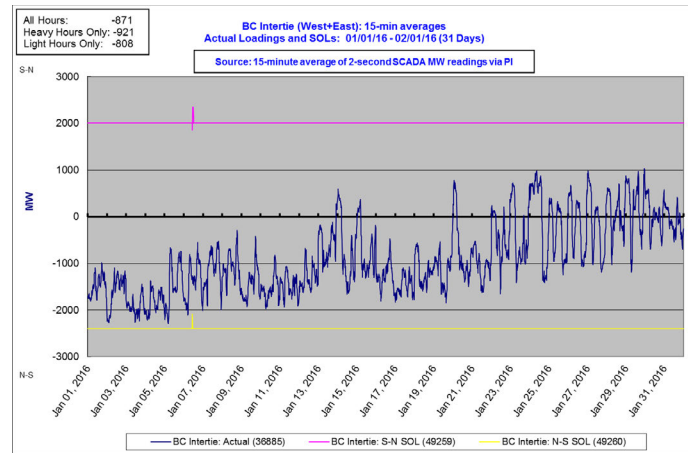
CENSE has never said that the entire 1,500 MW flows through Bellevue. However, some portion of this flow does go through Bellevue, and it adds stress to our local infrastructure. PSE says this is just a distraction. If it isn’t a central issue, then PSE should have no objection to removing this assumption from the load flow study, as USE did (and almost all of the overloads on PSE’s equipment disappeared).

3. *1,500 MW IS ASSUMED IN BASE CASES.*

Lauckhart and Schiffman started with the same WECC Heavy Winter Base Case for 2017-18 that PSE used in the Eastside Needs Assessment. The amount of electricity exported to Canada in that Base Case is 500 MW. Does PSE dispute this?

4. REALITY CHECK

Do large amounts of electricity actually flow to Canada when temperatures are low in the Puget Sound area? There is a BPA web site where anyone can look at electricity flow on the Northern Intertie. Let’s check what happened in January 2016, when the region had very cold weather for the first half of the month.



In the above graph, the squiggly line indicates flow on the transmission lines that connect the Northwest to British Columbia. Any time the line is below the central black line, energy is flowing from Canada to the US. You can see that for most of the month, Canada was delivering electricity to our region, not vice versa.

We have looked at data for the last decade, and it is very rare for electricity to flow northwards during the cold winter scenarios that PSE uses as a basis for Energize Eastside. If the flow were reversed in any dramatic way, the 11 transmission lines that deliver electricity to the Puget Sound from central Washington would not be able to satisfy the demand.

We conclude that Energize Eastside is being justified using a fantasy scenario that cannot happen in real life.

Don Marsh, President
CENSE.org

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Lifetime cost analysis for Energize Eastside

What will Energize Eastside cost customers over its lifetime?

February 17, 2016

If those numbers seem large, it's mostly because state policy guarantees PSE a return on investment of 9.8% per year for infrastructure projects. Interest adds up quickly at that rate.

What will Energize Eastside cost customers over its lifetime?

CENSE engaged Jeffrey King, a utility financing expert, to give us better answers to this question. Mr. King worked as a Senior Resource Analyst for the Northwest Power Planning Council for nearly 30 years.

Mr. King used MicroFin modeling software to come up with three different lifetime scenarios (45, 55, and 65 years) using a project base cost of \$100 million. The details of his analysis can be found in the following pages of this document.

A base cost of \$100 million is considerably less than PSE's cost estimates, but the results of the model can simply be scaled by the ratio of the actual cost to the base cost. For example, if the cost were to be \$300 million (three times the base cost), the results from Mr. King's analysis could simply be multiplied by a factor of 3.

PSE has not updated cost estimates for Energize Eastside, and the EIS contains no reference to the project's cost. Our best guess is that it will cost at least \$250 million. We scaled the results of Mr. King's analysis by a factor of 2.5 to arrive at the following lifetime costs:

Lifetime of Energize Eastside
transmission line Total cost to ratepayers
45 years \$1.45 billion
55 years \$1.74 billion
65 years \$2.03 billion

If those numbers seem large, it's mostly because state policy guarantees PSE a return on investment of 9.8% per year for infrastructure projects. Interest adds up quickly at that rate. Revenue collected by PSE for this level of investment would be approximately \$32 million per year. This is an important number, because it is possible to buy quite a bit of technology to implement alternative solutions with expenditures of that size. Because alternative solutions can be built incrementally as the need arises, we probably wouldn't need to continue that level of investment for 45-65 years.

We see an opportunity to build a solution of just the size we need and save a lot of money for ourselves, our children, and our grandchildren.

Estimation of the fixed charge rate and revenue requirements for the proposed Energize Eastside transmission project

Prepared for CENSE.org by Jeffrey C. King & Associates
February 10, 2016

The Energize Eastside transmission project is intended to reinforce the Puget Sound Energy electrical distribution system on the east side of Lake Washington in King County, Washington, an area that has experienced significant growth over the past several decades without concurrent expansion of the local transmission system. The Energize Eastside project is proposed to be an overhead single-circuit 230 kV transmission line¹ extending from the existing Talbot Hill substation in Renton approximately 18 miles north and east to the existing Sammamish substation in Redmond, passing through Bellevue, Kirkland and other Eastside communities. The line would feed, from both ends, a new or expanded substation in the Bellevue vicinity. Preconstruction fieldwork commenced in January 2015 and construction is proposed to commence in the second quarter of 2017 for fourth quarter 2018 energization. The purpose of the work described in this paper is to estimate the levelized fixed charge

rate (FCR)² and revenue requirement³ of the proposed Energize Eastside project. Revenue requirement can subsequently be used to estimate the rate impact of the proposed project. The MicroFin Levelized Project Revenue Requirements model, developed by the Bonneville Power Administration and the Northwest Power and Conservation Council is used to calculate project FCRs and revenue requirements. MicroFin uses normalization accounting⁴ to simulate investor-owned utility financing of electric power projects. MicroFin calculates total project investment costs using a construction cost estimate, construction cash flows and financing information. Annual cash flows over the forecast service life of the project are then calculated. Components of annual cash flows for transmission projects include debt service, debt interest, return on equity, equity recovery, income and property taxes, insurance, operation and maintenance expenses, interim capital replacement costs and the cost of losses. The net

1 The project may use towers capable of carrying a future second 230KV line.

2 The Fixed Charge Rate is the levelized annual cost of financing the construction of a project over the economic life of the project, expressed as a percentage of total investment cost. The total investment cost is the cost of developing and constructing a project (capital cost), including price escalation and interest incurred during the construction period.

3 Project Revenue Requirements are the annual costs of constructing and operating a project. Revenue requirements consist of the annual financing costs (Fixed Charge Rate x Total Investment Cost) plus annual operation and maintenance costs (expensed and capitalized).

4 Normalization accounting shifts a portion of the benefit of accelerated tax depreciation to later years of the life of a project.

Normalization accounting is mandated by the Internal Revenue Service for investor-owned utilities. of these comprise annual revenue requirements. Annual revenue requirements may vary over the life of a project due to factors such as cost escalation and a service life that exceeds the financing life. A levelized revenue requirement (an equivalent constant value) is then calculated by taking the net present value of the series of annual revenue requirements, then calculating a constant series of annual payments with equivalent net present value. For calculating the FCR and revenue requirements of a transmission project, MicroFin requires information regarding project capital costs, operation and maintenance (O&M) costs, interim capital replacement costs; construction cash flows; the project owner's financial structure, tax obligations and incentives, if any; forecast general inflation and escalation rates of capital and O&M costs; and electrical losses. Other MicroFin input data such as fuel cost and emission costs are not applicable to a transmission project. The information needed by MicroFin to calculate a fixed charge rate and revenue requirement for a transmission project is shown in Table 1 with the known or assumed values for the Energize Eastside project and sources of this information. Additional information regarding the derivation of certain input assumptions is provided in the Appendix.

Capital costs for transmission projects vary widely and the capital cost estimates for the proposed Energize Eastside project were not available for this analysis. \$100 million is used as a placeholder. \$100 million is substantially greater than typical cost for a 230kV project of this size, however the congested nature and environment of the proposed corridor will likely increase construction cost well above typical costs. Once construction cost estimates are available, revenue requirements can be calculated by taking ratios of \$100 million. Because all cost input assumptions for this project are a constant percentage of the capital cost and all input costs are independent of the load factor of the line, the relationship of overnight capital to revenue requirements is linear.

An uncertainty of some importance is the assumed service life of the project. PSE estimates that the service life of transmission facilities will range from 45 to 65 years. For this reason, FCR and revenue requirements calculations were run for 45, 55 and 65 year service lives. The estimated fixed charge rates and levelized annual revenue requirements for a \$100 million overnight capital cost investment in a project with the characteristics of the proposed Energize Eastside project are shown in Table 2 for 45, 55 and 65 year service lives. Also shown is the AFUDC ratio, to calculate total plant investment (basis of the fixed charge rate) from the overnight construction cost. All values are "nominal", e.g., include the effects of forecast general inflation, and therefore represent the actual dollar impact on rates.

Table 1: Modeling input data values and sources

Input Value Source Note

Plant Data:

Start of construction 1/1/2017 Approximation of PSE
Q2 2017
Closest MicroFin time series increment.

Service date 1/1/2019 Approximation of PSE end of Q3 2018
 Closest MicroFin time series increment
 Service life 44, 55 and 65 years PSE 2014 FERC Form 1 page 123.14
 Overnight capital cost 100 million Placeholder
 Annual construction cash flow 50%/yr JCK assumption
 Capital cost real escalation Zero JCK assumption Reflects currently low rates of labor and equipment price escalation.
 Annual operation and maintenance expenses
 1.3% of overnight capital cost
 See Appendix Exclusive of property tax and insurance.
 O&M cost real escalation Zero JCK assumption Reflects currently low rates of labor and equipment price escalation.
 Generation integration costs n/a No significant generation would be interconnected to the proposed project.
 Control and dispatch costs Zero Project is assumed not to significantly affect the control and dispatch costs of the PSE system
 Cost of losses Zero Project will likely reduce system losses overall but extent not known w/o load-flow analysis
 Interim capital replacement 1.2% of overnight capital cost
 See Appendix Levelized annual cost of replacing major equipment over the life of the project.
 Input price year dollars 2016 Cost estimates are assumed current

Project financing

Debt term 30 years JCK assumption
 Equity recovery period 30 years JCK assumption
 Debt/Equity ratio 52/48 PSE 2014 FERC Form 1, page 109.2
 WUTC approved, effective 1/2014
 Debt interest rate (nominal) 5.75% See Appendix Average of recent PSE 30-year issues plus 0.25% for Dec 2015 Federal Reserve increase.
 Return on equity (nominal) 9.8% PSE 2014 FERC Form 1, page 109.2
 WUTC approved, effective 1/2014
 Debt financing fee 1.0% of issue See Appendix Average of recent PSE 30-year issues.
 Discount rate (nominal) 6.7% Calculated After-tax cost of capital for the assumed financial parameters (PSE perspective)
 General inflation rate See Appendix NPCC 7th Plan (draft)

Taxes and Insurance

Federal income tax rate 35% PSE 2014 FERC Form1
 FIT recovery period 20 years IRS Pub 946 Recovery period for transmission assets
 Federal investment tax credit None
 State income tax rate None
 State investment tax credit None
 Annual property tax rate 0.95% of overnight capital cost
 See Appendix Average King Co. property tax rate x ratio of assessed to true value for King Co.
 Annual property insurance rate 0.06% of overnight capital cost
 See Appendix Average PSE property insurance cost on electric plant property
 3
 1: input data values and sources

Table 2: Estimated AFUDC ratio, fixed charge rates and revenue requirements (*Nominal values*)
Case AFUDC Ratio Annual FCR Annual Revenue
 (% Total Plant Investment) Requirement (\$/yr)

\$100 MM overnight cost: 1.038 9.9% \$12,869,000
 45-year useful life
 \$100 MM overnight cost: 1.038 9.7% \$12,622,000
 55-year useful life
 \$100 MM overnight cost: 1.038 9.6% \$12,505,000
 65-year useful life

Appendix: Derivation of certain modeling input assumptions

Operation and maintenance costs: Operation and maintenance costs for this project include the expensed costs of operating and maintaining the system plus administrative and general costs. Major equipment replacement costs are normally capitalized and are considered separately. System control and dispatch costs are not included because it is believed that PSE control and dispatch costs would not be significantly affected by the proposed project. Generation integration costs are also excluded because no significant generation would be interconnected to the proposed project. Operating and maintenance costs were estimated from PSE operation and maintenance cost data appearing on page 321 of the PSE 2014 Federal Energy Regulatory Commission (FERC) Form 1 annual report. Administrative and General (A&G) costs (Form 1 page 323), excluding property insurance (entered separately in MicroFin) were calculated as a percentage of total O&M. That percentage was applied to transmission O&M, as calculated above, to obtain an estimate of transmission A&G. The transmission O&M estimate plus the transmission A&G estimate were then divided by total transmission asset value (Form 1 page 206) to obtain transmission O&M plus transmission A&G as a percentage of transmission capital cost.

Interim capital replacement cost: Interim capital replacement cost is the annual cost of replacing major components over the expected service life of the project. Information regarding utility interim capital replacement costs is scarce – these costs are rolled into annual capital costs that also include system expansion and disaster recovery expenditures. Reported interim capital replacement expenditures by North American utilities for substation and transmission assets are relatively high, about 5% of asset value annually. However, North American transmission systems are aging – the average age of large power transformers is reported to be 40 years. Because replacement costs increase with age, the levelized lifetime replacement rate for a new transmission line will be less than the replacement rate for a 40 year old facility. Assuming an exponential increase in replacement costs over the service life of a facility, a 5% rate at age 40 yields a levelized lifetime rate of 1.2% of asset value for a facility with an expected service life of 55 years (midpoint of PSE service life estimates).

Debt interest rate and financing fee: The average interest rate of 30-year PSE bonds issued from 2009 through 2014 is 5.48% (PSE FERC Form 1 page 256 and 257). To this was added 0.25% to account for the December 2015 Federal Reserve rate increase. The result was rounded to 5.75%. The same source was used to calculate an average debt placement fee of 1.03% (rounded to 1%) for the same bond issues.

General inflation rate: The forecast general inflation rate used by the Northwest Power & Conservation Council for its 7th power Plan (draft) was adopted for this study. That series is 1.6% for 2015, 1.7% for 2016, 1.6% for 2017, 1.7 % for 2018-2028 and 1.8% for 2029 and on.

Property tax: An average property tax rate for King County, Washington was calculated as the product of assessed property value to true property value (Property Tax Ratio) and the average King County property tax rate, as follows:
 Property tax ratio for King Co. 93.800% (WA Dept. of Revenue)
 Average property tax rate for King Co. 1.014% (www.smartasset.com)
 Average property tax rate on true value 0.950%

Property insurance: Total PSE insurance expenditures (2014 PSE FERC Form 1 page 323) were divided by total electric plant in-service asset value (Form 1 page 206) to yield a 0.06% rate based on asset value.

JEFFREY C. KING
 3828 N.E. Alameda Street
 Portland, Oregon 97212
 503-984-0415
 jkingeca@gmail.com
 January 2016

EXPERIENCE

2011 - Present: President, Jeffrey C. King and Associates. Jeffrey C. King and Associates is a consulting firm engaged in energy-related analysis for public and private clients. The principal topics of the firm include energy policy analysis, technical, economic and environmental assessment of electric power generating technologies and power price forecasting.

2011: Planning Approaches for Water Resource Development in the Lower Mekong Basin. The purpose of this project, funded by USAID through AECOM International Development and Portland State University, was to propose and evaluate methods for improving planning for energy development of

the Lower Mekong Basin (LMB). Mr. King was responsible for preparing the assessment of potential alternatives for power production in the LMB.

1984 - 2011: Senior Resource Analyst, Northwest Power Planning Council, Portland, Oregon. Mr. King was responsible for assessing the commercial availability, performance, economics, development potential and issues associated with development and operation of electric power generating resources.

Mr. King was also responsible for the Council's forecast of wholesale electric power prices, using the AURORA^{amp} Electric Market Model, a proprietary model of the western electric power system. The model is also used to assess the CO₂ production and other effects of regulations and policies affecting the power system. Mr. King's activities included assessment and analysis, operation of computer models, preparation of issue papers, organization and chairing of advisory committees, administration of contracts, presentations to the Council and interested organizations, and work with utilities, government agencies, research organizations, resource developers and public interest groups. Information developed

by Mr. King is widely employed by utilities, agencies and others outside the Council.

2008 - 2010: Chief Planner, National Energy Development Framework Project, State of Eritrea.

Mr. King served as the chief planner for preparation of a 20-year energy development framework and five-year action plan for the State of Eritrea. The framework, funded by USAID, presents a vision for a future energy supply system for Eritrea to support an adequate, reliable, affordable, and sustainable energy supply for rural and urban areas, transportation, industry, and water resource, port and tourism development. Mr. King fashioned the contributions of specialists in various energy resources into a coherent description of Eritrean energy resource potential, formulated goals and objectives in response to

concepts provided by the State of Eritrea, and lead the development of a proposed Eritrean energy future, action plan and framework for implementation.

1974 - 1984: Staff Engineer, Energy Systems Department, Battelle, Pacific Northwest

Laboratories, Richland, Washington - Mr. King managed and contributed to projects involving assessment of the economic and environmental aspects of electric power conservation and supply resources and application of decision analysis techniques to energy policy and technology issues. Projects included the first assessment of conservation and generating resources for the newly-formed Northwest Power Planning Council, assessment of generating resource alternatives for the State of Alaska, assessment of decommissioning costs and priorities for retired nuclear facilities and analysis of high-level nuclear waste disposal alternatives.

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1964 - 1970: Test Engineer, Nuclear Power Division, Puget Sound Naval Shipyard, Bremerton, Washington - Mr. King was responsible for the planning and execution of acceptance testing procedures

for the construction, overhaul and refueling naval nuclear power plants.

EDUCATION

Bachelor of Science in Mechanical Engineering, University of Washington, Seattle, Washington. 1964.

Graduate Studies, Zoology, University of Washington, Seattle, Washington. (1970-1972).

Graduate Studies, Regional Planning, University of Pennsylvania, Philadelphia, Pennsylvania. (1972-1974).

SELECTED PUBLICATIONS

Seventh Northwest Conservation and Electric Power Plan (Document 2015-09). Northwest Power and Conservation Council. Portland, Oregon. October 2015. (Contributing author).

Wave Energy Utility Integration. Prepared by Pacific Energy Ventures for the Oregon Wave Energy Trust. December 2013. (Contributing author)

Planning Approaches for Water Resources Development in the Lower Mekong Basin. Portland State University, Mae Fah Luang University. July 2011. (Contributing author).

Effects of an Increasing Surplus of Energy Generating Capability in the Pacific Northwest (Document 2011-01). Northwest Power and Conservation Council. Portland, Oregon. March 2011.

Sixth Northwest Conservation and Electric Power Plan (Document 2010-09). Northwest Power and Conservation Council. Portland, Oregon. January 2010. (Contributing author).
 National Energy Development Framework - Part I. Prepared for State of Eritrea, Ministry of National Development. Asmara, Eritrea. April 2009. (Contributing author).
 Carbon Dioxide Footprint of the Northwest Power System (Document 2007-15). Northwest Power and Conservation Council. Portland, Oregon. November 2007.
 Pacific Northwest Wind Integration Action Plan (WIF 2007-15). Northwest Wind Integration Forum. Portland, Oregon. March 2007. (Contributing author).

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The Best Alternative Executive Summary

PSE and CENSE (Coalition of Eastside Neighborhoods for Sensible Energy) may not agree on the feasibility of the company's proposed transmission project through four Eastside cities. But at least we agree on one thing. The five alternative solutions evaluated in the Draft EIS are not practical solutions to power future growth of the Eastside.

- **Alternative 1B** (use existing Seattle City Light corridor): Seattle City Light has said they don't want to share these lines with PSE. We don't know how to change that conclusion.
 - **Alternative 1C** (underground transmission lines): The state tariff enforced by the Washington Utilities and Transportation Commission makes it prohibitively expensive for communities to request undergrounding.
 - **Alternative 1D** (underwater transmission lines): This alternative may be subject to the same expensive undergrounding tariff, and also raises questions about disturbing a Superfund site, shoreline issues, and concerns about salmon.
 - **Alternative 2** (integrated resource approach): The analysis of integrated resources is based on incorrect or obsolete information, making this option appear more expensive and less feasible than it actually is.
 - **Alternative 3** (new 115 kV lines and transformers): With 60 miles of new transmission lines, this alternative does not seem like an attractive or realistic option to anyone.
- Alternative 2 would be the most attractive option for residents and businesses if it were redesigned using more up-to-date and accurate information. Such a solution would be less expensive, less damaging to communities and the environment, and safer for homes and schools in close proximity to the power lines and high-pressure petroleum pipelines. Sadly, Alternative 2 was not designed or reviewed by experts in new technologies that make Demand Response and Electrical Efficiency the most important factors in planning the electrical grid of the future. This is validated by a quote from the Northwest Power Plan1 that was finalized this year:
- In more than 90 percent of future conditions, cost-effective efficiency met all electricity load growth through 2035. It's not only the single largest contributor to meeting the region's future electricity needs, it's also the single largest source of new winter peaking capacity.*
- EOL's full report is included following this introduction. The full report is quite detailed and technical. It may be more appropriate for analysis by industry experts, so this introduction attempts to distill the main points for the general public.
- 1 https://www.nwcouncil.org/media/7149671/7thplandraft_chap01_execsummary_20151020.pdf

A clear definition of need and cost

In order to determine the feasibility of any alternative solution, it is important to be clear about two crucial parameters:

1. How big is the need? Or, as the DEIS poses the question in section 2.3.3, what is the "projected deficiency in transmission capacity on the Eastside?"
2. What is the relative cost of alternatives compared to the cost of PSE's proposed project?

How big is the need?

In section 2.3.3, the DEIS says that Alternative 2 must cover 205 MW of projected shortfall by 2024. It is not clear in the DEIS where this number comes from. It is nearly three times the shortfall of approximately 70 MW shown for 2024 in PSE's famous Eastside Customer Demand Forecast.

The DEIS explains that Alternative 2 must be evaluated by a different standard than a solution based on transmission lines because "every solution has a different degree of effectiveness and reliability." The DEIS seems to dwell on every possible downside of the technologies included in Alternative 2 while turning a blind eye to the reliability risks of Alternative 1A. For example, suppose two of the approximately 150 power poles in PSE's proposal fall down (a scenario we are allowed to consider under N-1-1 contingency planning, and not hard to imagine during a big earthquake). In that case, the capacity of Alternative 1A would be reduced by 20%, about 140 MW.



It is difficult to imagine a scenario in which an N-1-1 failure would lead to a similar drop in capacity for Alternative 2. It improves reliability by not placing all our eggs in one basket.

There is evidence that PSE has been gradually skewing requirements to reduce the competitiveness of alternatives. In April 2015, an update to Quanta's Eastside Needs Assessment estimated the shortfall in transmission capacity at 123 MW. A few months later, the EIS consultant Stantec raised the estimate to 133 MW. In January 2016, PSE's latest Integrated Resource Plan pegged the number at 166 MW. A few weeks later, the DEIS was published with an estimate of 205 MW.

The shortfall has grown by 54% in less than a year, calling into question the stability of the methodology used to determine this number or the motives of the information source. The important point is that size matters. The mix of technologies and programs needed to cover a 205 MW shortfall is different from the mix that would be used to cover a shortfall of 123 MW. One wouldn't simply "scale up" the smaller solution.

It's important to note that CENSE is skeptical of even the lesser 123 MW figure. The Lauckhart-Schiffman Load Flow Study² exposes errors in PSE's assumptions and simulations that would dramatically alter the size and timeframe of the need. For the purposes of this report, we assume that the shortfall is 123-133 MW in order to critique the DEIS, but we do not agree that this is a realistic estimate.

What is the cost?

The DEIS treats cost as irrelevant for the purposes of evaluating environmental impact. However, in the real world, cost is an important factor in choosing one alternative over another.

PSE has not estimated the cost of the project for at least a year. The last cost estimates that were shared with the Community Advisory Group were in the range of \$150 million. EQL expects the actual cost will be closer to \$300 million, for the following reasons:

1. PSE initially thought that two transmission lines could be carried on a single set of monopoles. However, due to the meanderings of the Olympic pipelines in the shared corridor, there are many places where the lines must be carried by two poles to meet safety requirements. The number of poles and construction costs will increase.
 2. PSE initially thought that the current transmission poles could be removed before construction of the new line began. Recently, the company has admitted that operation of the system with no lines in place during many months of construction would present a reliability risk. Therefore, the design must be altered to accommodate both sets of transmission lines in place simultaneously.
[2 http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf](http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf)
 3. PSE assumed that it would be safe enough to put two transmission lines and two high-pressure petroleum pipelines in a utility corridor that is as narrow as 100 feet in densely settled residential neighborhoods. The DEIS wisely assumes that the corridor will have to be widened by up to 50 feet. This will require condemnation of homes and new easements, significantly increasing project costs.
 4. Resistance to the project is much higher than PSE expected. The costs of advertising, public relations, and potential legal actions are correspondingly higher.
- EQL's report points out a hidden cost of Alternative 1A. If PSE invests hundreds of millions of dollars in a transmission project, the amount of investment dedicated to important programs like Demand Response and Energy Efficiency will be reduced. Consequently, overall energy use will be higher with Alternative 1A than Alternative 2. That higher consumption must be matched by new generation, and PSE anticipates that need in the 2015 Integrated Resource Plan. PSE expects to build nearly 600 MW of new gas generation plants in 2021, just a few years after Energize Eastside is complete.
- Alternative 2 could reduce overall energy use enough to eliminate the need for one 200 MW generation plant, saving ratepayers \$300 million. In the long run, Alternative 2 could save ratepayers the cost of both transmission and generation infrastructure, at least \$600 million. Including both of these avoided costs in the analysis makes Alternative 2 the better choice for cost effectiveness.

Expert analysis from EQL Energy

To better understand how Distributed Energy Resources (DER) might contribute to the future operation of our energy grid, CENSE engaged industry expert EQL Energy from Portland, Oregon. EQL has been an important contributor to alternative energy solutions in Portland and other parts of the Pacific Northwest.

EQL possesses a different skill set than that needed to plan transmission lines. These skills have not been demonstrated by PSE or the EIS consultant Stantec. Consequently, Alternative 2 is not a credible DER solution. The description included in DEIS section 2.3.3.1 would lead the reasonable reader to conclude that this option is difficult to implement and dangerous for reliability. Consequently, EQL's list of technologies and policies differs significantly from those included in the DEIS:

Energy Efficiency

It is difficult to directly compare PSE's and EQL's estimates of potential savings from Energy Efficiency. In section 2.3.3.1, the DEIS states that 42 MW of savings would be required, but offers no clear idea of how that would be achieved: *"The potential for additional energy efficiency on the Eastside is not currently known and would require additional evaluation."* CENSE is disappointed that no more definitive estimate could be made of the potential. The DEIS claims that savings of this magnitude would be *"an aggressive goal."* Also, *"The additional energy efficiency assumed for Alternative 2 would be triple the amount that PSE estimated is achievable after 2024, and that additional energy efficiency would have to be accomplished before 2024."* The DEIS analysis makes it seem pretty hopeless.

In contrast, EQL has estimated 30 MW can be saved through Energy Efficiency. This is lower than PSE's goal, and EQL believes it is more easily achieved because PSE and its consultants are using load data that is decades out of date. The obsolete data makes Energy Efficiency appear to be less effective than it actually has been in more recent years. To get more accurate data, a "Request for Proposals" should be issued to companies that specialize in Energy Efficiency technologies and programs. A competitive bidding process would yield better estimates of the potential than the obsolete data being used by PSE and EIS consultants.

Distribution Efficiency

Energy Efficiency achieves savings on the consumer's side of the electric meter by using less electricity to accomplish tasks such as lighting, heating, operating appliances and electronics, and charging batteries. In contrast, Distribution Efficiency increases the efficiency of how PSE and other utilities deliver electricity to consumers. This reduces overall electricity usage by up to 4% without any impact on customers. PSE has already incorporated this technology in a few substations, but the program can be expanded to more broadly reduce peak loads. EQL included 18.8 MW of savings in its DER estimates, based on a somewhat conservative estimate of 2.5% of peak load. No estimate is included for Distribution Efficiency in the DEIS.

Combined Heat & Power

Combined Heat & Power is a technology that generates electricity from the waste heat produced by burning natural gas to heat or cool a building. It is most effectively incorporated in new buildings, and it provides two benefits. The very efficient use of natural gas reduces total carbon emissions compared to long-distance transmission of electricity, and local generation of electricity can provide a degree of immunity from power outages. Widespread use could reduce the need for new generation facilities and transmission lines, benefitting all customers.

Bellevue has a special opportunity to incorporate this technology due to the number of new buildings planned for construction in downtown Bellevue and the Spring District. If these projects are contributing to the need for Energize Eastside, it seems fair to ask them to help solve the problem of increased energy use. It is not fair to place the burden of rising downtown energy use on residential neighborhoods with increased industrialization and lower property values.

EQL estimates 30 MW of savings due to Combined Heat & Power. No estimate is included in the DEIS.

Energy Storage

DEIS section 2.3.3.4 describes a battery solution that would provide 121 MW to serve peak demand. However, the practicality of such a system is immediately dismissed: *"An energy storage system with power and energy storage ratings large enough to reduce normal overloads has not yet been installed anywhere in the world. For comparison, the largest operational transmission scale battery facility in the U.S. can provide 32 MW of power for about 40 minutes."* The DEIS analysis makes it sound like you'd have to be crazy to consider this idea.

EQL proposes a battery solution with a capacity of only 15 MW, approximately 8 times smaller than PSE's solution. For comparison, Southern California Edison is funding a project to install batteries with 250 MW of capacity. EQL's proposal is 16 times smaller, and by PSE's metric, 16

times more feasible.

But what about cost? EQL found a major error in the cost analysis included in the Strategen report referenced in the DEIS. Strategen ignored the cost of avoided transmission, leading to the improbable assumption that we would build transmission lines and battery storage units. When the error is corrected, the cost of batteries is approximately two times more cost effective than building new transmission lines. And battery costs will continue to fall, while the cost of transmission lines usually rises due to increasing property values. Even PSE admits that battery storage will become a game changer as we increasingly rely on intermittent renewable energy sources like wind and solar power. We can prepare for the future by investing in small amounts of battery storage now, so we can learn from our experience and advance the state of the art. If possible, we should use products like grid batteries manufactured by the Mukilteo-based company UniEnergy. That's a smart investment in our energy future and our economy. EQL estimates 15 MW of battery storage. The DEIS estimates 121 MW, but notes that the consultants skipped evaluation of a summer scenario because "energy storage would not be a feasible stand-alone alternative." This is an odd criteria to apply to energy storage, because the components of an "integrated resource approach" are designed to work together, not as standalone pieces.

Peak Generation Plant

DEIS section 2.3.3.1 describes "three 20 MW generators to be implemented in combination with the other components described for Alternative 2." As an important caveat, the DEIS notes that "PSE had eliminated this option from consideration" because "these types of generators produce a high noise level that would be incompatible with [residential] surroundings." In discussion with Bellevue city council members, CENSE has learned that there is little political will to consider these generators. EQL's proposal does not rely on gas-fired peak generation plants. The DEIS assumes 60 MW of capacity.

Dispatchable Standby Generation

Dispatchable Standby Generation (DSG) generates power on a customer's site, as explained in DEIS section 2.3.3.3. The DEIS mentions many technologies that could be used for this purpose, such as gas turbines, microturbines, reciprocating engines, fuel cells, and anaerobic digesters. However, no estimate is given regarding which ones are most practical or how much energy they might be expected to generate. EQL's proposal does not rely on gas-fired peak generation plants. The DEIS assumes 60 MW of capacity.

Dispatchable Standby Generation

Dispatchable Standby Generation (DSG) generates power on a customer's site, as explained in DEIS section 2.3.3.3. The DEIS mentions many technologies that could be used for this purpose, such as gas turbines, microturbines, reciprocating engines, fuel cells, and anaerobic digesters. However, no estimate is given regarding which ones are most practical or how much energy they might be expected to generate. EQL describes a solution that they helped design in Portland, Oregon. Generators owned by businesses, hospitals, and government buildings are networked to the utility company. These generators are usually idle unless there is a power failure, when they are turned on to supply emergency power. The utility is provided a way to remotely control the generators when electricity demand peaks. The owner gets an attractive incentive for participating, and the generator reverts to its previous purpose (backup power) if an outage occurs. Using the Portland program as a template, EQL used a scale factor to determine DSG potential for the Eastside. EQL estimates 18.8 MW of additional energy produced by DSG. The DEIS provides no estimate.

Demand Response

The importance of Demand Response as a primary part of future energy planning is underscored by the recently published Seventh Northwest Power Plan from the Northwest Power and Conservation Council, as well as a major victory for the Federal Energy Regulatory Commission in the U.S. Supreme Court.³ A 2015 article in Forbes explains how Demand Response will save U.S. consumers billions of dollars.⁴ DEIS section 2.3.3.2 mentions some rather vague ways to implement Demand Response programs, including real-time monitoring, utility control of heating and cooling systems, programmatic options to reduce peak demand (nothing specific), incentives and pricing structures to shift peak demand, continuous wireless signals to the utility (huh?) The DEIS doesn't provide any realistic estimate of how much energy can be saved through these programs, but it says it must be at least 32 MW. According to the DEIS, "this would triple the expected rate of adoption of demand response in PSE's Integrated Resource Plan..."

EQL is more specific. There are actually two types of Demand Response programs: one anticipates needs one day before peak loads materialize (it's not hard to predict very cold weather one day ahead), and one responds to emergency needs with 10 minutes' notice. EQL estimates 30 MW of savings for day-ahead Demand Response (4% of peak load based on a conservative estimate from industry analyst Navigant), and 11.3 MW for the 10-minute program (1.5% of peak load). The DEIS cites a goal of 32 MW, but is not specific or optimistic about achieving it.

3 <https://www.washingtonpost.com/news/energy-environment/wp/2016/01/26/the-supreme-court-just-gave-a-great-explanation-of-our-baffling-electricity-system/>

4 <http://www.forbes.com/sites/jamesconca/2015/02/24/solving-americas-energy-future-requires-a-demand-response/#5964a1457a9f>

Conclusions

The DEIS vaguely describes Alternative 2 using a resigned, pessimistic tone. The alternative seems risky and infeasible, because it was not developed or reviewed by experts with the specialized experience to accurately assess the technologies and potential energy savings. EQL has described a more realistic way to achieve these energy goals in a manner that is cost-effective, better for the environment, better for our local economy, safer for residents, and more in sync with the Eastside's leading edge, high-tech roots.

Alternative 2 has another advantage. PSE's transmission line is an all-or-nothing proposal. It won't deliver a single electron until every pole is installed and every wire strung. It will not be operational until PSE's customers have spent at least \$300 million for it.

By comparison, Alternative 2 can be built incrementally. According to PSE's famous chart, the Eastside Customer Demand Forecast, there will be a shortfall of approximately 10 MW in 2020. It should be easy to meet that shortfall in the next four years using a subset of the technologies described by EQL. Two years after that, we need to find another 15 MW. That shouldn't be too hard. As time progresses, technology will improve, and batteries will become cheaper and more efficient. We may find that it's pretty easy to meet these goals.

But there's another possibility. What if we have another recession? Or what happens if the ridiculous rate of growth (2.4% per year) that PSE is predicting doesn't materialize? In these cases, we could scale back ongoing investments in Alternative 2, saving PSE's customers hundreds of millions of dollars.

The DEIS describes many risks, but it doesn't explain this one. A huge investment in Alternative 1A could create a technology dinosaur that industrializes the Eastside, does nothing to mitigate greenhouse gas emissions, and saddles our children and grandchildren with higher utility bills, leaving less money to invest in the energy technologies of the future. That doesn't seem like a very smart investment.

CENSE.org
February 24, 2016
Alternatives to Energize Eastside

Response to Draft EIS

February 15, 2016

Prepared for:

CENSE

Prepared By

EQL Energy, LLC |

Portland, OR

www.eqlenergy.com

Prepared by:

EQL Energy, LLC

3701 SE Milwaukie Ave., Suite A

Portland, OR 97202

Primary Author(s)

Ken Nichols, Principal / EQL Energy | | 503.438.8223 / ken@eqlenergy.com

www.eqlenergy.com

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1 Introduction

EQL was asked to comment on Alternative 2 "Integrated Resource Approach" discussed in Chapter 2 of the Energize Eastside Draft EIS January 28, 2016. EQL has reviewed and commented Energize Eastside studies and has participated in several PSE IRP advisory group meetings, EQL has commented on the following topics through Energize Eastside and IRP Advisory process:

1. Distributed energy resources (DER), (e.g., energy efficiency, demand response, dispatchable standby generation, solar, storage, EV charging, CHP, distributed generation, etc.),
2. Demand Side Resource and transmission alternatives to Energize Eastside.
3. Integration of transmission and distribution planning/costs into the utility least cost planning process.
4. Resource adequacy modeling and methods (e.g., EUE expected unserved energy, focus on resource types), and
5. Reliability in IRP, Transmission Planning, and SAIFI/SAIDI statistics, as well as scenario and sensitivity analysis.

EQL is an energy industry consultancy started in 2010 to assist utilities, utility customers, and vendors develop smart grid technologies and business cases that lower cost of utility service, improve reliability, and integrate renewable energy. Our staff has supported IRPs throughout the Western Electricity Coordinating Council and MISO since 1993. Since 2010, our work has been related to smart grid technology evaluation/planning, and integration of renewable energy and distributed energy resources (DER).

EQL's comments are those of EQL, and are meant to promote improved least cost utility planning.

2 Critical Points on EIS Alternative 2

Alternative 2 if done properly could meet criteria for Eastside expected growth in peak load. Unfortunately, the work and discussion of Alternative 2 in the EIS is confusing, insufficient to determine feasibility, uses bad data and forecasts, and demonstrates very little attention by City of Bellevue and PSE.

Many utilities around the world are considering Distributed Energy Resources (DER) to defer or avoid transmission infrastructure, including ConEd (NY), SCE (CA) BC Hydro (BC), BPA (OR/WA), etc.1, DERs include targeted energy efficiency, demand response, dispatchable standby generation, solar, storage, EV charging, CHP, distributed generation, etc.

2.1 A proper Alternative 2 analysis would prevent increases in Eastside winter peaks and meet all 15 electrical criteria, and 4 non-electrical criteria.

A proper analysis would include accurate peak load forecast, cost effectiveness analysis, and ideally an all source RFI. A rule of thumb Eastside forecast is provided in Figure 1 below.

To put it simply, Alternative 2 DER would avoid ratepayer funding for transmission, distribution, generation, and environmental costs. To meet the peak load growth Puget Sound Energy will request to spend over \$300MM on Energize Eastside and another \$300MM for a peaking power plant (PSE 2015 IRP). If we assume that expected peak load to be met is 200 MW, the capital expenditure would be \$3,000/kW. Most DER, TODAY, can be installed and operated for less. When you consider expected cost reductions and performance improvements Alternative 2 is the lowest cost choice.2

1 <https://www.raonline.org/document/download/id/4765>

2 storage cost reductions expected to be 50% over next 5 years, Internet of things, sensors and controls

for demand response will become more cost effective and prevalent, EV charging control to avoid peak.
 Figure 1: DER potential at PSE above the DSR 100% forecast
 If PSE proceeds with transmission and generation, then DER will become less cost effective. In fact, Idaho Power after finishing construction of their Langley Gulch gas plant tried to shut off all their demand response programs. You don't need DER capacity if your trying to pay off a new gas plant.

2.2 Alternative 2 assessment is insufficient to determine feasibility and lacks credible analysis or estimate.

The EIS provides only a theoretical example of technology that could address winter peak load reductions which has no value in determining feasibility. See example graph in Fig. 2-14 in EIS.

(EIS Fig. 2-14) Theoretical example of Energy conserved or distributed generation
 In order to properly assess an Integrated Approach the EIS should either hire independent consulting firm to estimate cost effective DER on Eastside, or issue an all source RFP for all DER in affected eastside area. This process would include all avoided costs and provide actual estimates for DER capacity amounts and cost, as well as real vendors estimates. This process is being used in New York's Brooklyn-Queens Demand Management program which started in 2014. New York utility ConEd is expected to invest \$200MM to implement DER to avoid transmission build.

2.3 PSE Eastside winter peak load forecast has been a moving target throughout planning process, and has steadily increased over study period.

PSE has been changing the required winter peak load reduction on the Eastside throughout the Energize Eastside planning process. (see figure below). PSE has a history of changing methods and planning standards when justifying capital expenditures, e.g., peaking power plants. In the 2015 Integrated Resource Plan, PSE changed their planning standard, which led to an increase in 2021 peak load of 351 MW. Figure 1 below summarizes the source and the estimate of peak load reduction required to meet Eastside load requirement.

Figure 2: Range of Estimates for Eastside Peak Load Increase through 2024

E3 Non-Wires Study 70 MW Oct 2014

Quanta - Eastside Needs Assessment 123 Apr 2015 Page 19

Stantec Review Memo (referenced in EIS)

133 July 2015 Page 1-7 Draft

EIS

PSE 2015 IRP 166 Jan 2016 IRP Ch.5 page 31

Draft EIS (2016) 205 Jun 2015 EIS Page 2-34

* Assumes peak load after planned baseline energy conservation

The Draft EIS discusses 205MW non-transmission resources needed by 2024, which is a likely mistake. This value stems from an email from Jens Nedrud, Energize Eastside project manager, where he explains that the amount of conservation required to be equivalent to transmission capacity is 205 MW. Mr. Nedrud only mentions conservation, not other DER. Mr. Nedrud is the project manager for Energize Eastside, so estimates from him should be questioned.

2.4 PSE Eastside winter peak load forecast is wrong and has been consistently too high for the past 6 years.

Figure 2 below shows how peak load is historically flat, then suddenly takes off in the future. You'll find this to be true with PSE's previous peak load forecasts. I understand that forecasts are, by their nature are wrong, but PSE has a habit of overestimating peak load.

Figure 3: PSE 2015 IRP Figure 5-21: Electric Peak Demand Forecast before DSR 2015 IRP Base Scenario versus 2013 IRP Base Scenario Hourly Annual Peak (23 Degrees, MW)

Winter peaks have gone down in the Pacific Northwest in the last 5 years, and growth in the winter peak will continue to be less than the increase in growth in energy use. PSE's winter peak decreased by 11 MW from 2013 to 2014. This holds true because:

1. Electric heating load is saturated. I.e., new growth does not include electric heating that contribute to winter peak,
2. Fuel Conversion from electric to gas and propane are reducing winter peaks,
3. Milder winter temperatures reduce chance of extreme cold weather, and
4. Higher growth in multifamily and commercial,

PSE's 2011 IRP had peak forecasts rising from 2011 forward.3 This is not happening.

Notice in Figure 5-27 from PSE's 2015 IRP, the peak demand does not begin to increase until 2024.

http://www.utc.wa.gov/_layouts/CasesPublicWebsite/GetDocument.aspx?docID=42&year=2010&docketNumber=100961

Figure 5-27: Electric Peak Forecasts by County (MW), after applying 2013 IRP DSR
3 Other Points on EIS Alternative 2

3.1 PSE local needs assessment is not a local cause

PSE has suggested the transmission need is based on local winter peak demand on the eastside. This is only a small part of the story. The issue arises by modeling a series of unlikely regional wholesale power scenarios (e.g., plants offline, Canadian imports, transmission line outages, and high winter peak demand) that creates: 1) high winter power flows South to North through the PSE's eastside transmission corridor, and 2) increased loads on eastside substations. These modeled events would lead to equipment exceeding their thermal limits and the need to shed load at substations or limit power flow on the PSE 115kV system through eastside.

Based on the 2012 Memorandum of Agreement between PSE, Seattle City Light (SCL), and BPA, PSE has agreed to provide expanded transmission service through Puget Sound Area. SCL agreed to projects that would limit flow through their system by placing series inductors at two of their substations. This demonstrates that the issue and needs are indeed a regional one, not just local.

This local problem, if it were ever to occur, would happen for a few hours of the year during extreme cold days and hours of peak load on eastside. The EIS extreme scenarios suggest up to 13 days this could occur, but does not forecast number of hours. Given PSE's winter peak is in morning (8am) or evening (6pm) the load reduction would need to be for a few hours during these times. EQL's experience suggests that the winter peaks come in 2-3 day consecutive days (cold snaps) and last maybe one to two hours per day.

According to EIS scenarios, in 2026 eastside load will need to shed 133MW to accommodate flows to Canada over PSE 115kV system.

Another troubling area is how PSE attributed winter peak demand reductions to forecasted energy efficiency measures. It is impossible to determine how PSE and its contractors did this conversion. However, EQL Energy is familiar with the issue that load shapes used in the Pacific Northwest to attribute capacity reductions from energy efficiency are inaccurate and out of date. Some end use load shapes (ELCAP) date back to the 1980s. The topic of inaccurate load shapes and hence capacity contribution of energy efficiency has been consistently discussed and agreed upon by the Northwest Power and Planning Council, as well as the Regional Technical Forum on energy efficiency.

3.1.1 The Problem – several days and a few hours in the winter

The problem PSE has identified in their Energize Eastside proposal comes about through a series of unlikely events that lead to high winter power flows South to North through the Eastside and creates overloads on certain substations. This problem, if it were ever to occur, would only happen for a few hours of the year. PSE has not estimated the number of hours because the scenarios and stress cases they use don't lend themselves to firm estimates. If PSE could estimate the number of hours they would need winter peak demands to be reduced, it likely would come in 2-3 day consecutive days (cold snaps) and last maybe one to two hours per day. If Energize Eastside or one of the alternatives were not to be pursued, power outages would not be imminent during these peak demand hours unless at least three failures occur in the grid, a scenario that exceeds NERC reliability requirements. The total number of customers affected by these unlikely outages would be 3 to 5 percent of the 1.1 million customers that will pay for the project with higher electricity bills for the next 40 years.

3.1.2 The DER Solution

Distributed Energy Resources are well suited for targeting winter peak demands in the Eastside Area. Many North American electric system operators invest in DER to avoid transmission and peaking generation. These DER include demand response, storage, EV charging control, DSG, and Distribution Efficiency. If the problem is less than 60 hours per year, it is often much less expensive to manage demand than build Transmission and Generation. Efficiency and CHP tend to provide reductions throughout the day, but can be targeted for time of day contributions. Figure 4 shows a sample peak day load shape for the Puget Sound area with a stack of resources deployed both throughout the day and during a dispatch at 5:30PM during the peak to depict what could happen in the event of an outage.

Figure 4: Sample DER Contribution to Winter Peak Day Load Shape4

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Data source for load shape: Puget Area Net Load for 12.20.2008
<http://transmission.bpa.gov/Business/Operations/Misc/default.aspx>
 * This is not an Eastside area load shape, but is representative of typical winter peak load patterns for NW utilities.

3.2 PSE lags rest of country in DER

Utilities like Puget Sound Energy are way behind other areas of the country in investing in DER, especially demand response. For example, the rest of North America relies on over 60,000MW of demand response, and has eliminated billions of dollars of investments in peaking generation and transmission. The Northwest Power and Conservation Council in their recently released 7th Power Plan, identified 4,300 megawatts of regional demand response potential. PSE currently has no demand response resources it can rely upon.

One example of a DER approach to avoiding transmission project is New York's Brooklyn-Queens demand management project. Growth began to occur in this area from gentrification and employment growth. The utility ConEd estimated the cost to meet this growth would require a \$1Billion investment in expanded transmission and substation capacity. In 2014 the Public Service Commission approved the Brooklyn/Queens Demand Management program to invest up to \$200MM to avoid the larger infrastructure costs.

The Northwest is not new to Non-Wire Alternatives. In the 1990s BPA was considering transmission across the Cascades to support Puget Sound Area growth and reliability. The transmission cost assessment led to a plan that included aggressive demand side resources in Puget Sound Area, and use of series capacitors for voltage support. These lower cost alternatives deferred the project to the point of never being built.

3.3 EIS Impacts of Alt 2

The negative impacts of Alternative 2 were primarily associated with peaking generation and storage located on the Eastside, and relate to land and greenhouse gas (GHG) emissions.

EQL Energy, however, is not suggesting any new reciprocating engines, or peaking power units as part of EIS Alt. 2. We would expect primarily Combined Heat and Power (CHP) to be constructed in this alternative. CHP often uses biomass/biogas as well as natural gas, and would contribute to GHG, or could have noise impact. CHP has the benefit of also being "energy efficient" because the low value heat is used in industrial or commercial processes. Puget Sound Area has examples of CHP, e.g.,

- a. Renton, WA South Treatment Plant that can produce up to 8MW of power.
- b. Seattle, WA Enwave Seattle uses biomass and natural gas to produce 50 MW of electricity, and 35 MW of heat equivalent.

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<http://www.neep.org/file/2414/download?token=bNV2vVea>,
<http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B83594C1C-51E2-4A1A-9DBB-5F15BCA613A2%7D>
 6 <http://www.kingcounty.gov/services/environment/wastewater/resource-recovery/Energy/Renewable/cogen.aspx>

c. Univ. of Washington has 5MW natural gas CHP

CHP would require capacity on natural gas infrastructure.

A Dispatchable Standby Generation (DSG) program would have to go through air permitting compliance, but it is a permissible use. PSCleanAir has suggested that a DSG program like PGE would follow EPA NESHAP RICE rules.

EQL Energy would not recommend storage implementation as described in Alt. 2 of EIS. Six acres of storage does not make much sense. Energy storage highest value is utility owned and managed, yet behind the meter at a customer site. This means customers get backup and reliability, and utility can use for system issues, e.g., winter peak demands. This also avoids the 6 acres of storage containers suggested in the EIS draft (which is ridiculous). Fire and environmental authorities are becoming comfortable with both Li-ion and flow battery technology. PSE is working on a Li-ion storage system at Glacier. State of Washington is also granting \$40MM to projects in grid modernization and storage.

Alt 2 would cost less than Alt 1 and provide secondary benefits to customers through improved reliability and resiliency.

Alt 2 would have less risk during weather and natural disasters. DERs would provide

backup power during intermediate or sustained outage.

3.4 Alt 2 works with PSE Economic Study of Flexible AC Transmission (FACTS).

Flexible AC Transmission systems on high voltage lines would protect PSE transmission facilities from reaching thermal limits while providing required service to loads. Combining this alternative with appropriately procured and analyzed DER provides a good alternative in Draft EIS.

See PSE Economic Study request at link below.

http://www.oasis.oati.com/PSEI/PSEIdocs/Oct_31_PSET_Economic_Study_Request_from_EQL.PDF

4 Alternative 2 Issue Details

In estimating Non-Wires Alternatives (NWA) like Alternative 2, PSE and its contractors

have miscalculated both the technical and cost effective potential for DER in the Eastside area. They have used outdated information and methods, overestimated winter peak demand, improperly calculated "cost effectiveness", and have not considered forecasts of technology cost and performance improvements.

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4.1 2014 Non-Wires Alternative Screening Study underestimates

DER Potential for Eastside

PSE relies on 2013 Cadmus report and a 2014 E3 report to estimate DER potential on the eastside. These analysis both have used bad or out-of-date data, improper analysis, and have underestimated the DER potential for the Eastside.

E3's 2014 Screening study7 has bad data and provides no data or description of DER measures that were considered cost effective beyond the PSE baseline:

i. Estimated cost of Energize Eastside at the time of the Screening Study was \$220 MM. The cost has been stated to be between \$150 and \$300MM.

ii. Avoided cost analysis should use avoided cost of Transmission, Generation, and Distribution over 10 year period. A non-wires study should be performed that combines EE project deferral (\$155/kW-yr) with avoided cost of peaking Generation Capacity (\$184/kW-yr) and generic T&D deferral (\$23/kW-yr8). The sum of these (\$362/kW-yr) will buy PSE more DER than that forecasted by E3 and PSE. Other avoided costs that could play a role include environmental costs, customer cost savings, etc.

PSE's proposal to rebuild Sammamish-Lakeside-Talbot 115 kV line to 230 kV (Energize Eastside) is a project PSE says is needed to support a 65 to 133MW load growth in PSE's eastside. This transmission project is estimated to cost \$300MM or \$1,500/kW, about the same capital cost of a 200MW reciprocating engine. By integrating cost of transmission with system generation the cost to serve this 200MW load growth is \$600MM or \$3,000/kW capital cost.

iii. DER alternatives and cost estimates are not well defined, so it is difficult to evaluate the accuracy of Alternative 2.

iv. Include backup generators to be used as contingency reserve (e.g., Portland General Electric).

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7 http://www.energizeeastsideis.org/uploads/4/7/3/1/4/7314045/attachment_5_-_screening_study.pdf

8 E3 2014, page 23 PSE's IRP team also provided avoided generation capacity cost of \$184/kWyear and an avoided generic T&D cost of \$23/kW-year, which are both represented in 2014 dollars. For this analysis, we assumed that PSE's generic T&D avoided cost and the specific transmission line deferral value related to PSE upgrades are additive. This additive assumption presumes that load reductions in King County can defer the need for more general planned distribution system upgrades, in addition to deferring the construction of the specific Eastside upgrades.

v. Storage is quickly becoming more cost effective and accepted as an alternative to T&D investments.

Recommendation. PSE should redo DSR, DR, and DER forecasts on Eastside using all levelized costs, including transmission (e.g., Energize Eastside), distribution, and supply-side resource alternatives. This will undoubtedly increase the amount of DSR and DER PSE has forecasted in the Draft IRP.

2016 PSE all source RFP. In 2016 PSE is expected to issue an all source RFP for distributed resources. WUTC should ensure that the avoided cost for resources in the

Eastside accurately reflect all avoided costs, e.g., transmission, generation, distribution, customer benefits, environmental costs, etc. Through needs assessment of Energize Eastside, PSE's Eastside zone needs winter capacity resources to address transmission congestion and reliability by 2018. The IRP analysis supports addition of further distributed energy resources by 2021.

4.1.1 Defining distribution located resources

PSE should move away from current categories of distribution-side resources towards resource descriptions that meet utility requirements (energy, capacity, reserves, etc). As mentioned above these requirements need better descriptions than just MW and aMW. These requirements need amount, duration, time of day/season, etc.. The distribution located resources PSE has used 3 categories of distribution located resources seen in Cadmus report 2014:9

1. DSR, Demand Side Resources, energy efficiency. (which uses bad estimates for peak demand reductions (MW))
2. DR, demand-response
 - a. Residential DLC - Water Heat
 - b. Residential DLC - Space and Water heat
 - c. Residential Critical Peak Pricing (CPP)
 - d. C&I CPP
 - e. C&I Load Curtailment
3. DG, distributed generation, solar

Figure 5 is suggests a better way to describe all distribution level resources. This categorization allows planners to place different values on a resource based on its quality and location. For instance, getting dispatchable capacity for winter peaks is more valuable (\$/kW-year) than non-dispatchable capacity.

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 9 https://pse.com/aboutpse/EnergySupply/Documents/IRPAG_Cadmus_presentation_2014-12-08.pdf
 Figure 5: EQL Categories of Distributed Energy Resources

4.2 Energy Efficiency contribution to peak demand reductions underestimated

PSE and its consultants use end use load shapes that are out of date to calculated peak demand reduction from energy efficiency programs. Many of these load shapes are based on end uses and technologies from the 1980s. This leads to lower peak reduction (MW) per unit of energy efficiency (MWh). The Northwest Power and Conservation Council has been building a business case to update these load shapes, and is expected to pursue this work in 2016.10

4.3 Puget Sound DER and DSR avoided Cross-Cascades Transmission in 1990s

In the 1990s BPA was considering transmission across the Cascades to support Puget Sound Area growth and reliability. The transmission cost assessment led to a plan that included aggressive demand side resources in and use of series capacitors for voltage support. These lower cost alternatives deferred the project to the point of never being built.

DER, when cost of Transmission is considered, will increase dramatically. Estimates in Figure 2 below are estimates based on EQL estimates from WECC and NPCC forecasts.

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 10 <http://rf.nwcouncil.org/subcommittees/enduseload/>
 4.4 Western electricity markets

On March 5, 2015, PSE announced it would participate in the California ISO energy imbalance market that will provide imbalance energy via locational marginal pricing. This decision by PSE management to participate in EIM, demonstrates that PSE believes in a planning and operational paradigm that explicitly recognizes locational value of generating and demand-side resources.

PSE participation in Western energy imbalance market will allow better management of existing transmission assets to existing generation and load balance. In Energize Eastside assessment, PSE has not considered the operational improvements that will exist for generation, demand management, and DER.

PSE joining the EIM does not have much effect on capacity procurement, except a possible reduction in flexibility requirement for resources.

5 Assessment of Eastside DER Potential

EQL Energy expects PSE could add over 160MW of capacity to Eastside DSR forecast by 2021. below. Using an Avoided Cost analysis that includes avoiding cost of

Transmission, Distribution, and supply-side generation should include:
 Capital Cost (\$/kW) ! \$1,500/kW ! Transmission
 Capital Cost (\$/kW) ! \$1,500/kW! Thermal Resource (e.g., Peaker)
 Capital Cost (\$/kW-yr)!\$31.00! Distribution
 O&M Fixed \$/kW-yr! \$10.55
 O&M Variable \$/MWh! \$2.96

5.1 DSR and DER Contribution

The terminology around resources on the distribution side can be confusing. PSE uses DSR or demand side resources, which includes energy efficiency, demand response, and distributed generation. The EE Documents we reviewed focus on energy efficiency and do not fully address DSR and its impact on peak capacity (MW). Analysis that is reported in Annual Average Megawatts (aMW) provides limited useful information for analyzing for transmission and distribution infrastructure needs.

In our report, we distinguish between DSR and DER forecasts and work to not double count resources.
 DSR – Demand Side Resources: efficiency, demand response, and distributed generation (detail and types are unknown in PSE EE analysis). Cadmus 2013 IRP DSR

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 assessment does not include kW or peak contribution, nor do they provide DR assessments.

DER – Distributed Energy Resources: EQL uses this term to refer to all resources on the distribution system, including distribution efficiency (CVR and power factor correction), demand response, combined heat and power, dispatchable standby generation, and storage.¹¹

DER and load management in critical areas is an opportunity to invest in measures that address infrastructure costs and regional load growth while engaging and benefitting customers, just like energy efficiency. Through the evaluation of Energize Eastside it is unclear the extent to which PSE has considered the use of distributed energy resources (DER) in their modeling, either as a resource or as a means to reduce load. The DER resources described below should be considered in addition to the PSE's DSR contribution to the 100% conservation load forecast.

Many of these DERs are dispatchable, including demand response, dispatchable standby generation (DSG), and energy storage and can therefore target peak load and reduce the need for infrastructure expansion in transmission and distribution.

5.1.1 Distributed Resource Planning

The DER contribution to peak load should be appropriately allocated among existing and future Eastside substations such that DER quantity reasonably matches the load assumed to be present at these substations.

Figure 8 below shows substation locations in the Eastside area that have historically recorded higher load and may be more likely to serve larger customers sites with high DER potential such as commercial/industrial, multifamily residential, institutional, government, campus and hospital loads.

Distributed Resource Planning is a process which more accurately calculates capacity and value for DER in specific areas of a utility distribution system.

On February 6, 2015 the CPUC released a ruling providing guidance to IOUs with respect to the DRPs that are to be filed by July 1, 2015. The document¹² provides additional guidance to utilities beyond AB 327. The guidance specifics 11 components that are to be included, at a minimum, in the locational DER benefits analysis.

Figure 6: Distributed Resource Planning Value Analysis

Locational Value Component

1

Avoided Sub-transmission, Substation and Feeder Capital and Operating Expenditures: DER ability to avoid Utility costs incurred to increase capacity to ensure the system can accommodate forecasted load growth

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¹¹ In California Distribution Resources Planning they include energy efficiency into their DER analysis.

¹² Docket R14-08-013 DRP Guidance: <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M146/K374/146374514.PDF>

2

Avoided Distribution Voltage and Power Quality Capital and Operating Expenditures: DERs ability to avoid Utility costs incurred to ensure power is delivered within required operating specifications, including transient and steady-state voltage, reactive power and harmonics

3
 Avoided Distribution Reliability and Resiliency Capital and Operating Expenditures: DERs ability to avoid Utility reliability related costs incurred to prevent, mitigate and respond to routine outages (Utilities shall identify specific reliability metrics DERs could improve), and resiliency related costs incurred to prevent, mitigate, or respond to major or catastrophic events (Utilities shall identify specific resiliency metrics DERs could improve)

4 Avoided Transmission Capital and Operating Expenditures: DERs ability to avoid need for system and local area transmission capacity

5 Avoided Flexible Resource Adequacy (RA) Procurement: DERs ability to reduce Utility flexible RA requirements

6
 Avoided Renewables Integration Costs: DERs ability to reduce Utility costs associated with renewable integration (for this line item, the Utilities shall attempt to coordinate their efforts with the development of the updated RPS Calculator and the Renewables Integration Charge)

7 Any societal avoided costs which can be clearly linked to the deployment of DERs

8 Any avoided public safety costs which can be clearly linked to the deployment of DERs

9 Definition for each of the value components included in the locational benefits analysis

10
 Definition of methodology used to assess benefits and costs of each value component explicitly outlined above, irrespective of its treatment in the E3 Cost-Effectiveness Calculator

11
 Description of how a locational benefits methodology can be a into longterm planning initiatives like the Independent System Operator's (ISO) Transmission Planning Process (TPP), the Commission's Long Term Procurement Plan (LTTP), and the California Energy Commission's (CEC) Independent Energy Policy Report (IEPR), including any changes that could be made to these planning process to facilitate more integrated analysis
 Figure 7: DRP locational value components (CPUC DRP Guidance)
 Notes:
 The Resource Adequacy (RA) program, administered by the CPUC and CAISO is a 1-year forward bilateral capacity market. Utilities must procure sufficient resources to meet their expected peak load. Since it began in 2006, utilities were required to procure system-wide peak capacity resources, and local resources as needed in constrained areas. In 2013, a flexible resource requirement was added.

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 Figure 8: Bellevue Substation Peak Load Heat Map (2006)
Sources:
 Data: City of Bellevue substation peak load for 2002 and 200513
 See Appendix A for data table
 Map: EQL (using Microsoft Excel/Bing Maps)
Note: PSE's transmission topology in this area has changed and is expected to continue to change to serve changing load patterns, therefore this rendering is for sample purposes only.
 PSE's existing 115 kV network in the Eastside with suggestions of areas that may experience higher load growth, may require additional infrastructure such as new substations, and therefore would represent advantageous locations for PSE and/or other appropriate parties to incentivize and site distributed energy resources.
Customer Driven DER
 DER adoption behavior and demand for services is customer driven based on broad socio-economic factors and technology advancements –not strictly regional or based only on energy cost.
 Customer desire for self-reliance is increasing

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 13 City of Bellevue Comprehensive Plan Utilities Element Update, November 2006
http://www.ci.bellevue.wa.us/pdf/PCD/PSE_System_Plan_Update_November_2006.pdf
 (accessed 06.08.2015)
 • **Ernst & Young:** 33% of the multi-national firms are expected to meet a greater

share of their energy needs through **self-generation over the next five years**

- **Navigant:** nearly **75%** of surveyed **residential customers** have "concerns about the impact electricity costs have on their monthly budgets, and **63%** are interested in **managing energy used in their homes**"
- **Best Buy:** **36%** of **residential** customers desire to "financially and physically protect the home" (Home Safeguarding persona)

5.1.2 Distributed Solar

PSE currently has 2,800 customers and 17.4MW of capacity producing 17,037MWh of energy a year. As mentioned above, the Cadmus March 2015 memorandum has many errors regarding PV Solar forecasting and should not be reference by PSE. EQL suggests the following as an estimate of growth in energy from distributed solar.

Figure 9: Range of Distributed Solar by 2030

MW Capacity Energy

MW MWh aMW

Minimum 5 5,000 0.57

BaseCase 50 50,000 5.71

Maximum 400 400,000 45.66

5.1.3 Distribution Efficiency (aka CVR)

In 2007 Puget Sound and 12 other Pacific Northwest Utilities participated in a Northwest Energy Efficiency Alliance (NEEA) pilot to evaluate the energy and capacity savings from operating Conservation Voltage Reduction. 14 The study tested and found a 2 to 4 percent capacity reduction through distribution efficiency projects. An updated 2014 NEEA study found that over half the CVR projects operating in the United States are used for peak demand reductions versus energy efficiency. 15

Wide scale adoption is beginning. One hurdle to adoption was mentioned in NEEA paper as, "hurdle to CVR implementation includes the lost customer revenue due to CVR rollout. End users reduce energy consumption with CVR and thus lower utility revenue. Utilities are often reluctant to recuperate lost revenue through rate increases, especially during times of slow or no load growth in the utility service area. Utilities can recuperate lost revenue from CVR more easily during periods of more rapid load growth. BPA currently offers incentives for CVR initiatives, which can help with utility cost recovery."

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14 https://www.leidos.com/NEEA-DEL_Report.pdf

15 <http://neea.org/docs/default-source/reports/long-term-monitoring-and-trackingdistribution-efficiency.pdf?sfvrsn=5> (page 45)

In Washington, Energy efficiency standard I-937 is currently a main driver for CVR implementation for IOUs in Washington State. I-937 mandates IOUs to undertake cost effective energy efficiency measures, such as CVR.

PSE has implemented Conservation Voltage Reduction (CVR) on three to six PSE substations before energy is sent to customers, thereby reducing customers' electric power consumption at the point of consumption on the customers' side of the meter. CVR will be useful to PSE during winter peak load events due to the influence of resistive loads during those times. Reducing voltage is more effective for winter resistance heating load than for other types of load such as motors that experience greater use in summer for cooling loads.

CVR Target: 2.5% of peak load

5.1.4 Demand Response

By 2021 NPCC estimates the Pacific Northwest states will obtain between 600 and 1,080 MW (or 3%) of winter peak through demand response. At present, only a fraction of that quantity is operational. The Council is currently preparing their 7th power plan and has been working with regional utilities and industry stakeholders. 16 In a 2015 report for NPCC, Navigant estimates that by 2030 Northwest utilities will have achieved nearly **9% of winter peak** load from demand response.

The estimated cumulative DR market potential for capacity programs represents nearly 9% of winter peak load by 2030. This estimate is in line with estimates of other DR potential studies conducted both in the Northwest and other parts of the country. 17

Cadmus 2013 DSR report for PSE IRP (page 7) suggests that by 2033 PSE could expect **4.7% of winter peak** to be reduced by Demand Response. Cadmus (2013) is approximately half of Navigant (2015) winter peak reduction forecast.

Two types of DR are likely to be beneficial for eastside areas:

1. Day-Ahead notification peak load reduction DR
2. Emergency 10-minute response DR

Because PSE identifies a peak load resource requirement for the Eastside, we have identified a need to study a demand response program to operate during these times, when PSE's most expensive resources will likely be supplying power. DR programs are often cost effective when displacing this expensive generation, such as PSE's peaking units in Whatcom County. When combined with the additional value of

EQL Energy LLC | Puget Sound Energy 2015 IRP Comments Page 21 of 27
 16 <https://www.nwcouncil.org/news/meetings/2015/06/>
 17 http://www.nwcouncil.org/media/7148943/npsc_assessing-dr-potential-for-seventh-power-plan_updatedreport_1-19-15.pdf

providing an infrastructure alternative, the cost effectiveness of such a DR program is improved. Many utilities have implemented day-ahead notification DR programs that call upon enrolled customer or 3rd party resources to reduce their demand for a specified duration, typically 2-4 hours. In addition, emergency DR programs have successfully been implemented that are capable of fast response for contingency reserve purposes. An example is a 10-minute response program run by Southern California Edison.¹⁸ These programs are typically of higher value due to the short notice time and reliability service provided. SCE's program pays customers \$240/kW-year for capacity that successfully participates. For purposes of the EIS analysis, we have requested conservative DR quantities, shown in Figure 10, for the eastside area that are reflective of percentages of peak load that have been achieved in other areas and below those estimated by Navigant (2015).

Figure 10: Eastside Area DR by 2021

Eastside DR Estimate

Day-Ahead DR quantity 4%

10-minute DR quantity 1.5%

Because PSE has indicated it may include DR at a level of approximately 2.7% of load by 2020, the 4% DR estimate above for day-ahead programs is incorporated into the 100% conservation forecast used by PSE.¹⁹

WECC rule Bal-002-WECC-1 was referenced by PSE20 as one of the reasons the reserve amounts are increasing. This same rule allows a balancing authority to use a number of different resources to meet this requirement including demand response:

** A resource, other than generation or load, that can provide energy or reduce energy consumption

* Load, including demand response resources, Demand-Side Management resources, Direct Control Load Management, Interruptible Load or Interruptible Demand, or any other Load made available for curtailment by the Balancing Authority or the Reserve Sharing Group via contract or agreement."

5.1.5 Dispatchable Standby Generation (DSG)

Portland General Electric's DSG program can be used as an example for one designed to provide enhanced reliability in the Eastside area. The DSG program connects customer backup generators to the distribution grid using parallel switchgear at sites such as hospitals, commercial/industrial, and government buildings. PGE remotely dispatches the generators, which are capable of providing uninterrupted service to

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 18 https://www.sce.com/NR/rdonlyres/7A1BC024-698D-44A0-98D1-ABD8DEE9E451/0/NR572V20810_BIP.pdf

19 May 19 PSE IRP Advisory Group meeting materials

20 PSE IRP Chapter 6 page 16

customers in the event of a grid outage. As part of the program, PGE invests in and owns some of the interconnection equipment, pays for fuel, and performs ongoing testing – required for units at many sites such as hospitals.

DSG potential is determined by using a simple proportion of peak load to DSG capacity installed at PGE and applying it to PSE, as shown in Figure 11 below.

Figure 11: Potential DSG by 2021

DSG Potential MW

2018 PGE System Peak 4000

Current PGE DSG Capacity 94

DSG MW per System MW 2.5%

2018 PSE System Peak 6000

2018 Eastside Peak Load Forecast 750

PSE System DSG Potential 141

PSE Eastside Area DSG Potential 18.8

Note that the size of PGE's DSG program is growing and has plans to increase the program capacity to 125 MW in the next 5 years. Using the proportion method described above, Eastside DSG potential would increase to 22.7 MW.

While the simple DSG potential figures provided here are adequate to inform planning at this stage, additional detailed analysis of DSG capacity will be valuable to PSE and Eastside reliability regardless which transmission projects are built. PSCleanAir has suggested that a DSG program like PGE would follow EPA NESHAP RICE rules. Developer of DSG program would have to go through air permitting compliance, but it is a permittable use. PSE evaluated using DSG as part of a stipulation in Washington Utilities and Transportation Commission (WUTC) Order 06 in docket UE-130617, in which both parties agreed that PSE should perform an evaluation. Specifically, the Settlement agreement states: PSE agrees to evaluate the PGE Dispatchable Standby Generation (DSG) program, described in the testimony of staff witness Juliana Williams, and either provide a report to the Commission of PSE's conclusions and recommendations by December 1, 2014, regarding the financial and technical feasibility of PSE implementing a similar DSG program in its territory, or file a tariff implementing DSG service by December 1, 2014.

EOL evaluated the PSE report and finds it evasive, inconclusive, and provides the following feedback.

Specific Comments on PSE DSG Findings and select sections. (Dec. 1, 2014)

The primary benefit of the PGE DSG program has been the ability to use the standby generators as a cost-effective resource to meet non-spin operating reserve obligations.
True

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PSE does not have a near-term need for non-spin operating reserves and has maintained more than adequate operating reserves during peak events

PSE can use DSG to meet winter peak demands.

While originally established as peaking resource, PGE's use of its distributed standby generator fleet as a peaking resource has been *de minimis* during the life of the program

True. Program is not used as peaking resource.

New Environmental Protection Agency (EPA) emissions requirements that limit operation and testing on diesel-fired emergency standby generators create uncertainty and potential operational constraints during times of peak need

True that EPA rules are in flux for legal reasons. Current laws to watch are state and local air permits. PSCleanAir has suggested that a DSG program like PGE would follow EPA

NESHAP RICE rules

Under normal conditions, PGE's standby generator fleet is not economic compared to other alternatives during dispatch decisions DSG resources are not part of normal dispatched resources

PSE lacks sufficient market research of its customers that would justify investment in a DSG program including potential participation rates and standby generator inventory
Getting this information would be very easy

It is unlikely PSE would be able to implement a DSG program to meet any near-term capacity needs given time, resources, and current systems capability

PSE has time to develop DSG

Section 4.6 Compliance

Section 5.2 Constraints and Opportunities

Market Barrier. The 2011 CBRE market search led to no customers expressing interest in further engagement with PSE to interconnect a standby generation system to the grid.

PGE Customers are not that different than PSE Customers. It takes a clear customer value proposition and a few key customers to get it started.

Monitoring and dispatch. PSE does not own software that allows for monitoring and dispatch. PSE need operational and technical knowledge to operate new software.

EQL can assist.

Interconnection. PSE needs specifications for interconnecting standby generators. PSE does not have interconnection agreement

EQL Team can assist

PSE has several low-cost resources to meet non-spin reserve obligations.

Contradicted in IRP

Operating reserves exceed need by 200-400MW in most peak hours. **Contradiction with IRP forecasts**

The NERC contingency reserves standard (BAL-002-WECC-221) applies to the NW Power Pool Reserve Sharing Group (RSG), and requires the RSG to carry the larger of: 3% of load + 3% of generation OR the **Most Severe Single Contingency (what is this for PSE?)**. Contingency reserves can be comprised of any combination of seven types defined in the standard. DSG is categorized as the Operating Reserve – Supplemental subcategory of Contingency Reserve. This reserve type was formerly **EQL Energy LLC** | Puget Sound Energy 2015 IRP Comments Page 24 of 27

21 <http://www.nerc.com/files/BAL-002-WECC-2.pdf> defined as Non-Spin reserve, but was changed to supplemental in the current standard to be inclusive of demand side management pursuant to FERC Order 740.22 E3 incorrectly ruled out DSG in their 2014 non-wires study for Energize Eastside. They wrote,

"The US Environmental Protection Agency (EPA) prohibits PSE from relying on customer-sited backup generation for peak shaving of utility loads for resource planning purposes, which PSE planners believe would prevent them from planning grid conditions that rely on backup generation to defer transmission upgrades. This regulation exists primarily to protect local air quality. Therefore, customer-sited backup generation was excluded from the DG non-wires potential estimates."

5.1.6 Combined Heat and Power (CHP)

CHP is the simultaneous use of a fuel, primarily natural gas, to generate electricity and provide heat. When properly designed, CHP is capable of operating at higher efficiency than typical central station power plants.

PSE's Non-Wires Screening Study 23 CHP analysis, performed by E3 and informed by earlier work by Cadmus, found approximately 1 MW of peak CHP resource by 2023 across all of PSE's King County service area. Because this quantity can reasonably be achieved in a single building, the previous estimate is likely not reflective of actual potential. In order to determine this potential, a new study is warranted, especially in light of the amount of growth expected to occur in Bellevue and PSE's need for peak capacity resources.

With the cost of capacity to utilities often exceeding \$100/kW-year, infrastructure deferral benefits and electricity sales revenue are components that contribute to cost effectiveness determination and would inform the ultimate potential of this resource.

PSE needs over 1000 MW of new capacity by 2025, according to recent IRP development information.²⁴

150 MW of load growth could occur in the Bellevue downtown and Bel-Red areas in the next 20 years.²⁵ The new development represents a large opportunity because many DER technologies such as CHP make the most sense when incorporated during the design phase and provide further benefits when central utility plants serve multiple buildings. But such a strategy requires deliberate planning and clear leadership to become successful.

Because Downtown and Bel-Red will consume significant quantities of natural gas regardless of PSE's electricity infrastructure decisions, the extent to which this gas can be put to use generating electricity should be studied. Additionally, the civil construction work to occur in these areas in future years points toward investigation of co-locating energy infrastructure and potentially common use infrastructure such as

district energy where central utility plants supply heating, cooling and electricity to a potentially large development, such as the Spring District.

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 22 <http://www.ferc.gov/whats-new/comm-meet/2010/102110/E-6.pdf>
 23 http://www.energizeeastsideis.org/uploads/4/7/3/1/47314045/attachment_5_-_screening_study.pdf
 24 May 19 PSE IRP Advisory Group meeting materials
 25 Exponent Reliability Study

Recommendation: Explore 3rd party or PSE owned central utility plants with CHP in parts of the Eastside that will experience the most new construction.

Figure 12: Base CHP Quantity 2021

Eastside CHP Estimate

CHP 4% of peak load

Note:

Transmission topology alternative D adds Eastside generation. Because a larger central plant CHP project should be considered for this option, selection of this alternative could result in a substantially higher CHP penetration.

5.1.7 Energy Storage

Energy Storage is receiving a great deal of attention right now due to the cost declines seen in recent years and an increasing number of predictions for continuing storage cost reduction. PSE, Avista, and Snohomish PUD have received \$15MM to study use of energy storage.

Figure 13: Energy Storage Quantity 2021

Eastside Storage Estimate

Storage 2% of peak load

5.1.8 PSE DER Potential & Interconnection

Many existing and future commercial, multifamily residential, institutional and corporate campus sites are centered near downtown Bellevue, Bel-Red and South Redmond – areas that are driving the need for new transmission and distribution infrastructure.

Cost effectiveness of DER investments in these areas stands to be influenced to the extent they can substantively contribute to load service and reliability needs. In other words, a next-generation energy system, which is being pursued by leading utilities, will make full use of DERs by integrating their capabilities into utility planning and operations, a step that may well deliver cost reductions to PSE ratepayers – and one that will require developing appropriate compensation mechanisms to DER owners. In addition, PSE or 3rd parties could own DERs that may be designed to provide benefits directly to specific customers (i.e. storage installed behind-the-meter), while simultaneously providing infrastructure deferral benefits enjoyed by all ratepayers. DER interconnection and operations practices will become more important as these resources grow in quantity and take on additional performance obligations related to reliability and system resiliency. Should PSE and Eastside communities decide to move to make full use of DER options as part of a strategy to support and enhance regional growth, appropriate technical interconnection and operations procedures and

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26 Sample media story addressing storage:

<http://cleantechnica.com/2015/03/04/energy-storage-could-reach-cost-holy-grail-within-5-years/>

standards will be needed. DER best practices are emerging from California, New York, and Hawaii, states that have taken the lead. The standards by which PSE designs and operates the 12.5 kV distribution system will be important for DERs so as to ensure maximum utilization of the system, including supporting 2-way power flows.

Most distribution systems move electricity in one direction – from power plants to substations to customers. But when customers interconnect generation resources, their power will flow the other direction, serving other customers and in some cases flowing power back to the substation itself and serving load further upstream, possibly at higher voltages. While there is no fundamental reason why these new flows of electricity cannot occur, investments in additional monitoring equipment and advanced control technologies will be needed.

These types of investments, involving software, communications, controls, and switching equipment, are also likely to provide reliability benefits by enhancing the ability of utilities to automatically switch customers to alternate feeds in the event of an outage on a given distribution circuit.

EQL Energy LLC | Puget Sound Energy 2015 IRP Comments Page 27 of 27

Barbara Braun
 CENSE Member
 13609 SE 43rd Place
 Bellevue WA 98006

Energize Eastside DEIS Comments
 Prepared by: CENSE - Coalition of Eastside Neighborhoods for Sensible Energy

Barbara Braun
CENSE Member
13609 SE 43rd Place
Bellevue WA 98006

Note this document was submitted to info@EnergizeEastsideEIS.org on March 13, 2016. One supporting file was attached for the public record. The file contains a "sticky note" with my name and physical address to assure these documents are added to the public record:

- **Criteria for Pipelines Co-Existing with Electric Power Lines.pdf**

The following comment pertains to **Chapter 12: Recreation**

Alternative 1A claims that "If transmission lines are located in recreation sites they could impact recreation users." This statement is false and misleading. Parks that would be substantially impacted include Viewpoint Park, Kelsey Creek Park, and May Creek Park. It appears Forest Hill Neighborhood Park, Sierra Heights Park would be eliminated altogether. Further community programs such as the farm at Kelsey Creek would have to be shut down or moved in order to prevent safety issues.

Pipeline safety

"Criteria for Pipelines Co-Existing with Electric Power Lines"
 Prepared by DNV-GL, October 2015

1. Separation Distance = **HIGH RISK!**
2. HVAC Power Line Current = **HIGH or VERY HIGH RISK!**
3. Soil Resistivity = ?
4. Collocation Length = **HIGH RISK! (OFF THE CHART)**
5. Collocation Angle = **HIGH RISK!**

The DEIS claims "There would be permanent loss of vegetation, including trees, because a 230 kV transmission line would require a cleared corridor of 120 to 150 feet wide (or up to 50 feet of clearing where the existing PSE easement is used)." The DEIS needs to reassess the amount of ROW needed to meet current day safety standards for utility corridors with transmission and pipeline co-location and its impact on park lands.

While the DEIS admits the following, there is no off setting measure or cost provisions added to Alternative 1A - "Impacts from vegetation loss would be considered significant if there is a permanent conversion of vegetation type (e.g., from forested to low-growing vegetation) that would substantively change or negatively impact the scenic nature of a recreation site. In recreation sites where there is a permanent conversion of vegetation type, a loss of habitat for animals that may use these areas would result, which

Submitted: March 12, 2016

Barbara Braun, CENSE

I19-R -1 See responses for Key Theme REC-3 and Key Theme ALT-2.

I19-R-1

Energize Eastside DEIS Comments
 Prepared by: CENSE - Coalition of Eastside Neighborhoods for Sensible Energy

I19-R-1

could reduce user enjoyment. In addition, benches, playground equipment, gazebos, or other structures may be removed underneath the transmission lines. Visitors may avoid a recreation site if it no longer offers the amenities they previously used at that site. Refer to Chapter 6 and Chapter 11 for further description of potential impacts to plants, animals, and visual quality."

The DEIS does fails to address at all: the safety issues for children and other park users and the cost to insure the safety of parkland users that Alternative 1A runs through; the impact to the quality of life of adding industrial blight and environmental destruction to our parks and recreational corridors; the impact of eliminating certain "unsafe" recreation activities such as kite flying, and the expansion of severely impacted lands from the clearing of native plants, habitat elimination and unmaintained ROW corridors that invite invasive species, dumping and other pollution, and inappropriate uses such as homeless encampments. There is plenty of evidence around our state that substantiate these concerns and from which the cost and significant impacts can be assessed.

The DEIS needs to more accurately assess the loss of recreation acreage and utility in Alternative 1A and add the cost of replacement park lands within community boundaries into the cost and add this cost into Alternative A1 and also reassess the significance of this impact compared to other alternatives such as Alternative 2 which would have the flexibility to locate infrastructure away from park lands and would require less clearing and environmental destruction.

Submitted: March 12, 2016

Barbara Braun, CENSE



From: [Barbara Braun](mailto:Barbara.Braun@bellevuewa.gov)
To: kwallace@bellevuewa.gov; vsletter@bellevuewa.gov; robison@bellevuewa.gov; j.robertson@bellevuewa.gov; chess@bellevuewa.gov; jhelmink@bellevuewa.gov; info@EnergizeEastsideEIS.org; jstokes@bellevuewa.gov; chelland@bellevuewa.gov; hbdwell@bellevuewa.gov; bmiyake@bellevuewa.gov
Cc: eis@cense.org; council@bellevuewa.gov; [Barbara Braun](mailto:Barbara.Braun@bellevuewa.gov)
Subject: DEIS Management and Council
Date: Monday, March 14, 2016 3:43:41 PM

This letter is intended to reach the Bellevue City Council, The Bellevue City Manager and the Energize Eastside EIS Management:

From:
Barbara Braun
 13609 SE 43rd Place
 Bellevue WA 98006

Dear Leaders,

This is your time. This is your day to step up. This is the opportunity you dreamed of when you entered your position of public leadership. Now is your time to demonstrate you truly are a leader! That you are a true American and a true leader in ensuring Truth, Justice and Quality of Life for all.

I19-S-1

The citizens of Bellevue are calling you to lead and adjust the Energize Eastside process so that is not rigged in favor of the corporations (PSE and British Petroleum) but represents the true needs of the citizenry you represent and work for. The Energize Eastside CAG and EIS process have not adequately established the need for this project or the alternatives described in the DEIS. The public has voiced concern about this for several years, since the beginning of the process, and they have spent their own money and time to retain independent industry experts to conduct independent studies that have brought more realistic assessments of need and alternatives. The citizens have done this because our leaders have not. The current process is so flawed and biased in favor of the VERY costly and VERY dangerous Alternative 1A PSE wants that it should be thrown out and restarted with a new and independently verified assessment of need that is aligned with state and regional authorities using a new, publically transparent Load Flow Study. Alternative 1 needs to be reassessed using a more complete assessment of impact and cost, as well as adherence to contemporary safety requirements for collocating transmission lines with gas pipelines. Also a new, more contemporary Alternative 2 should be formulated in a new DEIS that is independently designed and assessed by renewable/alternative energy industry experts and not by PSE. Last, Bellevue City Council, and the other City Councils involved, need to update their land use and safety laws to reflect contemporary safety requirements for collocating transmission lines and gas pipelines prior to any planning or permitting of a project with this level of risk to the public safety. Further laws and oversight processes need to be put on place to insure PSE and BP Olympic Pipeline comply with these laws and requirements and are penalized for non-compliance. Without this, it would seem that the City of Bellevue, as well as other Cities considering Energize Eastside, are grossly negligent in their duty to protect the public's safety.

I19-S-2

I19-S-3

I19-S-4

I19-S-5

This is your time. This is your day to step up. This is the opportunity you dreamed of when you entered your position of community leadership. Now is your time to demonstrate you truly are a leader! That you are a true American and a true leader in ensuring Truth, Justice and Quality of Life for all.

Thank you!

- I19-S -1 See response for Key Theme OBJ-1.
- I19-S -2 See response for Key Theme EIS-1.
- I19-S -3 See responses for Topic PLS and Key Themes ALT-1 and ALT-3.
- I19-S -4 See response for Key Theme ALT-1.
- I19-S -5 See responses for Key Themes PSL-3 and PSL-6.



From: [Energize Eastside EIS](#)
 To: [Jessica Conquest](#)
 Subject: Fwd: Energize Eastside DEIS
 Date: Wednesday, February 17, 2016 7:24:26 AM

----- Forwarded message -----
 From: **Dave Mickelson** <DaveMickelson@comcast.net>
 Date: Tue, Feb 16, 2016 at 11:25 AM
 Subject: Energize Eastside DEIS
 To: Info@energizeeastsideeis.org

I20-A-1

Bellevue City Council, please RE-START a transparent process to determine the Eastside's future electricity needs.

~~~

*Dave & Denise Mickelson*

[\(425\) 829-8483](tel:(425)829-8483)

[DaveMickelson@comcast.net](mailto:DaveMickelson@comcast.net)

*4518 Somerset Drive SE*

*Bellevue, WA 98006-3062*

I20-A -1 Comment noted.

**From:** [Jean Garber](#)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** Comments on Energize Eastside Phase 1 Draft EIS  
**Date:** Wednesday, February 17, 2016 6:23:21 PM

City of Bellevue, Co-Lead Agencies, and PSE:

After looking over the Phase 1 Draft EIS, I have two general concerns that I would like to express at this point. I may have additional comments on the substance of the Draft EIS later on.

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The cover letter to the Phase 1 Draft EIS says the EIS process is a phased environmental review consistent with WAC 197-11-060(5)(c). In fact, however, the process illustrated in Figure 1-7 of the Draft EIS (page 1-14) is not a phased review.

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I21-A-1

In contrast to the above-outlined phased-review process, Figure 1-7 of the Phase 1 Draft EIS shows that Bellevue doesn’t intend to issue a Phase 1 Final EIS. In other words, the Phase 1 environmental review will not be completed. In my opinion, it is inadvisable – if not illegal – for Bellevue to narrow the range of alternatives to be considered in Phase 2 without the benefit of a Phase 1 Final EIS.

I had a 35-year career as project manager and principal author of numerous EISs on regional projects, some of which were done by phased review. I have never seen a phased review designed like this one, and question whether it would survive legal scrutiny, which it will surely get. In my opinion, unless Bellevue and PSE correct the process now, they may spend a lot of time correcting it later on.

I recommend that Bellevue immediately issue an addendum to the Draft Phase 1 EIS in which the city commits to the real phased review that the SEPA Rules envision and the public expects.

**Length of the EIS**

I21-A-2

WAC 197-11-425 (4) states in part : “The EIS text shall not exceed seventy-five pages; except for projects of unusual scope and complexity, where the EIS shall not exceed one hundred fifty pages.” WAC 197-11-430(3) defines the EIS text as being divided into two sections: the description of alternatives, including the proposal; and the discussion of affected environment, significant impacts, and mitigation measures. Those two sections of the Phase 1 Draft EIS **far** exceed 150 pages. In my opinion, this is not trivial. It leaves the door open for reviewers to claim that the EIS doesn’t comply

I21-A -1 See response for Key Theme EIS-2.

I21-A -2 See response for Key Theme EIS-2.

I21-A-2

with state law, and that they could not review and understand the document in the time allotted for comments. In addition, an overly long EIS like this is not as useful to agency decision makers.

In future iterations of the EIS, I recommend keeping the EIS text to no more than 150 pages, with detailed information in appendices.

Thank you for the opportunity to comment.

Jean Garber  
8436 129<sup>th</sup> Place SE  
Newcastle, WA 98056  
425-277-9327



**From:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** FW: Comments on Energize Eastside Phase 1 Draft EIS  
**Date:** Wednesday, February 24, 2016 9:30:09 AM

**From:** Jean Garber [mailto:jgarber11@comcast.net]  
**Sent:** Tuesday, February 23, 2016 4:59 PM  
**To:** Helland, Carol <CHelland@bellevuewa.gov>  
**Subject:** RE: Comments on Energize Eastside Phase 1 Draft EIS

Thank you for your kind words, Carol. It is so personally rewarding to work with these kids that I almost think my motives are selfish!

By the way, I wouldn't want you to interpret my previous email as agreeing with you on the EIS process. I still don't think the process being used is really a phased environmental review, nor is it what the public expected when you agreed to do a phased review. Given the importance of the project in this case, and the high level of public scrutiny, I think it's a risky approach.

My husband and I will be at the Renton or Newcastle public meetings or both. If you are there, I would love to meet you!

Jean

**From:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov) [mailto:CHelland@bellevuewa.gov]  
**Sent:** Tuesday, February 23, 2016 3:37 PM  
**To:** [jgarber11@comcast.net](mailto:jgarber11@comcast.net)  
**Subject:** RE: Comments on Energize Eastside Phase 1 Draft EIS

Thanks for your understanding. I appreciate what you do for the local elementary school. My father was the principle for several schools in San Diego dedicated to kids with special needs, and I have a kiddo with a learning disability, so I am grateful for people like you that volunteer their time. You work is commendable. If you would still like to talk in the future, let me know, and I will set up a time after next Tuesday. Thanks again, Carol

**From:** Jean Garber [mailto:jgarber11@comcast.net]  
**Sent:** Tuesday, February 23, 2016 3:17 PM  
**To:** Helland, Carol <[CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)>  
**Subject:** RE: Comments on Energize Eastside Phase 1 Draft EIS

Carol,

Thank you for your efforts to contact me. I am sorry we weren't able to connect. Although "retired," I volunteer teach in an elementary school special ed class and am very much in and out. I greatly appreciate your thoughtful response to my questions, and understand your point of view. I also understand that you are very busy at this time!

I21-B -1 See response for Key Theme EIS-2.

I21-B-1

Jean

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**From:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov) [<mailto:CHelland@bellevuewa.gov>]  
**Sent:** Tuesday, February 23, 2016 12:54 PM  
**To:** [jgarber11@comcast.net](mailto:jgarber11@comcast.net)  
**Subject:** RE: Comments on Energize Eastside Phase 1 Draft EIS

I just left you a message that I had called again with a gentleman that answered at your phone number. Since we have not connected over the last few days, I thought I would send off a brief email reply since my schedule over the next week is quite busy. First of all, thank you, Jean. I appreciate the benefit of the expertise that I am receiving from practitioners such as yourself.

I understand the issues you are raising, and it was with great care that the partner cities and I developed the approach pursued in the EIS for the Energize Eastside project. I believe that we are on solid footing (even if the approach is uncommon), and does not present a legal error. As it sounds like you are well aware from your years of experience, SEPA is intended to ensure that environmental values are considered during decision-making by state and local agencies. The programmatic (or non-project) part of the EIS was not required to be undertaken at all, because PSE is a privately-held regulated utility. There is no "action" that will be taken by the City to choose among the alternatives that were presented for consideration. PSE agreed with the issuance of DS on its project and is supporting the programmatic approach as a means to be transparent and educate the public regarding their project objectives and to look for every opportunity to seek alternatives that would meet those objectives. "Reasonable alternatives" will be moved forward for consideration during the project level review – that narrowing of alternatives does not in and of itself constitute an action that requires a Final EIS. It is part and parcel of the EIS process. We are simply using SEPA in its broadest sense as a fact finding and environmental review document.

The gentleman who answered the call I made to your phone number said he expected you back after 4pm. I will be in transit to and preparing for our public comment hearing on the Energize Eastside EIS at that time, and likely will not be able to try and call again. If you do have additional questions or suggestions that you would like to discuss, please let me know some times it might be convenient to reach you. Thanks again for your comments. Carol

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**From:** Jean Garber [<mailto:jgarber11@comcast.net>]  
**Sent:** Thursday, February 18, 2016 11:32 AM  
**To:** Helland, Carol <[CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)>  
**Subject:** FW: Comments on Energize Eastside Phase 1 Draft EIS

Carol –

Thank you so much for your call. Sorry I was out!

Yesterday, I submitted these comments on the Energize Eastside Phase 1 Draft EIS (see below). I thought I would email them to you and then call you back. In the third paragraph (starting "In contrast..."), I express the opinion that it is inadvisable – if not illegal – for Bellevue to narrow the range of alternatives for purposes of the Phase 2 EIS without a Phase 1 Final EIS. What I don't

explicitly state is that WAC 197-11-070 (1)(b) prohibits the responsible official from limiting the choice of reasonable alternatives without a Final EIS.

No malice is intended in these comments! I'll call in about 5 minutes.

Take care,

Jean

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**From:** Jean Garber [<mailto:jgarber11@comcast.net>]  
**Sent:** Wednesday, February 17, 2016 6:23 PM  
**To:** 'info@EnergizeEastsideEIS.org'  
**Subject:** Comments on Energize Eastside Phase 1 Draft EIS

City of Bellevue, Co-Lead Agencies, and PSE:

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Jean Garber  
8436 129<sup>th</sup> Place SE  
Newcastle, WA 98056  
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**From:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** FW: Comments on Energize Eastside Phase 1 Draft EIS  
**Date:** Thursday, February 25, 2016 3:22:18 PM

FYI

**From:** Helland, Carol  
**Sent:** Thursday, February 25, 2016 3:21 PM  
**To:** 'Jean Garber' <[jpgarber11@comcast.net](mailto:jpgarber11@comcast.net)>  
**Subject:** RE: Comments on Energize Eastside Phase 1 Draft EIS

I understand Jean – be well. Thanks again for sharing your comments. Carol

**From:** Jean Garber [<mailto:jpgarber11@comcast.net>]  
**Sent:** Thursday, February 25, 2016 3:19 PM  
**To:** Helland, Carol <[CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)>  
**Subject:** RE: Comments on Energize Eastside Phase 1 Draft EIS

Carol, just want you to know that my husband and I have changed our plans and will not be at either the Renton or Newcastle public meetings. We would like to see more detailed information in the EIS on how public safety will be protected if the proposed electrical transmission lines are constructed in the same corridor as the Olympic liquid-fuel pipeline. However, we would prefer to submit written comments on that subject. Hope the tone of the meetings is respectful! Take care, Jean

**From:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov) [<mailto:CHelland@bellevuewa.gov>]  
**Sent:** Wednesday, February 24, 2016 9:29 AM  
**To:** [jpgarber11@comcast.net](mailto:jpgarber11@comcast.net)  
**Subject:** RE: Comments on Energize Eastside Phase 1 Draft EIS

I understand. Thank you Jean. C

**From:** Jean Garber [<mailto:jpgarber11@comcast.net>]  
**Sent:** Tuesday, February 23, 2016 4:59 PM  
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I21-C-1 See responses for Key Themes PLS-2 and PLS-3.

I21-C-1

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Thank you for the opportunity to comment.

Jean Garber  
8436 129<sup>th</sup> Place SE  
Newcastle, WA 98056  
425-277-9327



COMMENT

RESPONSE

I22-A-1

**From:** [Lee\\_Cynthia](mailto:Lee_Cynthia@energizeeastsideeis.org)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** questions  
**Date:** Sunday, February 21, 2016 7:51:32 AM

We received an e-mail about the study indicating that a 20-50 feet wider area is needed for the new powerlines. It stated that partial or full buy out of some homes will be needed. We live adjacent to the lines. So:

- <!--[if !supportLists]-->1. <!--[endif]-->When will people be notified that their house will be in the partial or total buy out?
- <!--[if !supportLists]-->2. <!--[endif]-->How long will those people have to plan for their move?
- <!--[if !supportLists]-->3. <!--[endif]-->What is meant by partial buy out?
- <!--[if !supportLists]-->4. <!--[endif]-->How will fair market value be determined?
- <!--[if !supportLists]-->5. <!--[endif]-->Why was this not mentioned earlier?

I22-A -1 See response for Key Theme LU-2.

**From:** [Lee\\_Cynthia](mailto:Lee_Cynthia@energizeeastsideeis.org)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** questions  
**Date:** Monday, February 22, 2016 8:21:04 AM

We received an e-mail about the study indicating that a 20-50 feet wider area is needed for the new powerlines. It stated that partial or full buy out of some homes will be needed. We live adjacent to the lines. So:

1. When will people be notified that their house will be in the partial or total buy out?
2. How long will those people have to plan for their move?
3. What is meant by partial buy out?
4. How will fair market value be determined?
5. Why was this not mentioned earlier?
6. What is the timeline for this process?

This information will help people to make decisions & plans both ones affecting plans for their current property & needs for major life changes. We purchased our house in 1987. There were no indications that living by the lines would be a problem. Now, there are several items that are a concern.

Cindy Lee  
 8328 128<sup>th</sup> Ave. SE  
 Newcastle, WA

I22-B-1

I22-B -1 See response for Key Theme LU-2.

| Comment                                                             | Timestamp             | First Name | Last Name |
|---------------------------------------------------------------------|-----------------------|------------|-----------|
| I am responding to the Draft EIS for the Energize Eastside Project. | 2/21/2016<br>15:22:07 | Denise     | Mickelson |

As a resident of Bellevue for 55 years, I am very disappointed in the Alternatives that are presented to our Somerset neighborhood for the Energize Eastside Project by Puget Sound Energy.

The Olympic Pipeline runs in front of our home and the existing 115kV transmission lines currently run through our backyard. We are squeezed by these two utilities.

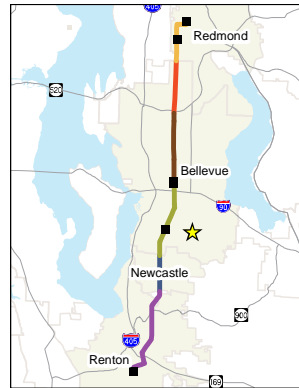
My main concern besides disrupting the character of our neighborhood is that the proposed high voltage transmission lines are located too close to the Olympic Pipeline and would increase the risk of a catastrophic explosion. We have jokingly asked ourselves, would we run up the hill (towards the downed lines) or down the hill (towards the burning fuel) should a catastrophe indeed occur.

Having attended the meetings both at the Bellevue City Hall to learn the details of the Energize Eastside Project as well as the meetings offered by CENSE, I am convinced that the project has been mismanaged and that the No Action Alternative 4 should be the choice as a short-term solution.

Sincerely,

Denise Mickelson  
Somerset Resident

COMMENTS LOCATION



I23-A-1

I23-A-2

I23-A -1 See response for Key Theme PLS-3.

I23-A -2 Comment noted.

I24-A -1 See response for Key Theme OBJ-3.

I24-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp             | First Name | Last Name |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| <p>Richard Lauckhart, the former Vice President of Power Planning at Puget Sound Power &amp; Light (the predecessor of PSE), is a man that deeply understands the technical details of PSE's Energize Eastside project and what Mr. Lauckhart recently revealed in his technical study of the project can only be described as shocking [Lauckhart R., Schiffman R. (2016) Lauckhart-Schiffman Load Flow Study, <a href="http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf">http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf</a>]. In a nutshell, PSE misled our region about the electric load growth on the Eastside, the capacity of our current transmission system, the cost of the project, the impact on the area, the safety of the project, and the efficacy of the proposed transmission line.</p> <p>To justify Energize Eastside to the people of the Eastside, PSE told us a very different number from what they told the region's electric planning entity – the Western Electric Coordinating Council. In fact, they told us that customer demand would grow at a rate almost FIVE TIMES higher (2.4% per year growth) than what they told the WECC (just 0.5% per year). [Lauckhart-Schiffman Load Flow Study, Appendix B – Choice of Base Case]</p> <p>PSE also came up with an irrational capacity scenario to justify Energize Eastside. Electric utilities are required to simulate what would happen if two critical elements of their system failed. PSE did that by simulating outages at the Talbot Hill substation in Renton and their Sammamish substation in Redmond. Interestingly, in that scenario the system kept working. So PSE added several more inexplicable conditions to</p> | 2/21/2016<br>15:46:25 | Jeffrey    | Byers     |

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp | First Name | Last Name |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I24-A-1 | <p>the scenario, taking six local power plants offline while sending 1,500 megawatts of electricity to Canada. It's not clear why the power plants would be offline when they are meant to be run in precisely these types of emergency situations and Canada would in no way be expecting our electricity when we're in the midst of an emergency [Lauckhart-Schiffman Load Flow Study, Appendix D – Exports to Canada]. Besides that, PSE appears to have used the wrong transformer capacity in their much publicized demand growth chart (<a href="http://energizeeastside.com/need">http://energizeeastside.com/need</a>). Instead of using the appropriate "winter emergency" capacity for their transformers in their winter peak demand scenario, they incorrectly used "summer normal" transformer capacity, which is 24% lower! [Lauckhart-Schiffman Load Flow Study, Appendix F – Equipment ratings]</p> <p>But for just a moment, let's consider what would happen in the bizarre scenario that PSE has laid out in which two critical transformers go down, six local generators are brought offline, and 1,500 megawatts of electricity is sent to Canada. Mr. Lauckhart did precisely that by running computer simulations on the scenario and found that the 11 transmission lines that connect the Puget Sound to power sources in central Washington would be overloaded. The whole Puget Sound area would be blacked out! [Lauckhart-Schiffman Load Flow Study, Appendix E – Regional grid capacity limitations]</p> |           |            |           |
| I24-A-2 | <p>Energize Eastside is also much riskier than what they are telling the public. When utilities put power lines in the same area as gas pipelines, they consider several criteria to establish risk level, e.g., separation distance,</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |            |           |

I24-A -2 See responses for Key Themes PLS-2 and PLS-3.



COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timestamp | First Name | Last Name |
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| I24-A-2 | HVAC power line current, collocation length, collocation angle. For those four criteria, Energize Eastside would be considered "high risk" per industry standards. [Finneran S. (2015), Criteria for Pipelines Co-Existing with Electric Power Lines, DNV GL, <a href="http://www.ingaa.org/File.aspx?id=24732">http://www.ingaa.org/File.aspx?id=24732</a> ] But this is what Mark Williamson, representing PSE had to say about the collocation of the transmission line and gas line: "You don't need to do any engineering studies. [25 feet of separation is] far enough that you can just be laissez-faire and let it go. " |           |            |           |
| I24-A-3 | To sum up, we don't need Energize Eastside, it's dangerous, and even in the contrived outage scenario that PSE devised to justify it the whole Puget Sound area would be blacked out! And for the privilege of having this project built for us, we the PSE ratepayers get to pay, conservatively, a total of \$1.4 - \$2 billion over its lifetime. [King J. (2016) Lifetime cost analysis for Energize Eastside - What will Energize Eastside cost customers over its lifetime?, <a href="http://cense.org/Lifetime%20Cost.pdf">http://cense.org/Lifetime%20Cost.pdf</a> ]                                                      |           |            |           |
| I24-A-4 | The residents of the Eastside have had our trust betrayed by our public utility. Regulators and our elected leaders haven't protected us from this outrageous project. It's up to us, the residents of the Eastside, to protect ourselves from Energize Eastside by voicing our concerns and trust that the agency reviewing these comments on the Environmental Impact Statement act in the public's best interest.                                                                                                                                                                                                              |           |            |           |
|         | The best alternative is clearly "Alternative 4: No Action".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |           |            |           |

I24-A -3 See response for Key Theme OBJ-2.  
 I24-A -4 Comment noted.



COMMENT

RESPONSE

|         | <u>Comment</u>                                                                                                                            | <u>Timestamp</u>      | <u>First Name</u> | <u>Last Name</u> |
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|         | To whom it may concern:                                                                                                                   | 2/21/2016<br>20:22:28 | James             | Leininger        |
| I25-A-1 | I am very concerned about the Energize Eastside initiative.                                                                               |                       |                   |                  |
|         | I do not feel that PSE has clearly demonstrated a need for large power lines. The studies you site are based on flawed assumptions.       |                       |                   |                  |
| I25-A-2 | I endorse Alternative 2 as the preferred energy alternative because it is: Safe, Cost effective, Reliable and Better for the environment. |                       |                   |                  |
|         | Sincerely,                                                                                                                                |                       |                   |                  |
|         | Jim                                                                                                                                       |                       |                   |                  |

I25-A -1 See response for Key Theme OBJ-2.  
 I25-A -2 See response for Key Theme ALT-1.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Timestamp             | First Name   | Last Name |
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|         | Proposed PSE Energize Eastside transmission line project (Alternate 1-A) will:<br>Disrupt Neighbor Character                                                                                                                                                                                                                                                                                                                                                                                                | 2/21/2016<br>21:48:14 | Chris<br>Val | Fritz     |
| I26-A-1 | <ul style="list-style-type: none"> <li>• Huge poles and wires are NOT consistent with City of Bellevue Comprehensive Plan which contains detailed descriptions of neighborhoods and neighborhood character.</li> </ul>                                                                                                                                                                                                                                                                                      |                       |              |           |
| I26-A-2 | <ul style="list-style-type: none"> <li>• The utility corridor in cities like Newcastle may need to be widened for safety purposes. This will require homes to be condemned and families displaced.</li> </ul> Threaten Community Safety                                                                                                                                                                                                                                                                     |                       |              |           |
| I26-A-3 | <ul style="list-style-type: none"> <li>• High voltage transmission lines located so close to the Olympic Pipeline increase the risk of a catastrophic explosion during construction and daily operation. (threatening Somerset area homes and schools, including Tyee Middle School)</li> <li>• Taller poles and higher voltage expose more homes and schools to risk if lines are brought down by earthquake, extreme weather, or terrorist attack.</li> </ul> Cause unnecessary environmental degradation |                       |              |           |
| I26-A-4 | <ul style="list-style-type: none"> <li>• Approximately 8,000 trees will be removed. • Strategies for reducing carbon emissions are not addressed, as they are in Alternative 2.</li> </ul> Divert investments from 21st century energy technologies                                                                                                                                                                                                                                                         |                       |              |           |
| I26-A-5 | <ul style="list-style-type: none"> <li>• PSE's preferred solution puts all our eggs in one basket. We will spend more than a billion dollars over the lifetime of the project for a solution that will cause reliability problems if it fails.</li> <li>• Newer technologies spread the risk and the investment. Our dollars will go further as technology improves and costs drop. We can also support local businesses developing the energy solutions of the future.</li> </ul>                          |                       |              |           |

- I26-A -1 See responses for Key Themes VR-4 and VR-5.
- I26-A -2 See response for Key Theme LU-2.
- I26-A -3 See responses for Key Themes PLS-2 and PLS-4, and Key Theme EARTH-1.
- I26-A -4 See responses for Key Themes GHG-1 and GHG-3.
- I26-A -5 See responses for Topic ALT, and Key Themes ECON-4 and ECON-3.



**From:** [Kayla](#)  
**To:** [info@energize-eastside.org](mailto:info@energize-eastside.org)  
**Cc:** [Laughlin, Kayla](#)  
**Subject:** "Energize Eastside"  
**Date:** Monday, February 22, 2016 10:57:29 AM

February 22, 2016

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Kayla Laughlin, 8316 127 Pl SE, Newcastle, WA 98056

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I have been to many PSE and CENSE meetings, and what I hear is PSE trying to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I27-A-1

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I27-A-2

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I27-A-3

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons. Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I27-A-4

I am yet to be convinced we need this expensive project. I am very concerned for neighborhood safety, the detrimental impact on our communities and environment, and now I hear that homes in my neighborhood may need to be removed to expand the easement that runs through Newcastle (which has two gas pipelines)! If and when this project is needed, we all know there are other alternatives with less impact on our neighborhoods. Please consider them.

I27-A-5

Sincerely,

Kayla Laughlin

- I27-A -1 See response for Key Theme PLS-2.
- I27-A -2 Comment noted.
- I27-A -3 Comment noted.
- I27-A -4 Comment noted.
- I27-A -5 See response for Key Theme LU-1.

COMMENT

RESPONSE

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|                                                                                                                                                                                                                                                                                                     |                       |       |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|--------|
| Thank you for the opportunity to comment on this project. In the interest of full disclosure I was employed by PSE for over twelve years, and left voluntarily in 2014 to pursue another opportunity. I was directly involved in this project in its early planning stages as a Right of Way Agent. | 2/20/2016<br>15:46:10 | Kelly | McGill |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|--------|

While I am not qualified to evaluate the load models that PSE or its detractors use, I am, for the sake of this comment assuming PSE's science to be accurate. My comments assume the need for the project is well justified and that the region's growth depends on a robust electrical system.

I speak in support of the only two alternatives that I feel are a reasonable use of land resources, specifically options 1a and 1b. In both cases the routes substantially use existing rights of way that were purchased ages ago and where homeowners have made a choice to purchase homes adjoining. The resistance neighborhoods such as Somerset and Olympus have created is quite astounding. The residents made decisions to live in developments created adjacent to the rights of way, and seem to feel those land rights are somehow invalid. I would encourage anyone to read the easements themselves, they are quite broad and are certainly appropriate for high voltage lines. PSE ought to use an existing corridor, where practical, rather than create new ones.

I urge the decision makers on this project to weigh heavily the need for an electrical system that can accommodate a robust economic growth against the often ill informed opinions of individuals who voluntarily

I28-A -1 Comment noted.

I28-A-1



|         | <u>Comment</u>                                                                                                                                                                                                                                                        | <u>Timestamp</u> | <u>First Name</u> | <u>Last Name</u> |
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| I28-A-1 | <p>purchased property right next to an already active energy corridor.</p> <p>Sincerely</p> <p>Kelly C. McGill SR/WA</p> <p>P.S. I spent the first three years of my life growing up in a house on College Hill. The entire backyard being in PSE's Right of Way.</p> |                  |                   |                  |

COMMENT

RESPONSE

**From:** [Bruce.Williams](mailto:Bruce.Williams)  
**To:** [Info@energizeeastsideEIS.org](mailto:Info@energizeeastsideEIS.org)  
**Subject:** Energize Eastside DEIS  
**Date:** Monday, February 22, 2016 12:41:55 PM

My public comment is as follows:

After reviewing the load flow studies done by both PSE and CENSE it is obvious THE ENERGIZE EASTSIDE PROJECT IS NOT NEEDED.

I challenge PSE to do a complete load flow study and do the study with all the facts and conditions present. If they dare do the study with each and every parameter in place, in other words a real world study, it will be obvious these transmission lines are not needed.

Bruce T Williams  
8564 129th AV SE  
Newcastle WA 98056  
425-417-8765

I29-A-1

I29-A -1 See response for Key Theme OBJ-2.

COMMENT

RESPONSE

From: [mike.abel@comcast.net](mailto:mike.abel@comcast.net)  
 To: [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
 Subject: Comments re: DEIS - Mike Abel  
 Date: Monday, February 22, 2016 9:04:32 PM

Mike Abel  
 4401 138<sup>th</sup> Ave SE  
 Bellevue, WA 98006

425.643.9626  
 Mike.abel@comcast.net

I would like to submit for the record these comments regarding the Alternatives proposed in the Draft Environmental Impact Statement. I am primarily concerned with Alternative 1, Option A which is the course of action initially pursued by Puget Sound Energy.

I30-A-1

Environment – The proposed route for the Energize Eastside project includes many environmentally sensitive areas. Impact due to construction Activity as well as long term destruction of valuable wildlife and vegetative resources is inevitable. Chapter 11.6.3.5.1 of the DEIS concedes that as many as 327 acres of land may need to be cleared of vegetation should Alternative 1 option A be chosen. This is simply not acceptable.

I30-A-2

Safety – Alternative 1 Option A would require 18 miles of new construction much of which would be built on top of the existing Olympic Gas Pipeline. The DEIS minimizes the risk to public safety that will be generated. PSE has in the past expressed little or no concern regarding this aspect of the project despite the fact that examples exist of prior serious incidents involving leaks and explosions due to construction activity near gas pipelines. Additionally, there are examples in the academic literature warning of the risks associated with co-location of flammable liquid pipelines and electrical power transmission infrastructure. Chapters 16.3.7, 16.6.1.3 16.6.3.11 16.6.4.3 and 5.5.3.1.6 of the DEIs address some of these issues in a superficial manner however it would be prudent to conduct additional study on these topics with the aim of better quantifying the risks associated with Alternative 1 option A.

I30-A-3

Neighborhood Character – Alternative 1 option A would require tall power transmission poles which are not consistent with the City of Bellevue comprehensive plan. Additionally, in some locations utility easements would need to be widened severely impacting the neighborhoods through which the project would traverse. This would result in loss of property and in some instances complete loss of dwelling units.

I30-A-4

I30-A-5

Project Need - Need for the Energize Eastside project, as proposed by PSE appears to be based on a flawed analysis. As illustrated by the independent Laukhard-Schiffman Study (2/18/2016) PSE's in-house produced load flow study appears to have been conducted using assumptions designed to generate a report supporting

- I30-A -1 See response for Key Theme P&A-2.
- I30-A -2 See responses for Key Themes PLS-2 and PLS-4.
- I30-A -3 See response for Key Theme VR-4.
- I30-A -4 See response for Key Theme LU-2.
- I30-A -5 See response for Key Theme OBJ-3.



I30-A-5

the need for the project. As a result, I simply cannot trust PSE's stated motivations and intentions for promoting the project.

Because of these concerns I feel strongly that the only prudent course of action is to stop the project until such time that the need and benefit of the project can be re-evaluated.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Timestamp                    | First Name  | Last Name   |
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| I30-B-1 | <p>Wednesday March 9, another pipeline explosion rocks a Seattle neighborhood. This Incident is eerily similar to the explosion that rocked San Bruno California in 2010 resulting in 8 deaths and destruction of 38 residences. As noted in the Seattle Times, PSE has had numerous instances of failure to comply with applicable pipeline safety regulations. And now they plan to construct 150 foot power poles along an existing high pressure gasoline pipeline that is owned by Olympic pipeline, a company with its own history of failing to comply with safety rules. Time and time again, pipeline companies have been shown to be negligent in servicing, monitoring and maintaining the safety of their systems, with corrective action only being taken after disaster strikes. Olympic Pipeline has been suspiciously absent from all of the meetings and hearings related to Energize Eastside. They should be made to be a party to these hearings.</p> | <p>3/10/2016<br/>9:24:40</p> | <p>Mike</p> | <p>Abel</p> |
| I30-B-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |             |             |

- I30-B -1 See responses for Key Themes PLS-2, PLS-3, and PLS-5.
- I30-B -2 See response for Key Theme PLS-6.

COMMENT

RESPONSE

I36-A-1

| Comment                                                                                                                                                                                  | Timestamp             | First Name | Last Name |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| Please do not place high power lines near the Olympic Pipeline near Tyee Middle School. This would cause a significant increase in life-threatening hazardous conditions for the region. | 2/23/2016<br>13:38:34 | Stella     | Shepard   |

I36-A -1 See responses for Key Theme EMF-3 and Key Theme PLS-4.



**From:** [Energize Eastside EIS](#)  
**To:** [Jessica Conquest](#)  
**Subject:** Fwd: FW: Energize Eastside Route J  
**Date:** Friday, April 15, 2016 12:40:46 PM

----- Forwarded message -----  
**From:** <[CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)>  
**Date:** Thu, Apr 14, 2016 at 5:19 PM  
**Subject:** FW: Energize Eastside Route J  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)

**From:** Nunnelee, Sandra J.  
**Sent:** Wednesday, March 09, 2016 11:41 AM  
**To:** Helland, Carol <[CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)>  
**Subject:** FW: Energize Eastside Route J

FYI

**From:** Stella Shepard [<mailto:stellashep@live.com>]  
**Sent:** Sunday, March 06, 2016 18:18  
**To:** Council <[Council@bellevuewa.gov](mailto:Council@bellevuewa.gov)>  
**Subject:** Energize Eastside Route J

Dear Bellevue City Council,

If you are not already keenly aware, route J of Energize Eastside would put those high voltage powerlines right on top of the aging petroleum pipeline. Today as I was walking past, I took this picture which speaks volumes. Please do all you can to block this project. This photo was taken just one block away from Tyee Middle School,

I36-B-1

I36-B -1 See responses for Key Theme EMF-3 and Key Theme PLS-4.

I36-B

COMMENT

RESPONSE

I36-B-1 |

next to the Somerset Fountain.

Respectfully,  
Stella Shepard  
13908 SE 42<sup>nd</sup> Place

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

|                  |                       |        |        |
|------------------|-----------------------|--------|--------|
| Dear Ms. Bedwell | 2/24/2016<br>12:02:36 | Jeanne | DeMund |
|------------------|-----------------------|--------|--------|

I appreciate the opportunity to comment on the Draft Environmental Impact Statement for the Energize Eastside Project. As you may recognize from my address, I live along one of the routes that was not selected for this project. However, after considering the information provided by PSE, by the EIS, and by independent sources, I am compelled to comment.

1. The project is not needed: The assumptions underlying PSE's load flow are critically flawed, as explained by independent experts Richard Lauckhart and Roger Shiffman in their February 2016 report. Here are just 2 examples:

PSE has inflated electric demand growth estimates by as much as 500%. The Northwest Power and Conservation Council estimates overall demand growth at just 0.5 to 1.0%...right in line with the 0.5% that PSE told the Western Energy Coordinating Council they anticipate in their Base Case data. So why is PSE using a 2.4% annual growth rate as a key element in their justification for Energize Eastside?

PSE did load flow analysis of winter peak demand rates using summer load limits on transformers. This effectively shrinks actual transformer capacity by 25-30%, creating an artificial shortfall.

If either or both of these anomalies is an error, it raises grave questions in my mind about PSE's competence, and the possibility for other errors in both their assumptions and their analysis. If either is a

I40-A -1 See response for Key Theme OBJ-3.

I40-A-1

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp | First Name | Last Name |
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| I40-A-1 | <p>deliberate attempt to rig the outcome of the analysis, PSE's integrity as a member of our community is at issue.</p> <p>You can read the entire report on line at:<br/> <a href="http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf">http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf</a></p>                                                                                                                                                                                                                                                                                                                                                     |           |            |           |
| I40-A-2 | <p>2. Environmental impacts: This project will require cutting down thousands of trees, somewhere in the neighborhood of 8,000 trees over its 18 mile length. A mature tree can absorb up to 48 lbs of carbon dioxide per year. The Eastside will potentially suffer an increase of over 14,000 MT of carbon dioxide that is not being absorbed by these trees (EIS amount). Any mitigate might occur off site, require purchase of carbon credits, and leave the some or all of the impact in our area. This is an unacceptable environmental impact, even more so given that the entire project is not needed for either capacity or reliability of the electric system.</p> |           |            |           |
| I40-A-3 | <p>3. Safety: As cited in the EIS, there is potential for damage to the Olympic Pipeline during construction, in chapter 16, maintenance in chapter 18 and increased corrosion due to electromagnetic interference during ongoing operations, Chapter 16 again. The EIS attempts throughout these chapters to minimize perception of these risks, for example in chapter 18, using the word "theoretical" in describing the potential for damage to the Olympic pipeline during routine power pole and line maintenance.</p> <p>The Olympic Pipeline is only 3-10 feet below the</p>                                                                                           |           |            |           |

I40-A -2 See response for Key Theme GHG-1.  
 I40-A -3 See responses for Key Themes PLS-3 and PLS-5.

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Timestamp | First Name | Last Name |
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| I40-A-3 | <p>surface of the ground, and it carries gasoline, diesel and jet fuel. All of these are flammable and hazardous. We all know that gasoline is so flammable that we're not supposed to touch our car after we start fueling in the winter, to avoid static electricity that could start a fire. To give you an idea of the scale of potential damage, a 2014 pipeline spill of 7 gallons resulted in \$1.5 million in property damage in Skagit County according the federal records.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           |            |           |
| I40-A-4 | <p>Here's what really sent chills up my spine: the Olympic Pipeline is currently under a Final Order to comply with standards of the Office of Pipeline Safety, part of the federal Department of Transportation. The problems relate to corrosion control, and the Order states that Olympic Pipeline failed to correct identified deficiencies in its corrosion control system that could adversely affect the safe operation of the pipeline. You can see the details of both the Final Order, and the prior documents at:<br/> <a href="http://primis.phmsa.dot.gov/comm/reports/enforce/Cas eDetail_cpf_520155014.html#_TP_1_tab_1">http://primis.phmsa.dot.gov/comm/reports/enforce/Cas eDetail_cpf_520155014.html#_TP_1_tab_1</a></p> <p>The inspection that ultimately lead to this Final Order was conducted in August of 2014. This final order was only issued in January 2016. The condition has gone uncorrected for 18 months, and the pipeline has a further 18 months to complete corrective action, a time period that overlaps with PSE proposed construction. And PSE wants a green light for construction right next to this pipeline, wants to increase the potential for corrosion and wants us to believe that these risks are "theoretical". These two corporate citizens might deserve each other as neighbors, but we do not.</p> |           |            |           |

I40-A -4 See response for Key Theme PLS-5.



I40-A-4

| Comment | Timestamp | First Name | Last Name |
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Ms. Bedwell, the citizens of King County rely on you and your colleagues in Bellevue and the other jurisdictions to do the right thing to protect us, both physically and fiscally. I submit to you that risking lives, property and the environment in this way for a project that is not needed is irresponsible, unacceptable and should not be condoned. There is time to develop an integrated resource approach in sync with the recommendations of the Northwest Power and Conservation Planning Council, and different in some respects from the alternative offered by PSE, and such an approach should be developed.

Thank you for the opportunity to comment.

Sincerely,

Jeanne DeMund

cc:

Carol Helland, Development Services Land Use  
 Director City of Bellevue, 450 110th Avenue NE  
 Bellevue, WA 98004

City of Kirkland

Jeremy McMahan, Development Services - Planning  
 Manager (425) 587-3229 jcmahan@kirklandwa.gov  
 City of Newcastle

Tim McHarg, Director of Community Development  
 (425) 649-4444 TimM@ci.newcastle.wa.us  
 City of Redmond

Catherine Beam Principal Planner, (425) 556-2429



COMMENT

RESPONSE

| Comment                            | Timestamp                      | First Name | Last Name |
|------------------------------------|--------------------------------|------------|-----------|
| CBEAM@redmond.gov                  |                                |            |           |
| City of Renton                     |                                |            |           |
| Jennifer Henning Planning Director | SEP 11 11:42 AM (425) 430-7286 | Jennifer   | Henning   |
| Jhenning@Rentonwa.gov              |                                |            |           |

**From:** Patrick Elliott  
**To:** Patrick Elliott  
**Subject:** Comments on Energize Eastside EIS  
**Date:** Thursday, March 24, 2016 10:55:35 AM

**From:** Jeanne DeMund [mailto:[jcdemund@gmail.com](mailto:jcdemund@gmail.com)]  
**Sent:** Wednesday, February 24, 2016 12:09 PM  
**To:** Bedwell, Heidi <[HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov)>; Helland, Carol <[CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)>; [jmcmahan@kirklandwa.gov](mailto:jmcmahan@kirklandwa.gov); [TimM@ci.newcastle.wa.us](mailto:TimM@ci.newcastle.wa.us); [CBFAM@redmond.gov](mailto:CBFAM@redmond.gov); [jhenning@rentonwa.gov](mailto:jhenning@rentonwa.gov)  
**Subject:** Comments on Energize Eastside EIS

Jeanne DeMund  
 2811 Mountain View Ave. N  
 Renton, WA 98056  
[206-898-9818](tel:206-898-9818)  
 February 24, 2016

Ms. Heidi Bedwell,  
 Senior Planner  
 Land Use Division-Development Services  
 City of Bellevue  
 450 110th Avenue NE  
 Bellevue, WA 98004

Dear Ms. Bedwell

I appreciate the opportunity to comment on the Draft Environmental Impact Statement for the Energize Eastside Project. As you may recognize from my address, I live along one of the routes that was not selected for this project. However, after considering the information provided by PSE, by the EIS, and by independent sources, I am compelled to comment.

1. The project is not needed: The assumptions underlying PSE's load flow are critically flawed, as explained by independent experts Richard Lauckhart and Roger Schiffman in their February 2016 report. Here are just 2 examples:

PSE has inflated electric demand growth estimates by as much as 500%. The Northwest Power and Conservation Council estimates overall demand growth at just 0.5 to 1.0%...right in line with the 0.5% that PSE told the Western Energy Coordinating Council they anticipate in their Base Case data. So why is PSE using a 2.4% annual growth rate as a key element in their justification for Energize Eastside?

I40-C-1

PSE did load flow analysis of winter peak demand rates using summer load limits on transformers. This effectively shrinks actual transformer capacity by 25-30%, creating an artificial shortfall.

If either or both of these anomalies is an error, it raises grave questions in my mind about PSE's competence, and the possibility for other errors in both their assumptions and their analysis. If either is a deliberate attempt to rig the outcome of the analysis, PSE's integrity as a member of our community is at issue.

You can read the entire report on line at: <http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf>

I40-C-2

2. Environmental impacts: This project will require cutting down thousands of trees, somewhere in the neighborhood of 8,000 trees over its 18 mile length. A mature tree can absorb up to 48 lbs of carbon dioxide per year. The Eastside will potentially suffer an increase of over 14,000 MT of carbon dioxide that is not being absorbed by these trees (EIS amount). Any mitigate might occur off site, require purchase of carbon credits, and leave the some or all of the impact in our area. This is an unacceptable environmental impact, even more so given that the entire project is not needed for either capacity or reliability of the electric system.

I40-C-3

3. Safety: As cited in the EIS, there is potential for damage to the Olympic Pipeline during construction, in chapter 16, maintenance in chapter 18 and increased corrosion due to electromagnetic interference during ongoing operations, Chapter 16 again. The EIS attempts throughout these chapters to minimize perception of these risks, for example in chapter 18, using the word "theoretical" in

I40-C -1 See response for Key Theme OBJ-3.  
 I40-C -2 See response for Key Theme GHG-1.  
 I40-C -3 See responses for Key Themes PLS-1 and PLS-5.



I40-C-3

describing the potential for damage to the Olympic pipeline during routine power pole and line maintenance.

The Olympic Pipeline is only 3-10 feet below the surface of the ground, and it carries gasoline, diesel and jet fuel. All of these are flammable and hazardous. We all know that gasoline is so flammable that we're not supposed to touch our car after we start fueling in the winter, to avoid static electricity that could start a fire. To give you an idea of the scale of potential damage, a 2014 pipeline spill of 7 gallons resulted in \$1.5 million in property damage in Skagit County according to the federal records.

Here's what really sent chills up my spine: the Olympic Pipeline is currently under a Final Order to comply with standards of the Office of Pipeline Safety, part of the federal Department of Transportation. The problems relate to corrosion control, and the Order states that Olympic Pipeline failed to correct identified deficiencies in its corrosion control system that could adversely affect the safe operation of the pipeline. You can see the details of both the Final Order, and the prior documents at: [http://primis.phmsa.dot.gov/comm/reports/enforce/CaseDetail\\_cpf\\_520155014.html#\\_TP\\_1\\_tab\\_1](http://primis.phmsa.dot.gov/comm/reports/enforce/CaseDetail_cpf_520155014.html#_TP_1_tab_1)

The inspection that ultimately led to this Final Order was conducted in August of 2014. This final order was only issued in January 2016. The condition has gone uncorrected for 18 months, and the pipeline has a further 18 months to complete corrective action, a time period that overlaps with PSE proposed construction. And PSE wants a green light for construction right next to this pipeline, wants to increase the potential for corrosion and wants us to believe that these risks are "theoretical". These two corporate citizens might deserve each other as neighbors, but we do not.

I40-C-4

Ms. Bedwell, the citizens of King County rely on you and your colleagues in Bellevue and the other jurisdictions to do the right thing to protect us, both physically and fiscally. I submit to you that risking lives, property and the environment in this way for a project that is not needed is irresponsible, unacceptable and should not be condoned. There is time to develop an integrated resource approach in sync with the recommendations of the Northwest Power and Conservation Planning Council, and different in some respects from the alternative offered by PSE, and such an approach should be developed.

Thank you for the opportunity to comment.

Sincerely,

Jeanne DeMund

cc:

Carol Helland  
Development Services Land Use Director City of Bellevue  
450 110th Avenue NE  
Bellevue, WA 98004

**City of Kirkland**

Jeremy McMahan  
Development Services - Planning Manager (425) 587-3229  
[jmcmahan@kirklandwa.gov](mailto:jmcmahan@kirklandwa.gov)

**City of Newcastle**

Tim McHarg  
Director of Community Development (425) 649-4444 [TimM@ci.newcastle.wa.us](mailto:TimM@ci.newcastle.wa.us)

**City of Redmond**

Catherine Beam Principal Planner  
(425) 556-2429 [CBEAM@redmond.gov](mailto:CBEAM@redmond.gov)

**City of Renton**

Jennifer Henning Planning Director  
(425) 430-7286 [Jhenning@Rentonwa.gov](mailto:Jhenning@Rentonwa.gov)

I40-C -4 See response for Key Theme ALT-1.

## COMMENT

## RESPONSE

**From:** [Gary Beerman ARNP](mailto:info@energizeeastsideEIS.org)  
**To:** ["info@EnergizeEastsideEIS.org"](mailto:info@energizeeastsideEIS.org)  
**Subject:** Comments regarding the EIS report  
**Date:** Thursday, February 25, 2016 10:56:06 AM

Thank you for the opportunity to comment on this.

I41-A-1

I want to go on record as extremely against what you have planned. It is now obvious to me that you planned the route through Newcastle all along and are just going through the motions to wear people down or wait for them to forget about the proposed route.

I41-A-2

This will run right through our yard. NOBODY ever addressed my concerns at one of the meetings regarding how you would compensate those of us affected by this project. It is industrial blight and will significantly lower the value of my property and the other properties along the route. I am 63 and close to retirement and am counting on the equity of our house. This route through our backyard will destroy my retirement nest egg.

I41-A-3

I also feel that all the viable alternative plans were completely disregarded and brushed off.

I41-A-4

I've heard nothing about the communities concern for the extensive number of trees that will be destroyed with this project.

I41-A-5

If you go forward with the current proposed route I have no choice but to file a lawsuit.

Sincerely,  
 Gary Beerman  
 12851 SE 76<sup>th</sup> Place  
 Newcastle, WA 98056

I41-A -1 Comment noted.  
 I41-A -2 See response for Key Theme LU-1.  
 I41-A -3 See response for Key Theme ALT-1.  
 I41-A -4 See response for Key Theme P&A-2.  
 I41-A -5 Comment noted.

**From:** [Cathy Williams](#)  
**To:** [info@energizeeastsideEIS.org](mailto:info@energizeeastsideEIS.org)  
**Subject:** My public comment  
**Date:** Thursday, February 25, 2016 9:48:33 PM

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My public comment is as follows:  
After reviewing the load flow studies done by both PSE and CENSE it is obvious The ENERGIZE EASTSIDE PROJECT IS NOT NEEDED.

I43-A-1

I challenge PSE to do a complete load flow study and do the study with all facts and conditions present. If they dare do the study with each and every parameter in place, in other words a real world study, it will be obvious these transmission lines are not needed.

Mary Cathy Williams  
8564 129th AVE SE  
Newcastle, WA 98056  
425-466-4654

I43-A -1 See response for Key Theme OBJ-2.

COMMENT

RESPONSE

I44-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                          | Timestamp             | First Name | Last Name |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I am opposed to the energize eastside project. Evidence provided by a nonindependent surveyor does not show a clear indication to proceed with this poorly designed plan. There are much better alternatives, ie: underground transmissions lines, that PSE states is too expensive. Until clear evidence is provided by an entity other than PSE, this project is nothing but a way to improve revenue for PSE. | 2/25/2016<br>17:56:42 | jamie      | kim       |

I44-A -1 Comment noted.

COMMENT

RESPONSE

|         | <b>Comment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Timestamp</b> | <b>First Name</b> | <b>Last Name</b> |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|
| I45-A-1 | It is not clear that this project is required and that PSE has the best interests of the residents of Bellevue and neighboring areas. They have not been open with the data to support the studies and attempts to simulate their work and assumptions failed. A project like this requires complete transparency of all relevant data. PSE is a private corporation with interests the will not always align with the residents that their projects will affect. There are viable and more environmentally sound alternatives available. | 2/25/2016        | Conrad            | Bayer            |
| I45-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 22:12:48         |                   |                  |
| I45-A-3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  |

I45-A -1 Comment noted.  
 I45-A -2 Comment noted.  
 I45-A -3 Comment noted.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                  | Timestamp            | First Name | Last Name |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I46-A-1 | Alternatives 1 and 3 involve significant amount of construction, and removal of thousands of trees. I don't think that loss of so many trees is acceptable - it would significantly degrade environment on the Eastside. | 2/26/2016<br>0:04:50 | Oleg       | Ryabukha  |
| I46-A-2 | I urge PSE to look closer into Alternative 2 as it the best for preserving environment.                                                                                                                                  |                      |            |           |

I46-A -1 See response for Key Theme P&A-2.  
 I46-A -2 Comment noted.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timestamp            | First Name | Last Name |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I46-B-1 | <p>Alternatives 1 option A involves construction of a high-voltage line right next to Olympic Pipeline or existing natural gas pipelines. This is unsafe (as mentioned in DEIS, Chapters 16.3.7, 16.6.1.3, 16.6.3.1.1) even in the normal course of events, but even more dangerous in case of earthquake.</p> <p>Moreover, building one single line without redundancy makes whole system more vulnerable to disruptions caused by construction accidents, natural causes (storms, floods and earthquakes), or malicious intent (terrorism).</p> | 2/26/2016<br>0:16:13 | Oleg       | Ryabukha  |
| I46-B-2 | <p>I urge PSE to consider and implement Alternative 2 (Integrated Resource Approach), since it does not require placing high-voltage lines near gas pipelines and makes it possible to distribute (much smaller) generation and storage unit closer to consumers, thus making whole infrastructure more resilient to any disruptions.</p>                                                                                                                                                                                                         |                      |            |           |

- I46-B -1 See responses for Topic PLS, Key Theme EARTH-1, and Key Theme UTL-2.
- I46-B -2 See response for Key Theme ALT-1.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Timestamp            | First Name | Last Name |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I46-C-1 | <p>Alternatives 1 and 3 involve paying significant cost for unclear benefit - independent Lauckhart-Schiffman Load Flow Study, available at cense.org, found that: "... PSE's system can avoid overloads and outages even when two critical transformers have failed during winter peak usage. There appears to be sufficient capacity to handle anticipated growth for at least a couple of decades. In our professional opinion, Energize Eastside is not needed to provide reliable power in this scenario for many years."</p> | 2/26/2016<br>0:22:23 | Oleg       | Ryabukha  |
| I46-C-2 | <p>I would strongly prefer to see Alternative 2 (Integrated Resource Approach) implemented, since it allows pay-as-you-go, with incremental improvements where they really needed, and when they can take advantage of newly developed technologies (solar, cheaper battery storage, etc.)</p>                                                                                                                                                                                                                                     |                      |            |           |

I46-C -1 See response for Key Theme OBJ-3.  
 I46-C -2 See response for Key Theme ALT-1.



February 22, 2016

Ms. Heidi Bedwell, Senior Planner  
 Land Use Division-Development Services  
 City of Bellevue  
 450 110<sup>th</sup> Ave. NE  
 Bellevue, WA 98004

Dear Ms. Bedwell:

I am a homeowner in The Olympus Development, Newcastle, WA. My late husband and I worked hard and long to own and maintain our beautiful home. Now Puget Sound Energy propose to increase the voltage lines to 230kV voltage supported by steel monopoles that could reach 130 feet tall – this would be so close to my home it scares me to the point my health is effected.

I47-A-1 Added into this nightmare of high voltage towers you have The Olympic Pipe Line sitting just a few feet under! The Olympic Pipe Line must be so concerned as they do not want a repeat of 1999 in Bellingham, WA. I am sure Olympic Pipe Line do not want to be responsible for deaths by excruciating burns. No one can say 100% that gas explosions will not take place – I don't know very many people who would want people to die because of corporate greed. How do you live with that on your conscience?

I47-A-2 It has been proven that Puget Sound Energy's plan is not needed and really the big winner in all of this will be the foreign-based Hedge Fund in Australia. We the customers of Puget Sound Energy get to pay for this and also suffer huge consequences.

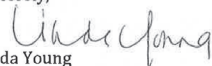
I47-A-3 Have you read the 700 plus page Puget Sound Energy document where it even mentions that homes will have to be destroyed along with thousands of trees? Ms. Bedwell how would you like to see a bulldozer aiming for your home that is filled with memories? I had always thought The Eastside was proud of their trees and open spaces for people to enjoy.

I47-A-4 Thousands of people will be affected by Puget Sound Energy's disastrous plans – these people matter, they create and maintain communities and they cannot be cast aside.

I47-A-5 Have you read and studied the materials put together by CENSE? Brilliant minds and dedicated people who have given their time to make others see the folly of Puget Sound Energy's plans. Are you aware of the countless people who attend every meeting fighting against Puget Sound Energy? Don't we count for something?

I47-A-6 It is time to stop and re-think and not be pushed and bullied by a foreign owned company – after all last time I checked this is America and we are Americans.

Sincerely,

  
 Linda Young  
 12813 SE 80<sup>th</sup> Way  
 Newcastle, WA 98056

- I47-A -1 See responses for Key Theme EMF-1 and Key Themes PLS-2, PLS-3, and PLS-4.
- I47-A -2 See response for Key Theme OBJ-1.
- I47-A -3 See responses for Key Theme P&A-2 and Key Theme LU-1.
- I47-A -4 See response for Key Theme LU-1.
- I47-A -5 Comment noted.
- I47-A -6 Comment noted.

COMMENT

RESPONSE

**From:** [Ellen Kerr](#)  
**To:** [Info@energizeeastsideEIS.org](mailto:Info@energizeeastsideEIS.org)  
**Subject:** Energize Eastside DEIS Comment  
**Date:** Saturday, February 27, 2016 12:56:56 PM

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I48-A-1

I am against PSE moving forward on this project until all alternatives are considered. I am firmly against this project as proposed!

Ellen Kerr  
4255 134th Ave., NE  
Bellevue, WA 98005

I48-A -1 Comment noted.

**From:** [Margie Hussey](mailto:Margie.Hussey@energizeeastsideeis.org)  
**To:** [Info@energizeeastsideeis.org](mailto:Info@energizeeastsideeis.org)  
**Subject:** EIS  
**Date:** Saturday, February 27, 2016 2:48:06 PM

I49-A-1

Installing high capacity electric transmission lines through residential areas is not the best process. The area is fully developed now and the high lines would only distract from property values. The residential areas have been in existence for some time...some over 40 years and there was no awareness of such a project when the area was developed. It would be unfair to consider such an intrusive project upon the residents. There are other options and PSE needs to discontinue focus on the project as envisioned and proceed to less disruptive means to provided energy.

Margie Hussey

--  
*margie*

I49-A -1 See responses for Key Themes ECON-1 and ECON-2.

COMMENT

RESPONSE

**From:** [Bob Moore](#)  
**To:** [info@energizeEastsideEIS.org](mailto:info@energizeEastsideEIS.org)  
**Subject:** Energize Eastside EIS  
**Date:** Sunday, February 28, 2016 4:11:25 PM

150-A-1

ENERGIZE EASTSIDE: COMMENTS ON ENERGIZE EASTSIDE STATEMENT (EIS) February, 2016  
 I am very concerned about PSE’s intention to build a large transmission line from Redmond, WA to Renton, WA. The **need** for expanded capacity outlined in Chapter 1.3 of the DEIS has been questioned by the Lauckhart-Schiffman load-flow study dated February 18, 2016. This study indicates there are many flaws in PSE’s assumptions. If winter emergency conditions are used instead of summer normal conditions and if .5%/year growth for Eastside energy demand is used, demand does not exceed flow until 2058. PSE’s inflated rate of growth of 2.4%/year indicates the capacity is not exceeded until 2027. This should provide plenty of time to implement rapidly developing new technologies which would be much less expensive and intrusive.

150-A-2

Furthermore, **Public safety** is of primary concern. Given that we live in a seismic zone and the existing power line is built along a gas line, the possibility of a human catastrophe is exacerbated by construction and long term operations activities. Chapter 8.5.1.3 only mentions earthquakes during construction. What about seismic events in the future? I am reminded of the 1999 Bellingham disaster. In addition while effects on humans is hard to prove and controversial, why risk any adverse health effects, such as bone marrow cancer in infants and brain cancer in adults?

150-A-3

The detrimental impact to the **environment** cannot be overemphasized. We are looking at the destruction of several thousand trees and clear cutting many acres of vegetation. Bellevue and other eastside cities pride themselves on the largely attractive and desirable living conditions that have been developed over the years.

150-A-4

I strongly urge PSE to stop the expansion project and reconsider the alternative which considers an integrated resource approach. Your public image is being severely damaged by a proposal which appears to be unnecessary and is strictly a financial play on the part of the hedge fund investors who own PSE at the expense of the rate paying customers. Shame on PSE!

-  
 W. Robert Moore  
 4707 135<sup>th</sup> Place Bellevue, WA 98006  
  
 Tel: 425-747-1388  
 Email: [bmooreii@comcast.net](mailto:bmooreii@comcast.net)

- 150-A -1 See response for Key Theme OBJ-3.
- 150-A -2 See responses for Key Themes PLS-1, PLS-2, and PLS-3, Key Theme EMF-1 and Key Theme EARTH-1.
- 150-A -3 See response for Key Theme VR-3.
- 150-A -4 Comment noted.



COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Timestamp          | First Name | Last Name |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------|-----------|
|         | ENERGIZE EASTSIDE: COMMENTS ON ENERGIZE EASTSIDE STATEMENT (EIS) February, 2016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2/28/2016 16:03:08 | W. Robert  | Moore     |
| I50-B-1 | I am very concerned about PSE's intention to build a large transmission line from Redmond, WA to Renton, WA. The need for expanded capacity outlined in Chapter 1.3 of the DEIS has been questioned by the Lauckhart-Schiffman load-flow study dated February 18, 2016. This study indicates there are many flaws in PSE's assumptions. If winter emergency conditions are used instead of summer normal conditions and if .5%/year growth for Eastside energy demand is used, demand does not exceed flow until 2058. PSE's inflated rate of growth of 2.4%/year indicates the capacity is not exceeded until 2027. This should provide plenty of time to implement rapidly developing new technologies which would be much less expensive and intrusive. |                    |            |           |
| I50-B-2 | Furthermore, Public safety is of primary concern. Given that we live in a seismic zone and the existing power line is built along a gas line, the possibility of a human catastrophe is exacerbated by construction and long term operations activities. Chapter 8.5.1.3 only mentions earthquakes during construction. What about seismic events in the future? I am reminded of the 1999 Bellingham disaster. In addition while effects on humans is hard to prove and controversial, why risk any adverse health effects, such as bone marrow cancer in infants and brain cancer in adults?                                                                                                                                                             |                    |            |           |
| I50-B-3 | The detrimental impact to the environment cannot be overemphasized. We are looking at the destruction of several thousand trees and clear cutting many acres of vegetation. Bellevue and other eastside cities pride themselves on the largely attractive and desirable living conditions that have been developed over the                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |            |           |

- I50-B -1 See response for Key Theme OBJ-3.
- I50-B -2 See responses for Key Themes PLS-1, PLS-2, and PLS-3, Key Theme EMF-1 and Key Theme EARTH-1.
- I50-B -3 See response for Key Theme VR-3.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                      | Timestamp | First Name | Last Name |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I50-B-3 | years.<br>I strongly urge PSE to stop the expansion project.<br>Your public image is being severely damaged by a proposal which appears to be strictly a financial play                                                      |           |            |           |
| I50-B-4 | on the part of the hedge fund investors who own PSE at the expense of the rate paying customers. Shame on PSE!<br>W. Robert Moore<br>4707 135th Place Bellevue, WA 98006<br>Tel: 425-747-1388<br>Email: bmooreii@comcast.net |           |            |           |

I50-B -4 Comment noted.

*To: Heidi Bedwell*

ENERGIZE EASTSIDE: COMMENTS ON ENERGIZE EASTSIDE STATEMENT (EIS) February, 2016

I am very concerned about PSE's intention to build a large transmission line from Redmond, WA to Renton, WA. for several reasons:

- 150-C-1 1. The **need** for expanded capacity outlined in Chapter 1.3 of the DEIS has been questioned by the Lauckhart-Schiffman load-flow study dated February 18, 2016. This study indicates there are many flaws in PSE's assumptions. If winter emergency conditions are used instead of summer normal conditions and if .5%/year growth for Eastside energy demand is used, demand does not exceed flow until 2058. PSE's inflated rate of growth of 2.4%/year indicates the capacity is not exceeded until 2027. This should provide plenty of time to implement rapidly developing new technologies which would be much less expensive and intrusive. It appears the real motive for PSE's desire to expand capacity has more to do with the transfer of power to British Columbia, thereby enhancing the profitability of PSE and increasing the return on investment for the hedge fund owners of PSE who made a 10-year investment which anticipated high returns. These profits would on the backs of the customers who would pay for the huge capital investment with increased rates.
- 150-C-2 2. **Public safety** is of primary concern. Given that we live in a seismic zone and the existing power line is built along a gas line, the possibility of a human catastrophe is exacerbated by construction and long term operations activities. Chapter 8.5.1.3 only mentions earthquakes during construction. What about seismic events in the future? I am reminded of the 1999 Bellingham disaster. In addition while effects on humans is hard to prove and controversial, why risk any adverse health effects, such as bone marrow cancer in infants and brain cancer in adults?
- 150-C-3 3. The detrimental impact to the **environment** cannot be overemphasized. We are looking at the destruction of several thousand trees and clear cutting many acres of vegetation. Bellevue and other eastside cities pride themselves on the largely attractive and desirable living conditions that have been developed over the years. Does it make sense to downgrade these admirable results and diminish the quality of life and the investments in homes and public places, especially when the demand need that has been proposed by PSE is highly suspect?

150-C-4 For these main reasons I urge those officials responsible for the evaluation of the Energize Eastside Project to reject the building of the proposed energy infrastructure and turn to the more sensible Alternative 2 – Integrated Resource Approach-outlined in the DEIS, pp2-32 to 2-49.

150-C-5 Furthermore, I urge the current EIS Step 1 Review to reach a conclusion and remand the final findings to the Bellevue City Council for review and a decision about proceeding to step 2.

W. Robert Moore *W. Robert Moore*  
 4707 135<sup>th</sup> Place Bellevue, WA 98006  
 Tel: 425-747-1388  
 Email: [bmooreii@comcast.net](mailto:bmooreii@comcast.net)

- 150-C -1 See response for Key Theme OBJ-3.
- 150-C -2 See responses for Key Themes PLS-1, PLS-2, and PLS-3, Key Theme EARTH-1, and Key Theme EMF-1.
- 150-C -3 See responses for Key Theme VR-3 and Key Theme P&A-2.
- 150-C -4 See response for Key Theme ALT-1.
- 150-C -5 See response for Key Theme EIS-2

COMMENT

RESPONSE

**From:** [Jeff Felix](mailto:Jeff.Felix@energize-eastside.org)  
**To:** [info@energize-eastside.org](mailto:info@energize-eastside.org)  
**Subject:** Comments on Energize Eastside EIS  
**Date:** Sunday, February 28, 2016 9:56:52 PM  
**Importance:** High

City of Bellevue  
 Development Services Department  
 Attn: Heidi Bedwell  
 450 110th Ave NE  
 Bellevue, WA 98004

To: Heidi Bedwell, Energize Eastside EIS Program Manager

From: Jeff Felix, 2033 135<sup>th</sup> Place SE Bellevue, WA

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A). This will impact our neighborhood negatively and we believe it is not needed.

- I51-A-1 PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org. Additionally, the draft of the Northwest Power and Conservation Council forecasts an almost flat change in electrical needs for the Northwest for several decades. Accommodating any future needs can be more cheaply, more flexibly and with less reliance on a single source of electrical transmission using the sources in Alternative 2.
- I51-A-2
- I51-A-3 Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS. During the construction phase, power must be supplied over two sets of "H" poles in the Right-of-Way while PSE would excavate and construct large, deep concrete bases to support the new tandem line of much taller steel poles – and do this in a ROW that PSE already shares with the Olympic Pipeline. This scenario requires careful scrutiny of precedent for overburdening the ROW in a densely populated corridor.
- I51-A-4 Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

- I51-A -1 See response for Key Theme OBJ-2.
- I51-A -2 See response for Key Theme ALT-1.
- I51-A -3 See responses for Key Themes PLS-1 and PLS-2.
- I51-A -4 See response for Key Theme ALT-1.



COMMENT

RESPONSE

I51-A-5 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

I51-A-6 | Ratepayers are being asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

We need the City of Bellevue to step up and do what is right and support its citizens.

Sincerely,

Jeff Felix  
2033 135<sup>th</sup> Place SE  
Bellevue, WA 98005  
425-378-8017 home  
425-891-3635 cell

I51-A -5    Comment noted.

I51-A -6    Comment noted.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Timestamp             | First Name | Last Name |
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| I52-A-1 | <p>I'm very concerned about plans to construct and run high voltage lines so close to the Olympic petroleum pipeline. My house backs up to the pipeline right of way and I walk there almost every day with my dog. The 1999 Bellingham explosion, which killed three people, was a terrible tragedy that should make us extremely cautious about creating an even more dangerous situation.</p> <p>In Chapter 8.5.1.3.2 of the draft EIS states that "significant adverse impact to public safety could occur if a leak or an explosion of any of these types of gas lines resulted from the project" in we choose Alternate 1 - Option A.</p> | 2/27/2016<br>13:10:24 | Judy       | Boyce     |
| I52-A-2 | <p>I believe we should choose Alternate 2. Chapter 8.5.4.2.2 mentions that "the risks during construction of distributed generation facilities would be lower than with Alternative 1 because there would be greater flexibility in locating the facilities away from pipelines."</p>                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |
| I52-A-3 | <p>In my neighborhood, the pipeline right of way goes by many houses and right in back of a park popular with neighborhood children. I dread to think about a major explosion due to an earthquake, fault in the pipeline, or any other reason.</p> <p>Thank you,</p> <p>Judy Boyce</p>                                                                                                                                                                                                                                                                                                                                                         |                       |            |           |

- I52-A -1 See response for Key Theme PLS-2.
- I52-A -2 See response for Key Theme ALT-1.
- I52-A -3 See response for Key Theme PLS-2.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                     | Timestamp             | First Name | Last Name |
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| I53-A-1 | The conditions PSE set up in the need for this project: Shut down multiple substations, ship additional energy to Canada (when they are not required to) seems to indicate that this project should not move forwards.                                                                                                                                                                                                      | 2/27/2016<br>14:16:59 | Thomas     | Cezeaux   |
| I53-A-2 | Also, the proposed route along the Olympic Pipeline, regardless of promises of safety from PSE, flies in the face of common sense and endangers families and communities throughout King County.<br><br>Environmental risks of high voltage lines through neighborhoods composed of many young families with small children also causes concerns around EMF emissions and cancer concerns.<br><br>Please stop this project. |                       |            |           |

I53-A -1 See response for Key Theme OBJ-3.  
 I53-A -2 See responses for Key Theme PLS-4 and Key Theme EMF-1.

COMMENT

RESPONSE

I53-B-1

| Comment                                                                                                                                                                                                                                                                                                                                                                   | Timestamp             | First Name | Last Name |
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| The level of impact of this project seem to be compared against Bellevue only. However, the impact of the project on smaller towns like Newcastle will likely be proportionally higher. For example, the impact on revenue from property taxes to Newcastle will be proportionally much higher than for Bellevue (because it is larger, and has a more diverse tax base). | 2/27/2016<br>14:31:57 | Thomas     | Cezeaux   |

I53-B -1 See response for Key Theme ECON-2.

COMMENT

RESPONSE

I54-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                               | Timestamp             | First Name | Last Name |
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| After reading all accounts of the EnergizeEastside proposal and reading about the Lauckhart-Schiffman load study I am more convinced than ever that this project should not be approved. Personally I think PSE is acting like current day carpetbaggers. I am also appalled that a government agency has no power to stop this? Maybe we need to pass some new laws? | 2/27/2016<br>20:14:38 | Thomas     | Heinzle   |

I54-A -1 See response for Key Theme OBJ-3.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timestamp             | First Name | Last Name |
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| I55-A-1 | I support and endorse Alternative 2, an Integrated Resource approach. It is cost effective (a lifetime cost of 1.4 - 2 billion to rate payers is outrageous!), more reliable, better for the environment, smart and secure.                                                                                                                                                                                                                                                                                                                                                         | 2/27/2016<br>21:06:07 | Sally      | McCray    |
| I55-A-2 | The only objective it doesn't meet is making the PSE owners more money via the WUTC 10% investment boondoggle. When can we rate payers get in on that deal? Oh, right, it is the unfortunate rate payers who get to PAY PSE the 10% for 30 years. No wonder they found a need and then proposed the costliest "solution" possible.                                                                                                                                                                                                                                                  |                       |            |           |
| I55-A-3 | I believe that if a need for an additional transmission capacity is revealed, in the next 40 years, over and above what the Integrated Resource approach can provide, then and only then should a massive upgrade to a utility corridor running through a heavily populated area. Transmission to Canada and California can easily happen on the east side of the Cascades. Transmission to benefit the Eastside, only, should run on one of the two North South corridors already in existence, starting with the substantially unused 230kv corridor owned by Seattle City Light. |                       |            |           |

- I55-A -1 See response for Key Theme ALT-1.
- I55-A -2 See response for Key Theme OBJ-1.
- I55-A -3 See responses for Key Theme ALT-1 and Key Theme OBJ-3.

I55-B-1

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |       |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|--------|
| I believe the need for this massive project does not exist. PSE cooked the books to come up with an analysis demonstrating the need. Bellevue, to their credit, hired an independent consultant. However, the City Council is made up of ordinary folks and politicians, who are easily misled in a billion dollar game with a corporation with millions to spend on marketing. Thus the independent consultant was hired to do the wrong job, review PSE's calculations. NOT to do the more important work of reviewing the assumptions. You've heard the term garbage in, garbage out? That is what Bellevue got for their money, they didn't ask the right question. | 2/27/2016<br>21:46:02 | Sally | McCray |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|--------|

Fortunately, others did ask the question. And when their assumptions were different than PSE's? PSE refused to explain their assumptions. For example, why did they assume so much more load going to Canada than required? PSE has said time and again that this is a local project, yet they tripled or even quadrupled the load to Canada in their peak demand calculation. Why would they assume this load going to Canada on during peak demand locally? There is no requirement to continue that flow during a peak demand time - a time that might not last any longer than a few hours to a few days at most. Garbage in, garbage out.

As another example, why isn't there an assumption of a peaker station or two, supplying power in peak demand times, like the old Shuffleton station? It doesn't take a EE degree; it is just common sense that the management of power delivery would include a peak demand generator or two. It is the low cost,

I55-B -1 See responses for Key Themes OBJ-1 and OBJ-2.

I55-B-1

| Comment | Timestamp | First Name | Last Name |
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reliable, smart alternative. If we didn't know that PSE had its rate payer's interests at heart, it would almost seem PSE was planning, even then, to "need" to build a giant project to increase return on capital for the private corporation, at the expense of rate payers on the Eastside. I wonder how the sale of that asset was justified? Probably that there was no conceivable need for power generation to support the Eastside - quite the opposite of what they are saying now. Can we see those records and learn for ourselves? Regardless, a reasonable need analysis should assume at least two peak demand generation facilities.

Independent analysts should be hired to review all the PSE "need" assumptions, and justifications for those assumptions. How is the 205MW shortfall in the EIS calculated? Why are there so few transformers in PSE's calculations? (They are a low cost, proven alternative).

PSE should comment on the Lauckhart-Schiffman Load Flow Study. Respected industry experts Rich Lauckhart and Roger Schiffman ran computer simulations of the need for PSE's "Energize Eastside". They used the same industry software that PSE uses. Their conclusion: PSE is using an impossible situation to try to scare residents into funding a billion-dollar project. In other words: garbage in, garbage out.

PSE should be required to reveal the rational for its assumptions. In the medical field, no one takes a study seriously unless it is peer reviewed. Even the best make mistakes. It is the best way to avoid: garbage in, garbage out.



COMMENT

RESPONSE

|         | <b>Comment</b>                                                                                                                                                                                            | <b>Timestamp</b>      | <b>First Name</b> | <b>Last Name</b> |
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| I55-C-1 | Alternative 1, Option A should be avoided due to the huge and significant adverse impacts to people who live near the project. Chapter 11.6.3.5.3 states that permanent clear zones would be required for | 2/27/2016<br>21:56:25 | Sally             | McCray           |
| I55-C-2 | Alternative 1, Option A. This is not consistent with Eastside esthetic values, anywhere but in downtown areas. (Where transmission lines are always underground). Alternative 2 would have much fewer     |                       |                   |                  |
| I55-C-3 | land use impacts and is thus preferred.                                                                                                                                                                   |                       |                   |                  |
| I55-C-4 | The only worse alternative to Alternative 1, Option A would be to put the transmission lines in an area that didn't already have transmission lines.                                                      |                       |                   |                  |

- I55-C -1 Comment noted.
- I55-C -2 See response for Key Theme VR-3.
- I55-C -3 Comment noted.
- I55-C -4 See response for Key Theme VR-2.

COMMENT

RESPONSE

I55-D-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Timestamp             | First Name | Last Name |
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| <p>This project is not needed and should be rejected. The Northwest Power Plan report, dated Feb 2016, states that even though the population is forecast to grow..."the region's electricity loads are expected to stay at the current level....continuing a 20 year trend of low load growth"</p> <p>PSE's own annual reports, found on the SEC website support this conclusion, power demand has been decreasing; peak demand for PSE was in the winter of 2009.</p> <p>The Wall Street Journal, New York Times and other respected periodicals have all reported that electrical demand is decreasing all around the country. At the same time, alternatives to ever more wires are being developed. It is outrageous that a project like this would be approved for a "potential" demand that may never materialize, with the most expensive and environmentally destructive solution possible. The only people this could make sense to sit in the PSE board room or stockholders meeting. It makes absolutely no sense for PSE rate payers.</p> | 2/27/2016<br>22:10:19 | Sally      | McCray    |

I55-D -1 See response for Key Theme OBJ-2.

COMMENT

RESPONSE

I56-A-1

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |       |        |
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| I believe the flow studies that were used to justify the "Energize Eastside project" were flawed and consequently incorrect alternatives and conclusions are being presented. PSE has refused to provide information to clarify the assumptions used in their flow study. In addition, a load flow study was produced by Lauckhart-Schiffman that reaches significantly different results and they have offered the study to PSE who has refused to enter into discussions regarding the discrepancies. | 2/27/2016<br>21:12:39 | David | McCray |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|--------|

Essentially, PSE has based their flow study on several significant faulty assumptions. The winter season is the peak period of usage in our region. However, the PSE load flow study does not appear to use the winter seasonal ratings for critical transformers in the study. The winter ratings are significantly higher than summer ratings and consequently using the incorrect season causes a significant understated distortion in capacity.

In addition PSE did not reflect utilization of local generator capacity in their load flow study. Again this significantly distorts and understates the projected capacity.

Another aspect of the PSE study that makes no sense, is they actually show the flow to Canada increasing during local peak season needs. There is no requirement for PSE to transfer power to Canada and that faulty assumption falsely increases apparent usage in the local area.

The Lauckhart-Schiffman load flow study was prepared with corrected assumptions and they have offered to

I56-A -1 See response for Key Theme OBJ-3.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                           | Timestamp | First Name | Last Name |
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| I56-A-1 | <p>make that study available for review and discussion.<br/>This study needs to be followed up on.</p> <p>PSE is a foreign "for profit" company who has a clear profit motive for distorting the load flow results and getting the project approved for a guaranteed near 10% rate of return. The process and proposal is outrageous and the brakes need to be put on to get to the truth behind the numbers.</p> |           |            |           |
| I56-A-2 | <p>As far as alternatives presented in the EIS, only Alternative 2 - Integrated approach is justifiable. This alternative is safe and cost effective. It is better for the environment as it preserves thousands of trees, reduces carbon emissions, and provides for improved appearance of our neighborhoods.</p>                                                                                               |           |            |           |

I56-A -2 See response for Key Theme ALT-1.

COMMENT

RESPONSE

I56-B-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timestamp                     | First Name   | Last Name     |
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| <p>I understand PSE sold the Shuffleton power plant in recent years. This reduction of local production capacity has the effect of reducing the local energy supply and narrowing the margin between peak demand and available resources.</p> <p>PSE obviously has a plan to make significant profits for it's foreign shareholders. It doesn't seem right for PSE to pocket the proceeds from selling the local power plant and turn around and try to falsely justify the need for local ratepayers to pay for investing in increased capacity.</p> <p>PSE should be required to put the proceeds from the Shuffleton power plant back into additional power generation capabilities in the local market place. Local rate payers paid for the Shuffleton plant and PSE should not be allowed to sell off the asset and reduce important local power generation capability.</p> | <p>2/27/2016<br/>22:18:34</p> | <p>David</p> | <p>McCray</p> |

I56-B -1 See response for Key Theme ECON-4.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timestamp             | First Name | Last Name |
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| I57-A-1 | As a long-time resident of south Bellevue, I am very concerned about the current proposal for EIS. The forests and other wild places on the eastside are a unique and precious feature of our area, and once they are lost or damaged, they are not easily recovered. The number of trees that would be destroyed by the project is too high a loss to accept, in my opinion. I am aware that several alternatives are being considered. I beg that everyone involved choose the least destructive option in environmental terms. | 2/28/2016<br>16:19:52 | Katharine  | Phelps    |
| I57-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |            |           |

I57-A -1 See response for Key Theme P&A-2.  
 I57-A -2 Comment noted.

COMMENT

RESPONSE

I58-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timestamp             | First Name | Last Name |
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| The current PSE plan is based on a return for their Australian investment group. This is not a beneficial plan to Bellevue residences. The PSE (profit generating company) load studies are flawed and should not include energy being provided to Canada. This is a local issue as determined by FARC. Any Bellevue Council Member voting positively for this PSE proposed changes should be financially accountable for their vote via litigation. This is not a near term issue for Bellevue. This is a near term issue for the Australian investors Group. The City of Bellevue should not lay the cost of this Australian investor groups profit on the heads of their Bellevue population. Technology is advancing in a direction that needs less power. This is supported by all the current power consumption data that I have seen. The Bellevue City Council should require PSE to release all their data to Energize Eastside and any other organization before they make their decision. | 2/28/2016<br>19:35:13 | Thomas     | Campbell  |

I58-A -1 See response for Key Theme OBJ-1.

COMMENT

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| Energize Eastside Draft Environmental Impact Statement (DEIS) Comments | 2/28/2016 17:10:52 | Don | Miller |
|------------------------------------------------------------------------|--------------------|-----|--------|

Submitted by Don Miller, 5205 Lakehurst Lane SE, Bellevue (email: donald\_c\_miller@hotmail.com)

I Support the NO BUILD OPTION 4 based on the deceptive representation (or flawed analysis) of need by PSE, the outrageous environmental impacts and the inadequate consideration of viable alternatives.

COMMENTS DIRECTED TO THE CITY OF BELLEVUE AS LEAD AGENCY:

I'd like to start by acknowledging the work of the City staff to include alternatives in this DEIS that were never considered by PSE from the introduction of Energize Eastside; namely underground, underwater and energy efficiency options. Not only did PSE fail to consider alternatives, the company worked aggressively to undermine consideration and feasibility of these options. Further, the members of the Community Advisory Group (CAG) that represented municipalities and business worked in concert with PSE to denounce and repress consideration of alternatives. Thank you to the City of Bellevue staff who worked to include the alternatives in this DEIS. Interestingly, what has not been considered in the Energy Efficiency Alternative are specific code changes to the Building Code in the City of Bellevue that would ensure a sufficient power supply by modifying the way residential and commercial buildings are constructed.

PROJECT NEED Section 1.3:

The DEIS states "PSE has determined that there is a need" As a foreign owned for profit energy company we cannot merely accept their determination as justification to destroy our environment, property

I59-A-1

I59-A-2

I59-A -1 See response for Key Theme ALT-1.  
 I59-A -2 See responses for Key Themes OBJ-1 and OBJ-3.





I59-A-2

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values, neighborhood character and to burden the entire Puget Sound rate-payer base with the enormous cost of this project. This section of the DEIS goes on to discuss the secrecy and complexity of determining the need. While there are certain security concerns, the process is not as exotic as the DEIS would lead one to believe. I have attended a presentation of the Lauckhart-Schiffman load-flow study dated February 18, 2016 and found that with the appropriate security clearance and qualified engineers to conduct an alternative analysis the engineering concepts used to determine need are straightforward and rational. The extent to which PSE attempted to thwart this alternative analysis must be added to the actions of this foreign owned company. Although the City of Bellevue accepted validation of PSE's analysis the firm the City of Bellevue hired to validate PSE's analysis of need is a close ally and in PSE's pocket. In this regard, the City of Bellevue has failed to obtain an independent review of the need for this project. Further, the data used in the Lauckhart-Schiffman load-flow study uses the very database which PSE supplied to the Western Electricity Coordinating Council (WECC) prior to the conception of the Energize Eastside project. In that earlier version of PSE's own database, there was NO NEED for this project. NO NEED. Even in the extreme scenarios. Only after PSE altered the model to a state of substantial system failure combined with an excessive flow of power to Canada were they able to manipulate the database to create justification of the Energize Eastside project. The recent actions of PSE to justify this project continue to be based on discrediting valid information while simultaneously failing to provide any

I59-A-2

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substantiation to their claims. The bottom line is what matters here and as a foreign owned power company PSE's only concern is profit. They are burdening generations of Puget Sound citizens with the expense of this unneeded project as all rate-payers will bear the cost, not just the Eastside.

SECTION 6.1 UNAVOIDABLE ENVIRONMENTAL IMPACTS:

The DEIS states pursuing the Energize Eastside project with Overhead lines will create "significant unavoidable adverse impacts to plants and animals." This is probably the most important statement in the DEIS. While the City of Bellevue has gone to great lengths to suggest they will no longer consider if the need for the project is for energy or for profit, the analysis in this section is complete. To allow this project to go forward would be a catastrophe to the City of Bellevue and our neighbors. We must do everything we can to preserve the limited habitats that remain and therefore must re-evaluate the need using the independent Lauckhart-Schiffman load-flow study.

The simple environmental analysis conducted by PSE while the CAG evaluated route alternatives showed that over 8000 mature trees would be cut down if PSE builds overhead lines. The final project EIS will show permanent damage to dozens of streams, hundreds of wetlands, untold wildlife, foliage and trees. This project will devastate the remaining natural areas in our Cities. While our cities enact countless restrictions to protect the environment they seem willing to allow this un-needed project to proceed on the backs of the



|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp | First Name | Last Name |
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| I59-A-2 | hard working taxpayers and the defenseless environment. No Mitigation will ever replace the damage wrought by this profit motivated initiative.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |            |           |
| I59-A-3 | SECTION 10.7.2 NO ACTION ALTERNATIVE:<br>This section was written based on this assumption "No Action Alternative would likely lead to declining reliability of the electrical power supply on the Eastside" which the Lauckhart-Schiffman Load Flow Study shows to be a distortion of fact. The projected growth in the Eastside will not stop developers from building or people from moving here. If, in fact, there is a power supply issue it will be managed by PSE and the developers will be long gone and the houses will be occupied. This is a red herring that PSE has created to scare municipalities into approved this un-needed project. |           |            |           |
| I59-A-4 | SECTION 10.7.3.1.2 EXISTING CORRIDOR:<br>I am dumbfounded as to the purpose of Table 10-2 where it lists restrictions in Beaux Arts, Hunts Point and Yarrow Point areas of Bellevue. These areas have never been under consideration as a part of the Energize Eastside project. Is this boilerplate, diversion or just a waste of City resources as it has no value in this report.                                                                                                                                                                                                                                                                     |           |            |           |
| I59-A-5 | SECTION 10.7.1.14 PROPERTY VALUES:<br>The DEIS states " one study prepared for The Electric Power research Institute (EPRI) titled Transmission Lines and Property Values: State of Science (Mullins et al., 2003) was chosen for use as the source of information for this EIS because it synthesizes and summarizes the findings of over 50 surveys and                                                                                                                                                                                                                                                                                                |           |            |           |

- I59-A -3 See responses for Key Themes OBJ-1 and OBJ-3.
- I59-A -4 See response for Key Theme LU-5.
- I59-A -5 See response for Key Theme ECON-1.



I59-A-5

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studies."

Let's look at the problems with this study:

(1) It is something that was prepared for the power industry, not a study conducted by recognized experts in real estate value.

(2) It is a consolidation of 50 independent studies and without statistical validation of the individual studies it is merely opinion. As the DEIS quotes "no quantitative generalizations about findings from the studies can be made with any degree of reliability" This EPRI study masks the geographical and socioeconomic demographics that impacted the results of these studies. It is common knowledge that the Property values of undeveloped land increases with the introduction of utilities whereas the value of affluent neighborhoods decline with such intrusions yet the DEIS used a study that could provide neither of these conclusions.

(3) The DEIS claims "land use analysis in this Phase 1 Draft EIS considered effects on property values but found them to be inconclusive" yet the Draft EIS cites 12 conclusions from the EPRI study and over half of these conclusions point to decreased property value, increased selling times, negative opinion and other factors negatively impacting property values. The evidence from your selected and flawed study doesn't even support the claim you made in the DEIS.

(4) The DEIS makes no indication that real estate professionals were consulted to obtain valid information about the impact of power transmission lines on property values in affluent US communities which would have been a reasonable source to seek out.



COMMENT

RESPONSE

|         | <u>Comment</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <u>Timestamp</u> | <u>First Name</u> | <u>Last Name</u> |
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| I59-A-5 | Again, in this regard, the City of Bellevue has failed to obtain an independent analysis as the lead agency.<br>SECTION 11.6.3.5.3 NEIGHBORHOOD IMPACTS:<br>The DEIS states "It is anticipated that 85- to 100-foot-tall steel or wood poles would be used" which represents new and avoidable risks to citizens and their property due to the presence of the Cascadia Subduction Seismic Zone. Recent predictions are not                                     |                  |                   |                  |
| I59-A-6 | "if" a big earthquake will hit in the Pacific Northwest but "when." An article in The New Yorker describes the likely scenario as defined by the Federal Emergency Management Agency (FEMA)<br><br>A link to FEMA and the associated article can be found here: <a href="http://www.fema.gov/blog/2015-07-15/big-one-pacific-northwest-taking-conversation-action">http://www.fema.gov/blog/2015-07-15/big-one-pacific-northwest-taking-conversation-action</a> |                  |                   |                  |
| I59-A-7 | Introducing new risk to our communities is entirely preventable. The obvious choice is the NO BUILD OPTION, Alternative 4.                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |

I59-A -6 See responses for Key Themes PLS-2 and EARTH-1.  
I59-A -7 Comment noted.

160-A-1

160-A-2

Dear Elected Councilmember, *2/14/16*

By electing NOT to include the Energize Eastside project in the regional transmission plan, PSE avoids FERC Order 1000 compliance and side-steps NEPA review.

PSE has simply chosen to have Energize Eastside accomplish the goal of permitting more transmission capacity to Canada without asking for cost contributions from BPA, SCL, and others. If PSE is required to include Canadian Entitlement power in their load flow studies, then shouldn't PSE also be required to submit the Energize Eastside project as part of the regional transmission plan for cost allocation purposes? <https://www.columbia.edu/~drc/download.cfm?DVID=2152> (pg 15 of 21)

Why are PSE customers being asked to solely pay for electricity grid enhancements? Sincerely,

*Jeanne Bronwell*  
*BOBIE TRAINS*



TO: Mayor John Stokes  
 450 110th Ave. NE  
 P.O. Box 90012  
 Bellevue, WA  
 98009

**Did You Know?**

Can PSE have it both ways—claim it is required to include Canadian Entitlement electricity in power flow studies, then turn around and **elect** to have Energize Eastside OMITTED from regional transmission planning for cost allocation purposes?

Power flows to Canada “are required to be included in the PSE load flow studies.... It is not optional.” (PSE)

“...neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation....” (FERC ruling)

**“Energize Eastside” Is NOT A Done Deal**  
 Voice Your Concerns to  
**BELLEVUE CITY COUNCIL**

Dear Elected Councilmember, *2/10/16*

- Peak Load hours occur during a 6-hour period (6am-9am and 5pm-8pm)

- Over the past 16-year period, the region's temperature dipped to 23F, or below, on 70 days

- Of those 70 days, only 44 days occurred on weekday work days (non-weekend, non-holiday)

- 44 days x 6 hours = 264 hours vulnerable to Peak Demand outages, worst case

- During that same 16-year period, 139,992 hours are not vulnerable to Peak Demand outages

Assuming Energize Eastside avoided a power outage during every peak usage hour (264 hrs), Energize Eastside provides a maximum reliability improvement of 0.2%. (264hrs / 139,992 hrs). The City of Bellevue has a fiduciary duty to its citizens to analyze how to make measurable, meaningful improvements to the electricity grid. Sincerely,



TO: Councilmember  
 John Chelminiak  
 450 110th Ave. NE  
 P.O. Box 90012  
 Bellevue, WA  
 98009

RECEIVED  
 FEB 12 2016  
 CITY COUNCIL

**Did You Know?**

Are PSE customers being asked to overpay for reliability to falsely insure against an improbable climax of events—NINE events occurring simultaneously (N-9)? FERC and NERC require infrastructure investments to avoid N-2 situations. In reality, how much will Energize Eastside actually increase our reliability?

Energize Eastside provides a theoretical maximum reliability improvement of 0.2%

Energize Eastside will cost customers close to \$1 billion over 40 years

**“Energize Eastside” Is NOT A Done Deal**  
 Voice Your Concerns to  
**BELLEVUE CITY COUNCIL**

160-A -1 See response for Key Theme OBJ-1.

160-A -2 See response for Key Theme ECON-4.

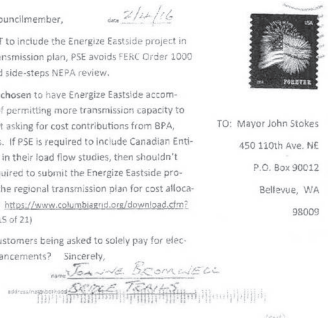
I60-B-1

Dear Elected Councilmember,

By electing NOT to include the Energize Eastside project in the regional transmission plan, PSE avoids FERC Order 1000 compliance and side-steps NEPA review.

PSE has simply chosen to have Energize Eastside accomplish the goal of permitting more transmission capacity to Canada without asking for cost contributions from BPA, SCL, and others. If PSE is required to include Canadian Entitlement power in their load flow studies, then shouldn't PSE also be required to submit the Energize Eastside project as part of the regional transmission plan for cost allocation purposes? <https://www.columbiariver.org/download.cfm?DVID=215>? (pg 15 of 21)

Why are PSE customers being asked to solely pay for electricity grid enhancements? Sincerely,



**Did You Know?**

Can PSE have it both ways—claim it is required to include Canadian Entitlement electricity in power flow studies, then turn around and elect to have Energize Eastside OMITTED from regional transmission planning for cost allocation purposes?

Power flows to Canada "are required to be included in the PSE load flow studies... It is not optional." (PSE)

"...neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation..." (FERC ruling)

**"Energize Eastside" Is NOT A Done Deal**

**Voice Your Concerns to**  
**BELLEVUE CITY COUNCIL**

I60-B -1 See responses for Key Theme OBJ-1 and Key Theme ECON-4.

**From:** [Clyde Moore](#)  
**To:** [info@energizeeastside.org](mailto:info@energizeeastside.org)  
**Subject:** FW: Comments on Energize Eastside Phase 1 Draft EIS  
**Date:** Monday, February 29, 2016 9:09:41 PM  
**Attachments:** [Answers to Clyde's Comments on Energize Eastside 4-2-14\\_final.doc](#)

February 28, 2014

To: City of Bellevue, CO-Lead Agencies, and PSE

Re: [Comments on Draft EIS, Energize Eastside Project](#)

I am a resident of the Olympus neighborhood in Newcastle who lives downgradient from and less than 500 feet east of the easement containing two parallel high-pressure liquid-fuel pipelines operated by Olympic Pipeline Company. Because PSE is considering constructing new towers to support a 230 kV transmission line in the same easement, I am very concerned about the potential for ruptures of the liquid-fuel pipelines and the release of flammable high-pressure fuel. This potential would exist during construction of the foundations for the new towers, as well as during erection of the towers and cable. A rupture of one of the liquid-fuel pipelines could pose a severe hazard to anyone downgradient and within as much as 3000 feet of the rupture, including construction workers, residents, motorists, pedestrians, hikers, or bicyclists.

The SEPA Rules state:

The severity of an impact should be weighed along with the likelihood of its occurrence. An impact may be significant if its chance of occurrence is not great, but the resulting environmental impacts would be severe if it occurred. WAC 197-11-794

If information relevant to adverse impacts is important to the decision and the means to obtain it are speculative or not known, then, the agency shall weigh the severity of possible adverse impacts which would occur if the agency were to decide to proceed in the face of uncertainty. If the agency proceeds, it shall generally indicate in the appropriate environmental review documents its worst case analysis and the likelihood of occurrence, to the extent this information can reasonably be developed. WAC 197-11-080(b)

My wife, Jean Garber, is a chemist who has participated in preparing the EISs on numerous regional projects, including solid waste landfills and the Northern Tier oil pipeline project. EISs on new solid waste landfills typically include a detailed analysis of the worst-case impacts of a potential rupture of the landfill bottom liner. Similarly, the EIS on the Northern Tier Pipeline project included a detailed analysis of the worst-case impacts from a potential rupture of the oil pipeline under Puget Sound and over land.

Potential hazards due to a leak in a landfill liner or a pipeline carrying unrefined oil don't come close to the severity of the potential hazards posed by the rupture of one of the Olympic high-pressure liquid-fuel lines. For evidence of this, one need only remember that in 1999 a severe rupture of the Olympic pipeline, followed by accidental ignition of gasoline vapors, caused the death of three people in a sparsely populated area of Whatcom County. That rupture was attributed to human error, as well as a faulty computer system and pressure-relief valve. The impacts would have been far greater in more densely populated areas like Renton, Newcastle, and Bellevue.

As a worst-case analysis, the EIS on the Energize Eastside project should analyze the impacts of a

162-A -1 See responses for Key Themes PLS-1 and PLS-4.

162-A -2 See responses for Key Themes PLS-4 and PLS-6.

162-A-1

162-A-1



I62-A-2

pipeline rupture and ignition of fuel of similar or larger magnitude, assuming instead that it occurred in the most densely populated area downgradient of the proposed new transmission line.

As part of that analysis, I request that the EIS on the Energize Eastside project provide the following information:

1. What is the location of the valves that shut off flow and relieve pressure in the fuel pipelines in the event of a rupture during construction of the new power poles and foundations? (Please show locations on a map.)
2. When were these valves last tested and closed, and how long did it take to close them?
3. Will these valves be tested immediately before construction begins, and at regular intervals during construction?
4. Will a "smart pig" be used to determine the condition of the pipe immediately before construction begins?
5. Considering the lowest viscosity fuel transported in the pipeline, the maximum pressure of the fuel in the pipe, the maximum duration of the leak, and if the rupture is near the bottom of a hill so the pipe drains through the rupture, what is the maximum volume of fuel that could be released? Please show detailed calculations.
6. Provide a map of the potential impact zones where fuel and fuel vapor could travel following a rupture anywhere along the construction zone, considering the volume of fuel released, the slope of the ground surface, wind velocity and direction.
7. What provisions will PSE make for evacuating residents and other persons at risk within the impact zones if a rupture occurs, and maintaining that evacuation?
8. What provisions will be made for containment of fuel from a rupture?
9. What provisions will be made to reduce the potential for ignition of the vapor plume and liquid from a rupture?
10. What provisions will be made for extinguishing vapor and liquid fires should they occur?

I62-A-3

If the proposed new transmission line is constructed in the same easement as the existing high-pressure liquid-fuel lines, PSE cannot guarantee with certainty that there would be no human error or equipment failure that could result in a severe rupture of the fuel lines and potential ignition of flammable fuel. Because the impacts of a severe rupture and fuel ignition could be catastrophic in the densely-populated neighborhoods near the pipeline easement, the EIS should regard these impacts as significant regardless of the likelihood of occurrence. To mitigate these potential impacts, I recommend at a minimum that the liquid-fuel lines be depressurized during construction of tower foundations and erection of towers and cable.

I am attaching to this email a memo I wrote to fellow Olympus residents and City of Newcastle staff in April 2014. That letter includes questions I posed to Lowell Rogers, an engineering consultant who is assisting PSE in the siting and preliminary design phase of the Energy Eastside project; as well as a brief summary of the answers he provided. I would also like these questions addressed in a detailed manner in the EIS.

Thank you for the opportunity to comment.

Clyde Moore  
 8436 129<sup>th</sup> Place SE  
 Newcastle, WA 98056-1764  
 Cell: 425-757-0111

I62-A -3 See response for Key Theme PLS-4.

COMMENT

RESPONSE

From: [Pamela Johnston](#)  
 To: [info@energizeeastside.org](mailto:info@energizeeastside.org)  
 Subject: Phase 1 Draft EIS Comment - Pamela Johnston  
 Date: Monday, February 29, 2016 6:41:34 PM

City of Bellevue  
 Development Services Department  
 Attn: Heidi Bedwell  
 450 110th Ave NE  
 Bellevue, WA 98004

Dear Ms. Bedwell,

I63-A-1

There is not a mutual understanding with the public for the need of the Energize Eastside project. The public's concerns have not been fully addressed, specifically the cost/benefits and safety.

I63-A-2

First, PSE waged a campaign that focused the public outreach on the location of the lines rather than the need for the project. This confused people into thinking that once the route was chosen that the project had no options other than the transmission lines.

Second, splitting the EIS process into Phase 1 Draft/Final and Phase 2 has further caused confusion. This is not in the spirit of transparency needed for the public to truly participate.

I63-A-3

Third, PSE has waged a marketing campaign to say that this is needed to address the reliability concerns on the Eastside which makes no sense given their reliability feedback to the City. See [http://www.ci.bellevue.wa.us/pdf/PCD/2015\\_Reliability\\_Workshop\\_Final\\_150805pm.pdf](http://www.ci.bellevue.wa.us/pdf/PCD/2015_Reliability_Workshop_Final_150805pm.pdf)

2014 Bellevue Reliability Overview which said

- 95 distribution circuits serving Bellevue 70 circuits [74%] had performance better than our system wide average 24 circuits [25%] experienced no unplanned outages 25 circuits [26%] had SAIDI or SAIFI exceeding system wide average figures • Distribution system serving Bellevue in 2014
- 65 circuits exceeded system wide average performance ... 43 (64%) once in five years 13 (19%) twice in five years 10 (15%) three times in five years 1 (1%) four times in five years
- 25 circuit had SAIDI or SAIFI exceeding system wide figures. 17 of these circuits have been addressed or require no corrective action. The remaining 8 circuits have improvement actions identified.

I63-A -1 See responses for Key Theme OBJ-1 regarding need, and Topic EMF and Topic

I63-A -2 See response for Key Theme EIS-2.

I63-A -3 See responses for Key Themes OBJ-2 and OBJ-3.



- All but 6 circuits serving Bellevue had performance within the 1st quadrant
- Bellevue CBD Performance continues to be very good

Fourth, the PSE proposed reliability projects should be implemented before a system as expensive as Energize Eastside

2014 Bellevue Reliability Overview which listed Proposed Distribution Reliability Projects as “ Mark 1 switch replacement in the Cherry Crest Neighborhood • Replacement of four oil-filled switches at Bellevue Square • Recloser installations on Eastgate 27, Factoria 13 & 25, Northrup 23 and South Bellevue 22 feeder circuits • Tree wire retrofit projects on Lake Hills 22, Medina 36, Overlake 15 and South Bellevue 26 • Bridle Trails 22 feeder undergrounding west of 140th AVE NE • CBD SCADA switch installation and future automation implementation (continuing) • 1/0 cable replacements in Crossroads area (continuing) • 33 cable replacement projects engineered for future construction (55,000 circuit feet) • 24 cable replacement projects scoped for future engineering (40,000 circuit feet)”

No project of the magnitude of Energize Eastside should be concerned until these known smaller projects are implemented and results addressed in an EIS, which need to be put into the need equation.

I63-A-3

Fifth, per [https://www.bellevuewa.gov/pdf/Manager/Final\\_Electrical\\_Reliability\\_Study\\_Phase\\_II\\_Report\\_2012.pdf](https://www.bellevuewa.gov/pdf/Manager/Final_Electrical_Reliability_Study_Phase_II_Report_2012.pdf), “Chapter 7 of the 2011 IRP discusses the needs for reinforcement of PSE’s electric transmission system during the next 10 years: 2011 through 2021. No part of the plan addresses needs for a 20-year planning horizon, which is probably appropriate because the uncertainties over such a long time horizon are substantial.”

and

“In its IRP, PSE discusses the demands put on the bulk power transmission systems in the region by the anticipated 5,000 MW of wind power that will be needed to meet the demands from the 84 Reference 9, Appendix E, Figure E-1.3. Future System Study 1101628.000 E0FO 0212 WRB3 101 regulators for renewable generation in the states of Washington and Oregon. Wind power is challenging for transmission system operators because such power can fluctuate significantly from the scheduled power flows over short time periods. This can lead to voltage instability as well as thermal overloads if no facilities are available to mitigate the fluctuations. The IRP is as detailed as possible considering the uncertainties surrounding all forecasts relative to the needs for future additions to the bulk power transmission systems in the Northwest. The plan appears to be sound for the next 10 years. Beyond the 10-year horizon, the uncertainties are too numerous to make any plan or forecast credible.”

**We should not spend the sums proposed for Energize Eastside for systems that are not flexible and adaptable to meet long time uncertainties.**

I63-A-4

Sixth, per the Final\_Electrical\_Reliability\_Study\_Phase\_II\_Report\_2012,

“PSE anticipates that 200 miles of new transmission lines operating at voltages above 100 kV and upgrading of 300 miles of existing transmission lines will be needed. One of the major uncertainties in the plan is the potential impact of new regulations. For example, new

I63-A -4 See response for Key Theme OBJ-2.

I63-A-4 regulations were issued in 2007 through the Energy Policy Act of 2005 regarding electric system reliability, which required PSE to make investments in software and hardware for operation of its 100 kV and above power delivery system.<sup>80</sup> Other uncertainties relate to the use of emerging distributed generation technologies, which might become an acceptable alternative to the use of central electric power stations. If distributed generation becomes cost effective, then the need for long distance power transmission lines will be reduced. Thus, for long-term planning, constant scanning of the environmental and technical factors that can impact the need for power lines is required.”  
New regulation potential is not adequately addressed in the EIS.  
The statement about emerging distributed generation technologies defines why Alternative 2 needs to move forward.

I63-A-5 Seventh, per the Final\_Electrical\_Reliability\_Study\_Phase\_II\_Report\_2012,  
“ It would be difficult for PSE to build its own bulk power transmission lines. Therefore, the most likely route will be to work through BPA’s network open seasons (NOS) process, which will probably be pursued by PSE through its membership in the Columbia Grid organization.”  
Why are they pursuing a local system to meet this regional demand.

I63-A-6 Eight,, PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I63-A-6 Ninth, alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS. It is a detriment to the residents that surround it and the area as a whole.

I63-A-7 Tenth, Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies.

I63-A-8 As the Northwest Power Council’s Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment. The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons. Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE’s transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible

I63-A -5 See response for Key Theme OBJ-3.  
I63-A -6 See response for Key Theme PLS-2.  
I63-A -7 See response for Key Theme ALT-1.  
I63-A -8 See response for Key Theme ALT-1.

I63-A-8 | plan for our energy future.

I63-A-9 | Finally, we should not spend the money for a project that does not have the benefit to the community that it needs in the lifetime of the project. The cost/benefit has not been proven. It has not been proven that this is necessary beyond a much smaller cost of accumulated smaller projects and conservation.

Sincerely,

Pamela Johnston

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*Pamela Johnston*  
3741 122nd Ave NE  
425.881.3301

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I63-A -9 See responses for Key Theme ECON-3.

COMMENT

RESPONSE

I64-A-1

| Comment                                                                                                                                                                                                                                                                                              | Timestamp            | First Name | Last Name |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| The current transmission line corridor provides a green space that is currently fenced, particularly between NE 24th ST and the 520 bicycle path. The corridor should include a path or trail so that people can use the space, particularly to provide access to the 520 bike path from NE 24th st. | 2/29/2016<br>8:16:30 | Shawn      | Steele    |

I64-A -1 See response for Key Theme REC-1.

COMMENT

RESPONSE

|         | <u>Comment</u>                                 | <u>Timestamp</u>    | <u>First Name</u> | <u>Last Name</u> |
|---------|------------------------------------------------|---------------------|-------------------|------------------|
| I65-A-1 | We don't accept Energize Eastside EIS program. | 3/1/2016<br>1:59:35 | Lily              | Yin              |

I65-A -1 Comment noted.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                        | Timestamp | First Name | Last Name |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I65-B-1 | Energize Eastside EIS program will cause negative environmental issue at Eastside. Please seeking other green and clean resources. We love this beautiful land and enjoy it. Will prevent any project from damaging this city. | 3/1/2016  | Lily       | Yin       |
| I65-B-2 |                                                                                                                                                                                                                                | 7:09:38   |            |           |

I65-B -1 Comment noted.  
 I65-B -2 Comment noted.



COMMENT

RESPONSE

|         | <u>Comment</u>                                  | <u>Timestamp</u>      | <u>First Name</u> | <u>Last Name</u> |
|---------|-------------------------------------------------|-----------------------|-------------------|------------------|
| I66-A-1 | We do not need a new PSE new transmission line. | 2/29/2016<br>21:31:27 | Lin               | Gong             |

I66-A -1 Comment noted.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                          | Timestamp             | First Name | Last Name |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I67-A-1 | I am writing to support the NO ACTION ALTERNATIVE . Here is why:                                                                                                                                                                                                                                 | 2/29/2016<br>21:12:55 | Amy        | Faith     |
|         | 1. PSE manipulated the data when doing the load study to create the appearance of need for this project.                                                                                                                                                                                         |                       |            |           |
|         | 2. When citizen advocacy group Cense asked you to redo your load study due to suspected inconsistencies, you refused, saying you were done doing studies.                                                                                                                                        |                       |            |           |
|         | 3. When Cense asked for permission to see the data you used for your load study, you refused, saying there was no need for anyone to review your work.                                                                                                                                           |                       |            |           |
|         | 4. Instead, Cense had to go through FERC in order to gain access to your data.                                                                                                                                                                                                                   |                       |            |           |
| I67-A-2 | 5. When Cense had a load study done using the same data as you, they only got your results after entering incorrect weather conditions, not clicking the proper boxes,adding the sale of energy to Canada and adding unrealistic situations that would not happen at the same time in real life. |                       |            |           |
|         | 6. The project would bring in a profit of 8.9% a year for PSE , while costing customers over a billion dollars over the life of the project.                                                                                                                                                     |                       |            |           |
|         | 7. Factoring in the sale of energy to Canada when the energy produced should be used to provide power for the cities the lines are to be going through instead.                                                                                                                                  |                       |            |           |
|         | This is not the way to work with the residents who would be adversely affected by your proposed project.                                                                                                                                                                                         |                       |            |           |
| I67-A-3 | All options, except that of the NO ACTION alternative would have significant negative effects on the environment, plants, animals, and people in those neighborhoods. The combination of over head power lines and pipeline adds even more danger. We need to                                    |                       |            |           |
|         | work together to find an economically reasonable                                                                                                                                                                                                                                                 |                       |            |           |
| I67-A-4 | solution that meets our energy needs without jeopardizing our health or the environment.                                                                                                                                                                                                         |                       |            |           |

- I67-A -1 Comment noted.
- I67-A -2 See responses for Key Themes OBJ-1 and OBJ-2.
- I67-A -3 Comment noted.
- I67-A -4 Comment noted.



| <u>Comment</u> | <u>Timestamp</u> | <u>First Name</u> | <u>Last Name</u> |
|----------------|------------------|-------------------|------------------|
|----------------|------------------|-------------------|------------------|

|                                                   |  |  |  |
|---------------------------------------------------|--|--|--|
| Thank you for listening.<br>Amy Faith<br>Bellevue |  |  |  |
|---------------------------------------------------|--|--|--|

COMMENT

RESPONSE

|         | <u>Comment</u>                            | <u>Timestamp</u>      | <u>First Name</u> | <u>Last Name</u> |
|---------|-------------------------------------------|-----------------------|-------------------|------------------|
| I68-A-1 | We don't need new PSE transmission lines! | 2/29/2016<br>21:08:23 | Edward            | Huang            |

I68-A -1 Comment noted.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Timestamp             | First Name | Last Name |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I69-A-1 | We have lived in Bellevue for 25 years and watched its fairly rapid, yet controlled, growth. We believe that the citizens of Bellevue, ourselves included, have a strong desire to preserve the quality of our environment for its present and future residents. We are concerned about the effect of the PSE Energize Eastside project on the environment in that it will cause the loss of over 5000 trees, create new landslide risks, potentially expose nearby residents to the deleterious effects of EMF, and ravage the beautiful landscapes through which above ground utility poles will pass under alternatives 1A or 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2/29/2016<br>17:14:23 | Terry      | Block     |
| I69-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |            |           |
| I69-A-2 | We might be willing to accept these very negative environmental impacts if we believed the assertions of PSE that there is a potential near term energy shortfall on the Eastside. Despite the fact that energy demand has been relatively flat in recent years, suggesting that conservation measures are taking hold, and PSE's projection to WECC is an only 0.5%/year growth in demand, PSE modeled its request for the project on a greater than 2% growth rate. Now we have been presented with new information from the Lauckhart-Schiffman Load Flow study, an independent study without the inherent financial conflicts of interest implicit in the PSE study, that suggests that there is no short-term, or even intermediate term, need for increased energy capacity/transmission on the Eastside. For this reason, we believe that PSE is motivated not by it's obligation to provide a consistent and ample energy supply to the Eastside, but rather a desire to maximize it's cash flow. Since the costs of this project, which will be considerable over the next two decades, are guaranteed by rate payers, we |                       |            |           |

I69-A -1 Comment noted.  
 I69-A -2 See responses for Topic PLS, Key Theme P&A-3, and Key Theme EMF-1 .

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timestamp | First Name | Last Name |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I69-A-3 | believe that our elected officials should protect our interests and those of our fellow citizens by reviewing the PSE proposal with a healthy skepticism.                                                                                                                                                                                                                                                                                                                                                           |           |            |           |
| I69-A-4 | In the twenty-first century, the technology of energy creation and conservation is changing rapidly. We are old enough to remember the WPPS fiasco, and we fear that Energize Eastside will be another repetition, albeit on a smaller scale, of these types of past mistakes. Alternative 2 appears to be a common sense approach to a twenty-first century issue rather than the anachronistic, costly, and environmentally unfriendly approach advocated by PSE.<br><br>Respectfully<br><br>Terry and Kari Block |           |            |           |

I69-A -3 See responses for Key Themes OBJ-1 and OBJ-3.  
 I69-A -4 See response for Key Theme ALT-1.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp             | First Name | Last Name |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
|         | I have thought the story of evil corporation riding into town to make a fast buck with no respect to its safety, traditions or values belongs to Hollywood. Sadly, it is happening right in my neighborhood.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2/29/2016<br>14:11:20 | Nailene    | Wiest     |
| I70-A-1 | I have attended several public hearings on the PSE's proposed power line project before making up my mind on the issue. Many of my neighbors make clear and forceful arguments that the proposed power line built over the aging deteriorating jet fuel pipeline is a serious safety risk. I believe, or used to believe, this fact alone should kill the project right on the drawing board. Not only did it take off, but shockingly the \$1.4 billion cost would be borne by PSE customers. The need assessment is simply not convincing. The Eastside is thriving, but the projected growth comes from increased residential and consumer-based commercial use, not the construction of some power-hungry industrial plants. The increased need can be met by efficient use of energy without reconfiguring the powerline. |                       |            |           |
| I70-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       |            |           |
| I70-A-3 | Citing woefully outdated technology as the "only" other options and alternatives to its proposed project, PSE is insulting the intelligence of our community. We know that better alternatives exist and with the rapid advance of technology, more solutions will become available in the coming years. Why should any sensible project planner commit huge resources now to build a white elephant? The only answer is the profit motive. The rate payers foot the bill and investors in a far-flung foreign country reap the gains.                                                                                                                                                                                                                                                                                         |                       |            |           |
| I70-A-4 | Residing in China for 15 years, I saw time and again                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |

- I70-A -1 Comment noted.
- I70-A -2 See response for Key Theme OBJ-2.
- I70-A -3 See response for Key Theme OBJ-1.
- I70-A -4 See responses for Key Theme ALT-1 and Key Theme EIS-2.



170-A-4

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

the rich and powerful in cahoots with corrupt officials trampling on citizens' rights in a country where there's no representative democracy, no accountability of the officialdom, no access to justice, few outlets to voice grievances. With a heavy heart I left China to retire in Newcastle only to find the same corporate greed, mendacity and utter disregard for community welfare. Luckily, we are in the U.S.A. We have recourse as citizens to demand strict safety standard and respect for our right-to-know. I support Alternative 2. It is absolutely the right thing to do to stop PSE from imposing its will on us, treating us like docile fools and making us pay for future accidents waiting to happen.



COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

|            |                       |          |           |
|------------|-----------------------|----------|-----------|
| Hello All, | 2/29/2016<br>10:47:07 | Rajendra | Kuramkote |
|------------|-----------------------|----------|-----------|

I am Raj Kuramkote. I live at 8613 129th Court South East Newcastle. This is with reference to Proposed PSE transmission line project (Alternate 1-A) Pages 2-21 to 2-25 18 miles of new overhead 230 kV transmission lines + new transformer. We have the power line running directly behind our house. We have lived in our house for the last 18 years. I work for Intel corporation and I am stationed in Microsoft campus in Redmond. I have good visibility into how these pillars of technology are handling the movement towards green energy. At Microsoft campus they have started experimenting with powering the street lights with both solar panel and little wind turbine both on the same pole that houses the lamp. This is a great self-powered approach to lighting for Northwest environment. At Intel in the Oregon campus, they have installed micro wind turbines on top of a building along with solar panels that generate 65 kilowatt-hours of power that will be used to provide electricity to the conference center. They have a number of such initiatives all over the world and are recognized by the United States EPA agency for seven years in a row. Please take a look at print-outs of these green energy initiatives. These are just two examples of many more that forward looking corporations are making.

I71-A-1

We are concerned about losing our home which has a perfect setting in terms of proximity to Seattle and Bellevue and at the same time is in a green neighborhood and it will be hard to find another similar property. We are concerned about safety impact of the proposed plan for folks living in proximity to the power

I71-A-2

I71-A-3

I71-A -1 Comment noted.  
 I71-A -2 See response for Key Theme LU-1.  
 I71-A -3 See response for Key Theme PLS-2.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                       | Timestamp | First Name | Last Name |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I71-A-3 | line. We are concerned that if the plan goes through, there is no turning back and our neighborhood is forever changed.                                                                                                                                                                                                       |           |            |           |
| I71-A-4 |                                                                                                                                                                                                                                                                                                                               |           |            |           |
| I71-A-5 | I strongly urge PSE and cities of King county to stop eastside energy efforts that are backward looking and start working with both corporations/city Governments and residential customers to move towards green energy installations in our fast growing cites and set an example for other energy corporations across U.S. |           |            |           |
| I71-A-6 | I reject proposed PSE transmission line project (Alternate 1-A).                                                                                                                                                                                                                                                              |           |            |           |
|         | Thanks for allowing me to present my case.                                                                                                                                                                                                                                                                                    |           |            |           |
|         | Sincerely,<br>Raj Kuramkote                                                                                                                                                                                                                                                                                                   |           |            |           |

I71-A -4 See response for Key Theme VR-5.  
 I71-A -5 Comment noted.  
 I71-A -6 Comment noted.

COMMENT

RESPONSE

172-A-1

**From:** [Gloria Northcroft](#)  
**To:** [info@energizeEastsideEIS.org](mailto:info@energizeEastsideEIS.org)  
**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov)  
**Subject:** EnergizeEastsideEIS  
**Date:** Tuesday, March 01, 2016 3:08:12 PM

Dear Sirs:  
 My name is Gloria Northcroft and I reside at 5015 145th Pl SE, Bellevue, WA 98006. I have lived in Bellevue for 35 years.  
 As a long time Bellevue resident, I feel it is very important that the PSE energy plan move forward. Using the existing corridor makes the most sense and will have the least impact. Alternatives that will solve the problem have been proposed. These should be carried forward. We need increased energy capacity for the future.  
 Delaying the project or worse no action at all will result in undesirable risks to our community and our economy.  
 Thank you,  
 Gloria Northcroft

Gloria Northcroft R.Ph., M.S.  
 G&G Life Sciences Consultant, LLC  
 P: 425-643-6620  
 C: 206-979-5435  
<http://www.gglscconsultant.com/>

172-A -1 Comment noted.

COMMENT

RESPONSE

|         | <u>Comment</u>                                                                          | <u>Timestamp</u>    | <u>First Name</u> | <u>Last Name</u> |
|---------|-----------------------------------------------------------------------------------------|---------------------|-------------------|------------------|
| I73-A-1 | We do not support having the overhead option. Please consider other options. Thank you! | 3/1/2016<br>7:21:31 | xue               | song             |

I73-A -1 Comment noted.

COMMENT

RESPONSE

I74-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                          | Timestamp           | First Name | Last Name |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|-----------|
| It would be INSANE to put PSE towers along Ripley Lane. Not only would it be destroying one of the prettiest routes along Lake Washington but it would be putting our environment and neighbors health in danger. We pay so much in taxes, much more than the average resident, to protect our environment so why would we jeopardize that? I dont think its worth the risk. I vote for Alternative 1, Option D. | 3/1/2016<br>7:48:20 | Irene      | Wilmore   |

I74-A -1 See responses for Key Themes ALT-1 and ALT-3.

COMMENT

RESPONSE

**From:** [Margaret Moore](#)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** PSE proposed EnergizeEastside project comments  
**Date:** Tuesday, March 01, 2016 4:38:26 PM  
**Attachments:** [PSE DEIS statement, March 2016.docx](#)

---

I75-A-1

Please find attached my comments regarding the proposed PSE project and the DEIS process underway. This project is highly suspect for the reasons outlined and PSE should pay great attention to enhancing its role as a forward-thinking corporation, rather than reverting to dangerous and out-dated methods to enhance profits within a very short timeline.  
Margaret Moore  
mmooreii@comcast.net

I75-A -1 See response for Key Theme OBJ-1.

March 2016

RE: Proposed PSE Energize Eastside Project

I75-B-1

The Proposed PSE project which is now in Phase 1 of the DEIS process is of great concern to me and all citizens who live on the Eastside. In addition to having enormous environmental impact on the entire region, it is increasingly being disproven as a necessary project. Touted by PSE - an off-shore consortium - as critical to future needs, it is designed to enhance its investment and ensure emergency power to Canada at the expense of rate-payers throughout our region. Better methods to meet future needs are available and will continue to be developed before our Eastside requirements become crucial.

I75-B-2

1. Of primary significance to the current EIS process, **the ENVIRONMENTAL IMPACT is enormous**. Over the 18 mile length of the plan, thousands of trees and numerous homes must be destroyed to make way for the required easement for 240kV wires on up to 135 foot poles. This is to say nothing of the archaic, ugly towers required to complete the installation. Far better ways exist to meet future needs than to revert to this old-fashioned method of power transmission. New, proven ways are happening -- new technologies are coming on line, utility efficiencies are developing, to say nothing of people and businesses reducing their consumption voluntarily and/or through pricing schedules.

I75-B-3

2. It is **unthinkable to ignore the public SAFETY issues** around constructing these heavy-duty transmission wires over an existing, aging pipeline carrying high octane jet fuel under great pressure. In this active earthquake zone so much could happen to damage both the fuel line and the transmission towers/lines. It's hard enough to think about the existing situation, let alone consider having the new lines involved with the Olympic Pipeline in a seismic event. We have had ample evidence of the unthinkable happening in similar situations to not be extremely concerned about the possibility here and do everything we can to prevent it.

I75-B-4

3. Finally, **the NEED is not there** for the foreseeable future. PSE has created a scenario to enhance their investment within the window in which they must divest, thereby increasing profits for Australian and Canadian investors. Who pays for this \$215 million dollar project? We the rate-payers will, while they continue to receive their guaranteed 9.84% ROI. PSE selected and edited data to enhance their request. It refused to allow a citizen's panel offer solutions or comments that were outside PSE's preferred scenario. (A surprising number of citizens on that review panel refused to sign the final report because it was shaped by PSE and did not allow a truly open process.) PSE has refused to acknowledge the Lauckhart-Schiffman load-flow study created by experts in energy planning -- indeed Lauckhart previously was PSE's expert!

I75-B-5

It is very important that the current DEIS review pay attention to all data and information available and come to a conclusion that truly reflects more than the self-serving rationale presented by PSE. When a recommendation is made now, it should closely reflect Alternative 2 -- an option that truly considers more than 20th century thinking about how to continue power flowing to the Eastside far into the future.

I75-B-6

Sincerely,

Margaret R. Moore  
4707135th PL SE  
Bellevue, WA 98006  
425-747-1388

- I75-B -1 See response for Key Theme OBJ-1.
- I75-B -2 See responses for Key Themes ALT-1 and ALT-3.
- I75-B -3 See responses for Key Themes PLS-2 and PLS-3 and Key Theme EARTH-1.
- I75-B -4 See responses for Key Themes OBJ-1 and OBJ-3.
- I75-B -5 Comment noted.
- I75-B -6 See response for Key Theme ALT-1.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timestamp            | First Name | Last Name |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I75-C-1 | The Proposed PSE project which is now in Phase 1 of the DEIS process is of great concern to me and all citizens who live on the Eastside. In addition to having enormous environmental impact on the entire region, it is increasingly being disproven as a necessary project. Touted by PSE - an off-shore consortium - as critical to future needs, it is designed to enhance its investment and ensure emergency power to Canada at the expense of rate-payers throughout our region. Better methods to meet future needs are available and will continue to be developed before our Eastside requirements become crucial.                                                                                 | 3/1/2016<br>16:24:17 | Margaret   | Moore     |
| I75-C-2 | 1. Of primary significance to the current EIS process, the ENVIRONMENTAL IMPACT is enormous. Over the 18 mile length of the plan, thousands of trees and numerous homes must be destroyed to make way for the required easement for 240kV wires on up to 135 foot poles. This is to say nothing of the archaic, ugly towers required to complete the installation. Far better ways exist to meet future needs than to revert to this old-fashioned method of power transmission. New, proven ways are happening -- new technologies are coming on line, utility efficiencies are developing, to say nothing of people and businesses reducing their consumption voluntarily and/or through pricing schedules. |                      |            |           |
| I75-C-3 | 2. It is unthinkable to ignore the public SAFETY issues around constructing these heavy-duty transmission wires over an existing, aging pipeline carrying high octane jet fuel under great pressure. In this active earthquake zone so much could happen to damage both the fuel line and the transmission towers/lines. It's hard enough to think about the existing situation, let alone consider having the new lines involved with                                                                                                                                                                                                                                                                        |                      |            |           |

- I75-C -1 See response for Key Theme OBJ-1.
- I75-C -2 See responses for Key Themes ALT-1 and ALT-3.
- I75-C -3 See responses for Key Themes PLS-2 and PLS-3 and Key Theme EARTH-1.





COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Timestamp | First Name | Last Name |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I75-C-3 | the Olympic Pipeline in a seismic event. We have had ample evidence of the unthinkable happening in similar situations to not be extremely concerned about the possibility here and do everything we can to prevent it.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |            |           |
| I75-C-4 | 3. Finally, the NEED is not there for the foreseeable future. PSE has created a scenario to enhance their investment within the window in which they must divest, thereby increasing profits for Australian and Canadian investors. Who pays for this \$215 million dollar project? We the rate-payers will, while they continue to receive their guaranteed 9.84% ROI. PSE selected and edited data to enhance their request. It refused to allow a citizen's panel offer solutions or comments that were outside PSE's preferred scenario. (A surprising number of citizens on that review panel refused to sign the final report because it was shaped by PSE and did not allow a truly open process.) PSE has refused to acknowledge the Lauckhart-Schiffman load-flow study created by experts in energy planning – indeed Lauckhart previously was PSE's expert! |           |            |           |
| I75-C-5 | It is very important that the current DEIS review pay attention to all data and information available and come to a conclusion that truly reflects more than the self-serving rationale presented by PSE. When a recommendation is made now, it should closely reflect                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |            |           |
| I75-C-6 | Alternative 2 – an option that truly considers more than 20th century thinking about how to continue power flowing to the Eastside far into the future.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |            |           |

- I75-C-4 See responses for Key Themes OBJ-1 and OBJ-2.
- I75-C-5 Comment noted.
- I75-C-6 See response for Key Theme ALT-1.

March 1, 2016

Ms. Heidi Bedwell, Senior Planner  
Land Use Division-Development Services  
City of Bellevue  
450 110th Avenue NE  
Bellevue, WA 98004

Dear Ms. Bedwell,

Please find enclosed my comments regarding the PSE EnergizeEastside project currently under DEIS review. It is imperative that smarter heads prevail at City Hall to be sure that we are not railroaded into something that is not needed in its current form and is certain to be highly dangerously placed and destructive to our prized Eastside environment.

I hope you can use your leverage to ensure that Bellevue takes a courageous role in stopping this runaway project before it is beyond retrieve.

Sincerely,



Margaret Moore  
4707 135th PL SE  
Bellevue, WA 98006  
425-747-1388  
mmooreii@comcast.net

March 2016

RE: Proposed PSE Energize Eastside Project

175-D-1

The Proposed PSE project which is now in Phase 1 of the DEIS process is of great concern to me and all citizens who live on the Eastside. In addition to having enormous environmental impact on the entire region, it is increasingly being disproven as a necessary project. Touted by PSE - an off-shore consortium - as critical to future needs, it is designed to enhance its investment and ensure emergency power to Canada at the expense of rate-payers throughout our region. Better methods to meet future needs are available and will continue to be developed before our Eastside requirements become crucial.

175-D-2

1. Of primary significance to the current EIS process, **the ENVIRONMENTAL IMPACT is enormous.** Over the 18 mile length of the plan, thousands of trees and numerous homes must be destroyed to make way for the required easement for 240kV wires on up to 135 foot poles. This is to say nothing of the archaic, ugly towers required to complete the installation. Far better ways exist to meet future needs than to revert to this old-fashioned method of power transmission. New, proven ways are happening – new technologies are coming on line, utility efficiencies are developing, to say nothing of people and businesses reducing their consumption voluntarily and/or through pricing schedules.

175-D-3

175-D-4

2. It is **unthinkable to ignore the public SAFETY issues** around constructing these heavy-duty transmission wires over an existing, aging pipeline carrying high octane jet fuel under great pressure. In this active earthquake zone so much could happen to damage both the fuel line and the transmission towers/lines. It's hard enough to think about the existing situation, let alone consider having the new lines involved with the Olympic Pipeline in a seismic event. We have had ample evidence of the unthinkable happening in similar situations to not be extremely concerned about the possibility here and do everything we can to prevent it.


175-D-5

3. Finally, **the NEED is not there** for the foreseeable future. PSE has created a scenario to enhance their investment within the window in which they must divest, thereby increasing profits for Australian and Canadian investors. Who pays for this \$215 million dollar project? We the rate-payers will, while they continue to receive their guaranteed 9.84% ROI. PSE selected and edited data to enhance their request. It refused to allow a citizen's panel offer solutions or comments that were outside PSE's preferred scenario. (A surprising number of citizens on that review panel refused to sign the final report because it was shaped by PSE and did not allow a truly open process.) PSE has refused to acknowledge the Lauckhart-Schiffman load-flow study created by experts in energy planning – indeed Lauckhart previously was PSE's expert!

175-D-6

It is very important that the current DEIS review pay attention to all data and information available and come to a conclusion that truly reflects more than the self-serving rationale presented by PSE. When a recommendation is made now, it should closely reflect Alternative 2 – an option that truly considers more than 20th century thinking about how to continue power flowing to the Eastside far into the future.

Sincerely,

  
Margaret R. Moore  
4707135th PL SE  
Bellevue, WA 98006  
425-747-1388

- 175-D -1 See response for Key Theme OBJ-1.
- 175-D -2 See response for Key Theme VR-5.
- 175-D -3 See response for Key Theme ALT-1.
- 175-D -4 See responses for Key Themes PLS-2 and PLS-3 and Key Theme EARTH-1.
- 175-D -5 See responses for Key Themes OBJ-1 and OBJ-3.
- 175-D -6 See response for Key Theme ALT-1.

COMMENT

RESPONSE

I76-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Timestamp            | First Name | Last Name |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I would like to voice my opposition to the Energize Eastside project, in particular, any options that require bigger and/or more power lines to be constructed. We are living in an era where major technological advances in power are occurring, both on the generation side (i.e. solar, battery storage) and the consumption side (more power-efficient electronic devices, LED bulbs). The Eastside needs to be a beacon for these new and future energy technologies to be deployed, not a reminder of yesteryear via unsightly and unnecessary power lines. | 3/1/2016<br>15:49:54 | Jamie      | Moy       |

I76-A -1 Comment noted.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timestamp            | First Name | Last Name |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I77-A-1 | Everything I am seeing is that proposed action is for the profit of the utilities rather than the well-being of the community. The analysis on which the case for the added capacity was built on is weak and not representative of real-world reality, which raises red flags on true motives. If there are other communities that need the electrical capacity, the least the utility can do is minimize the long-term impact to the Seattle Eastside community (use existing overhead lines, underground lines, underwater lines, or explore other integrated approaches). | 3/1/2016<br>23:27:45 | Eugene     | Choi      |
| I77-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      |            |           |
| I77-A-3 | Alternate 1-A's impact on the character of the neighborhoods and especially the physical impact to New Castle homes is appalling. Additionally, why would anyone put high voltage lines close to the Olympic Pipeline?                                                                                                                                                                                                                                                                                                                                                        |                      |            |           |
| I77-A-4 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      |            |           |

- I77-A -1 See response for Key Theme OBJ-1.
- I77-A -2 See response for Key Theme ALT-1.
- I77-A -3 See response for Key Theme VR-5.
- I77-A -4 See response for Key Theme PLS-3.

Brian Elworth  
8605 129th Ct SE, Newcastle

- Research integrity
- Science and engineering research have standards of integrity
  - Researchers are accountable for what they report
- The EIS is essentially a research document
  - Its purpose is to serve as an organized consolidation of factual information related to the environmental impact of a proposal.
- Although the standards of integrity are much lower for the EIS
  - It's important the EIS be reasonably factual
- This EIS affects not just Bellevue but all the cities in the region
  - It affects a very broad 18 mile region
- Unsupported opinions and unsupported summary conclusions don't belong in the EIS
  - Please eliminate them

I78-C-1

Brian Elworth  
8605 129th Ct SE, Newcastle

- Washington Administrative Code WAC 197-11-400 "An EIS shall provide impartial discussion of significant environmental impacts and shall inform decision makers and the public of reasonable alternatives, including mitigation measures, that would avoid or minimize adverse impacts or enhance environmental quality."
- Process should comply with spirit, intent, and letter of the WAC
- Cities and residents of Redmond, Kirkland, Newcastle and Renton depend on Bellevue as lead agency to provide a document with
  - integrity
  - transparency
  - objectivity
  - thoroughness

I78-C -1 See response for Key Theme EIS-2.

178-C-1

- SEPA Handbook section 3.3 states “The lead agency is responsible for the content of the EIS...”
  - You are responsible for the content of the EIS
- Regardless of its source,
  - every word,
  - every sentence,
  - every paragraph,
  - every diagram,
  - every figure,
  - every table in the DEIS is owned by Bellevue
- If you put it in the EIS, you own it
- Ownership implies a trust that declarations of fact are
  - Accurate
  - Complete
- Please eliminate unsupported opinions and unsupported summary conclusions

178-C-2

- *“This EIS will not be used to reject or validate the need for the proposal.”* (page 1-5)
- But stating assertions as facts implies validation
  - *“This deficiency is expected to arise as a result of anticipated population and employment growth on the Eastside...”* (page 1-1)
  - *“Based on federally mandated planning standards, PSE’s analysis found that the existing transmission system could place Eastside customers and/or the regional power grid at risk of power outages...”* (page 1-2)
- Both statements are PSE opinions not facts

178-C -2 Comment noted.

178-C-2

- *“Stantec prepared a memorandum evaluating the stated need for the project, and confirmed that PSE’s Eastside Needs Assessment was conducted in accordance with industry standards for utility planning (Stantec, 2015). See Appendix A for more information.”* (page 1-5)
- Compare the needs diagram PSE advertised to the CAG against the diagram in the EIS
  - Both presumably “conducted in accordance with industry standards”
  - Divergent by 75 Megawatts in first year.
  - Wild divergence shows conclusions may be irrelevant to true needs and capacities
- There is reasonable doubt in assertions being stated as facts by Bellevue
  - This is not proper research integrity

178-C-3

- Question is, what training and mentoring on the proper conduct of research has been provided to the individuals who are responsible for the content of the DEIS?
- If no formal training or mentoring is in place what is the plan to rectify this process deficiency and provide a product for public review that is compliant with basic research standards?
- If concept of research integrity is not well understood
- If process for research integrity is unclear
- Get guidance
  - “On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition (2009): National Academies Press.
  - “Responsible Science”, Volume I: Ensuring the Integrity of the Research Process (1992). National Academies Press

178-C -3 See response for Key Theme EIS-1.



178-C-4

- I recommend Bellevue
  - step back,
  - Get the proper research training
  - Look at the real issues
    - Is this about what PSE needs or is it about what the communities and cities the region needs
    - SEPA Handbook section 3.3.1 *"Agencies are encouraged to describe a proposal as an objective, particularly for agency actions."*
    - Objective should be in terms for the region not for PSE
    - Alternative statement: "Identify and address energy needs for the region in the next decade."
  - Pursue a solution for the common good
    - Energize Eastside and the current EIS process are not it

178-C -4 See response for Key Theme EIS-1.

COMMENT

RESPONSE

Speakers #2 Newcastle Public Hearing 2.27.16

- Brian Elworth  
8605 129th Ct SE, Newcastle
- Olympus Homeowner Association
- Lived in area since 1963
- Lived in current residence since 1988
- Newcastle is my city
- Olympus is my neighborhood
- This is my home
- Regardless of any outcome of this process it must be safe

1

I78-D-1

- Safety and my community
- Uphill battle by residents since the beginning of the Community Advisory Group (CAG)
- Safety is still not taken seriously
- DEIS: *“Risk of accidental rupture and explosion of Olympic Pipeline would increase during construction but be minimize by employing best management practices.”* (page 1-32)
  - Bellingham disaster was 5 years after construction
  - The project leading to the Bellingham disaster was very closely monitored
- DEIS: *“Risk to the public is not likely from constructing or operating the project near pipelines due to extensive safety policies and regulations.”* (page 1-32)

2

- I78-D -1 See response for Key Themes PLS-2, PLS-3, and PLS-5.
- I78-D -2 See responses for Key Themes PLS-2 and PLS-5.



- US DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) Hazardous Liquid Pipeline Incidents
  - ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY (06/12/2010 - 09/09/2015)
    - \$68,772,650
  - THIRD PARTY EXCAVATION DAMAGE (01/09/1996 - 12/08/2015)
    - \$144,702,203
  - UNSPECIFIED CORROSION (10/28/1997 - 11/19/2009)
    - \$6,062,845
  - MISCELLANEOUS (01/15/1996 - 12/08/2015)
    - \$160,891,735
    - (Bellingham disaster classified as miscellaneous)
  - Injuries and fatalities (02/27/1996 – 12/23/2015)
    - 23 injuries (8 in 06/10/1999 Bellingham Olympic Pipeline disaster)
    - 29 deaths (3 in 06/10/1999 Bellingham Olympic Pipeline disaster)
- All accomplished “by employing best management practices” and “extensive safety policies and regulations”

I78-D-2

3

PSE's selected corridor 'M' is much too narrow to safely colocate 230KV transmission line metal towers and hazardous liquid pipeline

- Other sections of corridor equally high risk
- PSE has been told of safety risk repeatedly
- PSE asserts colocation is a good thing for safety (PSE to Newcastle City Council and Planning Commission February 2 2016)

I78-D-3

- BPA, Chevron, Arco, NACE, DNV GL and many more experts realize significant hazards in colocation
  - A high energy ignition source next to a highly flammable material is not a good thing
  - Induced AC corrosion is not a good thing
  - Need 50' separation between towers, supports, and grounding lines and all underground pipelines and hazardous liquid pipeline corridors
  - The existing 'M' corridor is not wide enough
- Why is PSE's position so radically different than the rest of the industry?
  - Because they are wrong
  - It is not safe
  - Why is this being ignored in the DEIS?

NACE National Association of Corrosion Engineers.” 4

I78-D -3 See response for Key Theme PLS-3.

- I78-D-4 • DEIS: “The process...includes an objective understanding...in order to identify feasible and reasonable project alternatives for consideration in the EIS.”(page 1-5)
- I78-D-4 • You have a choice to make, either:
  - Reject alternative 1 since it’s not technically feasible nor reasonable due to extreme safety risk, or
  - Address the impact of the mitigations to make it safe
- I78-D-5 • Pick one or the other
  - Don’t fail to step up to this critical choice
  - Right now the DEIS looks like a white wash
- I78-D-5 • The project should not impose safety risks to residents

5

- I78-D-6 • Community
- I78-D-6 • If corridor ‘M’ turns into Mega ‘M’ to provide necessary safe margins:
- I78-D-6 • Many homes will be condemned and destroyed
- I78-D-6 • Up to 51 homes in Olympus gone (if centered on the existing corridor)
  - These are not just concrete, 2x4s, and drywall structures
  - These are homes of families
  - Homes are places where children sleep at night
  - Homes are where neighbors have been neighbors for over a quarter century
  - Homes are where families enjoy life
  - Homes are part of a community
  - In Olympus, 20% of a well established community erased
- I78-D-7 • How is the impact of this loss being addressed
  - Appears to be ignored
- I78-D-7 • What’s the visual character of a former neighborhood with metal towers replacing destroyed homes
  - The face of a neighborhood with a bunch of teeth knocked

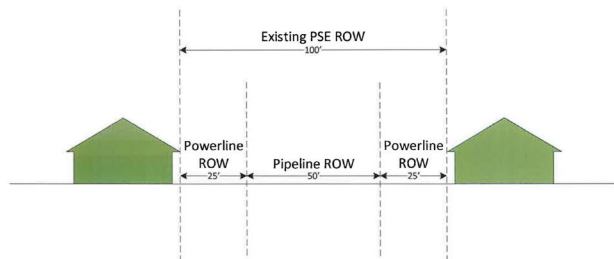
Cambridge Dictionary: A condemned building that has been officially judged not safe for people to live in or to use 6

- I78-D -4 Comment noted.
- I78-D -5 Comment noted.
- I78-D -6 See response for Key Theme LU-1.
- I78-D -7 See response for Key Theme VR-5.

- To repeat:
- You have a choice to make, either:
  - Reject alternative 1 since it's not technically feasible nor reasonable due to extreme safety risk, or
  - Address the impact of the mitigations required to make it safe
- Choose one

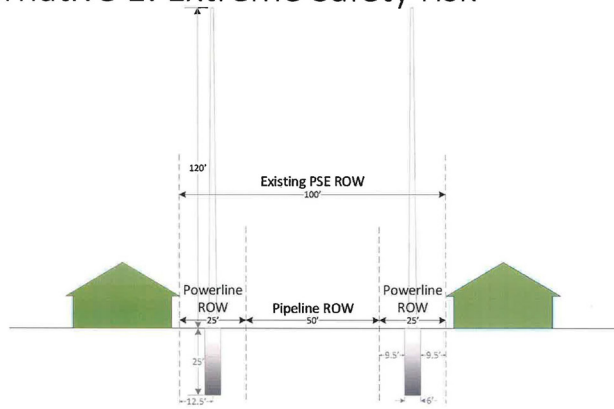
7

Current state



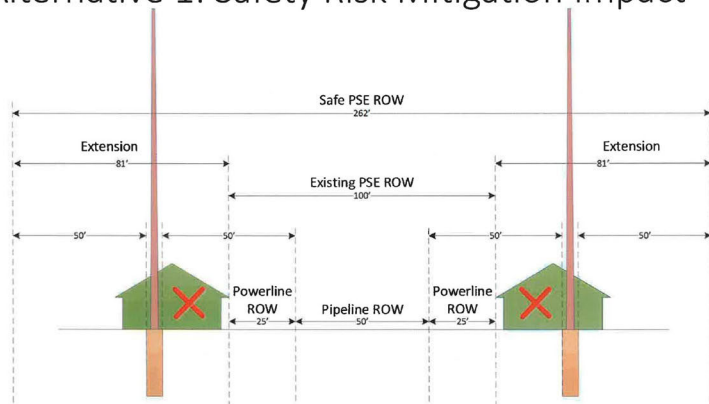
8

### Alternative 1: Extreme Safety risk



9

### Alternative 1: Safety Risk Mitigation Impact



10

I78-D-8

- EIS should include complete mitigation of safety risks including:
- Electromagnetic
  - Corrosion from induced AC currents
  - High energy events, e.g., lightning, arcing, structure failure
- Thermal
  - Immediate breach - transmission line has 10,000 times the arc voltage needed to melt ductile iron pipe
  - Latent damage – Event of sufficient energy to rupture cathodic protection insulation
- Mechanically induced failure
  - Immediate rupture
  - Construction induced latent failure, e.g., Bellingham disaster
  - Long term stress from forces on transmission line structure

11

- Project provides a 4-fold increase in energy available to aggravate a line fault condition.
  - Mitigation for this is physical separation
- Key change in the supporting structure is replacement of the relatively insulating wooden supports with highly conductive metal supports.
  - Mitigation for this is physical separation
- AC magnetic field in the power lines induce a current in adjacent parallel pipes causing corrosion and shock hazard for personnel contacting the pipe and its fittings and valves.
  - Mitigation for this is physical separation

12

I78-D -8 See response for Key Theme PLS-1.

I78-D-9

- Industry standards call for a minimum 50' separation
- Pipeline now and in the future be anywhere in the pipeline corridor
- 50' setback from the pipeline corridor boundary to
  - Base of transmission tower
  - Supporting structures
  - Grounding lines
  - Same separation applies
- Same setback needed between transmission line components and any utility or residential pipes

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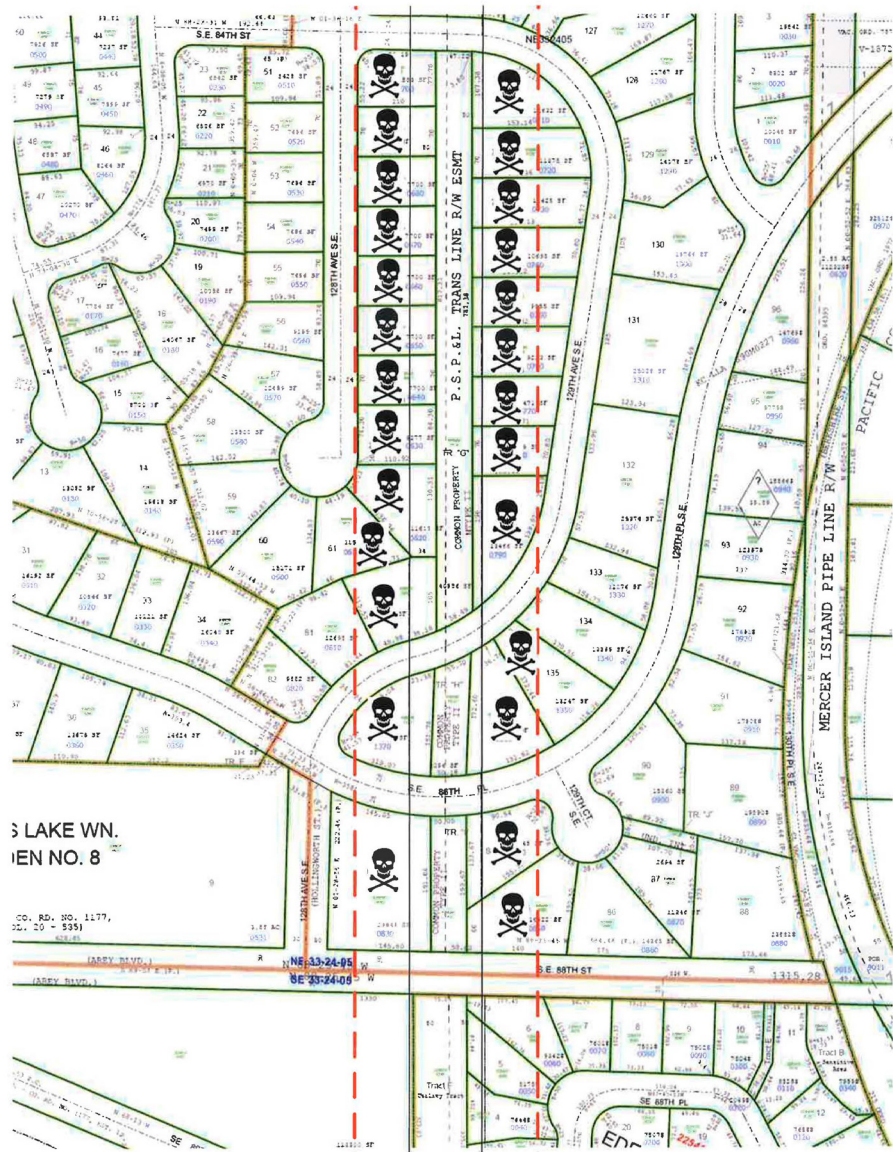
### Criteria for Pipelines Co-Existing with Electric Power Lines – DNV GL October 2015

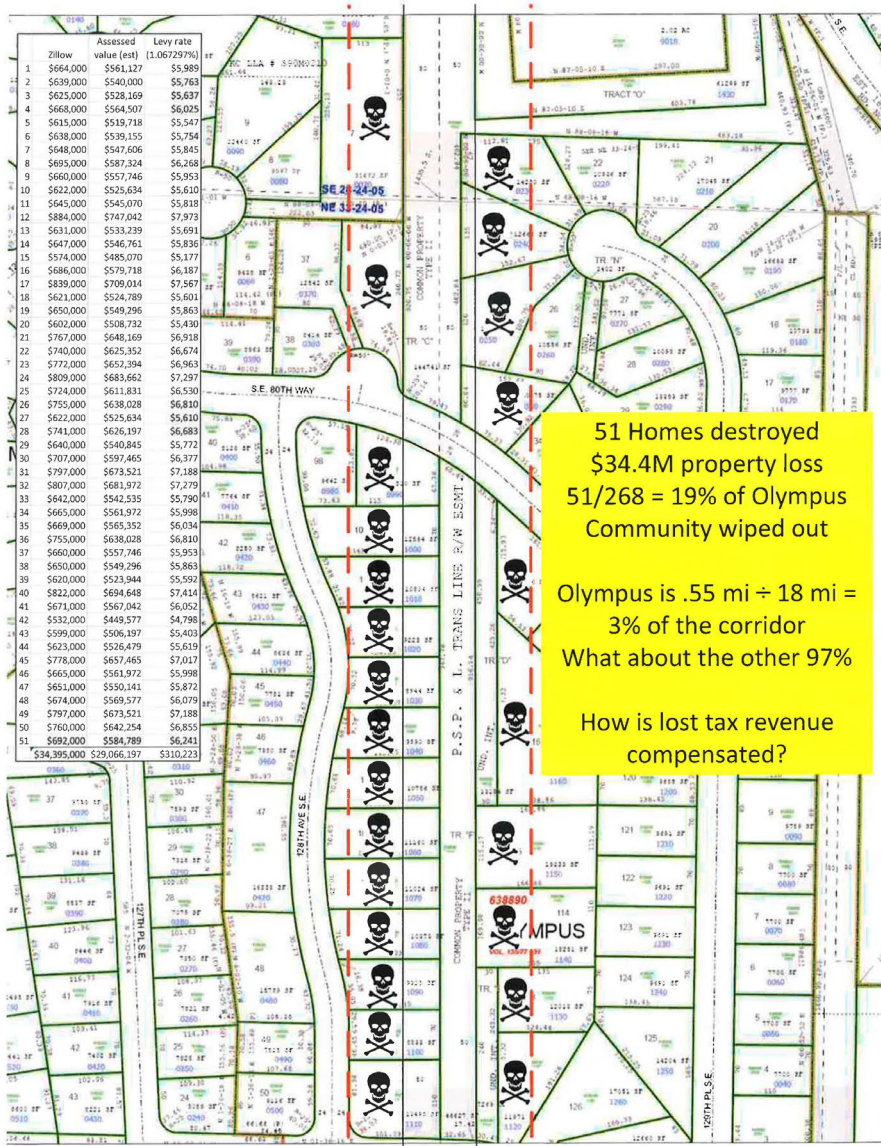
- Separation distance
  - $D < 100$  ft
  - High Severity Ranking of HVAC Interference
- HVAC Power Line Current
  - $I \geq 1,000$  Amps
  - Very High Severity Ranking of HVAC Interference
- Collocation Length
  - $L > 5,000$  ft
  - High Severity Ranking of HVAC Interference
- Collocation / Crossing Angle
  - $\theta < 30$
  - High Severity Ranking of HVAC Interference
- <http://www.ingaa.org/File.aspx?id=24732>

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I78-D -9 See response for Key Theme LU-2.







I78-D-10 See responses for Key Themes ECON-1 and ECON-2.

I78-D-10



Final - Data as of 2/16/2016  
Data Source: US DOT Pipeline and Hazardous Materials Safety Administration  
PHMSA All Reported Pipeline Incidents - Listing By Cause: 20 Year Totals (1996-2015)  
System Type: ALL State: ALL

| Date       | Reported Cause of Incident | Incident Cause Sub-Type                         | State | County      | Operator ID | Operator Name                           | System Type      | Hazardous | Spilled | Total Cost As Reported |
|------------|----------------------------|-------------------------------------------------|-------|-------------|-------------|-----------------------------------------|------------------|-----------|---------|------------------------|
| 06/11/2002 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | UT    | SALT LAKE   | 2791        | CHEVRON PIPE LINE CO                    | HAZARDOUS LIQUID | 0         | 0       | \$12,383,340           |
| 12/24/2002 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | IL    | WILL        | 22480       | WEST SHORE PIPELINE CO                  | HAZARDOUS LIQUID | 0         | 0       | \$18,495,900           |
| 02/20/2003 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | PA    |             | 19925       | PETROLEUM OF PENNSYLVANIA INC           | HAZARDOUS LIQUID | 0         | 0       | \$196,204              |
| 06/06/2003 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | IL    | COOK        | 32330       | CANON NGL PIPELINE, LLC                 | HAZARDOUS LIQUID | 0         | 0       | \$411,277              |
| 12/10/2003 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | NY    | SOMerset    | 1848        | BUCKETE PARTNERS, LP                    | HAZARDOUS LIQUID | 0         | 0       | \$11,318               |
| 06/09/2003 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | IN    | MARION      | 20241       | AMATHON PIPE LINE LLC                   | HAZARDOUS LIQUID | 0         | 0       | \$8,038,050            |
| 06/20/2003 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | CA    | LA          | 22552       | CONOCO PIPELINE L.P.                    | HAZARDOUS LIQUID | 0         | 0       | \$1,102,224            |
| 03/24/2004 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | IL    | KANKAKEE    | 1848        | BUCKETE PARTNERS, LP                    | HAZARDOUS LIQUID | 0         | 0       | \$1,987,841            |
| 03/24/2004 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | IL    | KANKAKEE    | 1848        | BUCKETE PARTNERS, LP                    | HAZARDOUS LIQUID | 0         | 0       | \$4,007,118            |
| 02/27/2005 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | MT    | JEFFERSON   | 28247       | MORGAN MORGAN PIPE LINE LLC             | HAZARDOUS LIQUID | 0         | 0       | \$1,453,000            |
| 06/06/2005 | OTHER OUTSIDE FORCE DAMAGE | ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY | TX    | HARRIS      | 26264       | UNION MORGAN LIQUID TERMINAL, LLC       | HAZARDOUS LIQUID | 0         | 0       | \$245,000              |
|            |                            |                                                 |       |             |             |                                         |                  |           |         | \$68,772,650           |
| 01/26/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | CA    | KINGS       | 26127       | CHEVRON PIPELINE CO                     | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 02/20/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | MT    | FALLON      | 18220       | TEXACO PIPELINE INC                     | HAZARDOUS LIQUID | 0         | 0       | \$4,600                |
| 02/13/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | PARKER      | 1870        | DAMOND SHALLOOZ REFINING & MARKETING CO | HAZARDOUS LIQUID | 0         | 0       | \$70,000               |
| 04/06/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | OR    | OREGONIA    | 18726       | CONOCO PIPELINE L.P.                    | HAZARDOUS LIQUID | 0         | 0       | \$1,200                |
| 03/25/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | IL    | LAURENS     | 12117       | AMATHON ASHLAND PIPE LINE LLC           | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 02/27/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | YOAKUM      | 13482       | MO- AMERICA PIPELINE CO (BAMPOC)        | HAZARDOUS LIQUID | 1         | 0       | \$100,000              |
| 04/03/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | DONALD      | 28023       | COASTAL STATES CRUDE GATHERING CO       | HAZARDOUS LIQUID | 0         | 0       | \$10,000               |
| 03/07/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | OK    | CRAWFORD    | 1204        | WESTEX 66 PIPELINE CO                   | HAZARDOUS LIQUID | 0         | 0       | \$40,000               |
| 03/26/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | KY    | JEFFERSON   | 717         | ASHLAND PIPELINE CO                     | HAZARDOUS LIQUID | 0         | 0       | \$70,000               |
| 04/09/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | OK    | OSAGE       | 22623       | MARCELLAN PIPELINE COMPANY, LP          | HAZARDOUS LIQUID | 0         | 0       | \$200,000              |
| 04/05/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | DALLAS      | 2770        | CHEVRON PIPE LINE CO                    | HAZARDOUS LIQUID | 0         | 0       | \$18,000               |
| 05/13/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | LA    | ST JAMES    | 12117       | AMATHON ASHLAND PIPE LINE LLC           | HAZARDOUS LIQUID | 0         | 0       | \$6,994,000            |
| 05/18/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | LIBERTY     | 22850       | KOCH PIPELINE COMPANY, L.P.             | HAZARDOUS LIQUID | 0         | 0       | \$7,000                |
| 06/09/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | GAINES      | 13482       | MO- AMERICA PIPELINE CO (BAMPOC)        | HAZARDOUS LIQUID | 0         | 0       | \$25,000               |
| 06/01/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | PARKER      | 12623       | TEXAS ENERGY AND SUPPLY, LP             | HAZARDOUS LIQUID | 0         | 0       | \$60,000               |
| 07/01/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | IL    | PUTNAM      | 12117       | AMATHON ASHLAND PIPE LINE LLC           | HAZARDOUS LIQUID | 0         | 1       | \$100,000              |
| 07/29/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | NY    | CLARK       | 28123       | CALNEY PIPELINE CO                      | HAZARDOUS LIQUID | 0         | 0       | \$400,000              |
| 08/10/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | LOVING      | 4470        | ENERGY PARTNERS PIPELINE LLC            | HAZARDOUS LIQUID | 0         | 0       | \$60,000               |
| 06/26/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | IA    | MONROE      | 13310       | MO- AMERICA PIPELINE CO (BAMPOC)        | HAZARDOUS LIQUID | 0         | 1       | \$613,000              |
| 06/28/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | CA    | KERN        | 28133       | TEXACO TRADING & TRANSPORTATION, INC    | HAZARDOUS LIQUID | 0         | 0       | \$0,000                |
| 06/28/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | KS    | BUTLER      | 18026       | TEXACO PIPELINE INC                     | HAZARDOUS LIQUID | 0         | 0       | \$90,000               |
| 06/28/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | CA    | BLAKE       | 22850       | KOCH PIPELINE COMPANY, L.P.             | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 06/24/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | MO    | GRAND JAVEN | 30839       | WOLVERINE PIPELINE COMPANY              | HAZARDOUS LIQUID | 0         | 1       | \$124,500              |
| 04/05/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | OK    | ELBERT      | 18246       | PHILLIPS PIPE LINE CO                   | HAZARDOUS LIQUID | 0         | 0       | \$49,000               |
| 04/05/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | MS    | PERN        | 4402        | PETROLEUM PRODUCTS CO                   | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 02/24/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | OK    | TULSA       | 13113       | CONOCO/PHILIPS (66P - L-48)             | HAZARDOUS LIQUID | 0         | 0       | \$50,000               |
| 02/22/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | TX    | WHARTON     | 28023       | COASTAL STATES CRUDE GATHERING CO       | HAZARDOUS LIQUID | 0         | 0       | \$80,000               |
| 12/21/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | OK    | WOODS       | 22850       | KOCH PIPELINE COMPANY, L.P.             | HAZARDOUS LIQUID | 0         | 0       | \$11,500               |
| 12/05/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE                   | OK    | PERN        | 18726       | CONOCO PIPELINE L.P.                    | HAZARDOUS LIQUID | 0         | 0       | \$0                    |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type       | State | County            | Operator ID | Operator Name                               | System Type      | Hazardous | Spilled | Total Cost As Reported |
|------------|----------------------------|-------------------------------|-------|-------------------|-------------|---------------------------------------------|------------------|-----------|---------|------------------------|
| 12/26/1996 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | LA    |                   | 3460        | MOSE PIPELINE COMPANY LLC                   | HAZARDOUS LIQUID | 0         | 0       | \$710,000              |
| 01/18/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | LOS ANGELES       | 26264       | KINDER MORGAN LIQUID TERMINAL, LLC          | HAZARDOUS LIQUID | 0         | 0       | \$20,000               |
| 01/09/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | BENTON            | 22850       | KOCH PIPELINE COMPANY, L.P.                 | HAZARDOUS LIQUID | 0         | 0       | \$200,000              |
| 01/02/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | HENRIEVILLE       | 22850       | KOCH PIPELINE COMPANY, L.P.                 | HAZARDOUS LIQUID | 0         | 0       | \$64,000               |
| 01/28/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | FORTWATKINS       | 18726       | CONOCO PIPELINE L.P.                        | HAZARDOUS LIQUID | 0         | 0       | \$1,000                |
| 02/01/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | LA    | ST MARY           | 1734        | MOGULINE GAS DISTRIBUTION, LLC              | HAZARDOUS LIQUID | 0         | 0       | \$81,176               |
| 02/01/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OR    | BUTTE             | 13117       | MOSE PARTNER PRODUCTS PIPELINE CO           | HAZARDOUS LIQUID | 0         | 0       | \$44,000               |
| 03/15/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | ROBER MILLS       | 18480       | PHILIPS PIPE LINE CO                        | HAZARDOUS LIQUID | 0         | 0       | \$64,000               |
| 03/18/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | LIBERTY           | 15116       | AROKA / RUSK GATHERERS                      | HAZARDOUS LIQUID | 0         | 0       | \$600,000              |
| 04/10/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | WI    | LA FAYETTE        | 12482       | MO- AMERICA PIPELINE CO (BAMPOC)            | HAZARDOUS LIQUID | 0         | 0       | \$79,000               |
| 04/01/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | AR    | PHILLIPS          | 18026       | TEXACO PIPELINE COMPANY, LLC                | HAZARDOUS LIQUID | 0         | 0       | \$17,000               |
| 04/01/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | AR    | ARKANSAS          | 18026       | TEXACO PIPELINE COMPANY, LLC                | HAZARDOUS LIQUID | 0         | 0       | \$10,000               |
| 04/14/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | KS    | WYANDOTTE         | 22850       | MARCELLAN PIPELINE COMPANY, LP              | HAZARDOUS LIQUID | 0         | 0       | \$0,000                |
| 04/08/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | IL    | CHRYE             | 440         | AMOCO PIPELINE CO                           | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 05/23/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    |                   | 28010       | COASTAL CORP.                               | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 07/01/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CO    | ELBERT            | 18246       | WESTEX 66 PIPELINE CO                       | HAZARDOUS LIQUID | 0         | 1       | \$60,000               |
| 06/06/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | KERN              | 18920       | KOCH OIL CO                                 | HAZARDOUS LIQUID | 0         | 0       | \$266,000              |
| 05/24/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | POPCOCCO          | 18726       | CONOCO PIPELINE L.P.                        | HAZARDOUS LIQUID | 0         | 0       | \$0                    |
| 06/24/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MN    | STEVEN            | 3466        | DOMO PETROLEUM CORP                         | HAZARDOUS LIQUID | 0         | 2       | \$1,500,000            |
| 06/02/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | SANTA BARBARA     | 18922       | TEXACO CORP                                 | HAZARDOUS LIQUID | 0         | 0       | \$40,000               |
| 06/01/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | AR    | WINDSOR           | 18026       | TEXACO PIPELINE COMPANY, LLC                | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 06/23/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NE    | WABASHOTA         | 22850       | MARCELLAN PIPELINE COMPANY, LP              | HAZARDOUS LIQUID | 0         | 0       | \$120,000              |
| 05/06/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | VA    | FAIRFAX           | 13624       | PLANTATION PIPE LINE CO                     | HAZARDOUS LIQUID | 0         | 0       | \$86,000               |
| 06/16/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | PERN              | 13113       | CONOCO/PHILIPS (66P - L-48)                 | HAZARDOUS LIQUID | 0         | 0       | \$7,000                |
| 02/10/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | NOBLE             | 22850       | KOCH PIPELINE COMPANY, L.P.                 | HAZARDOUS LIQUID | 0         | 0       | \$92,000               |
| 06/24/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | BEAVER            | 22850       | KOCH PIPELINE COMPANY, L.P.                 | HAZARDOUS LIQUID | 0         | 0       | \$16,250               |
| 12/10/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | LA    |                   | 4006        | ENDRINGER PIPELINE CO                       | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 12/10/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | SABIN             | 4400        | AMOCO PIPELINE CO                           | HAZARDOUS LIQUID | 0         | 0       | \$50,000               |
| 11/30/1997 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NY    | MIDDLESEX         | 18113       | SUN PIPE CORP - GENERAL WASH BLDG           | HAZARDOUS LIQUID | 0         | 0       | \$0                    |
| 02/09/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | LA    | PLAZEMINES PARISH | 18179       | SHELL PIPELINE CORP                         | HAZARDOUS LIQUID | 0         | 0       | \$200,000              |
| 01/22/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OKC   |                   | 440         | AMOCO PIPELINE CO                           | HAZARDOUS LIQUID | 0         | 0       | \$126,846              |
| 02/10/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NY    | USA               | 1730        | CHEVRON PIPELINE CO - MIDLAND DIV           | HAZARDOUS LIQUID | 0         | 0       | \$60,000               |
| 03/11/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | IL    | COLES             | 6800        | KOCH PIPELINE COMPANY, L.P. AMMONIA         | HAZARDOUS LIQUID | 0         | 0       | \$60,000               |
| 04/01/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | SC    | LINCOLN           | 18010       | MUSTAR PIPELINE OPERATING PARTNERSHIP, L.P. | HAZARDOUS LIQUID | 0         | 0       | \$48,000               |
| 01/13/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    |                   | 18026       | TEXACO MARKETING AND SUPPLY, LP             | HAZARDOUS LIQUID | 0         | 0       | \$16,000               |
| 02/11/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | FALLS             | 35310       | KOCH REFINING CO                            | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 06/02/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MO    | NOBAX             | 440         | AMOCO PIPELINE CO                           | HAZARDOUS LIQUID | 0         | 1       | \$11,000,000           |
| 06/01/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CO    | DOUGLASS          | 18010       | MUSTAR PIPELINE OPERATING PARTNERSHIP, L.P. | HAZARDOUS LIQUID | 0         | 0       | \$900,000              |
| 04/05/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | DEWINE            | 1730        | CHEVRON PIPELINE CO                         | HAZARDOUS LIQUID | 0         | 0       | \$50,000               |
| 06/03/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | LAN PAT           | 28010       | COASTAL STATES CRUDE GATHERING CO           | HAZARDOUS LIQUID | 0         | 0       | \$60,000               |
| 06/13/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MN    | WILKIN            | 440         | AMOCO PIPELINE CO                           | HAZARDOUS LIQUID | 0         | 0       | \$0                    |
| 06/10/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    |                   | 11109       | ENERGY ENERGY LIMITED PARTNERSHIP           | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 06/11/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NY    | CAMDEN            | 18120       | SUN PIPELINE CORP - GENERAL WASH BLDG       | HAZARDOUS LIQUID | 0         | 0       | \$60,000               |
| 06/13/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MN    |                   | 11109       | ENERGY ENERGY LIMITED PARTNERSHIP           | HAZARDOUS LIQUID | 0         | 0       | \$100,000              |
| 04/20/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MO    | SALINE            | 440         | AMOCO PIPELINE CO                           | HAZARDOUS LIQUID | 0         | 0       | \$50,000               |
| 04/06/1998 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | KERN              | 81124       | SHELL PIPELINE CO, L.P.                     | HAZARDOUS LIQUID | 0         | 0       | \$90,000               |

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COMMENT

RESPONSE

| Date       | Reported Cause of Incident | Incident Cause Sub-Type       | State | County       | Operator ID | Operator Name                               | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------------|-------|--------------|-------------|---------------------------------------------|------------------|------------|----------|------------------------|
| 10/01/1998 | Excavation Damage          | Third Party Excavation Damage | IL    | COOK         | 443         | AMCO PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0        | 1,036,000              |
| 03/04/1999 | Excavation Damage          | Third Party Excavation Damage | MI    | BRANCH       | 1468        | BP PIPELINES INC                            | HAZARDOUS LIQUID | 0          | 0        | 1,280,000              |
| 03/12/1999 | Excavation Damage          | Third Party Excavation Damage | OK    | GARVIN       | 1881        | 1881 SIKAWAY PIPELINE INC                   | HAZARDOUS LIQUID | 0          | 0        | 1,320,000              |
| 03/03/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | FARRIS       | 3122        | MANITOK OKLAND PIPE LINE LLC                | HAZARDOUS LIQUID | 0          | 0        | 164,000                |
| 04/02/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | FARRIS       | 1814        | STARWAY PIPELINE INC                        | HAZARDOUS LIQUID | 0          | 0        | 14,300,000             |
| 04/28/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | HENDERSON    | 2217        | TRIA MIDSTREAM SERVICES, L.P.               | HAZARDOUS LIQUID | 0          | 0        | 1,700,000              |
| 06/01/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | DAWSON       | 3010        | TRIO PRODUCTS PIPELINE CO                   | HAZARDOUS LIQUID | 0          | 0        | 1,020,000              |
| 06/21/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | HARRIS       | 440         | AMCO PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0        | 500,000                |
| 06/04/1999 | Excavation Damage          | Third Party Excavation Damage | IA    | POLK         | 2383        | KOCH PIPELINE COMPANY, L.P.                 | HAZARDOUS LIQUID | 0          | 0        | 14,000,000             |
| 06/23/1999 | Excavation Damage          | Third Party Excavation Damage | MN    | OTTERTAIL    | 441         | AMCO PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0        | 50                     |
| 06/23/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | MIDLAND      | 1242        | WD - AMERICA PIPELINE CO (BAMCO)            | HAZARDOUS LIQUID | 0          | 0        | 540,000                |
| 07/05/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | MIDLAND      | 3006        | AMCO PIPE LINE COMPANY                      | HAZARDOUS LIQUID | 0          | 0        | 540,000                |
| 04/06/1999 | Excavation Damage          | Third Party Excavation Damage | CA    | KERN         | 3114        | SHELL PIPELINE CO., L.P.                    | HAZARDOUS LIQUID | 0          | 0        | 510,000                |
| 07/12/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | TARRANT      | 4401        | TRIO PRODUCTS PIPELINE CO                   | HAZARDOUS LIQUID | 0          | 0        | 170,000                |
| 08/10/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | WILLAMSON    | 1834        | SEMROLE PIPELINE CO                         | HAZARDOUS LIQUID | 1          | 0        | 5,880,000              |
| 08/22/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | MUELLS       | 2388        | KOCH PIPELINE COMPANY, L.P.                 | HAZARDOUS LIQUID | 0          | 0        | 280,000                |
| 08/09/1999 | Excavation Damage          | Third Party Excavation Damage | NY    | ONEIDA       | 1843        | BUCKEYE PARTNERS, LP                        | HAZARDOUS LIQUID | 0          | 0        | 340,000                |
| 08/21/1999 | Excavation Damage          | Third Party Excavation Damage | KS    | RUSS         | 2381        | MAGELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | 151,000                |
| 08/23/1999 | Excavation Damage          | Third Party Excavation Damage | CA    | CONTRA COSTA | 1820        | UPP, LP                                     | HAZARDOUS LIQUID | 0          | 0        | 544,300                |
| 09/13/1999 | Excavation Damage          | Third Party Excavation Damage | OR    | WASHINGTON   | 1802        | UPP, LP                                     | HAZARDOUS LIQUID | 0          | 0        | 11,320,000             |
| 08/12/1999 | Excavation Damage          | Third Party Excavation Damage | OR    | CLATSOP      | 441         | AMCO PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0        | 340,000                |
| 11/01/1999 | Excavation Damage          | Third Party Excavation Damage | KS    | SALINE       | 1801        | ULSTAR PIPELINE OPERATING PARTNERSHIP, L.P. | HAZARDOUS LIQUID | 0          | 0        | 1,010,000              |
| 11/23/1999 | Excavation Damage          | Third Party Excavation Damage | TX    | WHARTON      | 842         | ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | 500,000                |
| 10/20/1999 | Excavation Damage          | Third Party Excavation Damage | DC    | STANTON      | 1311        | CONOCOPHILPS (BP - L48)                     | HAZARDOUS LIQUID | 0          | 0        | 340,000                |
| 01/20/2000 | Excavation Damage          | Third Party Excavation Damage | NE    | YORK         | 1801        | ULSTAR PIPELINE OPERATING PARTNERSHIP, L.P. | HAZARDOUS LIQUID | 0          | 0        | 1,178,000              |
| 03/13/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | HARRIS       | 494         | DOVONMOBI PIPELINE CO                       | HAZARDOUS LIQUID | 0          | 0        | 151,700                |
| 04/01/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | BLUM         | 3148        | PLAINS MARTINIS LP                          | HAZARDOUS LIQUID | 0          | 0        | 113,300                |
| 04/07/2000 | Excavation Damage          | Third Party Excavation Damage | KS    | RUSS         | 441         | AMCO PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0        | 170,000                |
| 04/24/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | JEFFERSON    | 481         | EXPLORER PIPELINE CO                        | HAZARDOUS LIQUID | 0          | 0        | 340,000                |
| 05/04/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | MONTAGUE     | 441         | AMCO PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0        | 58,000                 |
| 04/26/2000 | Excavation Damage          | Third Party Excavation Damage | MN    | PRESTON      | 2241        | MAGELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | 1,330,000              |
| 04/26/2000 | Excavation Damage          | Third Party Excavation Damage | KS    | CONKASKA     | 1842        | WD - AMERICA PIPELINE CO (BAMCO)            | HAZARDOUS LIQUID | 0          | 0        | 540,000                |
| 05/18/2000 | Excavation Damage          | Third Party Excavation Damage | AR    | UNION        | 1151        | DELEX LOGISTICS OPERATING, LLC              | HAZARDOUS LIQUID | 0          | 0        | 47,400                 |
| 06/02/2000 | Excavation Damage          | Third Party Excavation Damage | MN    | HENNING      | 441         | AMCO PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 06/20/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | HARRIS       | 3010        | TRIO PRODUCTS PIPELINE CO                   | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 06/20/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | GLASSBORO    | 3117        | CHEVRON PIPE LINE NORTHWEST REGION          | HAZARDOUS LIQUID | 0          | 1        | 1,111,000              |
| 06/01/2000 | Excavation Damage          | Third Party Excavation Damage | NM    | CORA ANA     | 3117        | CHEVRON PIPE LINE NORTHWEST REGION          | HAZARDOUS LIQUID | 0          | 0        | 1,111,000              |
| 07/20/2000 | Excavation Damage          | Third Party Excavation Damage | OH    | ALLIEN       | 1840        | BUCKEYE PARTNERS, LP                        | HAZARDOUS LIQUID | 0          | 0        | 1,310,000              |
| 07/08/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | ANGELINA     | 3114        | SHELL PIPELINE CO., L.P.                    | HAZARDOUS LIQUID | 0          | 0        | 510,000                |
| 07/08/2000 | Excavation Damage          | Third Party Excavation Damage | IL    | ROSEMONT     | 1240        | WEST SHORE PIPELINE CO                      | HAZARDOUS LIQUID | 0          | 0        | 170,000                |
| 07/21/2000 | Excavation Damage          | Third Party Excavation Damage | CA    | PLUM         | 3114        | SHELL PIPELINE CO., L.P.                    | HAZARDOUS LIQUID | 0          | 0        | 10,000,000             |
| 08/01/2000 | Excavation Damage          | Third Party Excavation Damage | OK    | DEWITT       | 3001        | ENTERPRISE CRUDE PIPELINE COMPANY           | HAZARDOUS LIQUID | 0          | 0        | 151,000                |
| 08/01/2000 | Excavation Damage          | Third Party Excavation Damage | MT    | CASCADE      | 1311        | CONOCOPHILPS (BP - L48)                     | HAZARDOUS LIQUID | 0          | 0        | 300,000                |
| 08/10/2000 | Excavation Damage          | Third Party Excavation Damage | CA    | ORANGE       | 3117        | CHEVRON PIPE LINE NORTHWEST REGION          | HAZARDOUS LIQUID | 0          | 0        | 1,100,000              |
| 08/01/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | TARRANT      | 4401        | TRIO PRODUCTS PIPELINE CO                   | HAZARDOUS LIQUID | 1          | 1        | 1,000,000              |
| 07/06/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | MITCH        | 490         | DOVONMOBI PIPELINE CO                       | HAZARDOUS LIQUID | 0          | 0        | 150,000                |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type       | State | County        | Operator ID | Operator Name                               | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------------|-------|---------------|-------------|---------------------------------------------|------------------|------------|----------|------------------------|
| 10/27/2000 | Excavation Damage          | Third Party Excavation Damage | AZ    | COCHISE       | 1801        | UPP, LP                                     | HAZARDOUS LIQUID | 0          | 0        | 540,000                |
| 11/01/2000 | Excavation Damage          | Third Party Excavation Damage | PA    | LANCASTER     | 1428        | MOBIL PIPE LINE COMPANY                     | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 09/22/2000 | Excavation Damage          | Third Party Excavation Damage | OH    | CLEVELAND     | 1801        | AM ENERGY PIPELINE LIMITED PARTNERSHIP      | HAZARDOUS LIQUID | 0          | 0        | 500,000                |
| 10/12/2000 | Excavation Damage          | Third Party Excavation Damage | VT    | FRANKLIN      | 1312        | MANITOK OKLAND PIPE LINE LLC                | HAZARDOUS LIQUID | 0          | 0        | 81,700                 |
| 07/06/2000 | Excavation Damage          | Third Party Excavation Damage | OR    | WASHINGTON    | 1801        | UPP, LP                                     | HAZARDOUS LIQUID | 0          | 0        | 1,010,000              |
| 05/24/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | HARRIS        | 3004        | GENSES PIPELINE USA, L.P.                   | HAZARDOUS LIQUID | 0          | 0        | 1,800,000              |
| 12/28/2000 | Excavation Damage          | Third Party Excavation Damage | DC    | STANTON       | 1841        | AMERICAN CORP                               | HAZARDOUS LIQUID | 0          | 0        | 1,070,000              |
| 01/08/2001 | Excavation Damage          | Third Party Excavation Damage | TX    | HARRIS        | 2011        | GLATTS STATES CRUDE GATHERING CO            | HAZARDOUS LIQUID | 0          | 0        | 11,200,000             |
| 11/17/2000 | Excavation Damage          | Third Party Excavation Damage | TX    | HARRIS        | 1917        | TRIO PRODUCTS PIPELINE COMPANY, LLC         | HAZARDOUS LIQUID | 0          | 0        | 1,100,000              |
| 07/13/2000 | Excavation Damage          | Third Party Excavation Damage | FL    | HARRIS        | 2101        | CENTRAL FLORIDA PIPELINE CORP               | HAZARDOUS LIQUID | 0          | 0        | 140,000                |
| 08/21/2000 | Excavation Damage          | Third Party Excavation Damage | CA    | CONTRA COSTA  | 1801        | UPP, LP                                     | HAZARDOUS LIQUID | 0          | 0        | 540,000                |
| 02/21/2001 | Excavation Damage          | Third Party Excavation Damage | OH    | LUCAS         | 1840        | BUCKEYE PARTNERS, LP                        | HAZARDOUS LIQUID | 0          | 0        | 1,138,300              |
| 05/19/2001 | Excavation Damage          | Third Party Excavation Damage | TX    | SCURRY        | 441         | COG RESOURCES, INC                          | HAZARDOUS LIQUID | 0          | 0        | 1,100,000              |
| 04/21/2001 | Excavation Damage          | Third Party Excavation Damage | OH    | ROCKLAND      | 3101        | MANITOK OKLAND PIPE LINE LLC                | HAZARDOUS LIQUID | 0          | 0        | 1,020,000              |
| 06/28/2001 | Excavation Damage          | Third Party Excavation Damage | TX    | ROCKLAND      | 1548        | PHILLIPS PIPE LINE CO                       | HAZARDOUS LIQUID | 0          | 0        | 110,000                |
| 07/11/2001 | Excavation Damage          | Third Party Excavation Damage | TX    | EMERTON       | 3104        | GENSES PIPELINE USA, L.P.                   | HAZARDOUS LIQUID | 0          | 0        | 145,000                |
| 01/20/2001 | Excavation Damage          | Third Party Excavation Damage | KS    | BUTLER        | 1441        | WD - AMERICA PIPELINE CO (BAMCO)            | HAZARDOUS LIQUID | 0          | 0        | 110,000                |
| 08/21/2001 | Excavation Damage          | Third Party Excavation Damage | TX    | FARRIS        | 3117        | CHEVRON PIPE LINE NORTHWEST REGION          | HAZARDOUS LIQUID | 0          | 1        | 1,000,000              |
| 08/22/2001 | Excavation Damage          | Third Party Excavation Damage | LA    | GRANT         | 6814        | KOCH PIPELINE COMPANY, LP AMMONIA           | HAZARDOUS LIQUID | 0          | 0        | 1,200,000              |
| 08/07/2001 | Excavation Damage          | Third Party Excavation Damage | AL    | MOBILE        | 1875        | ALASKA PIPELINE COMPANY, LLC                | HAZARDOUS LIQUID | 0          | 0        | 540,000                |
| 08/01/2001 | Excavation Damage          | Third Party Excavation Damage | LA    | LAFOURCHE     | 3114        | SHELL PIPELINE CO., L.P.                    | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 09/07/2001 | Excavation Damage          | Third Party Excavation Damage | OK    | NOBLE         | 1241        | WD - AMERICA PIPELINE CO (BAMCO)            | HAZARDOUS LIQUID | 0          | 0        | 1,020,000              |
| 07/14/2001 | Excavation Damage          | Third Party Excavation Damage | TX    | JOHNSON       | 3114        | SHELL PIPELINE CO., L.P.                    | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 11/08/2001 | Excavation Damage          | Third Party Excavation Damage | MA    | HAMPDEN       | 1840        | BUCKEYE PARTNERS, LP                        | HAZARDOUS LIQUID | 0          | 0        | 1,111,000              |
| 11/21/2001 | Excavation Damage          | Third Party Excavation Damage | TX    | SCURRY        | 3117        | CHEVRON PIPE LINE NORTHWEST REGION          | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 12/14/2001 | Excavation Damage          | Third Party Excavation Damage | KS    | MCCONE        | 1311        | SUN PIPELINE CORP - GENERAL WASH BLDG       | HAZARDOUS LIQUID | 0          | 0        | 1,010,000              |
| 11/19/2001 | Excavation Damage          | Third Party Excavation Damage | IA    | POTTAWATTOMIE | 1801        | WESTAR PIPELINE OPERATING PARTNERSHIP, L.P. | HAZARDOUS LIQUID | 0          | 0        | 1,010,000              |
| 11/21/2001 | Excavation Damage          | Third Party Excavation Damage | KS    | OSBORN        | 2241        | MAGELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 08/28/2001 | Excavation Damage          | Third Party Excavation Damage | TX    | WILE          | 490         | DOVONMOBI PIPELINE CO                       | HAZARDOUS LIQUID | 0          | 0        | 110,000                |
| 01/29/2002 | Excavation Damage          | Third Party Excavation Damage | IL    | WARREN        | 1142        | WD - AMERICA PIPELINE CO (BAMCO)            | HAZARDOUS LIQUID | 0          | 0        | 1,145,000              |
| 03/22/2002 | Excavation Damage          | Third Party Excavation Damage | KS    | BUTLER        | 2241        | MAGELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | 1,175,000              |
| 09/22/2002 | Excavation Damage          | Third Party Excavation Damage | AZ    | MARICOPA      | 1801        | UPP, LP                                     | HAZARDOUS LIQUID | 0          | 0        | 1,114,000              |
| 04/14/2002 | Excavation Damage          | Third Party Excavation Damage | WY    | CARBON        | 1311        | CONOCOPHILPS (BP - L48)                     | HAZARDOUS LIQUID | 0          | 0        | 1,080,000              |
| 01/20/2002 | Excavation Damage          | Third Party Excavation Damage | AL    | MOBILE        | 1875        | SHELL CHEMICAL, CO                          | HAZARDOUS LIQUID | 0          | 0        | 1,188,000              |
| 04/21/2002 | Excavation Damage          | Third Party Excavation Damage | TX    | MCCLELLAN     | 3010        | TRIO PRODUCTS PIPELINE CO                   | HAZARDOUS LIQUID | 0          | 0        | 1,174,000              |
| 06/17/2002 | Excavation Damage          | Third Party Excavation Damage | IA    | DELAWARE      | 3118        | BP PIPELINE NORTH AMERICA INC               | HAZARDOUS LIQUID | 0          | 0        | 1,078,100              |
| 06/06/2002 | Excavation Damage          | Third Party Excavation Damage | NM    | OSERO         | 3114        | BP SERVICES                                 | HAZARDOUS LIQUID | 0          | 0        | 111,000                |
| 06/10/2002 | Excavation Damage          | Third Party Excavation Damage | TX    | HARRIS        | 1817        | TRIO PRODUCTS PIPELINE COMPANY, LLC         | HAZARDOUS LIQUID | 0          | 0        | 89,400                 |
| 06/06/2002 | Excavation Damage          | Third Party Excavation Damage | OR    | WASCO         | 1312        | ENTERPRISE CRUDE PIPELINE SERVICES CO       | HAZARDOUS LIQUID | 0          | 0        | 114,000                |
| 07/01/2002 | Excavation Damage          | Third Party Excavation Damage | OK    | CARTER        | 3012        | ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | 151,300                |
| 06/19/2002 | Excavation Damage          | Third Party Excavation Damage | KS    | SEBOWNE       | 1311        | CONOCOPHILPS (BP - L48)                     | HAZARDOUS LIQUID | 0          | 0        | 173,400                |
| 06/14/2002 | Excavation Damage          | Third Party Excavation Damage | LA    | CAMERON       | 1217        | TRIA MIDSTREAM SERVICES, L.P.               | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 07/29/2002 | Excavation Damage          | Third Party Excavation Damage | IN    | POSEY         | 1317        | TRIO PRODUCTS PIPELINE COMPANY, LLC         | HAZARDOUS LIQUID | 0          | 0        | 111,100                |
| 06/01/2002 | Excavation Damage          | Third Party Excavation Damage | IL    | OGLE          | 2241        | MAGELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | 187,777                |
| 06/17/2002 | Excavation Damage          | Third Party Excavation Damage | KS    | JOHNSON       | 2241        | MAGELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | 1,000,000              |
| 11/01/2002 | Excavation Damage          | Third Party Excavation Damage | WY    | BEYOUSA       | 2240        | WEST SHORE PIPELINE CO                      | HAZARDOUS LIQUID | 0          | 0        | 140,000                |

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FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

| Date       | Reported Cause of Incident | Incident Cause Sub-Type       | State | County       | Operator ID | Operator Name                              | System Type      | Lat/Long (Easting) | Lat/Long (Northing) | Total Cost As Reported |
|------------|----------------------------|-------------------------------|-------|--------------|-------------|--------------------------------------------|------------------|--------------------|---------------------|------------------------|
| 11/20/2003 | Excavation Damage          | Third Party Excavation Damage | KS    | Douglas      | 21810       | MAGELLAN PIPELINE COMPANY, LP              | Hazardous Liquid | 0                  | 0                   | \$4,038                |
| 12/26/2003 | Excavation Damage          | Third Party Excavation Damage | NE    | Cass         | 4472        | CPRESS INTERSTATE PIPELINE LLC             | Hazardous Liquid | 0                  | 0                   | \$47,343               |
| 11/25/2003 | Excavation Damage          | Third Party Excavation Damage | KS    | Franklin     | 31176       | SHELL PIPELINE CO., LP                     | Hazardous Liquid | 0                  | 0                   | \$83,807               |
| 05/05/2004 | Excavation Damage          | Third Party Excavation Damage | NM    | Chaves       | 13322       | VALLEY REFINING CO                         | Hazardous Liquid | 0                  | 0                   | \$172,257              |
| 02/20/2004 | Excavation Damage          | Third Party Excavation Damage | TN    | Shelby       | 11701       | WILLIAMS MID SOUTH PIPELINES LLC           | Hazardous Liquid | 0                  | 0                   | \$1,363,000            |
| 01/26/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Terry        | 30831       | ENRGY PIPELINE LIMITED PARTNERSHIP         | Hazardous Liquid | 0                  | 0                   | \$42,718               |
| 02/11/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Melissa      | 36911       | ENRGY PIPELINE LIMITED PARTNERSHIP         | Hazardous Liquid | 0                  | 0                   | \$172,257              |
| 04/21/2003 | Excavation Damage          | Third Party Excavation Damage | OK    | Atoka        | 4820        | ENRGY PIPELINE CO                          | Hazardous Liquid | 0                  | 0                   | \$311,000              |
| 04/04/2004 | Excavation Damage          | Third Party Excavation Damage | AL    | Chilton      | 18474       | PLANTATION PIPE LINE CO                    | Hazardous Liquid | 0                  | 0                   | \$250,000              |
| 07/09/2003 | Excavation Damage          | Third Party Excavation Damage | CT    | New Haven    | 1845        | RODNEY PARTNER, LP                         | Hazardous Liquid | 0                  | 0                   | \$214,400              |
| 07/11/2003 | Excavation Damage          | Third Party Excavation Damage | CA    | Los Angeles  | 18920       | OPF, LP                                    | Hazardous Liquid | 0                  | 0                   | \$94,614               |
| 09/11/2003 | Excavation Damage          | Third Party Excavation Damage | TX    | Montgomery   | 13345       | GENESYS PIPELINE USA, L.P.                 | Hazardous Liquid | 0                  | 0                   | \$11,000               |
| 09/16/2003 | Excavation Damage          | Third Party Excavation Damage | KS    | Stafford     | 9176        | AMAR PIPELINE LLC                          | Hazardous Liquid | 0                  | 0                   | \$9,679                |
| 04/26/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | San Antonio  | 39203       | ENTERPRISE OILCO PIPELINE LLC              | Hazardous Liquid | 0                  | 0                   | \$125,850              |
| 09/21/2003 | Excavation Damage          | Third Party Excavation Damage | CA    | Los Angeles  | 31176       | SHELL PIPELINE CO., LP                     | Hazardous Liquid | 0                  | 0                   | \$200,000              |
| 09/16/2003 | Excavation Damage          | Third Party Excavation Damage | CA    | Los Angeles  | 26114       | EXXONMOBIL OIL CORP. WEST COAST            | Hazardous Liquid | 0                  | 0                   | \$479,700              |
| 09/16/2003 | Excavation Damage          | Third Party Excavation Damage | OK    | Oklahoma     | 31188       | BP PIPELINE (NORTH AMERICA) INC.           | Hazardous Liquid | 0                  | 0                   | \$1,140,000            |
| 06/25/2004 | Excavation Damage          | Third Party Excavation Damage | NM    | Santa Fe     | 12116       | ENTERPRISE PRODUCTS OPERATING LLC          | Hazardous Liquid | 0                  | 0                   | \$127,000              |
| 01/30/2004 | Excavation Damage          | Third Party Excavation Damage | NE    | Folsom       | 10012       | NUSTAR PIPELINE OPERATING PARTNERSHIP L.P. | Hazardous Liquid | 0                  | 0                   | \$13,000               |
| 11/04/2003 | Excavation Damage          | Third Party Excavation Damage | NM    | Douglas      | 12610       | MAGELLAN PIPELINE COMPANY, LP              | Hazardous Liquid | 0                  | 0                   | \$48,628               |
| 11/04/2003 | Excavation Damage          | Third Party Excavation Damage | CA    | San Diego    | 27702       | CHEVRON PIPE LINE CO                       | Hazardous Liquid | 0                  | 0                   | \$6                    |
| 11/05/2003 | Excavation Damage          | Third Party Excavation Damage | TX    | Sevier       | 13420       | MOBILE PIPE LINE COMPANY                   | Hazardous Liquid | 0                  | 0                   | \$33,500               |
| 02/18/2004 | Excavation Damage          | Third Party Excavation Damage | HI    | Hawaii       | 32689       | HELO-HAWAII ELECTRIC LIGHT COMPANY, INC.   | Hazardous Liquid | 0                  | 0                   | \$470,000              |
| 02/16/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Harris       | 28510       | COLONIAL PIPELINE CO                       | Hazardous Liquid | 0                  | 0                   | \$60,000               |
| 02/18/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | New Castle   | 29601       | COLONIAL TERMINAL CO                       | Hazardous Liquid | 0                  | 0                   | \$505,000              |
| 02/18/2004 | Excavation Damage          | Third Party Excavation Damage | OH    | Coshocton    | 18217       | TE PRODUCTS PIPELINE COMPANY, INC.         | Hazardous Liquid | 0                  | 0                   | \$154,414              |
| 04/21/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Hockley      | 31816       | ENTERPRISE PRODUCTS OPERATING LLC          | Hazardous Liquid | 0                  | 0                   | \$162,424              |
| 05/10/2004 | Excavation Damage          | Third Party Excavation Damage | KS    | Shawnee      | 31816       | ENTERPRISE PRODUCTS OPERATING LLC          | Hazardous Liquid | 0                  | 0                   | \$124,000              |
| 02/17/2004 | Excavation Damage          | Third Party Excavation Damage | KS    | Wyandotte    | 31816       | PHILLIPS 66 PIPELINE LLC                   | Hazardous Liquid | 0                  | 0                   | \$47,500               |
| 06/02/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Nelberg      | 31816       | NUSTAR LOGISTICS, L.P.                     | Hazardous Liquid | 0                  | 0                   | \$100,000              |
| 06/25/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Mitchell     | 30831       | ENRGY PIPELINE LIMITED PARTNERSHIP         | Hazardous Liquid | 0                  | 0                   | \$48,375               |
| 01/25/2004 | Excavation Damage          | Third Party Excavation Damage | UT    | Wasatch      | 31176       | CHEVRON PIPE LINE CO                       | Hazardous Liquid | 0                  | 0                   | \$381,000              |
| 06/21/2004 | Excavation Damage          | Third Party Excavation Damage | NE    | Washington   | 31816       | ENTERPRISE PRODUCTS OPERATING LLC          | Hazardous Liquid | 0                  | 0                   | \$812,790              |
| 05/01/2004 | Excavation Damage          | Third Party Excavation Damage | NM    | San Juan     | 31816       | AMMOX NATION OIL AND GAS COMPANY           | Hazardous Liquid | 0                  | 0                   | \$9                    |
| 01/21/2004 | Excavation Damage          | Third Party Excavation Damage | OK    | Osage        | 31816       | OSAGE OILCO OILCO PIPELINE ENERGY CO       | Hazardous Liquid | 0                  | 0                   | \$600,000              |
| 02/25/2004 | Excavation Damage          | Third Party Excavation Damage | OK    | Texas        | 4407        | VALDCO TERMINAL AND DISTRIBUTION COMPANY   | Hazardous Liquid | 0                  | 0                   | \$117,214              |
| 11/09/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Wood         | 4906        | EXXONMOBIL PIPELINE CO                     | Hazardous Liquid | 0                  | 0                   | \$1,300                |
| 01/27/2004 | Excavation Damage          | Third Party Excavation Damage | KS    | Anderson     | 31816       | ENTERPRISE PRODUCTS OPERATING LLC          | Hazardous Liquid | 0                  | 0                   | \$980,775              |
| 01/29/2004 | Excavation Damage          | Third Party Excavation Damage | CA    | Contra Costa | 18920       | OPF, LP                                    | Hazardous Liquid | 0                  | 0                   | \$74,000               |
| 01/21/2004 | Excavation Damage          | Third Party Excavation Damage | GA    | Bibb         | 31134       | BT SERVICES                                | Hazardous Liquid | 0                  | 0                   | \$6                    |
| 12/17/2003 | Excavation Damage          | Third Party Excavation Damage | AL    | Tuscaloosa   | 18246       | AMT REFINING CO                            | Hazardous Liquid | 0                  | 0                   | \$99,137               |
| 01/21/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Honore       | 31176       | CHEVRON PIPELINE LP                        | Hazardous Liquid | 0                  | 0                   | \$1,960,000            |
| 01/18/2004 | Excavation Damage          | Third Party Excavation Damage | SD    | Sandborn     | 10012       | NUSTAR PIPELINE OPERATING PARTNERSHIP L.P. | Hazardous Liquid | 0                  | 0                   | \$180,000              |
| 09/03/2003 | Excavation Damage          | Third Party Excavation Damage | WY    | Campbell     | 1246        | HELIX FOURCHE PIPELINE CO                  | Hazardous Liquid | 0                  | 0                   | \$1,000                |
| 01/19/2003 | Excavation Damage          | Third Party Excavation Damage | IA    | Floyd        | 22810       | MAGELLAN PIPELINE COMPANY, LP              | Hazardous Liquid | 0                  | 0                   | \$124,000              |
| 06/10/2003 | Excavation Damage          | Third Party Excavation Damage | TX    | Angleton     | 18116       | SUNOCO PIPELINE, L.P.                      | Hazardous Liquid | 0                  | 1                   | \$111,188              |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type       | State | County         | Operator ID | Operator Name                       | System Type      | Lat/Long (Easting) | Lat/Long (Northing) | Total Cost As Reported |
|------------|----------------------------|-------------------------------|-------|----------------|-------------|-------------------------------------|------------------|--------------------|---------------------|------------------------|
| 06/20/2005 | Excavation Damage          | Third Party Excavation Damage | LA    | Bertrille      | 19137       | TE PRODUCTS PIPELINE COMPANY, LLC   | Hazardous Liquid | 0                  | 0                   | \$60,000               |
| 08/14/2005 | Excavation Damage          | Third Party Excavation Damage | CA    | Alameda        | 2710        | CHEVRON PIPE LINE CO                | Hazardous Liquid | 0                  | 0                   | \$860,000              |
| 09/11/2005 | Excavation Damage          | Third Party Excavation Damage | KS    | Washington     | 4472        | CPRESS INTERSTATE PIPELINE LLC      | Hazardous Liquid | 0                  | 0                   | \$109,075              |
| 09/17/2005 | Excavation Damage          | Third Party Excavation Damage | NE    | Benewah        | 13176       | VALLEY CASCO PIPE LINE COMPANY, LLC | Hazardous Liquid | 0                  | 0                   | \$190,000              |
| 02/18/2005 | Excavation Damage          | Third Party Excavation Damage | CA    | Solano         | 2710        | CHEVRON PIPE LINE CO                | Hazardous Liquid | 0                  | 0                   | \$470,000              |
| 11/25/2005 | Excavation Damage          | Third Party Excavation Damage | CO    | Rio Blanco     | 2710        | CHEVRON PIPE LINE CO                | Hazardous Liquid | 0                  | 0                   | \$841,000              |
| 11/18/2005 | Excavation Damage          | Third Party Excavation Damage | KS    | Todd           | 31187       | BP PIPELINE (NORTH AMERICA) INC.    | Hazardous Liquid | 0                  | 0                   | \$1,000,000            |
| 11/04/2005 | Excavation Damage          | Third Party Excavation Damage | LA    | Oreleans       | 10473       | LOUISIANA NGL REFINERY SERVICES LLC | Hazardous Liquid | 0                  | 0                   | \$66,000               |
| 01/02/2004 | Excavation Damage          | Third Party Excavation Damage | CA    | Kern           | 31176       | SHELL PIPELINE CO., LP              | Hazardous Liquid | 0                  | 0                   | \$125,840              |
| 04/26/2004 | Excavation Damage          | Third Party Excavation Damage | LA    | Jefferson      | 4906        | EXXONMOBIL PIPELINE CO              | Hazardous Liquid | 0                  | 0                   | \$190,000              |
| 06/25/2004 | Excavation Damage          | Third Party Excavation Damage | OK    | Sevier         | 13420       | MOBILE PIPELINE L.P.                | Hazardous Liquid | 0                  | 0                   | \$4,500                |
| 09/28/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | San Patricio   | 22855       | LOCO PIPELINE COMPANY, L.P.         | Hazardous Liquid | 0                  | 0                   | \$399,800              |
| 09/18/2004 | Excavation Damage          | Third Party Excavation Damage | OK    | Osage          | 22810       | MAGELLAN PIPELINE COMPANY, LP       | Hazardous Liquid | 0                  | 0                   | \$80,000               |
| 06/21/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Gavitt         | 28510       | COLONIAL PIPELINE CO                | Hazardous Liquid | 0                  | 0                   | \$682,000              |
| 09/24/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Harris         | 18217       | TE PRODUCTS PIPELINE COMPANY, LLC   | Hazardous Liquid | 0                  | 0                   | \$268,528              |
| 11/03/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | San Patricio   | 31816       | ENTERPRISE PRODUCTS OPERATING LLC   | Hazardous Liquid | 0                  | 0                   | \$93,800               |
| 10/09/2004 | Excavation Damage          | Third Party Excavation Damage | CO    | Welder         | 32869       | RODNEY PARTNER PIPELINE SYSTEM, LLC | Hazardous Liquid | 0                  | 0                   | \$180,000              |
| 11/29/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Brewer         | 18716       | SUNOCO PIPELINE L.P.                | Hazardous Liquid | 0                  | 0                   | \$158,000              |
| 02/26/2007 | Excavation Damage          | Third Party Excavation Damage | TX    | Tarrant        | 18716       | SUNOCO PIPELINE L.P.                | Hazardous Liquid | 0                  | 0                   | \$571,234              |
| 04/11/2007 | Excavation Damage          | Third Party Excavation Damage | TX    | Parmer         | 31816       | PHILLIPS 66 PIPELINE LLC            | Hazardous Liquid | 0                  | 0                   | \$413,179              |
| 04/11/2007 | Excavation Damage          | Third Party Excavation Damage | TX    | San Antonio    | 39203       | ENRGY PIPELINE CORP                 | Hazardous Liquid | 0                  | 0                   | \$148,768              |
| 02/28/2007 | Excavation Damage          | Third Party Excavation Damage | NE    | Sandberg       | 33816       | ENTERPRISE PRODUCTS OPERATING LLC   | Hazardous Liquid | 0                  | 0                   | \$684,816              |
| 09/14/2007 | Excavation Damage          | Third Party Excavation Damage | PA    | Northumberland | 18716       | SUNOCO PIPELINE L.P.                | Hazardous Liquid | 0                  | 11                  | \$1,424,000            |
| 09/17/2007 | Excavation Damage          | Third Party Excavation Damage | TX    | Harris         | 14916       | CLAWSON, HOUSTON LP                 | Hazardous Liquid | 0                  | 0                   | \$104,000              |
| 04/18/2007 | Excavation Damage          | Third Party Excavation Damage | KS    | Morgan         | 30048       | OSAGE ENERGY, INC                   | Hazardous Liquid | 0                  | 0                   | \$149,000              |
| 04/24/2007 | Excavation Damage          | Third Party Excavation Damage | CA    | Los Angeles    | 26114       | PANAMOUNT PETROLEUM CORP            | Hazardous Liquid | 0                  | 0                   | \$1,070,300            |
| 09/20/2007 | Excavation Damage          | Third Party Excavation Damage | TX    | Polla          | 18716       | SUNOCO PIPELINE L.P.                | Hazardous Liquid | 0                  | 0                   | \$121,778              |
| 04/16/2007 | Excavation Damage          | Third Party Excavation Damage | TX    | Gavitt         | 31816       | BP PIPELINE (NORTH AMERICA) INC.    | Hazardous Liquid | 0                  | 0                   | \$682,000              |
| 06/27/2007 | Excavation Damage          | Third Party Excavation Damage | TX    | Brazos         | 4906        | EXXONMOBIL PIPELINE CO              | Hazardous Liquid | 0                  | 0                   | \$1,635,814            |
| 01/11/2007 | Excavation Damage          | Third Party Excavation Damage | OK    | Canadian       | 31816       | CENTURION PIPELINE L.P.             | Hazardous Liquid | 0                  | 0                   | \$6,000                |
| 10/19/2007 | Excavation Damage          | Third Party Excavation Damage | TX    | Liberty        | 4695        | EXPLORER PIPELINE CO                | Hazardous Liquid | 0                  | 0                   | \$85,494               |
| 04/26/2004 | Excavation Damage          | Third Party Excavation Damage | KS    | Cherokee       | 22817       | VALLEY PIPELINE CO                  | Hazardous Liquid | 0                  | 0                   | \$174,000              |
| 03/11/2004 | Excavation Damage          | Third Party Excavation Damage | MO    | Clay           | 395         | AMCO OIL CO                         | Hazardous Liquid | 0                  | 0                   | \$980,000              |
| 04/03/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Rogers         | 31816       | CENTURION PIPELINE L.P.             | Hazardous Liquid | 0                  | 0                   | \$38,000               |
| 01/21/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Johnson        | 2710        | CHEVRON PIPE LINE CO                | Hazardous Liquid | 0                  | 0                   | \$190,000              |
| 04/01/2004 | Excavation Damage          | Third Party Excavation Damage | NM    | Lea            | 2710        | CHEVRON PIPE LINE CO                | Hazardous Liquid | 0                  | 0                   | \$805,000              |
| 09/03/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Johnson        | 32107       | ENLAK NGL PIPELINE LP               | Hazardous Liquid | 0                  | 0                   | \$61,544               |
| 09/29/2004 | Excavation Damage          | Third Party Excavation Damage | TX    | Jefferson      | 22810       | LOCO PIPELINE COMPANY, L.P.         | Hazardous Liquid | 0                  | 0                   | \$177,000              |
| 04/11/2007 | Excavation Damage          | Third Party Excavation Damage | PA    | Lancaster      | 18410       | RODNEY PARTNER L.P.                 | Hazardous Liquid | 0                  | 0                   | \$100,400              |
| 09/04/2004 | Excavation Damage          | Third Party Excavation Damage | OK    | DeWitt         | 13100       | ONDEK NGL PIPELINE, LLC             | Hazardous Liquid | 0                  | 0                   | \$181,410              |
| 06/20/2004 | Excavation Damage          | Third Party Excavation Damage | KS    | Montgomery     | 31187       | BP PIPELINE (NORTH AMERICA) INC.    | Hazardous Liquid | 0                  | 0                   | \$174,000              |
| 09/19/2004 | Excavation Damage          | Third Party Excavation Damage | CA    | San            | 31816       | BP PIPELINE (NORTH AMERICA) INC.    | Hazardous Liquid | 0                  | 0                   | \$1,900,000            |
| 03/01/2004 | Excavation Damage          | Third Party Excavation Damage | NJ    | Mercer         | 3550        | COLONIAL PIPELINE CO                | Hazardous Liquid | 0                  | 0                   | \$1,148,416            |
| 09/03/2004 | Excavation Damage          | Third Party Excavation Damage | KS    | Butler         | 31816       | ENTERPRISE PRODUCTS OPERATING LLC   | Hazardous Liquid | 0                  | 0                   | \$700,000              |
| 01/01/2004 | Excavation Damage          | Third Party Excavation Damage | KS    | Boonville      | 31816       | VALLEY PIPELINE CO                  | Hazardous Liquid | 0                  | 0                   | \$1,399,100            |
| 03/14/2004 | Excavation Damage          | Third Party Excavation Damage | NE    | Yadon          | 31420       | ENRGY ENERGY PARTNERSHIP LLC        | Hazardous Liquid | 0                  | 0                   | \$76,000               |

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COMMENT

RESPONSE

| Date       | Reported Cause of Incident | Incident Cause Sub-Type       | State | County       | Operator ID | Operator Name                               | System Type      | Facilities | Spill(s) | Total Cost As Reported |
|------------|----------------------------|-------------------------------|-------|--------------|-------------|---------------------------------------------|------------------|------------|----------|------------------------|
| 12/07/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | KERN         | 31176       | SHELL PIPELINE CO., L.P.                    | HAZARDOUS LIQUID | 0          | 0        | \$6,472                |
| 12/11/2008 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CO    | RO BLANCO    | 33416       | ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$151,170              |
| 03/20/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TN    | BRADLEY      | 4803        | ENCLORIS PIPELINE CO.                       | HAZARDOUS LIQUID | 0          | 0        | \$1,438,711            |
| 02/20/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MS    | FAYETTE      | 31849       | PHILLIPS 66 PIPELINE LLC                    | HAZARDOUS LIQUID | 0          | 0        | \$702,250              |
| 04/23/2008 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | WY    | SHERIDAN     | 33884       | PHILLIPS 66 PIPELINE LLC                    | HAZARDOUS LIQUID | 0          | 0        | \$346,158              |
| 06/12/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NM    | LEA          | 2772        | CHEVRON PIPE LINE CO                        | HAZARDOUS LIQUID | 0          | 0        | \$139,138              |
| 07/02/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | KS    | ELLIS        | 8174        | AMSTAR PIPELINE LLC                         | HAZARDOUS LIQUID | 0          | 0        | \$51,566               |
| 07/25/2008 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | HARRIS       | 4090        | EDWARDS PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$306,603              |
| 07/31/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | ANDREW       | 32200       | TEPCO MIDSTREAM COMPANY, LLC                | HAZARDOUS LIQUID | 0          | 0        | \$186,280              |
| 08/12/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | SOMERVELL    | 28442       | WEST TEXAS GULF PIPELINE CO                 | HAZARDOUS LIQUID | 0          | 0        | \$63,206               |
| 08/26/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | TRINIDAD     | 14723       | TRINCO PIPELINE LP                          | HAZARDOUS LIQUID | 0          | 0        | \$506,796              |
| 11/06/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | IN    | POSBY        | 20849       | COUNTYMARK REFINING AND LOGISTICS, LLC      | HAZARDOUS LIQUID | 0          | 0        | \$114,815              |
| 12/17/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NY    | QUEENS       | 3845        | BUCKEYE PARTNERS, LP                        | HAZARDOUS LIQUID | 0          | 0        | \$234,843              |
| 12/23/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | HARRIS       | 33416       | ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$205,890              |
| 01/23/2008 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | GRISBIO      | 33416       | ROCK MIDSTREAM L.P.                         | HAZARDOUS LIQUID | 0          | 0        | \$75,675               |
| 01/30/2008 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | GRAYSON      | 380         | PLAINS PIPELINE, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | \$29,820               |
| 03/26/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | IL    | KANEADAM     | 3845        | BUCKEYE PARTNERS, LP                        | HAZARDOUS LIQUID | 0          | 0        | \$115,795              |
| 04/02/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | LA    | PLAQUEMINE   | 23173       | CHEVRON PIPE LINE CO                        | HAZARDOUS LIQUID | 0          | 0        | \$13,919,666           |
| 04/28/2008 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | KS    | RUTHER       | 32320       | ONDEK NGL PIPELINE, LLC                     | HAZARDOUS LIQUID | 0          | 0        | \$99,877               |
| 05/22/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | KS    | TRINCO       | 9173        | AMSTAR PIPELINE LLC                         | HAZARDOUS LIQUID | 0          | 0        | \$4,768                |
| 06/02/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | EMERY        | 31849       | ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | 7000                   |
| 07/09/2008 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | GA    | MCDUFFIE     | 33440       | COLE PIPELINE COMPANY LLC                   | HAZARDOUS LIQUID | 0          | 0        | \$214,225              |
| 08/07/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | GARVIN       | 22820       | MADELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | \$246,300              |
| 11/10/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | LOS ANGELES  | 33440       | WEST COAST PRODUCTS L.L.C.                  | HAZARDOUS LIQUID | 0          | 0        | \$780,000              |
| 12/09/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | KS    | EMERY        | 32320       | ONDEK NGL PIPELINE, LLC                     | HAZARDOUS LIQUID | 0          | 0        | \$134,000              |
| 02/20/2010 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MA    | MARTIN       | 33416       | ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$362,128              |
| 03/19/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | GARRETT      | 33416       | ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$45,000               |
| 07/18/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | NUCCES       | 30950       | EL PASO FIELD SERVICES                      | HAZARDOUS LIQUID | 0          | 0        | \$184,600              |
| 06/13/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | ORANGE       | 32320       | ORION PIPELINE L.P.                         | HAZARDOUS LIQUID | 0          | 0        | \$45,800               |
| 06/27/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | CONTRA COSTA | 33884       | PHILLIPS 66 PIPELINE LLC                    | HAZARDOUS LIQUID | 0          | 0        | \$1,275,940            |
| 06/29/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | ANDREW       | 30828       | ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | \$140,000              |
| 06/30/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MS    | CAVEUSE      | 31849       | PHILLIPS PIPELINE LP                        | HAZARDOUS LIQUID | 0          | 0        | \$1,392,200            |
| 06/28/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | SD    | LINCOLN      | 10012       | MUSTAR PIPELINE OPERATING PARTNERSHIP, L.P. | HAZARDOUS LIQUID | 0          | 0        | \$57,607               |
| 04/07/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | OKMUCHWA     | 33488       | CENTURION PIPELINE L.P.                     | HAZARDOUS LIQUID | 0          | 0        | \$796,500              |
| 04/08/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | KS    | TRINCO       | 23173       | AMSTAR PIPELINE COMPANY, LP                 | HAZARDOUS LIQUID | 0          | 0        | \$197,260              |
| 11/07/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | RI    | WHITESIDE    | 32320       | ENDER MORGAN COOH, LLC                      | HAZARDOUS LIQUID | 0          | 0        | \$479,830              |
| 12/08/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | WOODWARD     | 32320       | ONDEK NGL PIPELINE, LLC                     | HAZARDOUS LIQUID | 0          | 0        | \$32,472               |
| 12/10/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | RI    | MASPO        | 32317       | AMSTAR PIPELINE LLC                         | HAZARDOUS LIQUID | 0          | 0        | \$709,963              |
| 12/13/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NE    | STANTON      | 1248        | WELLS FOURCH PIPELINE CO                    | HAZARDOUS LIQUID | 0          | 0        | \$62,300               |
| 12/04/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | ND    | MOXNEAD      | 1248        | WELLS FOURCH PIPELINE CO                    | HAZARDOUS LIQUID | 0          | 0        | \$21,272               |
| 12/07/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | ND    | MOXNEAD      | 1248        | WELLS FOURCH PIPELINE CO                    | HAZARDOUS LIQUID | 0          | 0        | \$93,929               |
| 12/10/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NE    | HEMLOCK      | 23820       | MADELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | \$2,264,000            |
| 12/10/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NE    | HEMLOCK      | 23820       | MADELLAN PIPELINE COMPANY, LP               | HAZARDOUS LIQUID | 0          | 0        | \$2,286,608            |
| 01/25/2012 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | AR    | UNION        | 11553       | DELER LOGISTICS OPERATING, LLC              | HAZARDOUS LIQUID | 0          | 0        | \$42,512               |
| 01/13/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | LA    | JEFFERSON    | 200         | PLAINS PIPELINE, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | \$2,891,200            |
| 01/07/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NE    | EMERALD      | 200         | PLAINS PIPELINE, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | \$186,200              |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type       | State | County          | Operator ID         | Operator Name                           | System Type      | Facilities | Spill(s) | Total Cost As Reported |
|------------|----------------------------|-------------------------------|-------|-----------------|---------------------|-----------------------------------------|------------------|------------|----------|------------------------|
| 06/13/2013 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | TERRE           | 300                 | PLAINS PIPELINE, L.P.                   | HAZARDOUS LIQUID | 0          | 0        | \$7,475                |
| 07/02/2012 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | KONNA           | 33888               | CENTURION PIPELINE L.P.                 | HAZARDOUS LIQUID | 0          | 0        | \$403,000              |
| 06/07/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | THROCKMORTON    | 28813               | HOLLY ENERGY PARTNERS - OPERATING, L.P. | HAZARDOUS LIQUID | 0          | 0        | \$126,000              |
| 12/10/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | WEBB            | 30950               | WESTERN PIPELINE COMPANY                | HAZARDOUS LIQUID | 0          | 0        | \$68,300               |
| 01/28/2013 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | HARRIS          | 31176               | SHELL PIPELINE CO., L.P.                | HAZARDOUS LIQUID | 0          | 0        | \$10,000,000           |
| 08/26/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | LA    | PLAQUEMINE      | 33048               | WESTERN PIPELINE, LLC                   | HAZARDOUS LIQUID | 0          | 0        | \$234,000              |
| 06/12/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | MCLENNAN        | 33416               | HOLLY ENERGY PARTNERS - OPERATING, L.P. | HAZARDOUS LIQUID | 0          | 0        | \$1,205,000            |
| 07/09/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MO    | MCVENEDE        | 21370               | CINCO PIPELINE LLC                      | HAZARDOUS LIQUID | 0          | 0        | \$175,000              |
| 12/18/2008 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | KAY             | 33884               | PHILLIPS 66 PIPELINE LLC                | HAZARDOUS LIQUID | 0          | 0        | \$189,846              |
| 01/26/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | SOURRY          | 33888               | CENTURION PIPELINE L.P.                 | HAZARDOUS LIQUID | 0          | 0        | \$136,000              |
| 02/10/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | NE    | MCNEELY         | 32320               | TRINCO REFINERY OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$186,300              |
| 02/09/2014 | EXCAVATION DAMAGE          | UNSPECIFIED CORROSION         | MO    | KNOWLTON        | 15115               | SINCLAIR TRANSPORTATION COMPANY         | HAZARDOUS LIQUID | 0          | 0        | \$686,810              |
| 06/24/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | MILANO          | 33011               | HOLLY ENERGY PARTNERS - OPERATING, L.P. | HAZARDOUS LIQUID | 0          | 0        | \$3,241,200            |
| 08/18/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | AR    | WHITE           | 22120               | ENTERPRISE PRODUCTS OPERATING, LLC      | HAZARDOUS LIQUID | 0          | 0        | \$971,500              |
| 11/29/2014 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | IA    | OSAGE COUNTY    | 20510               | ENTERPRISE PRODUCTS OPERATING, LLC      | HAZARDOUS LIQUID | 0          | 0        | \$229,542              |
| 06/16/2011 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | TX    | SCURRY          | 32320               | ONDEK NGL PIPELINE, LLC                 | HAZARDOUS LIQUID | 0          | 0        | \$149,877              |
| 06/09/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | MS    | MCDONALD        | 32320               | WESTERN PIPELINE COMPANY, LP            | HAZARDOUS LIQUID | 0          | 0        | \$463,000              |
| 06/09/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CO    | WELLS           | 10012               | WELLS PIPELINE SERVICES                 | HAZARDOUS LIQUID | 0          | 0        | \$525,000              |
| 06/26/2013 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | SAN LUIS OBISPO | 33884               | PHILLIPS 66 PIPELINE LLC                | HAZARDOUS LIQUID | 0          | 0        | \$215,000              |
| 01/16/2013 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | IL    | CHRISTIAN       | 3845                | BUCKEYE PARTNERS, LP                    | HAZARDOUS LIQUID | 0          | 0        | \$228,800              |
| 12/08/2009 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | OK    | HEALING         | 23820               | MADELLAN PIPELINE COMPANY, LP           | HAZARDOUS LIQUID | 0          | 0        | \$446,600              |
| 12/04/2013 | EXCAVATION DAMAGE          | THIRD PARTY EXCAVATION DAMAGE | CA    | VENTURA         | 32320               | ORION PIPELINE L.P.                     | HAZARDOUS LIQUID | 0          | 0        | \$175,700              |
|            |                            |                               |       |                 |                     |                                         |                  |            |          | \$144,702,203          |
| 02/28/2009 | CORROSION                  | UNSPECIFIED CORROSION         | NE    | SOMERSET        | 1845                | BUCKEYE PARTNERS, LP                    | HAZARDOUS LIQUID | 0          | 0        | \$2,070,000            |
| 02/20/2009 | CORROSION                  | UNSPECIFIED CORROSION         | TX    | DUVAL           | 22850               | KOON PIPELINE COMPANY, L.P.             | HAZARDOUS LIQUID | 0          | 0        | 10                     |
| 04/16/2009 | CORROSION                  | UNSPECIFIED CORROSION         | LA    | IBEROLA         | 18017               | TE PRODUCTS PIPELINE COMPANY, LLC       | HAZARDOUS LIQUID | 0          | 0        | \$26,000               |
| 06/13/2009 | CORROSION                  | UNSPECIFIED CORROSION         | TX    | GRANDE          | 18017               | TE PRODUCTS PIPELINE COMPANY, LLC       | HAZARDOUS LIQUID | 0          | 0        | \$244,000              |
| 06/24/2008 | CORROSION                  | UNSPECIFIED CORROSION         | KS    | MARSHALL        | 28810               | CHS MOCHERSON REFINERY INC.             | HAZARDOUS LIQUID | 0          | 0        | \$175,000              |
| 02/20/2009 | CORROSION                  | UNSPECIFIED CORROSION         | TX    | JEFFERSON       | 31415               | PREACOR P.A. PIPELINE CO                | HAZARDOUS LIQUID | 0          | 0        | \$15,000               |
| 11/27/2009 | CORROSION                  | UNSPECIFIED CORROSION         | TX    | GRANDE          | 18017               | TE PRODUCTS PIPELINE COMPANY, LLC       | HAZARDOUS LIQUID | 0          | 0        | \$620,000              |
| 02/20/2009 | CORROSION                  | UNSPECIFIED CORROSION         | LA    | PLAQUEMINE      | 31276               | SHELL PIPELINE CO., L.P.                | HAZARDOUS LIQUID | 0          | 0        | \$500,000              |
| 06/15/2009 | CORROSION                  | UNSPECIFIED CORROSION         | CA    | KERN            | 31176               | SHELL PIPELINE CO., L.P.                | HAZARDOUS LIQUID | 0          | 0        | \$2,080                |
| 03/27/2009 | CORROSION                  | UNSPECIFIED CORROSION         | NC    | GUILFORD        | 2252                | COLONIAL PIPELINE CO                    | HAZARDOUS LIQUID | 0          | 0        | \$4,448                |
| 04/20/2009 | CORROSION                  | UNSPECIFIED CORROSION         | OK    | CHADDE          | 33330               | ONDEK PIPELINE SERVICES CO              | HAZARDOUS LIQUID | 0          | 0        | \$27,000               |
| 04/04/2009 | CORROSION                  | UNSPECIFIED CORROSION         | OK    | STEPHENS        | 30820               | ENTERPRISE CRUDE PIPELINE LLC           | HAZARDOUS LIQUID | 0          | 0        | \$2,100                |
| 02/18/2009 | CORROSION                  | UNSPECIFIED CORROSION         | OK    | PATNE           | 30820               | ENTERPRISE CRUDE PIPELINE LLC           | HAZARDOUS LIQUID | 0          | 0        | \$490                  |
| 04/03/2009 | CORROSION                  | UNSPECIFIED CORROSION         | CA    | LOS ANGELES     | 879                 | CHEMICAL TERMINALS CORP.                | HAZARDOUS LIQUID | 0          | 0        | \$39,300               |
| 04/06/2009 | CORROSION                  | UNSPECIFIED CORROSION         | TX    | NOBLE           | 31176               | SHELL PIPELINE CO., L.P.                | HAZARDOUS LIQUID | 0          | 0        | \$28,000               |
| 02/20/2009 | CORROSION                  | UNSPECIFIED CORROSION         | TX    | NUCCES          | 30950               | EL PASO FIELD SERVICES                  | HAZARDOUS LIQUID | 0          | 0        | \$4,500                |
| 06/13/2009 | CORROSION                  | UNSPECIFIED CORROSION         | OK    | LOGAN           | 33330               | ONDEK PIPELINE SERVICES CO              | HAZARDOUS LIQUID | 0          | 0        | \$6,570                |
| 04/16/2009 | CORROSION                  | UNSPECIFIED CORROSION         | KS    | BECKWORTH       | 9173                | AMSTAR PIPELINE LLC                     | HAZARDOUS LIQUID | 0          | 0        | \$60                   |
| 06/18/2009 | CORROSION                  | UNSPECIFIED CORROSION         | IL    | WILL            | 31189               | BP PIPELINE (NORTH AMERICAN) INC.       | HAZARDOUS LIQUID | 0          | 0        | \$14,000               |
| 06/24/2009 | CORROSION                  | UNSPECIFIED CORROSION         | TX    | CULBERTSON      | 2733                | CHEVRON PIPE LINE CO                    | HAZARDOUS LIQUID | 0          | 0        | \$1,020                |
| 07/10/2009 | CORROSION                  | UNSPECIFIED CORROSION         | OK    | NOBLE           | 33416               | CINCO PIPELINE L.P.                     | HAZARDOUS LIQUID | 0          | 0        | \$6,000                |
| 06/01/2009 | CORROSION                  | UNSPECIFIED CORROSION         | MA    | 33416           | CINCO PIPELINE L.P. | HAZARDOUS LIQUID                        | 0                | 0          | \$6,000  |                        |

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FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

COMMENT

RESPONSE

| Date       | Reported Cause of Incident | Incident Cause Def Type | State | County      | Operator ID | Operator Name                            | System Type      | Facility | Injured | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|-------------|-------------|------------------------------------------|------------------|----------|---------|------------------------|
| 06/21/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | GAINES      | 18326       | MOBIL PIPE LINE COMPANY                  | HAZARDOUS LIQUID | 0        | 0       | \$0.00                 |
| 06/23/2003 | Corrosion                  | UNSPECIFIED CORROSION   | NY    | ONTARIO     | 1846        | NUCETRY PARTNERS, LP                     | HAZARDOUS LIQUID | 0        | 0       | \$11,000               |
| 06/26/2003 | Corrosion                  | UNSPECIFIED CORROSION   | MS    | JACKSON     | 30036       | UNION PIPELINE SERVICES CO               | HAZARDOUS LIQUID | 0        | 0       | \$1,675                |
| 06/26/2003 | Corrosion                  | UNSPECIFIED CORROSION   | MS    | MAZON       | 15326       | VALLEY TRANSPORTATION COMPANY            | HAZARDOUS LIQUID | 0        | 0       | \$6,800                |
| 06/28/2003 | Corrosion                  | UNSPECIFIED CORROSION   | IL    | WILL        | 31189       | BP PIPELINE NORTH AMERICA INC.           | HAZARDOUS LIQUID | 0        | 0       | \$80,000               |
| 06/28/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | CALLAHAN    | 13038       | MOBIL PIPE LINE COMPANY                  | HAZARDOUS LIQUID | 0        | 0       | \$26,400               |
| 06/28/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | JEFFERSON   | 12626       | MOBIL PIPE LINE COMPANY                  | HAZARDOUS LIQUID | 0        | 0       | \$26,800               |
| 06/28/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | FREDRICKS   | 31189       | BP PIPELINE NORTH AMERICA INC.           | HAZARDOUS LIQUID | 0        | 0       | \$1,500                |
| 06/28/2003 | Corrosion                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES | 31238       | TOSCO DISTRIBUTION WEST                  | HAZARDOUS LIQUID | 0        | 0       | \$10,000               |
| 06/28/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | WINKLER     | 30036       | PLAINS PIPELINE, L.P.                    | HAZARDOUS LIQUID | 0        | 0       | \$940                  |
| 06/29/2003 | Corrosion                  | UNSPECIFIED CORROSION   | WY    |             | 81666       | ROCKY MOUNTAIN PIPELINE SYSTEM, LLC      | HAZARDOUS LIQUID | 0        | 0       | \$437                  |
| 06/29/2003 | Corrosion                  | UNSPECIFIED CORROSION   | KS    | BUTLER      | 22820       | MAGELLAN PIPELINE COMPANY, LP            | HAZARDOUS LIQUID | 0        | 0       | \$4,700                |
| 01/27/2002 | Corrosion                  | UNSPECIFIED CORROSION   | IL    | WILL        | 31189       | BP PIPELINE NORTH AMERICA INC.           | HAZARDOUS LIQUID | 0        | 0       | \$35,000               |
| 12/21/2002 | Corrosion                  | UNSPECIFIED CORROSION   | IL    | WYOMING     | 12177       | MAGELLAN GAS PIPELINE LLC                | HAZARDOUS LIQUID | 0        | 0       | \$28,800               |
| 05/24/2002 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | JEFFERSON   | 12626       | MOBIL PIPE LINE COMPANY                  | HAZARDOUS LIQUID | 0        | 0       | \$1,710                |
| 01/09/2002 | Corrosion                  | UNSPECIFIED CORROSION   | WY    | CARBON      | 15105       | ANGULAR TRANSPORTATION COMPANY           | HAZARDOUS LIQUID | 0        | 0       | \$4,370                |
| 01/02/2002 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | ECTOR       | 30036       | ALON USA, LP                             | HAZARDOUS LIQUID | 0        | 0       | \$1,190                |
| 12/23/2001 | Corrosion                  | UNSPECIFIED CORROSION   | WY    |             | 81666       | ROCKY MOUNTAIN PIPELINE SYSTEM, LLC      | HAZARDOUS LIQUID | 0        | 0       | \$480                  |
| 12/27/2002 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | PATNE       | 13131       | CONOCO-PHILLIPS (S&P - L&B)              | HAZARDOUS LIQUID | 0        | 0       | \$4,600                |
| 11/20/2002 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | PATNE       | 31174       | SHELL PIPELINE CO., L.P.                 | HAZARDOUS LIQUID | 0        | 0       | \$5,370                |
| 12/23/2001 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | LOGAN       | 31174       | SHOCKS & B INC.                          | HAZARDOUS LIQUID | 0        | 0       | \$24,600               |
| 11/26/2002 | Corrosion                  | UNSPECIFIED CORROSION   | IL    | MARION      | 31174       | SHELL PIPELINE CO., L.P.                 | HAZARDOUS LIQUID | 0        | 0       | \$20,520               |
| 02/07/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | WICHITA     | 31684       | PHILLIPS 66 PIPELINE LLC                 | HAZARDOUS LIQUID | 0        | 0       | \$922                  |
| 01/11/2003 | Corrosion                  | UNSPECIFIED CORROSION   | WY    | UNION       | 30036       | ROCKY MOUNTAIN PIPELINE SYSTEM, LLC      | HAZARDOUS LIQUID | 0        | 0       | \$890                  |
| 01/25/2003 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | DEWALD      | 12885       | ROCK PIPELINE COMPANY, L.P.              | HAZARDOUS LIQUID | 0        | 0       | \$11                   |
| 01/13/2002 | Corrosion                  | UNSPECIFIED CORROSION   | CA    | KERN        | 31174       | SHELL PIPELINE CO., L.P.                 | HAZARDOUS LIQUID | 0        | 0       | \$43,950               |
| 01/24/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | NAVARRO     | 13038       | MOBIL PIPE LINE COMPANY                  | HAZARDOUS LIQUID | 0        | 0       | \$14,000               |
| 02/24/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | HADSPETH    | 2783        | CHEVRON PIPE LINE CO                     | HAZARDOUS LIQUID | 0        | 0       | \$6,000                |
| 01/23/2003 | Corrosion                  | UNSPECIFIED CORROSION   | GA    | HARRISON    | 13617       | PLANTATION PIPE LINE CO                  | HAZARDOUS LIQUID | 0        | 0       | \$10,000               |
| 02/20/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    |             | 31872       | CHAPARRAL ENERGY, LLC                    | HAZARDOUS LIQUID | 0        | 0       | \$14,500               |
| 02/20/2003 | Corrosion                  | UNSPECIFIED CORROSION   | MS    | FORREST     | 30035       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0        | 0       | \$2,470                |
| 02/20/2003 | Corrosion                  | UNSPECIFIED CORROSION   | MS    | UNION       | 30035       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0        | 0       | \$20,400               |
| 02/18/2003 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | CREEK       | 31189       | BP PIPELINE NORTH AMERICA INC.           | HAZARDOUS LIQUID | 0        | 0       | \$5,000                |
| 02/18/2003 | Corrosion                  | UNSPECIFIED CORROSION   | CA    |             | 31420       | YORK TERMINAL LOS ANGELES INC.           | HAZARDOUS LIQUID | 0        | 0       | \$39,000               |
| 02/25/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    |             | 31872       | CHAPARRAL ENERGY, LLC                    | HAZARDOUS LIQUID | 0        | 0       | \$10,000               |
| 02/26/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | BRADSBY     | 30040       | SUNOCO PIPELINE USA, L.P.                | HAZARDOUS LIQUID | 0        | 0       | \$10,000               |
| 01/26/2003 | Corrosion                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES | 26041       | CINDER MORGAN LIQUID TERMINAL, LLC       | HAZARDOUS LIQUID | 0        | 0       | \$48,600               |
| 01/14/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | HARRIS      | 30739       | PARTNER PETROLEUM CORPORATION            | HAZARDOUS LIQUID | 0        | 0       | \$14,620               |
| 04/26/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | HARRIS      | 13037       | TE PRODUCTS PIPELINE COMPANY, LLC        | HAZARDOUS LIQUID | 0        | 0       | \$49,000               |
| 04/26/2003 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | PATNE       | 12885       | ROCK PIPELINE COMPANY, L.P.              | HAZARDOUS LIQUID | 0        | 0       | \$1,010                |
| 06/17/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | AUSTIN      | 30829       | ENTERPRISE CRUDE PIPELINE LLC            | HAZARDOUS LIQUID | 0        | 0       | \$5,370                |
| 06/17/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | BRACKEN     | 13038       | MOBIL PIPE LINE COMPANY                  | HAZARDOUS LIQUID | 0        | 0       | \$10,000               |
| 06/16/2003 | Corrosion                  | UNSPECIFIED CORROSION   | WI    | DOUGLAS     | 11189       | ENERGISE ENERGY LIMITED PARTNERSHIP      | HAZARDOUS LIQUID | 0        | 0       | \$10,000               |
| 06/25/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | ARCHER      | 30829       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0        | 0       | \$48,510               |
| 07/17/2002 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | MOFFITT     | 13175       | TE PRODUCTS PIPELINE LLC                 | HAZARDOUS LIQUID | 0        | 0       | \$1,000                |
| 07/16/2002 | Corrosion                  | UNSPECIFIED CORROSION   | WY    | BIG HORN    | 12127       | MAGELLAN GAS PIPELINE LLC                | HAZARDOUS LIQUID | 0        | 0       | \$11,700               |

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| Date       | Reported Cause of Incident | Incident Cause Def Type | State | County           | Operator ID | Operator Name                             | System Type      | Facility | Injured | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|------------------|-------------|-------------------------------------------|------------------|----------|---------|------------------------|
| 07/21/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | WARRANT          | 10540       | GENCO PIPELINE USA, L.P.                  | HAZARDOUS LIQUID | 0        | 0       | \$1,500                |
| 07/20/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | NUCLEUS          | 30022       | OTCO REFINING & CHEMICAL CO. L.P.         | HAZARDOUS LIQUID | 0        | 0       | \$20,200               |
| 06/19/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | GAINES           | 13038       | MOBIL PIPE LINE COMPANY                   | HAZARDOUS LIQUID | 0        | 0       | \$1,000                |
| 07/20/2003 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | BRIDGECR         | 30035       | ENTERPRISE CRUDE PIPELINE LLC             | HAZARDOUS LIQUID | 0        | 0       | \$4,000                |
| 06/19/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | HADSPETH         | 2783        | CHEVRON PIPE LINE CO                      | HAZARDOUS LIQUID | 0        | 0       | \$1,120                |
| 04/29/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | HADSPETH         | 2783        | CHEVRON PIPE LINE CO                      | HAZARDOUS LIQUID | 0        | 0       | \$760                  |
| 04/29/2003 | Corrosion                  | UNSPECIFIED CORROSION   | MS    | UNION            | 30035       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP  | HAZARDOUS LIQUID | 0        | 0       | \$1,800                |
| 08/20/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | JEFFERSON        | 18117       | TE PRODUCTS PIPELINE COMPANY, LLC         | HAZARDOUS LIQUID | 0        | 0       | \$381                  |
| 10/16/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | ECTOR            | 30036       | PLAINS PIPELINE, L.P.                     | HAZARDOUS LIQUID | 0        | 0       | \$12,000               |
| 10/16/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | MIDLAND          | 30036       | PLAINS PIPELINE, L.P.                     | HAZARDOUS LIQUID | 0        | 0       | \$12,000               |
| 10/20/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | ETTERLAKE        | 18170       | CONOCO PIPELINE, L.P.                     | HAZARDOUS LIQUID | 0        | 0       | \$6,200                |
| 11/04/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | ECTOR            | 12826       | MOBIL PIPE LINE COMPANY                   | HAZARDOUS LIQUID | 0        | 0       | \$550                  |
| 11/24/2003 | Corrosion                  | UNSPECIFIED CORROSION   | KS    | HASKELL          | 8123        | PARTNER PIPELINE LLC                      | HAZARDOUS LIQUID | 0        | 0       | \$980                  |
| 11/23/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | SAN PATRICK      | 30035       | ENTERPRISE CRUDE PIPELINE LLC             | HAZARDOUS LIQUID | 0        | 0       | \$60                   |
| 11/04/2003 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | NUCLEUS          | 30022       | OTCO REFINING & CHEMICAL CO. L.P.         | HAZARDOUS LIQUID | 0        | 0       | \$6,120                |
| 11/01/2003 | Corrosion                  | UNSPECIFIED CORROSION   | IN    | LAKE             | 4800        | EXPLORER PIPELINE CO                      | HAZARDOUS LIQUID | 0        | 0       | \$920                  |
| 11/14/2003 | Corrosion                  | UNSPECIFIED CORROSION   | IL    | WILL             | 31189       | BP PIPELINE NORTH AMERICA INC.            | HAZARDOUS LIQUID | 0        | 0       | \$20,000               |
| 01/01/2004 | Corrosion                  | UNSPECIFIED CORROSION   | LA    | EAST BATON ROUGE | 18616       | PLANTATION PIPE LINE CO                   | HAZARDOUS LIQUID | 0        | 0       | \$90,000               |
| 01/26/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | GALVESTON        | 31189       | BP PIPELINE NORTH AMERICA INC.            | HAZARDOUS LIQUID | 0        | 0       | \$6,510                |
| 02/20/2004 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | PATNE            | 31174       | SHELL PIPELINE CO., L.P.                  | HAZARDOUS LIQUID | 0        | 0       | \$0                    |
| 02/20/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | GRADY            | 4016        | WINDRIVER PIPELINE CO                     | HAZARDOUS LIQUID | 0        | 0       | \$38,000               |
| 04/06/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | CLEBURTON        | 31857       | CINDER MORGAN WINK PIPELINE LLC           | HAZARDOUS LIQUID | 0        | 0       | \$1,210                |
| 02/24/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | CLEBURTON        | 31857       | CINDER MORGAN WINK PIPELINE LLC           | HAZARDOUS LIQUID | 0        | 0       | \$1,800                |
| 04/02/2004 | Corrosion                  | UNSPECIFIED CORROSION   | GA    | CARROLL          | 13624       | PLANTATION PIPE LINE CO                   | HAZARDOUS LIQUID | 0        | 0       | \$3,010                |
| 04/02/2004 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | STEPHENS         | 12826       | MAGELLAN PIPELINE COMPANY, L.P.           | HAZARDOUS LIQUID | 0        | 0       | \$44,220               |
| 05/18/2004 | Corrosion                  | UNSPECIFIED CORROSION   | CA    | KERN             | 31174       | SHELL PIPELINE CO., L.P.                  | HAZARDOUS LIQUID | 0        | 0       | \$1,040                |
| 04/29/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | WINKLER          | 30036       | PLAINS PIPELINE, L.P.                     | HAZARDOUS LIQUID | 0        | 0       | \$4,700                |
| 04/29/2004 | Corrosion                  | UNSPECIFIED CORROSION   | KS    | MAGNolia         | 8123        | PARTNER PIPELINE LLC                      | HAZARDOUS LIQUID | 0        | 0       | \$900                  |
| 06/24/2004 | Corrosion                  | UNSPECIFIED CORROSION   | OK    | CARTER           | 31189       | BP PIPELINE NORTH AMERICA INC.            | HAZARDOUS LIQUID | 0        | 0       | \$10,000               |
| 06/24/2004 | Corrosion                  | UNSPECIFIED CORROSION   | GA    | COBB             | 2002        | COLONIAL PIPELINE CO                      | HAZARDOUS LIQUID | 0        | 0       | \$1,000                |
| 06/16/2004 | Corrosion                  | UNSPECIFIED CORROSION   | CA    | KERN             | 31174       | SHELL PIPELINE CO., L.P.                  | HAZARDOUS LIQUID | 0        | 0       | \$10,000               |
| 04/01/2004 | Corrosion                  | UNSPECIFIED CORROSION   | KS    | MCKEAN           | 13617       | PLANTATION PIPELINE CO                    | HAZARDOUS LIQUID | 0        | 0       | \$20,000               |
| 07/13/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | WALKER           | 4800        | EXPLORER PIPELINE CO                      | HAZARDOUS LIQUID | 0        | 0       | \$10,004               |
| 08/20/2004 | Corrosion                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES      | 31174       | SHELL PIPELINE CO., L.P.                  | HAZARDOUS LIQUID | 0        | 0       | \$11,000               |
| 04/21/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | ANDREWS          | 30035       | LINK ENERGY PIPELINE, L.P.                | HAZARDOUS LIQUID | 0        | 0       | \$600                  |
| 06/20/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | CRANE            | 30036       | PLAINS PIPELINE, L.P.                     | HAZARDOUS LIQUID | 0        | 0       | \$1,500                |
| 10/24/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | BRADSBY          | 30829       | ENTERPRISE CRUDE PIPELINE LLC             | HAZARDOUS LIQUID | 0        | 0       | \$190                  |
| 04/10/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | ECTOR            | 30036       | ALON STAR OIL & GAS CO                    | HAZARDOUS LIQUID | 0        | 0       | \$58,000               |
| 11/23/2004 | Corrosion                  | UNSPECIFIED CORROSION   | WY    | BRIDGE           | 81175       | TE PRODUCTS PIPELINE COMPANY, LLC         | HAZARDOUS LIQUID | 0        | 0       | \$1,000                |
| 03/21/2004 | Corrosion                  | UNSPECIFIED CORROSION   | CA    | SAN LUIS OBISPO  | 13164       | PHILLIPS 66 PIPELINE LLC                  | HAZARDOUS LIQUID | 0        | 0       | \$10                   |
| 11/20/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | CLEBURTON        | 31857       | CINDER MORGAN WINK PIPELINE LLC           | HAZARDOUS LIQUID | 0        | 0       | \$4,370                |
| 08/02/2004 | Corrosion                  | UNSPECIFIED CORROSION   | KS    | MAGNolia         | 30035       | ENTERPRISE CRUDE PIPELINE COMPANY, L.L.C. | HAZARDOUS LIQUID | 0        | 0       | \$4,000                |
| 01/19/2004 | Corrosion                  | UNSPECIFIED CORROSION   | AR    | COLUMBIA         | 11470       | VALLEY PIPELINE CO                        | HAZARDOUS LIQUID | 0        | 0       | \$2,010                |
| 01/20/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | ECTOR            | 30036       | PLAINS PIPELINE, L.P.                     | HAZARDOUS LIQUID | 0        | 0       | \$1,700                |
| 04/26/2004 | Corrosion                  | UNSPECIFIED CORROSION   | LA    | ST JAMES         | 12730       | ROCK LLC                                  | HAZARDOUS LIQUID | 0        | 0       | \$17,000               |
| 02/18/2004 | Corrosion                  | UNSPECIFIED CORROSION   | TX    | MIDLAND          | 30829       | ENTERPRISE CRUDE PIPELINE LLC             | HAZARDOUS LIQUID | 0        | 0       | \$1,100                |

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FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State | County      | Operator ID                             | Operator Name    | System Type | Ferretion | Reported | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|-------------|-----------------------------------------|------------------|-------------|-----------|----------|------------------------|
| 02/18/2005 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | ADREWS      | 31557 ANDER MORGAN WINK PIPELINE LLC    | HAZARDOUS LIQUID | 0           | 0         | 0        | 5405                   |
| 03/09/2005 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | EASTLAND    | 2731 CHEVRON PPI LINE CO                | HAZARDOUS LIQUID | 0           | 0         | 0        | 185,990                |
| 03/16/2005 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | HARRISON    | 300 PLAINS PIPELINE, L.P.               | HAZARDOUS LIQUID | 0           | 0         | 0        | 56,800                 |
| 04/08/2005 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | LAKECHARLES | 4000 ENDURANCE PIPELINE CO              | HAZARDOUS LIQUID | 0           | 0         | 0        | 12,894                 |
| 04/13/2005 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | FILE        | 9173 ARPAW PIPELINE LLC                 | HAZARDOUS LIQUID | 0           | 0         | 0        | 1540                   |
| 04/20/2005 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | GADSDO      | 300 PLAINS PIPELINE, L.P.               | HAZARDOUS LIQUID | 0           | 0         | 0        | 59,120                 |
| 04/22/2005 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | NAVARO      | 13045 MOBILE PIPE LINE COMPANY          | HAZARDOUS LIQUID | 0           | 0         | 0        | 31,660                 |
| 05/28/2005 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | HASKELL     | 9173 ARPAW PIPELINE LLC                 | HAZARDOUS LIQUID | 0           | 0         | 0        | 1500                   |
| 06/11/2005 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WINKLER     | 300 PLAINS PIPELINE, L.P.               | HAZARDOUS LIQUID | 0           | 0         | 0        | 56,950                 |
| 07/09/2005 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | KEENE       | 31176 SHELL PIPELINE CO., L.P.          | HAZARDOUS LIQUID | 0           | 0         | 0        | 129,000                |
| 08/20/2005 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES | 11887 PACIFIC TERMINAL LLC              | HAZARDOUS LIQUID | 0           | 0         | 0        | 15,000                 |
| 08/31/2005 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | NAVARO      | 18718 SUNOCO PIPELINE L.P.              | HAZARDOUS LIQUID | 0           | 0         | 0        | 15,300                 |
| 09/02/2005 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | BUTLERSON   | 26885 PLAINS MARKETING, L.P.            | HAZARDOUS LIQUID | 0           | 0         | 0        | 56,300                 |
| 09/27/2005 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | LOS ANGELES | 31889 PACIFIC TERMINAL LLC              | HAZARDOUS LIQUID | 0           | 0         | 0        | 32,800                 |
| 09/31/2005 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | CALHOUN     | 30716 MELAN PRODUCTION CO.              | HAZARDOUS LIQUID | 0           | 0         | 0        | 10                     |
| 09/24/2005 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | KAY         | 31684 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 10/12/2005 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | MORTON      | 9173 ARPAW PIPELINE LLC                 | HAZARDOUS LIQUID | 0           | 0         | 0        | 1500                   |
| 10/21/2005 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | CALCASIEU   | 31684 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0           | 0         | 0        | 54,000                 |
| 10/29/2005 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | CALCASIEU   | 31684 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0           | 0         | 0        | 5400                   |
| 10/21/2005 | CORROSION                  | UNSPECIFIED CORROSION   | MO    | SAN JUAN    | 2371 WESTERN REFINING SOUTHWEST, INC    | HAZARDOUS LIQUID | 0           | 0         | 0        | 57,342                 |
| 10/25/2005 | CORROSION                  | UNSPECIFIED CORROSION   | AR    | CLARK       | 18113 TE PRODUCTS PIPELINE COMPANY, LLC | HAZARDOUS LIQUID | 0           | 0         | 0        | 100,000                |
| 10/24/2005 | CORROSION                  | UNSPECIFIED CORROSION   | MI    | CARROLL     | 31180 BP PIPELINE NORTH AMERICA INC.    | HAZARDOUS LIQUID | 0           | 0         | 0        | 10,000                 |
| 11/15/2005 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | KEENE       | 31176 SHELL PIPELINE CO., L.P.          | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 11/24/2005 | CORROSION                  | UNSPECIFIED CORROSION   | MO    | CASS        | 31189 BP PIPELINE NORTH AMERICA INC.    | HAZARDOUS LIQUID | 0           | 0         | 0        | 111,000                |
| 12/01/2005 | CORROSION                  | UNSPECIFIED CORROSION   | RI    | LAKE        | 302 ANDROCO P.I. CO.                    | HAZARDOUS LIQUID | 0           | 0         | 0        | 170,000                |
| 12/06/2005 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | PAFNE       | 30829 ENTERPRISE CRUDE PIPELINE LLC     | HAZARDOUS LIQUID | 0           | 0         | 0        | 17,110                 |
| 12/09/2005 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | CRILEE      | 31189 BP PIPELINE NORTH AMERICA INC.    | HAZARDOUS LIQUID | 0           | 0         | 0        | 56,000                 |
| 01/05/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | GRISG       | 4000 ENDURANCE PIPELINE CO              | HAZARDOUS LIQUID | 0           | 0         | 0        | 54,000                 |
| 01/27/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | ETDIA       | 31684 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0           | 0         | 0        | 195,110                |
| 02/02/2006 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | PAFNE       | 30829 ENTERPRISE CRUDE PIPELINE LLC     | HAZARDOUS LIQUID | 0           | 0         | 0        | 16,000                 |
| 02/02/2006 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | MULTNOMAH   | 18829 PIPP, LP                          | HAZARDOUS LIQUID | 0           | 0         | 0        | 180,440                |
| 02/10/2006 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | KEENE       | 31176 SHELL PIPELINE CO                 | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 02/12/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | ECTOR       | 300 PLAINS PIPELINE, L.P.               | HAZARDOUS LIQUID | 0           | 0         | 0        | 10,000                 |
| 02/24/2006 | CORROSION                  | UNSPECIFIED CORROSION   | AR    | UNION       | 18113 TE PRODUCTS PIPELINE COMPANY, LLC | HAZARDOUS LIQUID | 0           | 0         | 0        | 10,070                 |
| 03/01/2006 | CORROSION                  | UNSPECIFIED CORROSION   | WA    | CLATSOP     | 30829 ENTERPRISE CRUDE PIPELINE LLC     | HAZARDOUS LIQUID | 0           | 0         | 0        | 1,000                  |
| 03/29/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | NAJESSE     | 30700 COTSO PRODUCTS PIPELINE CO        | HAZARDOUS LIQUID | 0           | 0         | 0        | 198,000                |
| 03/24/2006 | CORROSION                  | UNSPECIFIED CORROSION   | HI    | HONOLULU    | 26045 HAWAII INDEPENDENT ENERGY         | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,740                 |
| 04/19/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | SAN PATRICK | 26386 TACONET PIPELINE CORP             | HAZARDOUS LIQUID | 0           | 0         | 0        | 1,010                  |
| 04/19/2006 | CORROSION                  | UNSPECIFIED CORROSION   | MO    | KEOSAUQUO   | 11110 UNCLAR TRANSPORTATION COMPANY     | HAZARDOUS LIQUID | 0           | 0         | 0        | 196,100                |
| 04/30/2006 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | KEENE       | 26134 EXXONMOBIL OIL CORP - WEST COAST  | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,700                 |
| 04/30/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | ARCHER      | 30829 ENTERPRISE CRUDE PIPELINE LLC     | HAZARDOUS LIQUID | 0           | 0         | 0        | 14,070                 |
| 05/12/2006 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | ALLIE       | 18113 ANDER MORGAN WINK PARTNERSHIP LP  | HAZARDOUS LIQUID | 0           | 0         | 0        | 104,000                |
| 05/12/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | SOURB       | 30829 ENTERPRISE CRUDE PIPELINE LLC     | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,070                 |
| 05/08/2006 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | KEENE       | 26134 EXXONMOBIL OIL CORP - WEST COAST  | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,170                 |
| 06/10/2006 | CORROSION                  | UNSPECIFIED CORROSION   | MO    | KNOW        | 11110 UNCLAR TRANSPORTATION COMPANY     | HAZARDOUS LIQUID | 0           | 0         | 0        | 196,100                |
| 06/12/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | CALHOUN     | 30829 ENTERPRISE CRUDE PIPELINE LLC     | HAZARDOUS LIQUID | 0           | 0         | 0        | 100,100                |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State | County      | Operator ID                                            | Operator Name    | System Type | Ferretion | Reported | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|-------------|--------------------------------------------------------|------------------|-------------|-----------|----------|------------------------|
| 06/12/2006 | CORROSION                  | UNSPECIFIED CORROSION   | AR    | UNION       | 18113 TE PRODUCTS PIPELINE COMPANY, LLC                | HAZARDOUS LIQUID | 0           | 0         | 0        | 10,400                 |
| 06/12/2006 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | FRANKLIN    | 300 PLAINS PIPELINE, L.P.                              | HAZARDOUS LIQUID | 0           | 0         | 0        | 56,900                 |
| 07/12/2006 | CORROSION                  | UNSPECIFIED CORROSION   | MO    | JACKSON     | 11110 UNCLAR TRANSPORTATION COMPANY                    | HAZARDOUS LIQUID | 0           | 0         | 0        | 146,940                |
| 07/19/2006 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | CARTER      | 30829 ENTERPRISE CRUDE PIPELINE LLC                    | HAZARDOUS LIQUID | 0           | 0         | 0        | 16,000                 |
| 07/28/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WINKLER     | 300 PLAINS PIPELINE, L.P.                              | HAZARDOUS LIQUID | 0           | 0         | 0        | 111,970                |
| 07/31/2006 | CORROSION                  | UNSPECIFIED CORROSION   | VA    | FAIRFAX     | 7032 COLONIAL PIPELINE CO                              | HAZARDOUS LIQUID | 0           | 0         | 0        | 145,000                |
| 08/04/2006 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES | 26045 HAWAIIAN PETROLEUM CORP                          | HAZARDOUS LIQUID | 0           | 0         | 0        | 111,810                |
| 08/11/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | MELAND      | 30829 ENTERPRISE CRUDE PIPELINE LLC                    | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 08/06/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | MELAND      | 300 PLAINS PIPELINE, L.P.                              | HAZARDOUS LIQUID | 0           | 0         | 0        | 17,000                 |
| 08/29/2006 | CORROSION                  | UNSPECIFIED CORROSION   | DH    | ALLIE       | 18113 ANDER MORGAN WINK PIPELINE LLC                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 104,000                |
| 11/21/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | CRANE       | 300 PLAINS PIPELINE, L.P.                              | HAZARDOUS LIQUID | 0           | 0         | 0        | 54,300                 |
| 12/13/2006 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | PAFNE       | 31189 BP PIPELINE NORTH AMERICA INC.                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 100,000                |
| 12/22/2006 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | PAFNE       | 31189 BP PIPELINE NORTH AMERICA INC.                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 56,000                 |
| 12/28/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | MELAND      | 300 PLAINS PIPELINE, L.P.                              | HAZARDOUS LIQUID | 0           | 0         | 0        | 10,110                 |
| 01/22/2007 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | GRISG       | 12470 MED - VALLEY PIPELINE CO                         | HAZARDOUS LIQUID | 0           | 0         | 0        | 111,110                |
| 01/26/2007 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | NAVARO      | 18718 SUNOCO PIPELINE L.P.                             | HAZARDOUS LIQUID | 0           | 0         | 0        | 14,100                 |
| 02/29/2007 | CORROSION                  | UNSPECIFIED CORROSION   | IN    | LAKE        | 30829 ENTERPRISE CRUDE PIPELINE CORPORATION (TERMINAL) | HAZARDOUS LIQUID | 0           | 0         | 0        | 115,100                |
| 02/29/2007 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WINK        | 18718 SUNOCO PIPELINE L.P.                             | HAZARDOUS LIQUID | 0           | 0         | 0        | 1000                   |
| 03/20/2007 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES | 26045 ANDER MORGAN LIQUID TERMINAL LLC                 | HAZARDOUS LIQUID | 0           | 0         | 0        | 148,110                |
| 03/31/2007 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | GRISG       | 18718 SUNOCO PIPELINE L.P.                             | HAZARDOUS LIQUID | 0           | 0         | 0        | 110,100                |
| 03/29/2007 | CORROSION                  | UNSPECIFIED CORROSION   | NE    | PLACER      | 18113 ANDER MORGAN WINK PARTNERSHIP LP                 | HAZARDOUS LIQUID | 0           | 0         | 0        | 104,000                |
| 06/01/2007 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WINKLER     | 32917 ANDER MORGAN WINK PIPELINE LLC                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 100                    |
| 06/10/2007 | CORROSION                  | UNSPECIFIED CORROSION   | RI    | WILL        | 31189 ANDERCO ENERGY, LIMITED PARTNERSHIP              | HAZARDOUS LIQUID | 0           | 0         | 0        | 140,000                |
| 06/10/2007 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | PAFNE       | 31189 BP PIPELINE NORTH AMERICA INC.                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 107,970                |
| 06/14/2007 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | GADSDO      | 31189 BP PIPELINE NORTH AMERICA INC.                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 100,000                |
| 06/19/2007 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | SMITH       | 26885 PLAINS MARKETING, L.P.                           | HAZARDOUS LIQUID | 0           | 0         | 0        | 174,100                |
| 06/20/2007 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | TAHOMA      | 22442 WEST TROSS COOP PIPELINE CO                      | HAZARDOUS LIQUID | 0           | 0         | 0        | 114,100                |
| 06/24/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | NAVARO      | 18718 SUNOCO PIPELINE L.P.                             | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,300                 |
| 08/04/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | GRISG       | 18718 SUNOCO PIPELINE L.P.                             | HAZARDOUS LIQUID | 0           | 0         | 0        | 140                    |
| 08/11/2006 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | CALCASIEU   | 31684 PHILLIPS 66 PIPELINE LLC                         | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,070                 |
| 08/16/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | NAVARO      | 18718 SUNOCO PIPELINE L.P.                             | HAZARDOUS LIQUID | 0           | 0         | 0        | 10,000                 |
| 08/25/2006 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES | 26045 ANDER MORGAN LIQUID TERMINAL, LLC                | HAZARDOUS LIQUID | 0           | 0         | 0        | 101,110                |
| 09/11/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | MELAND      | 30829 ENTERPRISE CRUDE PIPELINE LLC                    | HAZARDOUS LIQUID | 0           | 0         | 0        | 10,000                 |
| 09/19/2006 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | CARTER      | 300 PLAINS PIPELINE, L.P.                              | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 09/21/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | SAN PATRICK | 32100 TEPSCO MIDSTREAM COMPANIES, LLC                  | HAZARDOUS LIQUID | 0           | 0         | 0        | 101,000                |
| 09/21/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | ANDREAS     | 31888 CENTURION PIPELINE L.P.                          | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 09/26/2006 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | BUTLER      | 31847 MIDCO PIPELINES (OSAGE) L.L.C.                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 09/28/2006 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | PAFNE       | 31189 BP PIPELINE NORTH AMERICA INC.                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 104,000                |
| 09/29/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | EASTLAND    | 18718 SUNOCO PIPELINE L.P.                             | HAZARDOUS LIQUID | 0           | 0         | 0        | 14,700                 |
| 09/29/2006 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | CALCASIEU   | 31684 PHILLIPS 66 PIPELINE LLC                         | HAZARDOUS LIQUID | 0           | 0         | 0        | 10,100                 |
| 09/29/2006 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | KEENE       | 31189 PHILLIPS 66 PIPELINE LLC                         | HAZARDOUS LIQUID | 0           | 0         | 0        | 114,000                |
| 09/29/2006 | CORROSION                  | UNSPECIFIED CORROSION   | MO    | CASS        | 31189 BP PIPELINE NORTH AMERICA INC.                   | HAZARDOUS LIQUID | 0           | 0         | 0        | 110,000                |
| 09/29/2006 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | GRISG       | 300 PLAINS PIPELINE, L.P.                              | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 11/01/2007 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | LOVING      | 32111 HOLLY ENERGY PARTNERS - OBERMIRA, L.P.           | HAZARDOUS LIQUID | 0           | 0         | 0        | 11,000                 |
| 11/01/2007 | CORROSION                  | UNSPECIFIED CORROSION   | RI    | MORRISSE    | 18113 ANDERCO PARTNERSHIP LP                           | HAZARDOUS LIQUID | 0           | 0         | 0        | 110,000                |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State | County           | Operator ID | Operator Name                                  | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|------------------|-------------|------------------------------------------------|------------------|------------|----------|------------------------|
| 11/20/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES      | 314310      | WEST COAST PRODUCTS L.L.C.                     | HAZARDOUS LIQUID | 0          | 0        | 119,000                |
| 11/29/2009 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | MCPHERSON        | 33814       | MO-CONTINENT FRACTIONATOR AND STORAGE, L.L.C.  | HAZARDOUS LIQUID | 0          | 0        | 51,000                 |
| 04/17/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | CHAMBERLAIN      | 30218       | ENTERPRISE PRODUCTS OPERATING LLC              | HAZARDOUS LIQUID | 0          | 0        | 56,145                 |
| 01/28/2009 | CORROSION                  | UNSPECIFIED CORROSION   | MS    | CANE             | 31237       | BP PIPELINE NORTH AMERICA INC.                 | HAZARDOUS LIQUID | 0          | 0        | 152,000                |
| 01/29/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES      | 28133       | EXXONMOBIL OIL CORP. WEST COAST                | HAZARDOUS LIQUID | 0          | 0        | 119,500                |
| 03/18/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES      | 28133       | EXXONMOBIL OIL CORP. WEST COAST                | HAZARDOUS LIQUID | 0          | 0        | 547,000                |
| 03/22/2009 | CORROSION                  | UNSPECIFIED CORROSION   | IN    | LANE             | 31119       | BP PIPELINE NORTH AMERICA INC.                 | HAZARDOUS LIQUID | 0          | 0        | 185,000                |
| 03/26/2009 | CORROSION                  | UNSPECIFIED CORROSION   | MS    | CANE             | 31237       | BP PIPELINE NORTH AMERICA INC.                 | HAZARDOUS LIQUID | 0          | 0        | 154,800                |
| 03/26/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | HUTCHINSON       | 33866       | PHILLIPS 66 PIPELINE LLC                       | HAZARDOUS LIQUID | 0          | 0        | 5513                   |
| 03/26/2009 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | MCPHERSON        | 33812       | USTAR PIPELINE OPERATING PARTNERSHIP, LP       | HAZARDOUS LIQUID | 0          | 0        | 235,000                |
| 04/08/2009 | CORROSION                  | UNSPECIFIED CORROSION   | DE    | PERM             | 33989       | PHILLIPS 66 PIPELINE LLC                       | HAZARDOUS LIQUID | 0          | 0        | 212,300                |
| 09/17/2008 | CORROSION                  | UNSPECIFIED CORROSION   | OH    | LUCAS            | 1840        | ALUCETE PARTNERS, LP                           | HAZARDOUS LIQUID | 0          | 0        | 118,000                |
| 04/02/2008 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | FRANKLIN         | 300         | PLAINS PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 15,300                 |
| 09/14/2008 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES      | 28134       | EXXONMOBIL OIL CORP. WEST COAST                | HAZARDOUS LIQUID | 0          | 0        | 548,700                |
| 05/28/2008 | CORROSION                  | UNSPECIFIED CORROSION   | OH    | LUCAS            | 1840        | ALUCETE PARTNERS, LP                           | HAZARDOUS LIQUID | 0          | 0        | 192,200                |
| 09/20/2008 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | MEADE            | 9175        | ARMAK PIPELINE LLC                             | HAZARDOUS LIQUID | 0          | 0        | 1550                   |
| 09/21/2008 | CORROSION                  | UNSPECIFIED CORROSION   | OH    | ALLEN            | 12470       | VALLEY PIPELINE CO                             | HAZARDOUS LIQUID | 0          | 0        | 5670                   |
| 09/22/2008 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | HARRIS           | 31174       | SHELL PIPELINE CO, L.P.                        | HAZARDOUS LIQUID | 0          | 0        | 12,000                 |
| 09/24/2008 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | ELTOW            | 300         | PLAINS PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 15,310                 |
| 09/17/2008 | CORROSION                  | UNSPECIFIED CORROSION   | IL    | MARION           | 11828       | MOBI PIPE LINE COMPANY                         | HAZARDOUS LIQUID | 0          | 0        | 145,800                |
| 09/17/2008 | CORROSION                  | UNSPECIFIED CORROSION   | IL    | MONTGOMERY       | 18012       | USTAR PIPELINE OPERATING PARTNERSHIP, LP       | HAZARDOUS LIQUID | 0          | 0        | 131,770                |
| 09/25/2008 | CORROSION                  | UNSPECIFIED CORROSION   | MS    | COBLENCE         | 18027       | TE PRODUCTS PIPELINE COMPANY, LLC              | HAZARDOUS LIQUID | 0          | 0        | 86,310                 |
| 09/21/2008 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | BEL              | 22895       | ROOY PIPELINE COMPANY, L.P.                    | HAZARDOUS LIQUID | 0          | 0        | 558,930                |
| 09/24/2008 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | JEFFERSON        | 30620       | ENTERPRISE CRUDE PIPELINE LLC                  | HAZARDOUS LIQUID | 0          | 0        | 593,310                |
| 02/12/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | SANTA BARBARA    | 31296       | VENOCO, INC.                                   | HAZARDOUS LIQUID | 0          | 0        | 50                     |
| 09/19/2008 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | GREGG            | 18718       | SUNOCO PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 127,411                |
| 04/01/2008 | CORROSION                  | UNSPECIFIED CORROSION   | NM    | LEA              | 300         | PLAINS PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 19,240                 |
| 12/04/2008 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WINNIE           | 33577       | ENDER LOGAN WINN PIPELINE LLC                  | HAZARDOUS LIQUID | 0          | 0        | 173,500                |
| 12/01/2008 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | STEVENS          | 479         | COFFEEVILLE REFINERS CRUDE TRANSPORTATION, LLC | HAZARDOUS LIQUID | 0          | 0        | 16,100                 |
| 11/02/2008 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | EAST BATON ROUGE | 31723       | EXXONMOBIL REFINING AND SUPPLY COMPANY         | HAZARDOUS LIQUID | 0          | 0        | 15,111                 |
| 01/17/2009 | CORROSION                  | UNSPECIFIED CORROSION   | NM    | LEA              | 31688       | PHILLIPS 66 PIPELINE LLC                       | HAZARDOUS LIQUID | 0          | 0        | 26,400                 |
| 11/22/2008 | CORROSION                  | UNSPECIFIED CORROSION   | MS    | CHARLES          | 480         | EXXONMOBIL PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | 164,000                |
| 11/19/2008 | CORROSION                  | UNSPECIFIED CORROSION   | MS    | ISSAQUENA        | 12470       | VALLEY PIPELINE CO                             | HAZARDOUS LIQUID | 0          | 0        | 108,200                |
| 11/12/2008 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WICHITA          | 300         | PLAINS PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 14810                  |
| 11/12/2008 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | HARRIS           | 12470       | VALLEY PIPELINE CO                             | HAZARDOUS LIQUID | 0          | 0        | 15,140                 |
| 11/09/2008 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | CHAMPAIGN        | 3162        | COFFEEVILLE REFINERS CRUDE TRANSPORTATION, LLC | HAZARDOUS LIQUID | 0          | 0        | 131,700                |
| 01/26/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | KEEN             | 31174       | SHELL PIPELINE CO, L.P.                        | HAZARDOUS LIQUID | 0          | 0        | 16,030                 |
| 01/24/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES      | 31688       | PHILLIPS 66 PIPELINE LLC                       | HAZARDOUS LIQUID | 0          | 0        | 164,840                |
| 01/23/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | REGGIE           | 30000       | PLAINS MARKETING, L.P.                         | HAZARDOUS LIQUID | 0          | 0        | 164,200                |
| 02/19/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | LOS ANGELES      | 31810       | BP WEST COAST PRODUCTS L.L.C.                  | HAZARDOUS LIQUID | 0          | 0        | 121,000                |
| 02/18/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | ECTOR            | 300         | PLAINS PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 133,240                |
| 01/20/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | FAYETTE          | 1886        | CARLETON PIPE LINE CO                          | HAZARDOUS LIQUID | 0          | 0        | 198,200                |
| 03/17/2009 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | FAYETTE          | 31947       | VENOCO PIPELINES (OMARK) L.L.C.                | HAZARDOUS LIQUID | 0          | 0        | 24,000                 |
| 09/14/2009 | CORROSION                  | UNSPECIFIED CORROSION   | IL    | COOK             | 22830       | MAGILLAN PIPELINE COMPANY, LP                  | HAZARDOUS LIQUID | 0          | 0        | 17,170                 |
| 04/02/2009 | CORROSION                  | UNSPECIFIED CORROSION   | FL    | PAUL SMITH       | 26200       | FLORIDA POWER & LIGHT CO                       | HAZARDOUS LIQUID | 0          | 0        | 166,000                |
| 04/09/2009 | CORROSION                  | UNSPECIFIED CORROSION   | NM    | MIDDLESEX        | 30042       | COFFEEVILLE REFINERS CRUDE TRANSPORTATION, LLC | HAZARDOUS LIQUID | 0          | 0        | 15,000                 |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State | County         | Operator ID                       | Operator Name                                  | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|----------------|-----------------------------------|------------------------------------------------|------------------|------------|----------|------------------------|
| 04/15/2009 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | ST LANDRY      | 2512                              | COLONAL PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0        | 141,000                |
| 04/03/2009 | CORROSION                  | UNSPECIFIED CORROSION   | OH    | ALLEN          | 1840                              | ALUCETE PARTNERS, LP                           | HAZARDOUS LIQUID | 0          | 0        | 102,200                |
| 03/19/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | ECTOR          | 31688                             | PHILLIPS 66 PIPELINE LLC                       | HAZARDOUS LIQUID | 0          | 0        | 16,770                 |
| 03/17/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WINNIE         | 33577                             | ENDER LOGAN WINN PIPELINE LLC                  | HAZARDOUS LIQUID | 0          | 0        | 164,200                |
| 04/24/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | SAN BERNARDINO | 28129                             | CALNEE PIPELINE CO                             | HAZARDOUS LIQUID | 0          | 0        | 110,411                |
| 03/11/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | GREGG          | 18718                             | SUNOCO PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 113,100                |
| 04/27/2009 | CORROSION                  | UNSPECIFIED CORROSION   | NM    | LEA            | 300                               | PLAINS PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 140,400                |
| 09/24/2008 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | HARRIS         | 25140                             | USTAR CHEMICALS, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 140,112                |
| 09/24/2008 | CORROSION                  | UNSPECIFIED CORROSION   | LA    | SANT JAMES     | 4900                              | EXXONMOBIL PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | 105,800                |
| 07/07/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | MITCHELL       | 82080                             | SH ENRIEP PIPELINE, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | 125,070                |
| 07/02/2009 | CORROSION                  | UNSPECIFIED CORROSION   | MS    | CONWAY         | 2152                              | COLONIAL PIPELINE CO                           | HAZARDOUS LIQUID | 0          | 0        | 142,100                |
| 07/05/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | NAVARRO        | 18718                             | SUNOCO PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 117,500                |
| 07/12/2009 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | LINCOLN        | 26029                             | PLAINS MARKETING, L.P.                         | HAZARDOUS LIQUID | 0          | 0        | 121,300                |
| 07/02/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WINNIE         | 33577                             | ENDER LOGAN WINN PIPELINE, LP                  | HAZARDOUS LIQUID | 0          | 0        | 124,600                |
| 07/02/2009 | CORROSION                  | UNSPECIFIED CORROSION   | WY    | FREMONT        | 31666                             | ROOY MOUNTAIN PIPELINE SYSTEM, LLC             | HAZARDOUS LIQUID | 0          | 0        | 117,070                |
| 09/20/2009 | CORROSION                  | UNSPECIFIED CORROSION   | WY    | FREMONT        | 31666                             | ROOY MOUNTAIN PIPELINE SYSTEM, LLC             | HAZARDOUS LIQUID | 0          | 0        | 14,415                 |
| 09/17/2009 | CORROSION                  | UNSPECIFIED CORROSION   | OK    | GARFIELD       | 18718                             | SUNOCO PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 106,810                |
| 09/10/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | KEENE          | 31688                             | PHILLIPS 66 PIPELINE LLC                       | HAZARDOUS LIQUID | 0          | 0        | 112,100                |
| 09/01/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | GREGG          | 18718                             | SUNOCO PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 115,000                |
| 03/04/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | WICHITA        | 300                               | PLAINS PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 15,300                 |
| 02/10/2009 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | CHAMPAIGN      | 3162                              | COFFEEVILLE REFINERS CRUDE TRANSPORTATION, LLC | HAZARDOUS LIQUID | 0          | 0        | 140,000                |
| 11/10/2009 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | ELLIS          | 9175                              | ARMAK PIPELINE LLC                             | HAZARDOUS LIQUID | 0          | 0        | 12,100                 |
| 11/11/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | REFUGIO        | 30700                             | CRIGO PRODUCTS PIPELINE CO                     | HAZARDOUS LIQUID | 0          | 0        | 123,340                |
| 11/06/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | CONTRA COSTA   | 28080                             | PLAINS MARKETING, L.P.                         | HAZARDOUS LIQUID | 0          | 0        | 114,400                |
| 11/01/2009 | CORROSION                  | UNSPECIFIED CORROSION   | KS    | CHAMPAIGN      | 3162                              | COFFEEVILLE REFINERS CRUDE TRANSPORTATION, LLC | HAZARDOUS LIQUID | 0          | 0        | 115,800                |
| 11/28/2009 | CORROSION                  | UNSPECIFIED CORROSION   | CA    | SANTA BARBARA  | 31296                             | VENOCO, INC.                                   | HAZARDOUS LIQUID | 0          | 0        | 110,300                |
| 11/30/2009 | CORROSION                  | UNSPECIFIED CORROSION   | AL    | MOBILE         | 300                               | PLAINS PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 16,140                 |
| 11/19/2009 | CORROSION                  | UNSPECIFIED CORROSION   | TX    | NAVARRO        | 18718                             | SUNOCO PIPELINE, L.P.                          | HAZARDOUS LIQUID | 0          | 0        | 124,600                |
|            |                            |                         |       |                |                                   |                                                |                  |            |          | 56,062,845             |
| 02/18/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | CARTER         | 806                               | ARCO PIPELINE CO.                              | HAZARDOUS LIQUID | 0          | 0        | 100,000                |
| 02/14/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | LOS ANGELES    | 31810                             | BP, LP                                         | HAZARDOUS LIQUID | 0          | 0        | 140,000                |
| 02/19/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    | 12269          | PENNOX, EXPANSION & PRODUCTION CO | HAZARDOUS LIQUID                               | 0                | 0          | 1140,000 |                        |
| 02/04/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OH    | ALLEN          | 18390                             | BP OIL PIPELINE CO                             | HAZARDOUS LIQUID | 0          | 0        | 11,000                 |
| 02/01/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OH    | PUTAH          | 18018                             | TE PRODUCTS PIPELINE COMPANY, LLC              | HAZARDOUS LIQUID | 0          | 0        | 12,000                 |
| 02/17/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | POTTAWATOMIE   | 30700                             | CRIGO PRODUCTS PIPELINE CO                     | HAZARDOUS LIQUID | 0          | 0        | 100,000                |
| 02/07/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | IN    | GIBSON         | 18127                             | TE PRODUCTS PIPELINE COMPANY, LLC              | HAZARDOUS LIQUID | 0          | 0        | 100,000                |
| 02/17/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | KEENE          | 28133                             | TRACOR TRACKING & TRANSPORTATION INC           | HAZARDOUS LIQUID | 0          | 0        | 110,000                |
| 02/03/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | COCKE          | 3162                              | COFFEEVILLE REFINERS CRUDE TRANSPORTATION, LLC | HAZARDOUS LIQUID | 0          | 0        | 95,200                 |
| 03/04/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | SWAN           | 22895                             | ROOY PIPELINE COMPANY, L.P.                    | HAZARDOUS LIQUID | 0          | 0        | 121,000                |
| 03/12/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | KS    | SEWARD         | 9175                              | ARMAK PIPELINE LLC                             | HAZARDOUS LIQUID | 0          | 0        | 120,400                |
| 03/07/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | KS    | WYANDOTT       | 3162                              | COFFEEVILLE REFINERS CRUDE TRANSPORTATION, LLC | HAZARDOUS LIQUID | 0          | 0        | 110,000                |
| 04/14/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | AL    | WHITE          | 18127                             | TE PRODUCTS PIPELINE COMPANY, LLC              | HAZARDOUS LIQUID | 0          | 0        | 100,000                |
| 04/14/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | MO    | ST CHARLES     | 480                               | EXPLORER PIPELINE CO                           | HAZARDOUS LIQUID | 0          | 0        | 10                     |
| 04/09/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | EL PASO        | 11812                             | ARMAK REFINING CO                              | HAZARDOUS LIQUID | 0          | 0        | 115,000                |
| 04/03/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | AR    | 20040          | CRIGO PIPELINE SERVICE CO         | HAZARDOUS LIQUID                               | 0                | 0          | 10       |                        |

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FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

COMMENT

RESPONSE

| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State | County       | Operator ID                                       | Operator Name | System Type      | Facilities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|--------------|---------------------------------------------------|---------------|------------------|------------|----------|------------------------|
| 04/23/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | SC    | CHEROKEE     | 4952 COLONIAL PIPELINE CO                         |               | HAZARDOUS LIQUID | 0          | 0        | \$45,000               |
| 06/06/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | TULSA        | 4800 EXPLORER PIPELINE CO                         |               | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 09/13/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | MN    |              | 11189 ENERCON ENERGY, LIMITED PARTNERSHIP         |               | HAZARDOUS LIQUID | 0          | 0        | \$43,000               |
| 09/28/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | FOOT BROS    | 1344 WORTHINGTON PIPELINE CO                      |               | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 09/24/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | FL    | BROWARD      | 1848 KUCIOTE PARTNERS, LP                         |               | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 09/28/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | NAVARO       | 13624 MOBIL PIPELINE CO - EMPIRE                  |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 10/24/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | KS    | FRANK        | 3777 GAGE TRANSPORTATION CO                       |               | HAZARDOUS LIQUID | 0          | 0        | \$18,000               |
| 09/20/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | AR    | FAYETTE      | 30986 SUN PIPE LINE COMPANY                       |               | HAZARDOUS LIQUID | 0          | 0        | \$100                  |
| 08/01/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    |              | 2791 CHEVRON PIPE LINE CO                         |               | HAZARDOUS LIQUID | 0          | 0        | \$20,000               |
| 07/07/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS       | 25146 EASTSTAR CHEMICAL, L.P.                     |               | HAZARDOUS LIQUID | 0          | 0        | \$9,000,000            |
| 07/07/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS       | 25146 EASTSTAR CHEMICAL, L.P.                     |               | HAZARDOUS LIQUID | 0          | 0        | \$90,000               |
| 06/04/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | LOWING       | 4472 CYPRESS INTERSTATE PIPELINE LLC              |               | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 06/06/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | VA    | CHESTERFIELD | 15624 PLANTATION PIPE LINE CO                     |               | HAZARDOUS LIQUID | 0          | 0        | \$75,000               |
| 06/03/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | KALMARHAWK   | 22880 BUCH-PHILIP COMPANY, L.P.                   |               | HAZARDOUS LIQUID | 2          | 0        | \$17,000               |
| 06/03/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | GA    | WEBB         | 2052 COLONIAL PIPELINE CO                         |               | HAZARDOUS LIQUID | 0          | 0        | \$19,000               |
| 06/04/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    |              | 13133 CONOCOPHILLIPS (BEP - L-48)                 |               | HAZARDOUS LIQUID | 0          | 1        | \$0                    |
| 06/18/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | OSHA         | 18226 TEXACO PIPELINE INC                         |               | HAZARDOUS LIQUID | 0          | 0        | \$1,100                |
| 06/16/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | AR    | DEBIS        | 4886 KOCH PIPELINE COMPANY, L.P. AMMONIA          |               | HAZARDOUS LIQUID | 0          | 0        | \$90,000               |
| 06/11/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | SOLANO       | 18021 SUPPLY, LP                                  |               | HAZARDOUS LIQUID | 0          | 0        | \$900,000              |
| 06/14/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | COCHRAN      | 15480 PHILLIPS PIPE LINE CO                       |               | HAZARDOUS LIQUID | 0          | 1        | \$84,000               |
| 05/28/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | MO    | CLAY         | 14112 9807 AMERICA PIPELINE CO (MAMCO)            |               | HAZARDOUS LIQUID | 0          | 0        | \$1,400                |
| 05/21/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | SHASTA       | 28324 UNICAL PIPELINE CO - WESTERN REGION         |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 05/24/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | ND    | WILLIAMS     | 18774 NORTH DAKOTA PIPELINE COMPANY LLC           |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 05/21/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | YUBA         | 3897 PLAINS PIPELINE, L.P.                        |               | HAZARDOUS LIQUID | 0          | 0        | \$25,000               |
| 05/21/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | KS    | WYANDOTT     | 13111 MAGELLAN PIPELINE COMPANY, LP               |               | HAZARDOUS LIQUID | 0          | 0        | \$75,000               |
| 05/04/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | BRADLAW      | 20105 TEXAS EASTMAN DIVISION, EASTMAN CHEMICAL CO |               | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 05/02/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | ELLIS        | 19226 TEXACO PIPELINE INC                         |               | HAZARDOUS LIQUID | 0          | 0        | \$55,000               |
| 05/02/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | NE    | WAGNER       | 16608 KOCH PIPELINE COMPANY, L.P. AMMONIA         |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 05/01/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | UT    | DAVIS        | 2137 CHEVRON PIPELINE CO                          |               | HAZARDOUS LIQUID | 0          | 0        | \$180,000              |
| 05/01/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | PARRIS       | 15851 DELEX MARKETING AND SUPPLY, LP              |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 04/29/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | MO    | WASHINGTON   | 30987 ARLAND PETROLEUM CO.                        |               | HAZARDOUS LIQUID | 0          | 0        | \$165,000              |
| 04/29/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | KS    | BUYER        | 15176 AMERIKAN PIPELINE LLC                       |               | HAZARDOUS LIQUID | 0          | 0        | \$3,400                |
| 04/17/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | BEOCHAN      | 23885 KOCH PIPELINE COMPANY, L.P.                 |               | HAZARDOUS LIQUID | 0          | 0        | \$14,400               |
| 04/18/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | KS    | BUYER        | 23020 MAGELLAN PIPELINE COMPANY, LP               |               | HAZARDOUS LIQUID | 0          | 0        | \$9,000                |
| 04/18/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | WHEELER      | 12402 MID- AMERICA PIPELINE CO (MAMCO)            |               | HAZARDOUS LIQUID | 0          | 0        | \$60,000               |
| 04/15/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | MONTGOMERY   | 4802 EXPLORER PIPELINE CO                         |               | HAZARDOUS LIQUID | 0          | 0        | \$90,000               |
| 02/24/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    | UNION PARISH | 6856 KOCH PIPELINE COMPANY, L.P. AMMONIA          |               | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 04/05/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | DC    |              | 38126 TEXACO PIPELINE INC                         |               | HAZARDOUS LIQUID | 0          | 0        | \$368,000              |
| 04/05/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | WV    | MATTHEW      | 462 MARCO PIPELINE CO                             |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 04/05/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | NM    | MOOREHEAD    | 1377 WESTERN REFINING SOUTHWEST, INC              |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 04/05/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | TEXAS        | 13026 MOBIL PIPELINE CO - EMPIRE                  |               | HAZARDOUS LIQUID | 0          | 0        | \$5,000                |
| 04/05/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | DC    |              | 13127 MARATHON ASHLAND PIPE LINE LLC              |               | HAZARDOUS LIQUID | 0          | 0        | \$200,000              |
| 04/05/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | EMAN         | 23805 KOCH PIPELINE COMPANY, L.P.                 |               | HAZARDOUS LIQUID | 0          | 0        | \$16,000               |
| 04/03/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | WY    | PLATTE       | 11813 CONOCOPHILLIPS (BEP - L-48)                 |               | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 04/03/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | MO    | FOURCH       | 18405 ODE PIPELINE COMPANY LLC                    |               | HAZARDOUS LIQUID | 0          | 0        | \$200                  |
| 04/02/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | WA    | CONWY        | 30761 OLYMPIC PIPE LINE COMPANY                   |               | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State | County          | Operator ID                                    | Operator Name | System Type      | Facilities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|-----------------|------------------------------------------------|---------------|------------------|------------|----------|------------------------|
| 05/09/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | MT    | RICHMOND        | 26026 CONATAL CORP                             |               | HAZARDOUS LIQUID | 0          | 0        | \$75,000               |
| 06/03/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | NM    | SANDOVAL        | 13451 MID- AMERICA PIPELINE CO (MAMCO)         |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 05/25/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    |                 | 29138 TEXACO TRADING & TRANSPORTATION INC      |               | HAZARDOUS LIQUID | 0          | 0        | \$5,000                |
| 04/26/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | SEISS           | 442 MARCO PIPELINE CO                          |               | HAZARDOUS LIQUID | 0          | 0        | \$90,000               |
| 04/11/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | IN    | LAKE            | 12117 AMARITION ASHLAND PIPE LINE LLC          |               | HAZARDOUS LIQUID | 0          | 0        | \$210,000              |
| 07/02/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | NE    | GARDNER         | 13127 MARATHON ASHLAND PIPE LINE LLC           |               | HAZARDOUS LIQUID | 0          | 0        | \$420,000              |
| 04/26/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | WV    | HOP SPRING      | 462 MARCO PIPELINE CO                          |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 06/24/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | RI    | SEIBER          | 28137 TE PRODUCTS PIPELINE COMPANY, LLC        |               | HAZARDOUS LIQUID | 0          | 0        | \$55,000               |
| 11/24/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | REFUGIO         | 23805 KOCH PIPELINE COMPANY, L.P.              |               | HAZARDOUS LIQUID | 0          | 0        | \$5,000                |
| 06/26/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | GA    | FRANK           | 28138 TEXACO TRADING & TRANSPORTATION INC      |               | HAZARDOUS LIQUID | 0          | 0        | \$25,500               |
| 06/26/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | AR    | CLARK           | 28132 COLONIAL PIPELINE CO                     |               | HAZARDOUS LIQUID | 0          | 0        | \$900,000              |
| 05/20/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | SC    | SPARTANBURG     | 2352 COLONIAL PIPELINE CO                      |               | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 07/28/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | KERN            | 28134 CONOCOPHILLIPS OIL CORP - WEST COAST     |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 06/28/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | DC    |                 | 21320 CHEVRON USA INC                          |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 07/07/1994 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS          | 809 MOBIL PIPE LINE CO.                        |               | HAZARDOUS LIQUID | 0          | 0        | \$4,200,000            |
| 08/11/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | LIBERTY         | 2791 CHEVRON PIPE LINE CO                      |               | HAZARDOUS LIQUID | 0          | 0        | \$140,000              |
| 06/18/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | SALPINE         | 18405 ODE PIPELINE PARTNERS, LP                |               | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 06/24/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | WV    | PLATTE          | 11813 CONOCOPHILLIPS (BEP - L-48)              |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 06/18/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    | ST JAMES PARISH | 18026 TEXACO PIPELINE INC                      |               | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 06/12/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | SC    | ANDERSON        | 2552 COLONIAL PIPELINE CO                      |               | HAZARDOUS LIQUID | 0          | 0        | \$180,010              |
| 06/05/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS          | 25146 EASTSTAR CHEMICAL, L.P.                  |               | HAZARDOUS LIQUID | 0          | 0        | \$5,000                |
| 05/21/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | NAVARO          | 30791 NOBEL OIL CORPORATION                    |               | HAZARDOUS LIQUID | 0          | 0        | \$22,000               |
| 11/13/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | MN    | DAKOTA          | 12306 MAMCO INC                                |               | HAZARDOUS LIQUID | 0          | 0        | \$780                  |
| 09/02/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | IA    | HARCOCK         | 6856 KOCH PIPELINE COMPANY, L.P. AMMONIA       |               | HAZARDOUS LIQUID | 0          | 0        | \$28,000               |
| 11/20/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | LISA            | 38025 LISA ENERGY PIPELINE LIMITED PARTNERSHIP |               | HAZARDOUS LIQUID | 0          | 0        | \$6,000                |
| 05/23/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | KS    | KOONIA          | 9176 ANIRAWK PIPELINE LLC                      |               | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 04/28/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | MO    | STODOLAS        | 19217 TE PRODUCTS PIPELINE COMPANY, LLC        |               | HAZARDOUS LIQUID | 0          | 0        | \$90,000               |
| 04/23/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    |                 | 18015 SANTA FE PACIFIC PIPELINE CO             |               | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 02/01/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | SEDCOCK         | 9176 ANIRAWK PIPELINE LLC                      |               | HAZARDOUS LIQUID | 0          | 0        | \$42,000               |
| 03/14/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | GRIMES          | 445 MARCO PIPELINE CO                          |               | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 03/09/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | DC    |                 | 38779 TORCH OPERATING COMPANY                  |               | HAZARDOUS LIQUID | 0          | 0        | \$6,000,000            |
| 11/05/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | FREESTONE       | 2791 CHEVRON PIPE LINE CO                      |               | HAZARDOUS LIQUID | 0          | 0        | \$2,400                |
| 11/28/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | TRINITY         | 30985 NOBEL OIL CORPORATION                    |               | HAZARDOUS LIQUID | 0          | 0        | \$20,000               |
| 12/12/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | OH    | WOOD            | 12420 MID- VALLEY PIPELINE CO                  |               | HAZARDOUS LIQUID | 0          | 0        | \$40,000               |
| 12/03/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | NE    | GOSWOLD         | 21320 CHEVRON PIPELINE CO                      |               | HAZARDOUS LIQUID | 0          | 0        | \$200,000              |
| 12/17/1997 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | PLACER          | 18518 SANTA FE PACIFIC PIPELINE CO             |               | HAZARDOUS LIQUID | 0          | 0        | \$205,000              |
| 02/14/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | VENTURA         | 20135 TEXACO TRADING & TRANSPORTATION INC      |               | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 02/07/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | FL    | OSCEOLA         | 12100 CENTRAL FLORIDA PIPELINE CORP            |               | HAZARDOUS LIQUID | 0          | 0        | \$88,000               |
| 02/08/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | COMANCHE COUNTY | 15851 DELEX MARKETING AND SUPPLY, LP           |               | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 02/03/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARDON          | 1387 CRISO PIPELINE CO                         |               | HAZARDOUS LIQUID | 0          | 0        | \$14,000               |
| 01/01/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | ORANGE COUNTY   | 19226 TEXACO PIPELINE INC                      |               | HAZARDOUS LIQUID | 0          | 0        | \$685,000              |
| 01/26/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | RENO COUNTY     | 9176 ANIRAWK PIPELINE LLC                      |               | HAZARDOUS LIQUID | 0          | 0        | \$4,000                |
| 02/16/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | DC    |                 | 18173 SHELL PIPELINE CORP                      |               | HAZARDOUS LIQUID | 0          | 0        | \$900,000              |
| 01/23/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | LINCOLN COUNTY  | 23805 KOCH PIPELINE COMPANY, L.P.              |               | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 01/26/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | OH    | HANCOCK         | 18389 LP OIL PIPELINE CO                       |               | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 01/21/1998 | ALL OTHER CAUSES           | MISCELLANEOUS           | OH    | LINCOLN         | 23805 KOCH PIPELINE COMPANY, L.P.              |               | HAZARDOUS LIQUID | 0          | 0        | \$15,000               |

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FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

COMMENT

RESPONSE

| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State         | County | Operator ID  | Operator Name                               | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------|---------------|--------|--------------|---------------------------------------------|------------------|------------|----------|------------------------|
| 03/17/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARDEN       | 2387 OTECO PIPELINE CO                      | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 03/30/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | GA     | FULTON       | 2352 COLONIAL PIPELINE CO                   | HAZARDOUS LIQUID | 0          | 0        | \$4,341,136            |
| 05/10/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | LOS ANGELES  | 33087 ARRA ENERGY LLC                       | HAZARDOUS LIQUID | 0          | 1        | \$30,000               |
| 05/13/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | SHAWNEE      | 9175 JATHAWK PIPELINE LLC                   | HAZARDOUS LIQUID | 0          | 0        | \$1,200                |
| 05/24/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | SONOMA       | 30908 ARCO PIPE LINE COMPANY                | HAZARDOUS LIQUID | 0          | 0        | \$135,000              |
| 06/02/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | MATAFORDA    | 28023 COSTAL STATES CLAUDE GATHERING CO     | HAZARDOUS LIQUID | 0          | 0        | \$200,000              |
| 06/02/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | DECATUR      | 15100 PHILLIPS PIPE LINE CO                 | HAZARDOUS LIQUID | 0          | 0        | \$500,000              |
| 06/28/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | UT     | WEBER        | 21302 CHEVRON PIPELINE CO                   | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 07/24/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS       | 18182 SEAWAY PIPELINE INC                   | HAZARDOUS LIQUID | 0          | 0        | \$90,000               |
| 07/26/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | FORTWORTH    | 18420 SEAWAY PIPELINE INC                   | HAZARDOUS LIQUID | 0          | 0        | \$480,000              |
| 07/28/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | SAN JOAQUIN  | 25112 TRACCO TRADING & TRANSPORTATION INC   | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 08/21/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | ND     | WILLIAMS     | 13174 NORTH DACOTA PIPELINE COMPANY LLC     | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 09/16/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | MONTGOMERY   | 12610 WAGELAN PIPELINE COMPANY, LP          | HAZARDOUS LIQUID | 0          | 0        | \$30,000               |
| 09/16/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | PATRICKSON   | 18124 THE SHAWNEE PIPE LINE CORP            | HAZARDOUS LIQUID | 0          | 0        | \$8,212                |
| 09/28/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WI     | PLATTE       | 15113 CONROCO/PHILIPS (BP - L-48)           | HAZARDOUS LIQUID | 0          | 0        | \$5,310                |
| 09/30/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | ASCENSO      | 31056 MAATHON AS-LAND PIPE LINE LLC         | HAZARDOUS LIQUID | 0          | 0        | \$85,000               |
| 09/31/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | MURKIN       | 31146 EDUSTAR PIPELINE OPERATIONS           | HAZARDOUS LIQUID | 0          | 0        | \$260,000              |
| 09/31/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | OKMURKIN     | 18110 EDUSTAR PIPELINE, LP                  | HAZARDOUS LIQUID | 0          | 0        | \$2,000                |
| 09/31/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | ORANGE       | 4472 CYPRESS INTERSTATE PIPELINE LLC        | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 09/30/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | PLAZEMINES   | 31147 OMEGA MIDSTREAM SERVICES INC          | HAZARDOUS LIQUID | 0          | 0        | \$300                  |
| 09/30/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | GRANDE       | 18117 TE PRODUCTS PIPELINE COMPANY, LLC     | HAZARDOUS LIQUID | 0          | 0        | \$4,000                |
| 09/11/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HILL         | 28103 UNOCAL PIPELINE CO - EASTERN REGION   | HAZARDOUS LIQUID | 0          | 0        | \$900,000              |
| 09/11/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | MERCED       | 21818 TRACCO TRADING & TRANSPORTATION INC   | HAZARDOUS LIQUID | 0          | 0        | \$800,000              |
| 09/14/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | BECK         | 9176 JATHAWK PIPELINE LLC                   | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 09/14/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | MARICOPA     | 30907 ARCO OIL CORPORATION                  | HAZARDOUS LIQUID | 0          | 0        | \$900,000              |
| 09/24/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MN     | MOORHEAD     | 12055 MINNESOTA PIPELINE CO                 | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 09/24/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | TARRANT      | 30909 ARCO OIL CORPORATION                  | HAZARDOUS LIQUID | 0          | 0        | \$900,000              |
| 09/27/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MT     | BEAVERHEAD   | 30909 ARCO OIL CORPORATION                  | HAZARDOUS LIQUID | 0          | 0        | \$400,000              |
| 09/30/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | LITTLE RIVER | 30790 OTECO PRODUCTS PIPELINE CO            | HAZARDOUS LIQUID | 0          | 0        | \$5                    |
| 11/18/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | NC     |              | 2052 COLONIAL PIPELINE CO                   | HAZARDOUS LIQUID | 0          | 0        | \$88,000               |
| 12/16/1988 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | LARUE        | 15480 PHILLIPS PIPE LINE CO                 | HAZARDOUS LIQUID | 0          | 0        | \$38,516               |
| 01/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | AR     | JEFFERSON    | 4306 COKO PIPELINE COMPANY, L.P. JAMARCA    | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 02/14/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WI     | WASHINGTON   | 22400 WEST SHORE PIPELINE CO                | HAZARDOUS LIQUID | 0          | 0        | \$400,000              |
| 02/17/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KY     | MCHENRY      | 9178 JATHAWK PIPELINE LLC                   | HAZARDOUS LIQUID | 0          | 0        | \$9,300                |
| 02/18/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CO     | FRANKLIN     | 11101 CHEVRON CO INC                        | HAZARDOUS LIQUID | 0          | 0        | \$900,000              |
| 02/18/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | FRANKLIN     | 21810 WAGELAN PIPELINE COMPANY, LP          | HAZARDOUS LIQUID | 0          | 0        | \$60,000               |
| 02/22/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MA     |              | 11180 ENBRIDGE ENERGY LIMITED PARTNERSHIP   | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 03/04/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CO     |              | 12122 MOBIL EXPLORATION & PRODUCTION US INC | HAZARDOUS LIQUID | 0          | 0        | \$179,000              |
| 03/04/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OR     | PORTLAND     | 18102 WAGELAN PIPELINE COMPANY, LP          | HAZARDOUS LIQUID | 0          | 0        | \$4,000                |
| 03/05/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     |              | 23805 KNOX PIPELINE COMPANY, L.P.           | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 03/10/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | MARION       | 30901 MOBIL OIL CORPORATION                 | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 03/10/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     |              | 4000 ENBRIDGE PIPELINE CO                   | HAZARDOUS LIQUID | 0          | 0        | \$68,100               |
| 03/12/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | TARRANT      | 31138 FUNT HILL RESOURCES PIPE BEND, LLC    | HAZARDOUS LIQUID | 0          | 0        | \$44,000               |
| 03/18/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WY     | PLATT        | 15136 UNICLAR TRANSPORTATION COMPANY        | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | COOKE        | 22400 WEST SHORE PIPELINE CO                | HAZARDOUS LIQUID | 0          | 0        | \$5                    |
| 03/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | KINGS        | 31174 SHELL PIPELINE CO, L.P.               | HAZARDOUS LIQUID | 0          | 0        | \$25,000               |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State         | County | Operator ID      | Operator Name                                 | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------|---------------|--------|------------------|-----------------------------------------------|------------------|------------|----------|------------------------|
| 04/16/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | RENO             | 9177 JATHAWK PIPELINE LLC                     | HAZARDOUS LIQUID | 0          | 0        | \$1,300                |
| 04/26/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     |                  | 23011 NO & TEXAS PIPELINE, L.P.               | HAZARDOUS LIQUID | 0          | 0        | \$400,000              |
| 04/30/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | KEEN             | 31120 PACIFIC PIPELINE SYSTEM LLC             | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 04/22/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     |                  | 31028 WASHINGTON AS-LAND PIPE LINE LLC        | HAZARDOUS LIQUID | 0          | 0        | \$280,000              |
| 05/03/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MA     |                  | 1446 COME PETROLEUM CORP                      | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 04/22/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | ECTOR            | 2791 CHEVRON PIPE LINE CO                     | HAZARDOUS LIQUID | 0          | 0        | \$90,000               |
| 04/23/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OR     |                  | 30801 ONE ENERGY PHILLIPS LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0          | 0        | \$1,500                |
| 07/07/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     |                  | 3922 COLONIAL PIPELINE CO                     | HAZARDOUS LIQUID | 0          | 0        | \$6,900,000            |
| 08/23/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | GREGG            | 13470 WAD - VALLEY PIPELINE CO                | HAZARDOUS LIQUID | 0          | 0        | \$7,000                |
| 07/21/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | ECTOR            | 31139 ALUMINUM POLYMERS CORP                  | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 07/28/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WI     | NORTHAM          | 18110 CONROCO/PHILIPS (BP - L-48)             | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 07/27/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | YOAKUM           | 30901 MOBIL OIL CORPORATION                   | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 08/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WA     | WHATCOM          | 30781 OLYMPIC PIPE LINE COMPANY               | HAZARDOUS LIQUID | 3          | 8        | \$48,000,000           |
| 08/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS           | 4000 ENBRIDGE PIPELINE CO                     | HAZARDOUS LIQUID | 0          | 0        | \$1,200,000            |
| 08/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | UPTON            | 30901 ONE ENERGY PIPELINE LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0          | 0        | \$1                    |
| 07/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MS     | AMITE            | 33855 LUK ENERGY PIPELINE LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 07/21/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MI     |                  | 22887 WEST EMERALD PIPE LINE CORP             | HAZARDOUS LIQUID | 0          | 0        | \$45,000               |
| 08/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | FRESNO           | 27102 CHEVRON PIPE LINE CO                    | HAZARDOUS LIQUID | 0          | 0        | \$1,000,000            |
| 08/24/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARDEN           | 30901 MOBIL OIL CORPORATION                   | HAZARDOUS LIQUID | 0          | 0        | \$45,000               |
| 08/25/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MA     |                  | 11188 ENBRIDGE ENERGY LIMITED PARTNERSHIP     | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 08/25/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | DC     |                  | 31170 CHEVRON PIPE LINE NORTHWEST REGION      | HAZARDOUS LIQUID | 0          | 0        | \$13,000               |
| 08/18/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | RI     | LAKE             | 30907 TRANSPORTATION OPERATING COMPANY, L.P.  | HAZARDOUS LIQUID | 0          | 0        | \$375,000              |
| 08/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WA     | KING             | 30781 OLYMPIC PIPE LINE COMPANY               | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/07/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | ND     |                  | 440 ARCO PIPELINE CO                          | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/07/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | KEEN             | 30901 MOBIL OIL CORPORATION                   | HAZARDOUS LIQUID | 0          | 0        | \$13,000               |
| 03/24/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | ASSUMPTION       | 1174 BROUDELIN GAS DISTRIBUTION LLC           | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/13/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MS     | COVINGTON        | 18474 PLANTATION PIPE LINE CO                 | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/13/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | DC     |                  | 31171 CHEVRON CO COMPANY OF CALIFORNIA (ARCO) | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 03/18/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | FRESNO           | 31170 CHEVRON PIPE LINE NORTHWEST REGION      | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 03/14/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     |                  | 31174 SHELL PIPELINE CO, L.P.                 | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/13/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | BARTON           | 9175 JATHAWK PIPELINE LLC                     | HAZARDOUS LIQUID | 0          | 0        | \$1,200                |
| 03/09/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MT     | WEST FOLEY       | 12100 WAGELAN PIPELINE COMPANY, LP            | HAZARDOUS LIQUID | 0          | 0        | \$135,000              |
| 03/10/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | NM     | LEA              | 30855 ONE ENERGY PIPELINE LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/10/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     |                  | 24613 COSTAL STATES CLAUDE GATHERINGS CO      | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 03/09/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | DECATUR          | 30918 ARCO HOBOKEN CO, INC                    | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 03/15/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WI     | TAYLOR           | 11188 ENBRIDGE ENERGY LIMITED PARTNERSHIP     | HAZARDOUS LIQUID | 0          | 0        | \$63,000               |
| 03/01/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | WEST BATON ROUGE | 4000 ENBRIDGE PIPELINE CO                     | HAZARDOUS LIQUID | 0          | 0        | \$7,000                |
| 03/13/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HUGHES           | 31170 CHEVRON PIPE LINE NORTHWEST REGION      | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/13/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | ORANGE           | 4000 ENBRIDGE PIPELINE CO                     | HAZARDOUS LIQUID | 0          | 0        | \$40,000               |
| 03/14/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | ORANGE           | 31170 CHEVRON PIPE LINE NORTHWEST REGION      | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 03/07/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MS     | JONES            | 31040 ENERS PIPELINE USA, L.P.                | HAZARDOUS LIQUID | 0          | 0        | \$800,000              |
| 03/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | JONES            | 30918 ARCO HOBOKEN CO, INC                    | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 03/20/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HONKAC           | 30901 MOBIL OIL CORPORATION                   | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/14/1989 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | PA     | TOGA             | 18217 TE PRODUCTS PIPELINE COMPANY, LLC       | HAZARDOUS LIQUID | 0          | 1        | \$100,000              |
| 03/14/2000 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | RI     |                  | 31170 CHEVRON PIPE LINE NORTHWEST REGION      | HAZARDOUS LIQUID | 0          | 0        | \$85,000               |
| 03/18/2000 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | BRADEN           | 31130 BP PIPELINE (ENGT-AMERICA) INC.         | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |

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FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES



COMMENT

RESPONSE

| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State | County           | Operator ID | Operator Name                            | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|------------------|-------------|------------------------------------------|------------------|------------|----------|------------------------|
| 01/27/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS           | 30356       | MARATHON ASHLAND PIPE LINE LLC           | HAZARDOUS LIQUID | 0          | 0        | \$13,806,800           |
| 01/28/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS           | 14130       | OLTANING, HOUSTON LP                     | HAZARDOUS LIQUID | 0          | 0        | \$5,000                |
| 01/29/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | NAVARRO          | 38170       | CHEROKEE PIPE LINE NORTHWEST REGION      | HAZARDOUS LIQUID | 0          | 0        | \$231,400              |
| 02/03/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | KS    |                  | 72010       | WAGGON WHEEL COMPANY, LP                 | HAZARDOUS LIQUID | 0          | 0        | \$75,000               |
| 02/22/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | IL    | GRUNDY           | 30918       | KROSER MORGAN GR, INC.                   | HAZARDOUS LIQUID | 0          | 0        | \$65,000               |
| 02/23/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | MN    | CASS             | 11188       | ENERGISE ENERGY, LIMITED PARTNERSHIP     | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 02/24/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | IN    | SPENCER          | 23000       | WAGGON WHEEL COMPANY, LP                 | HAZARDOUS LIQUID | 0          | 0        | \$400,000              |
| 03/13/1999 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | MIDLAND          | 30850       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 03/14/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | RI    |                  | 11828       | MOBIL PIPE LINE COMPANY                  | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 03/16/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | WILLAMSON        | 18516       | SHINOLA PIPELINE CO                      | HAZARDOUS LIQUID | 0          | 0        | \$6,000                |
| 03/22/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | EM               | 13111       | CONROCH PIPE LINES, L.P.                 | HAZARDOUS LIQUID | 0          | 0        | \$5,000                |
| 04/24/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | TULSA            | 18718       | SUNOCO PIPELINE L.P.                     | HAZARDOUS LIQUID | 0          | 0        | \$500                  |
| 11/29/1999 | ALL OTHER CAUSES           | MISCELLANEOUS           | NM    | SANDOVAL COUNTY  | 13462       | MID - AMERICA PIPELINE CO (MAPCO)        | HAZARDOUS LIQUID | 0          | 0        | \$750,000              |
| 04/01/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | DCS   |                  | 31174       | SHELL PIPELINE CO, L.P.                  | HAZARDOUS LIQUID | 0          | 0        | \$600,000              |
| 04/03/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    |                  | 23885       | EOCH PIPELINE COMPANY, L.P.              | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 04/17/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | AR    | PHILLIPS         | 19237       | TR PRODUCTS PIPELINE COMPANY, LLC        | HAZARDOUS LIQUID | 0          | 0        | \$24,000               |
| 05/24/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    | PLAQUEMINE       | 31547       | ONDEBY MIDSTREAM SERVICES INC            | HAZARDOUS LIQUID | 0          | 0        | \$14,000               |
| 05/28/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | NM    |                  | 11188       | ENERGISE ENERGY, LIMITED PARTNERSHIP     | HAZARDOUS LIQUID | 0          | 0        | \$50,000               |
| 05/29/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | NM    |                  | 22387       | WEST EMBALD PIPE LINE CORP               | HAZARDOUS LIQUID | 0          | 0        | \$345,000              |
| 06/17/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | GA    | BUTTS COUNTY     | 8480        | ONDE PIPELINE COMPANY LLC                | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 06/21/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    |                  | 38002       | OPPI, LP                                 | HAZARDOUS LIQUID | 0          | 0        | \$400,000              |
| 06/21/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | FREESTONE        | 31170       | CHEROKEE PIPE LINE NORTHWEST REGION      | HAZARDOUS LIQUID | 0          | 0        | \$55,000               |
| 06/21/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | LOS ANGELES      | 31170       | CHEROKEE PIPE LINE NORTHWEST REGION      | HAZARDOUS LIQUID | 0          | 0        | \$400,000              |
| 06/24/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | BEAUMONT         | 38413       | PREMOR P.A. PIPELINE CO                  | HAZARDOUS LIQUID | 0          | 0        | \$15,000               |
| 06/25/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | AUSTIN           | 38020       | ENTERPRISE CRUDE PIPELINE LLC            | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 07/18/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | FAVETTE          | 38020       | ENTERPRISE CRUDE PIPELINE LLC            | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 07/21/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | MN    | CLEARWATER       | 11188       | ENERGISE ENERGY, LIMITED PARTNERSHIP     | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 08/01/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | WI    | DODGESHIRE       | 11188       | ENERGISE ENERGY, LIMITED PARTNERSHIP     | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 07/24/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | PAINE            | 31174       | SHELL PIPELINE CO, L.P.                  | HAZARDOUS LIQUID | 0          | 0        | \$500,000              |
| 08/07/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | ANGELINA         | 31174       | SHELL PIPELINE CO, L.P.                  | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 08/08/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | IL    | COOK             | 33445       | THE PREMACOR REFINING GROUP INC          | HAZARDOUS LIQUID | 0          | 0        | \$98,000               |
| 08/11/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    |                  | 12485       | AMERICA PIPELINE CO                      | HAZARDOUS LIQUID | 0          | 1        | \$38,000               |
| 08/11/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | KI    | MORBERSON        | 12485       | MID - AMERICA PIPELINE CO (MAPCO)        | HAZARDOUS LIQUID | 0          | 0        | \$1,500                |
| 09/27/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    | WEST BAYOU ROUGE | 4000        | EDGEMOORE PIPELINE CO                    | HAZARDOUS LIQUID | 0          | 0        | \$3,818                |
| 09/27/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | MS    | COVINGTON        | 31174       | SHELL PIPELINE CO, L.P.                  | HAZARDOUS LIQUID | 0          | 0        | \$90,000               |
| 10/24/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | OKC   |                  | 31174       | SHELL PIPELINE CO, L.P.                  | HAZARDOUS LIQUID | 0          | 0        | \$500,000              |
| 11/01/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | DCS   |                  | 31174       | SHELL PIPELINE CO, L.P.                  | HAZARDOUS LIQUID | 0          | 0        | \$600,000              |
| 11/01/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    |                  | 879         | CHEROKEE TERMINAL CORP.                  | HAZARDOUS LIQUID | 0          | 0        | \$80,000               |
| 11/13/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | IN    |                  | 31020       | MARATHON OILFIELD PIPE LINE LLC          | HAZARDOUS LIQUID | 0          | 0        | \$61,100               |
| 02/19/1999 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | PAINE            | 31442       | ONDEBY CRUDE GATHERING INC               | HAZARDOUS LIQUID | 0          | 0        | \$10,000               |
| 03/29/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    | MOUREHOUSE       | 38027       | MID - VALLEY PIPELINE COMPANY            | HAZARDOUS LIQUID | 0          | 0        | \$955,000              |
| 11/21/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | WV    | WILLIAMSBURG     | 31174       | SHELL OILFIELD COMPANY                   | HAZARDOUS LIQUID | 0          | 0        | \$711,000              |
| 01/30/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | EL PASO          | 13102       | NAVAJO REFINING CO                       | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 01/30/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | IL    | CLARK            | 31038       | MARATHON ASHLAND PIPE LINE LLC           | HAZARDOUS LIQUID | 0          | 0        | \$750,000              |
| 01/30/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | SCOTLAND         | 38005       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 0          | 0        | \$24,000               |
| 01/30/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | COMANCHE         | 18718       | SUNOCO PIPELINE L.P.                     | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State | County        | Operator ID | Operator Name                                 | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|----------------------------|-------------------------|-------|---------------|-------------|-----------------------------------------------|------------------|------------|----------|------------------------|
| 01/27/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | NM    | RIO ARRIBA    | 1371        | WESTERN REFINING SOUTHWEST, INC               | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 01/27/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | LOST HILLS    | 31174       | SHELL PIPELINE CO, L.P.                       | HAZARDOUS LIQUID | 0          | 1        | \$1,029,431            |
| 01/29/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | MN    | CLEARWATER    | 11188       | ENERGISE ENERGY, LIMITED PARTNERSHIP          | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 02/06/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | CO    |               | 31447       | WAGON CO COMPANY OF CALIFORNIA (WCCO)         | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 02/26/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | IN    | LAG           | 30900       | TRAMADON/ASONE OPERATING COMPANY L.P.         | HAZARDOUS LIQUID | 0          | 0        | \$4,000                |
| 03/29/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    | ST CHARLES    | 31174       | SHELL PIPELINE CO, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | \$800,000              |
| 03/31/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    |               | 31174       | SHELL PIPELINE CO, L.P.                       | HAZARDOUS LIQUID | 0          | 1        | \$11,800               |
| 01/24/2000 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    |               | 28136       | PARAMOUNT PETROLEUM CORP                      | HAZARDOUS LIQUID | 0          | 0        | \$69,814               |
| 02/09/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | OSAGE         | 38005       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP      | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 02/28/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | PA    | LEWISBURG     | 13102       | NAVAJO PIPELINE COOP - GENERAL WASH BLDG      | HAZARDOUS LIQUID | 0          | 0        | \$1,000,000            |
| 05/21/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | ALAMOGADO     | 31174       | SHELL PIPELINE CO, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | \$761,613              |
| 05/22/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | GA    | WINSTON       | 15874       | PLANTATION PIPE LINE CO                       | HAZARDOUS LIQUID | 0          | 0        | \$700,000              |
| 05/26/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | MS    | WINNOC        | 31270       | TR-STATES NGL PIPELINE LLC                    | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 05/27/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | KOWALE        | 18516       | SHINOLA PIPELINE CO                           | HAZARDOUS LIQUID | 0          | 0        | \$3,000                |
| 05/28/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | BRADDEEN      | 15485       | PHILIPS 66 COMPANY - SWEETEN REFINERY         | HAZARDOUS LIQUID | 0          | 0        | \$1,500                |
| 08/18/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | OSAGE         | 38005       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP      | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 08/20/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | IL    | WARRICK       | 31038       | MARATHON ASHLAND PIPE LINE LLC                | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 04/03/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | IN    | WARREN        | 32058       | MARATHON ASHLAND PIPE LINE LLC                | HAZARDOUS LIQUID | 0          | 0        | \$215,000              |
| 04/24/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS        | 28301       | BP NORTH AMERICA INC                          | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 04/24/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | MN    | ANKLA         | 12105       | MINNESOTA PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$351,000              |
| 04/24/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | IN    |               | 28003       | MOBIL PIPELINE COMPANY, L.P.                  | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 06/10/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS        | 4000        | EDGEMOORE PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$4,000                |
| 06/10/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | NC    | ENCORVILLE    | 25102       | COLUMBIAN PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$1,318,372            |
| 06/10/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    |               | 24880       | MOBIL PIPELINE COMPANY, L.P.                  | HAZARDOUS LIQUID | 0          | 0        | \$900                  |
| 06/10/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS        | 31174       | SHELL PIPELINE CO, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | \$79,800               |
| 06/10/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | HARRIS        | 31174       | SHELL PIPELINE CO, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | \$120,000              |
| 07/19/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | LAPORTE       | 38170       | CHEROKEE DEVELOPMENT & LOGISTICS, LLC         | HAZARDOUS LIQUID | 0          | 0        | \$380,000              |
| 07/21/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    |               | 11846       | ORTHAN LOUISIANA INDIAN PIPELINE CO (ELIPECO) | HAZARDOUS LIQUID | 0          | 0        | \$1,000                |
| 07/24/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | PA    | LANCASTER     | 11818       | MOBIL PIPELINE COMPANY                        | HAZARDOUS LIQUID | 0          | 0        | \$600,000              |
| 07/26/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | COLLIN        | 22850       | EOCH PIPELINE COMPANY, L.P.                   | HAZARDOUS LIQUID | 0          | 1        | \$88,300               |
| 08/09/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | MONTGOMERY    | 31270       | STATES NGL PIPELINE LLC                       | HAZARDOUS LIQUID | 0          | 0        | \$34,500               |
| 08/16/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | IL    | TRAMPA        | 44127       | OPRESS INTERSTATE PIPELINE LLC                | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 08/17/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | HACKSON       | 28801       | BP NORTH AMERICA INC                          | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 08/18/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | SANTA BARBARA | 19512       | TOSCO CORP                                    | HAZARDOUS LIQUID | 0          | 0        | \$25,000               |
| 04/24/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | URB           | 31038       | MARATHON ASHLAND PIPELINE LLC                 | HAZARDOUS LIQUID | 0          | 0        | \$60,200               |
| 05/02/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | MN    |               | 11858       | ENERGISE ENERGY COMPANY INC                   | HAZARDOUS LIQUID | 0          | 0        | \$57,000               |
| 08/12/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | NA    |               | 31038       | MARATHON ASHLAND PIPE LINE LLC                | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 11/21/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | OK    | ALLEN         | 38077       | MID - VALLEY PIPELINE COMPANY                 | HAZARDOUS LIQUID | 0          | 0        | \$20,000               |
| 02/04/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | AR    |               | 25148       | ALVETA PIPELINE SERVICE CO                    | HAZARDOUS LIQUID | 0          | 0        | \$3,000,000            |
| 01/04/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | MO    | CHARITON      | 11106       | SINGLAR TRANSPORTATION COMPANY                | HAZARDOUS LIQUID | 0          | 0        | \$300,000              |
| 03/09/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | BRADSHAW      | 19137       | TR PRODUCTS PIPELINE COMPANY, LLC             | HAZARDOUS LIQUID | 0          | 0        | \$0                    |
| 11/21/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | RI    |               | 8472        | OPRESS INTERSTATE PIPELINE LLC                | HAZARDOUS LIQUID | 0          | 0        | \$7,000                |
| 03/15/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | SCHLECHER     | 11190       | DIAMOND ECHO                                  | HAZARDOUS LIQUID | 0          | 0        | \$4,500                |
| 03/29/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | LA    |               | 31034       | RODMARK PETROCHEMICAL PIPELINE, LLC           | HAZARDOUS LIQUID | 0          | 0        | \$13,078               |
| 03/29/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | TX    | SANFORD       | 38005       | LINK ENERGY PIPELINE LIMITED PARTNERSHIP      | HAZARDOUS LIQUID | 0          | 0        | \$100,000              |
| 03/31/2001 | ALL OTHER CAUSES           | MISCELLANEOUS           | CA    | KENO          | 31174       | SHELL PIPELINE CO, L.P.                       | HAZARDOUS LIQUID | 0          | 0        | \$400,000              |

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FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

COMMENT

RESPONSE

| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State         | County | Operator ID                   | Operator Name                                            | System Type      | Fatalities | Injuries | Total Cost An. Reported |
|------------|----------------------------|-------------------------|---------------|--------|-------------------------------|----------------------------------------------------------|------------------|------------|----------|-------------------------|
| 02/21/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | MATAGORCHA                    | 81546 GENESIS PIPELINE USA, L.P.                         | HAZARDOUS LIQUID | 0          | 0        | \$1,638                 |
| 01/09/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | YOURLING                      | 31165 ENDRIS MORGAN CO2 CO. LP                           | HAZARDOUS LIQUID | 0          | 0        | \$6,400                 |
| 12/12/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | TAMMART                       | 22855 KODI PIPELINE COMPANY, L.P.                        | HAZARDOUS LIQUID | 0          | 1        | \$0                     |
| 02/22/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | MORANO                        | 12632 NOBEL PIPE COMPANY                                 | HAZARDOUS LIQUID | 0          | 0        | \$10,800                |
| 02/22/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | CLARK                         | 12422 MO - AMERICA PIPELINE CO (MAYCO)                   | HAZARDOUS LIQUID | 0          | 0        | \$849                   |
| 04/05/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | WELL                          | 22838 WOLVERINE PIPELINE CO                              | HAZARDOUS LIQUID | 0          | 0        | \$261,000               |
| 03/09/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | RAJABHARMI                    | 4906 JORDANWELL PIPELINE CO                              | HAZARDOUS LIQUID | 0          | 0        | \$91,250                |
| 01/08/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | CONTRA COSTA                  | 18032 SPP, LP                                            | HAZARDOUS LIQUID | 0          | 0        | \$188,180               |
| 03/13/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | VA     | 15674 PLANTATION PIPE LINE CO |                                                          | HAZARDOUS LIQUID | 0          | 0        | \$393,380               |
| 03/16/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | HI     | HONOLULU                      | 30595 AGS - HONOLULU                                     | HAZARDOUS LIQUID | 0          | 0        | \$4260                  |
| 04/01/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | ND     | BRIVILLE                      | 15774 NORTH DAKOTA PIPELINE COMPANY LLC                  | HAZARDOUS LIQUID | 0          | 0        | \$1,604                 |
| 04/02/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | CALCASIEU                     | 53818 ENTERPRISE PRODUCTS OPERATING LLC                  | HAZARDOUS LIQUID | 0          | 0        | \$103,000               |
| 04/04/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | 2773 CHEVRON PIPE LINE CO     |                                                          | HAZARDOUS LIQUID | 0          | 0        | \$50,000                |
| 04/10/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OR     | 849                           | 13313 CONOCOPHILIPS GRP (BAP-L48)                        | HAZARDOUS LIQUID | 0          | 0        | \$11,300                |
| 06/24/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HANGFORD                      | 31454 ALUSTAR LOGISTICS, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$500                   |
| 09/28/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | NY     | CHEMUNG                       | 18728 SUNOCO PIPELINE L.P.                               | HAZARDOUS LIQUID | 0          | 0        | \$18,300                |
| 09/27/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | IRWIN                         | 31289 BP PIPELINE NORTH AMERICAN INC.                    | HAZARDOUS LIQUID | 0          | 0        | \$128,500               |
| 10/16/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | LIBERTY                       | 12825 NOBEL PIPE LINE COMPANY                            | HAZARDOUS LIQUID | 0          | 0        | \$79,300                |
| 11/29/2001 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | TULSA                         | 4805 EXPLORER PIPELINE CO                                | HAZARDOUS LIQUID | 0          | 0        | \$19,115                |
| 01/09/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | DU PAGE                       | 22400 WEST SHORE PIPELINE CO                             | HAZARDOUS LIQUID | 0          | 0        | \$188,100               |
| 02/17/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | GARRETT                       | 31174 SHELL PIPELINE CO, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$680                   |
| 03/13/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | ST. BERNAUD                   | 24122 COLINE PIPELINE CO                                 | HAZARDOUS LIQUID | 0          | 0        | \$6,400                 |
| 01/28/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IN     | LAKE                          | 4800 EXPLORER PIPELINE CO                                | HAZARDOUS LIQUID | 0          | 0        | \$85,110                |
| 03/28/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WA     | KING                          | 30793 OLYMPIC PIPE LINE COMPANY                          | HAZARDOUS LIQUID | 0          | 0        | \$5,800                 |
| 02/10/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | TERREBONNE                    | 31174 SHELL PIPELINE CO, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$2,091,100             |
| 02/02/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | SAN BERNARDINO                | 18032 SPP, LP                                            | HAZARDOUS LIQUID | 0          | 0        | \$144,119               |
| 03/17/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | WELL                          | 22514 CLSWING - CHICAGO CRUDE OIL PIPELINE (MCOO P/L CO) | HAZARDOUS LIQUID | 0          | 0        | \$11,200                |
| 03/17/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | COOK                          | 19017 TE PRODUCTS PIPELINE COMPANY, LLC                  | HAZARDOUS LIQUID | 0          | 0        | \$25,400                |
| 03/19/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | LINCOLN                       | 2514 CLSWING - CHICAGO CRUDE OIL PIPELINE (MCOO P/L CO)  | HAZARDOUS LIQUID | 0          | 0        | \$100,000               |
| 04/16/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS                        | 25146 EQUSTAR CHEMICALS, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$1,200                 |
| 05/09/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | SC     | SPARTANBURG                   | 2252 COLONIAL PIPELINE CO                                | HAZARDOUS LIQUID | 0          | 0        | \$40,000                |
| 05/09/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IN     | ELKHART                       | 12148 ENERGY EXPRESS, LIMITED PARTNERSHIP                | HAZARDOUS LIQUID | 0          | 0        | \$10,000                |
| 06/04/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MT     | ROOSEVELT                     | 31174 SHELL PIPELINE CO, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$5,740                 |
| 07/21/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS                        | 19237 TE PRODUCTS PIPELINE COMPANY, LLC                  | HAZARDOUS LIQUID | 0          | 0        | \$12,210                |
| 11/23/2002 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | PAWNEE                        | 31174 SHELL PIPELINE CO, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$4,200                 |
| 02/17/2003 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IN     | JACKSON                       | 19137 TE PRODUCTS PIPELINE COMPANY, LLC                  | HAZARDOUS LIQUID | 0          | 0        | \$118,810               |
| 04/24/2003 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | SAN BERNARDINO                | 24122 COLINE PIPELINE CO                                 | HAZARDOUS LIQUID | 0          | 1        | \$200                   |
| 11/20/2003 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | SOLANO                        | 24122 COLINE PIPELINE CO                                 | HAZARDOUS LIQUID | 0          | 0        | \$790,000               |
| 05/26/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | JEFFERSON                     | 31174 SHELL PIPELINE CO, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$108,460               |
| 09/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | BUTLER                        | 31174 SHELL PIPELINE CO, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$7,000                 |
| 09/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | LOS ANGELES                   | 18138 WARMOUNT PETROLEUM CORP                            | HAZARDOUS LIQUID | 0          | 0        | \$50,100                |
| 04/20/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | PLAQUEMINE                    | 31174 SHELL PIPELINE CO, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$84,140                |
| 05/02/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HUNT                          | 4805 EXPLORER PIPELINE CO                                | HAZARDOUS LIQUID | 0          | 0        | \$37,000                |
| 09/28/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | SANT JAMES                    | 2773 CHEVRON PIPE LINE CO                                | HAZARDOUS LIQUID | 0          | 0        | \$5,000                 |
| 07/09/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | COCK                          | 22400 WEST SHORE PIPELINE CO                             | HAZARDOUS LIQUID | 0          | 0        | \$200,000               |
| 02/24/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | SANT JAMES                    | 31174 SHELL PIPELINE CO, L.P.                            | HAZARDOUS LIQUID | 0          | 0        | \$10                    |

21,725

| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State         | County | Operator ID                           | Operator Name                           | System Type      | Fatalities       | Injuries | Total Cost An. Reported |          |
|------------|----------------------------|-------------------------|---------------|--------|---------------------------------------|-----------------------------------------|------------------|------------------|----------|-------------------------|----------|
| 07/19/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | PA     | 31791 TODA PIPELINE COMPANY           |                                         | HAZARDOUS LIQUID | 0                | 0        | \$116,600               |          |
| 08/24/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | PLAQUEMINE                            | 4906 EXMORNOBEL PIPELINE CO             | HAZARDOUS LIQUID | 0                | 0        | \$75,000                |          |
| 07/04/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MO     | CHAMPTON                              | 31720 OFFSHORE HOLDINGS USA, LLC        | HAZARDOUS LIQUID | 0                | 0        | \$11,000                |          |
| 04/23/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | NE     | GRANT                                 | 15814 LANTANA PIPE LINE CO              | HAZARDOUS LIQUID | 0                | 0        | \$104,000               |          |
| 10/02/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | BASTROP                               | 30829 ENTERPRISE CRUDE PIPELINE LLC     | HAZARDOUS LIQUID | 0                | 0        | \$15,000                |          |
| 11/20/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | GA     | KEEN                                  | 53848 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0                | 0        | \$4,000                 |          |
| 12/16/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | SANTA BARBARA                         | 18032 SPP, LP                           | HAZARDOUS LIQUID | 0                | 0        | \$1,000                 |          |
| 12/16/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IA     | SCOTT                                 | 4472 OFFSHORE INTERSTATE PIPELINE LLC   | HAZARDOUS LIQUID | 0                | 0        | \$1,200                 |          |
| 12/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | PAWNEE                                | 31247 ENRIDGE PIPELINES (ENR) L.L.C.    | HAZARDOUS LIQUID | 0                | 0        | \$900                   |          |
| 09/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | AL     | SHELBY                                | 2352 COLONIAL PIPELINE CO               | HAZARDOUS LIQUID | 0                | 0        | \$92,800                |          |
| 01/06/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | LOS ANGELES                           | 18032 SPP, LP                           | HAZARDOUS LIQUID | 0                | 0        | \$76,200                |          |
| 02/26/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | VENTURA                               | 31884 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0                | 0        | \$11,000                |          |
| 03/22/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | LOS ANGELES                           | 18032 SPP, LP                           | HAZARDOUS LIQUID | 0                | 0        | \$173,310               |          |
| 03/22/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | LOS ANGELES                           | 31174 SHELL PIPELINE CO, L.P.           | HAZARDOUS LIQUID | 0                | 0        | \$64,440                |          |
| 04/08/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | SEDGWICK                              | 31174 SHELL PIPELINE CO, L.P.           | HAZARDOUS LIQUID | 0                | 0        | \$4,750                 |          |
| 06/18/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | DUPAGE                                | 22400 WEST SHORE PIPELINE CO            | HAZARDOUS LIQUID | 0                | 0        | \$25,000                |          |
| 06/26/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | JEFFERSON                             | 31174 SHELL PIPELINE CO, L.P.           | HAZARDOUS LIQUID | 0                | 0        | \$490                   |          |
| 04/13/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OKC    | 31174 SHELL PIPELINE CO, L.P.         |                                         | HAZARDOUS LIQUID | 0                | 0        | \$0                     |          |
| 03/26/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MT     | YELLOWSTONE                           | 31884 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0                | 0        | \$2,000                 |          |
| 04/17/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | BELLS                                 | 4906 EXMORNOBEL PIPELINE CO             | HAZARDOUS LIQUID | 0                | 0        | \$113,300               |          |
| 04/19/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | CHAMBERLAIN                           | 4472 OFFSHORE INTERSTATE PIPELINE LLC   | HAZARDOUS LIQUID | 0                | 0        | \$24,740                |          |
| 01/15/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | BARTON                                | 31174 SHELL PIPELINE CO, L.P.           | HAZARDOUS LIQUID | 0                | 0        | \$1,500                 |          |
| 12/14/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | ND     | MOUNTAIN                              | 15774 NORTH DAKOTA PIPELINE COMPANY LLC | HAZARDOUS LIQUID | 0                | 0        | \$18,000                |          |
| 04/05/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WV     | NATHAN                                | 31884 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0                | 0        | \$94,400                |          |
| 12/09/2005 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | AR     | KEEN                                  | 31174 SHELL PIPELINE CO, L.P.           | HAZARDOUS LIQUID | 0                | 0        | \$55,200                |          |
| 02/26/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | ME     | WARREN                                | 1840 BUCCHETTI PARTNERS, LP             | HAZARDOUS LIQUID | 0                | 0        | \$101,000               |          |
| 09/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | NEA    | 81304 CONOCOPHILIPS COMPANY (BAP-L48) |                                         | HAZARDOUS LIQUID | 0                | 0        | \$29,000                |          |
| 03/23/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | SABINE                                | 31174 SHELL PIPELINE CO, L.P.           | HAZARDOUS LIQUID | 0                | 0        | \$11,240                |          |
| 03/23/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | NEE                                   | 31174 SHELL PIPELINE CO, L.P.           | HAZARDOUS LIQUID | 0                | 0        | \$5,470                 |          |
| 03/30/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | JEFFERSON                             | 31174 SHELL PIPELINE CO, L.P.           | HAZARDOUS LIQUID | 0                | 0        | \$185,000               |          |
| 03/22/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | JEFFERSON                             | 30812 NATIONAL ENERGY GROUP, INC.       | HAZARDOUS LIQUID | 0                | 0        | \$25,510                |          |
| 03/05/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CO     | ADAMS                                 | 81304 CONOCOPHILIPS COMPANY (BAP-L48)   |                  | HAZARDOUS LIQUID | 0        | 0                       | \$24,100 |
| 05/02/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | JEFFERSON                             | 12614 NOBEL CORP                        | HAZARDOUS LIQUID | 0                | 0        | \$202,310               |          |
| 09/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | GRAND                                 | 4472 OFFSHORE INTERSTATE PIPELINE LLC   | HAZARDOUS LIQUID | 0                | 0        | \$299,810               |          |
| 05/12/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | PLACER                                | 18032 SPP, LP                           | HAZARDOUS LIQUID | 0                | 0        | \$62,100                |          |
| 06/27/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | KEENE                                 | 305 PLANO PIPELINE, L.P.                | HAZARDOUS LIQUID | 0                | 0        | \$1,740                 |          |
| 09/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | LINCOLN                               | 30829 ENTERPRISE CRUDE PIPELINE LLC     | HAZARDOUS LIQUID | 0                | 0        | \$93,880                |          |
| 09/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | LOS ANGELES                           | 18032 SPP, LP                           | HAZARDOUS LIQUID | 0                | 0        | \$11,100                |          |
| 10/18/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | OTTAWA                                | 81304 CONOCOPHILIPS COMPANY (BAP-L48)   |                  | HAZARDOUS LIQUID | 0        | 0                       | \$43,000 |
| 12/04/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | AUTOCHANDON                           | 31884 PHILLIPS 66 PIPELINE LLC          | HAZARDOUS LIQUID | 0                | 0        | \$10,000                |          |
| 12/04/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CA     | ASCENSION                             | 31108 CHEVRON MORTMANN PIPELINES LLC    | HAZARDOUS LIQUID | 0                | 0        | \$69,560                |          |
| 04/19/2004 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | AR     | NORTH DAKOTA                          | 24122 COLINE PIPELINE CO                | HAZARDOUS LIQUID | 0                | 0        | \$490,110               |          |
| 02/26/2003 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | CO     | BIO BLANCO                            | 2773 CHEVRON PIPE LINE CO               | HAZARDOUS LIQUID | 0                | 0        | \$10,300                |          |
| 02/26/2003 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | GA     | LOS ANGELES                           | 18032 SPP, LP                           | HAZARDOUS LIQUID | 0                | 0        | \$144,000               |          |
| 02/22/2003 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MT     | GLACIER                               | 31289 WEST HAVEL PIPELINE, LLC          | HAZARDOUS LIQUID | 0                | 0        | \$1,000                 |          |
| 03/06/2003 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | 23885 OPL PIPELINE, LLC               |                                         | HAZARDOUS LIQUID | 0                | 0        | \$492,200               |          |

22,725



FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

COMMENT

RESPONSE

| Date       | Reported Cause of Incident | Incident Cause Sub-Type | State         | County | Operator ID       | Operator Name                                     | System Type      | Fatalities | Injuries | Total Cost An. Reported |
|------------|----------------------------|-------------------------|---------------|--------|-------------------|---------------------------------------------------|------------------|------------|----------|-------------------------|
| 02/23/2007 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS            | 30001 HOUSTON REFINING LP                         | HAZARDOUS LIQUID | 0          | 0        | \$1,652                 |
| 03/18/2007 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS            | 31418 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$165                   |
| 03/26/2007 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | MIDLAND           | 38629 ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | \$4,972                 |
| 06/06/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | STEVEN            | 81131 CHEVRON PIPELINE LLC                        | HAZARDOUS LIQUID | 0          | 0        | \$1,900                 |
| 06/23/2007 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | CHAMBERLAIN       | 53789 TENGOL AND GAS SULF COAST, LLC              | HAZARDOUS LIQUID | 0          | 0        | \$0                     |
| 06/23/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IN     | HENDRICK          | 18237 TE PRODUCTS PIPELINE COMPANY, LLC           | HAZARDOUS LIQUID | 0          | 0        | \$3,378                 |
| 07/23/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IN     | LAMAR             | 48025 EMPORER PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$84,364                |
| 07/28/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OH     | LUCAS             | 18779 SUNOCO, INC (NEMA)                          | HAZARDOUS LIQUID | 0          | 0        | \$4,195,000             |
| 08/04/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OKC    |                   | 31418 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$600                   |
| 07/02/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | GAUVESTON         | 38629 ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | \$18,000                |
| 08/08/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MT     | ROCKLAND          | 53183 EMPORER PIPELINE LLC                        | HAZARDOUS LIQUID | 0          | 0        | \$18,300                |
| 10/25/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | IL     | MADISON           | 48025 EMPORER PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$943,833               |
| 01/21/2009 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS            | 31418 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$179,000               |
| 04/01/2009 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | DAWSON            | 20377 DEVOTEY DEVELOPMENT & LOGISTICS, LLC        | HAZARDOUS LIQUID | 0          | 0        | \$100,000               |
| 06/21/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | AZ     | MARICOPA          | 18822 SPP, LP                                     | HAZARDOUS LIQUID | 0          | 0        | \$15,684                |
| 07/04/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | CARTER            | 30829 ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | \$4,300                 |
| 08/02/2008 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | MCPHERSON         | 12236 HANGLAN RAMONA PIPELINE, L.P.               | HAZARDOUS LIQUID | 0          | 0        | \$188,350               |
| 08/03/2009 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | GA     | COBB              | 21022 COLUMBIA PIPELINE CO                        | HAZARDOUS LIQUID | 0          | 0        | \$12,340                |
| 03/09/2009 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | WI     | DOUGLAS           | 11149 ENER-SEE ENERGY, LIMITED PARTNERSHIP        | HAZARDOUS LIQUID | 0          | 0        | \$637,000               |
| 11/05/2009 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | ND     | MCKENZIE          | 18376 NORTH DAKOTA PIPELINE COMPANY LLC           | HAZARDOUS LIQUID | 0          | 0        | \$10,370                |
| 02/23/2009 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | BERNARD           | 31147 SHARONWON PIPE LINE LLC                     | HAZARDOUS LIQUID | 0          | 0        | \$0                     |
| 06/13/2009 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | SCURRY            | 22442 WEST TEXAS SULF PIPELINE CO                 | HAZARDOUS LIQUID | 0          | 0        | \$0                     |
| 03/01/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | SEWARD            | 31872 CHAPARRAL ENERGY, LLC                       | HAZARDOUS LIQUID | 0          | 0        | \$3,510                 |
| 07/21/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | JEFFERSON         | 31174 SHELL PIPELINE CO., L.P.                    | HAZARDOUS LIQUID | 0          | 0        | \$80,000                |
| 07/21/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS            | 31418 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$80,000                |
| 09/24/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | HARRIS            | 10022 NUSTAR PIPELINE OPERATING PARTNERSHIP, L.P. | HAZARDOUS LIQUID | 0          | 0        | \$0                     |
| 07/09/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS            | 31418 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$261,317               |
| 08/20/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS            | 31418 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$600                   |
| 08/23/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | TULSA             | 48025 EMPORER PIPELINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$1,700                 |
| 08/23/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS            | 2731 CHEVRON PIPE LINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$1,300                 |
| 08/23/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | GAUVESTON         | 2731 CHEVRON PIPE LINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$45,000                |
| 08/23/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | KS     | PHOENIX           | 31418 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$116,100               |
| 06/14/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     | FARNE             | 30829 ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | \$11,910                |
| 08/23/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     |                   | 31330 ENER MORGAN CO2 CO. LP                      | HAZARDOUS LIQUID | 0          | 0        | \$1,310                 |
| 02/10/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | MT     | LAFRETTE          | 31148 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 0        | \$90,300                |
| 02/01/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | HARRIS            | 20345 ENER MORGAN LIQUID TERMINAL, LLC            | HAZARDOUS LIQUID | 0          | 0        | \$466,000               |
| 08/21/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | ASPER             | 22204 MARTIN OPERATING PARTNERSHIP, L.P.          | HAZARDOUS LIQUID | 0          | 0        | \$4,000                 |
| 07/26/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | LAKE              | 30829 ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | \$48,544                |
| 07/26/2010 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | LAKE CHARLES      | 2731 CHEVRON PIPE LINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$1,100                 |
| 07/21/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | LA     | PLAQUEMINE        | 2731 CHEVRON PIPE LINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$28,100                |
| 07/21/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | JEFFERSON         | 2731 CHEVRON PIPE LINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$770                   |
| 07/21/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | OK     |                   | 2731 CHEVRON PIPE LINE CO                         | HAZARDOUS LIQUID | 0          | 0        | \$100,000               |
| 07/21/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     |                   | 30829 ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | \$28,340                |
| 11/15/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | GAUVESTON         | 30829 ENTERPRISE CRUDE PIPELINE LLC               | HAZARDOUS LIQUID | 0          | 0        | \$185,000               |
| 07/20/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | PA     | HEMPHREY TOWNSHIP | 18822 SPP PARTNERSHIP, LP                         | HAZARDOUS LIQUID | 0          | 0        | \$940                   |
| 12/08/2011 | ALL OTHER CAUSES           |                         | MISCELLANEOUS | TX     | LOVING            | 31418 ENTERPRISE PRODUCTS OPERATING LLC           | HAZARDOUS LIQUID | 0          | 1        | \$23,030                |

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| Date       | Reported Cause of Incident | Incident Cause Sub-Type       | State         | County          | Operator ID                            | Operator Name                                         | System Type      | Fatalities | Injuries  | Total Cost An. Reported |
|------------|----------------------------|-------------------------------|---------------|-----------------|----------------------------------------|-------------------------------------------------------|------------------|------------|-----------|-------------------------|
| 03/14/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | NE              | MUSKOGEE                               | 20345 ENER MORGAN LIQUID TERMINAL, LLC                | HAZARDOUS LIQUID | 0          | 0         | \$1,210                 |
| 03/04/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | LA              | PLAQUEMINE                             | 2731 CHEVRON PIPE LINE CO                             | HAZARDOUS LIQUID | 0          | 0         | \$405,420               |
| 08/28/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | MUSKOGEE                               | 30782 HARVEST PIPELINE COMPANY                        | HAZARDOUS LIQUID | 0          | 0         | \$980,000               |
| 07/09/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              |                                        | 30782 HARVEST PIPELINE COMPANY                        | HAZARDOUS LIQUID | 0          | 0         | \$4,000                 |
| 07/28/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | HARRIS                                 | 20345 ENER MORGAN LIQUID TERMINAL, LLC                | HAZARDOUS LIQUID | 0          | 0         | \$1,800,300             |
| 08/19/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | LA              | BERVILLE                               | 31236 CHEVRON MIDSTREAM PIPELINES LLC                 | HAZARDOUS LIQUID | 0          | 0         | \$920                   |
| 08/19/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | WA              | DOUGLAS                                | 21022 COLUMBIA PIPELINE COMPANY, LP                   | HAZARDOUS LIQUID | 0          | 0         | \$448,000               |
| 07/28/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | MT              | GAFFNEY                                | 21732 ENER PIPELINE LLC                               | HAZARDOUS LIQUID | 0          | 0         | \$0                     |
| 08/07/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | KS              | MONTGOMERY                             | 20821 COPPERVILLE RESOURCES CRUDE TRANSPORTATION, LLC | HAZARDOUS LIQUID | 0          | 0         | \$100,410               |
| 07/19/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | JEFFERSON                              | 31418 ENTERPRISE PRODUCTS OPERATING LLC               | HAZARDOUS LIQUID | 0          | 0         | \$49,350                |
| 07/02/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | JEFFERSON                              | 30777 NORTHWEST PIPELINE LLC                          | HAZARDOUS LIQUID | 0          | 0         | \$13,300                |
| 08/28/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | WILBARGER                              | 30829 ENTERPRISE CRUDE PIPELINE LLC                   | HAZARDOUS LIQUID | 0          | 0         | \$1,000                 |
| 08/27/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | COLLINGS                               | 30829 ENTERPRISE CRUDE PIPELINE LLC                   | HAZARDOUS LIQUID | 0          | 0         | \$4,200                 |
| 08/25/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | KS              | ROTFEL                                 | 21022 COLUMBIA PIPELINE COMPANY, LP                   | HAZARDOUS LIQUID | 0          | 0         | \$10,000                |
| 08/04/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | HARRIS                                 | 31418 ENTERPRISE PRODUCTS OPERATING LLC               | HAZARDOUS LIQUID | 0          | 0         | \$1,300,000             |
| 08/04/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | PA              | LEHIGH                                 | 18403 DEVOTEY PARTNERS, LP                            | HAZARDOUS LIQUID | 0          | 0         | \$188,360               |
| 12/01/2012 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | HARRIS                                 | 31418 ENTERPRISE PRODUCTS OPERATING LLC               | HAZARDOUS LIQUID | 0          | 0         | \$1,790,000             |
| 02/25/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | HARRIS                                 | 14810 COLUMBIA PIPELINE CO                            | HAZARDOUS LIQUID | 0          | 0         | \$40,000                |
| 02/21/2014 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | OK              | CREEK                                  | 12351 BHP PIPELINE, LLC                               | HAZARDOUS LIQUID | 0          | 0         | \$10,500                |
| 03/24/2014 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | OK              | LINCOLN                                | 38008 GLASS MOUNTAIN PIPELINE                         | HAZARDOUS LIQUID | 0          | 0         | \$10,500                |
| 08/08/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | WA              | LEA                                    | 21022 COLUMBIA PIPELINE COMPANY, LP                   | HAZARDOUS LIQUID | 0          | 0         | \$1,000                 |
| 04/01/2014 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | LA              | PLAQUEMINE PARISH                      | 30782 HARVEST PIPELINE COMPANY                        | HAZARDOUS LIQUID | 0          | 0         | \$600,000               |
| 04/11/2014 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | JEFFERSON                              | 31418 ENTERPRISE PRODUCTS OPERATING LLC               | HAZARDOUS LIQUID | 0          | 0         | \$0                     |
| 06/02/2014 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | HARRIS                                 | 30001 HOUSTON REFINING LP                             | HAZARDOUS LIQUID | 0          | 0         | \$9                     |
| 06/26/2014 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | WI              | DOUGLAS                                | 11149 ENER-SEE ENERGY, LIMITED PARTNERSHIP            | HAZARDOUS LIQUID | 0          | 0         | \$264,100               |
| 08/26/2014 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | ND              | UNION                                  | 18403 DEVOTEY PARTNERS, LP                            | HAZARDOUS LIQUID | 0          | 0         | \$68,500                |
| 12/19/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | NM              | EDDY                                   | 32211 POLLY ENERGY PARTNERS - OPERATING, L.P.         | HAZARDOUS LIQUID | 0          | 0         | \$99,240                |
| 02/07/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | OK              | LINCOLN                                | 38008 GLASS MOUNTAIN PIPELINE                         | HAZARDOUS LIQUID | 0          | 0         | \$1,000                 |
| 04/06/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | LA              | TERREBORNE                             | 31174 SHELL PIPELINE CO., L.P.                        | HAZARDOUS LIQUID | 0          | 0         | \$1,000                 |
| 02/18/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | FREESTONE                              | 22442 WEST TEXAS SULF PIPELINE CO                     | HAZARDOUS LIQUID | 0          | 1         | \$0                     |
| 05/18/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | GRAYSON                                | 30829 ENTERPRISE CRUDE PIPELINE LLC                   | HAZARDOUS LIQUID | 0          | 0         | \$900                   |
| 04/20/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | MS              | NORTH WYCHEM COUNTY                    | 21022 COLUMBIA PIPELINE COMPANY                       | HAZARDOUS LIQUID | 0          | 0         | \$14,000                |
| 04/06/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | NM              | LEA                                    | 31450 HADRONNER PIPELINE, L.L.C.                      | HAZARDOUS LIQUID | 0          | 0         | \$5,510                 |
| 08/29/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | IL              | CLARK                                  | 32147 MARATHON PIPE LINE LLC                          | HAZARDOUS LIQUID | 0          | 0         | \$0                     |
| 08/21/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | HARRIS                                 | 30001 HOUSTON REFINING LP                             | HAZARDOUS LIQUID | 0          | 0         | \$0                     |
| 08/15/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | SAN PATRICK                            | 31930 HARVEST PIPELINE COMPANY                        | HAZARDOUS LIQUID | 0          | 0         | \$11,500                |
| 08/24/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | WICHITA                                | 30829 ENTERPRISE CRUDE PIPELINE LLC                   | HAZARDOUS LIQUID | 0          | 0         | \$10,200                |
| 08/26/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | BRADSHAW                               | 30829 ENTERPRISE CRUDE PIPELINE LLC                   | HAZARDOUS LIQUID | 0          | 0         | \$16,100                |
| 12/28/2013 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | KS              | POLK                                   | 21022 HANGLAN PIPELINE COMPANY, LP                    | HAZARDOUS LIQUID | 0          | 0         | \$190,100               |
|            |                            |                               |               |                 |                                        |                                                       |                  |            |           | \$160,891,731           |
| 02/11/2014 | EXHAUSTION DAMAGE          | THIRD PARTY EXHAUSTION DAMAGE | TX            | TOSCANI         | 12462 MID- AMERICA PIPELINE CO (EMACO) | HAZARDOUS LIQUID                                      | 3                | 0          | \$120,000 |                         |
| 08/24/1984 | ALL OTHER CAUSES           |                               | MISCELLANEOUS | TX              | KALAMIAN                               | 11863 KOCI PIPELINE COMPANY, L.P.                     | HAZARDOUS LIQUID | 2          | 0         | \$17,000                |
| 03/07/1989 | EXHAUSTION DAMAGE          | UNRECORDED EXHAUSTION DAMAGE  | TX            | ECTOR           | 11842 MID- AMERICA PIPELINE CO (EMACO) | HAZARDOUS LIQUID                                      | 2                | 4          | \$5,000   |                         |
| 02/09/1989 | INCORRECT OPERATION        | INCORRECT OPERATION           | LA            | ST JAMES PARISH | 30777 NORTHWEST PIPELINE LLC           | HAZARDOUS LIQUID                                      | 1                | 0          | \$0       |                         |
| 08/14/1984 | EXHAUSTION DAMAGE          | UNRECORDED EXHAUSTION DAMAGE  | TX            | WICHITA         | 21022 COLUMBIA PIPELINE COMPANY        | HAZARDOUS LIQUID                                      | 1                | 0          | \$90,000  |                         |

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FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

COMMENT

RESPONSE

| Date       | Reported Cause of Incident  | Incident Cause SubType                  | State | County       | Operator ID | Operator Name                        | System Type      | Fatalities | Injuries | Total Cost As Reported |
|------------|-----------------------------|-----------------------------------------|-------|--------------|-------------|--------------------------------------|------------------|------------|----------|------------------------|
| 04/02/1998 | ALL OTHER CAUSES            | MISCELLANEOUS                           | WA    | WHATCOM      | 30761       | OLYMPIC PIPE LINE COMPANY            | HAZARDOUS LIQUID | 3          | 8        | \$40,000,000           |
| 08/12/1998 | EXCAVATION DAMAGE           | THIRD PARTY EXCAVATION DAMAGE           | TX    | WILLIAMSON   | 18134       | SEMINOLE PIPELINE CO                 | HAZARDOUS LIQUID | 1          | 0        | \$180,000              |
| 09/07/2000 | EXCAVATION DAMAGE           | THIRD PARTY EXCAVATION DAMAGE           | TX    | TAYLOR       | 4906        | EXXONMOBIL PIPELINE CO               | HAZARDOUS LIQUID | 1          | 2        | \$900,000              |
| 06/28/2004 | INCORRECT OPERATION         | INCORRECT OPERATION                     | OH    | BUTLER       | 19237       | TE PRODUCTS PIPELINE COMPANY, LLC    | HAZARDOUS LIQUID | 1          | 0        | \$7,000                |
| 11/09/2004 | EXCAVATION DAMAGE           | THIRD PARTY EXCAVATION DAMAGE           | CA    | CONTRA COSTA | 18092       | SFPW, LP                             | HAZARDOUS LIQUID | 5          | 3        | \$794,440              |
| 06/07/2005 | MATERIAL/WELD/EQUIP FAILURE | MALFUNCTION OF CONTROL/RELIEF EQUIPMENT | TX    | JIM HOGG     | 31638       | ENTERPRISE PRODUCTS OPERATING LLC    | HAZARDOUS LIQUID | 1          | 0        | \$14,130               |
| 09/18/2005 | INCORRECT OPERATION         | INCORRECT OPERATION                     | OH    | BUTLER       | 19237       | TE PRODUCTS PIPELINE COMPANY, LLC    | HAZARDOUS LIQUID | 1          | 0        | \$5,361,300            |
| 11/28/2007 | INCORRECT OPERATION         | INCORRECT OPERATION                     | MS    | CLEARWATER   | 11166       | ENERGIZE ENERGY, LIMITED PARTNERSHIP | HAZARDOUS LIQUID | 2          | 0        | \$2,475,000            |
| 09/23/2008 | CORROSION                   | INTERNAL                                | TX    | HARRIS       | 26041       | KINDER MORGAN LIQUID TERMINALS, LLC  | HAZARDOUS LIQUID | 1          | 1        | \$40,800,000           |
| 09/28/2009 | INCORRECT OPERATION         | INCORRECT OPERATION                     | LA    | SAINT JAMES  | 32547       | MARATHON PIPE LINE LLC               | HAZARDOUS LIQUID | 1          | 3        | \$900,000              |
| 05/12/2009 | INCORRECT OPERATION         | INCORRECT OPERATION                     | AR    | WHITE        | 19237       | TE PRODUCTS PIPELINE COMPANY, LLC    | HAZARDOUS LIQUID | 3          | 0        | \$3,789,146            |
| 07/05/2010 | EXCAVATION DAMAGE           | THIRD PARTY EXCAVATION DAMAGE           | GA    | MCDUFFIE     | 3445        | DORR PIPELINE COMPANY LLC            | HAZARDOUS LIQUID | 1          | 1        | \$524,275              |
| 06/02/2012 | ALL OTHER CAUSES            | UNKNOWN                                 | TX    | HARRIS       | 14394       | OLYANKINS, HOUSTON LP                | HAZARDOUS LIQUID | 1          | 1        | \$5                    |
|            |                             |                                         |       |              |             |                                      |                  | 29         | 23       |                        |

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The INGAA Foundation, Inc.

## Criteria for Pipelines Co-Existing with Electric Power Lines

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Prepared For:  
The INGAA Foundation

Prepared By:  
DNV GL

October 2015




The INGAA Foundation  
FINAL Report No. 2015-04



Report name: Criteria for Pipelines Co-Existing with Electric Power Lines Det Norske Veritas (U.S.A.), Inc. Oil & Gas Computational Modeling  
 Customer: The INGAA Foundation, Inc. 5777 Frantz Road  
 Contact person: Richard Hoffmann 43017-1386 Dublin  
 Date of issue: October 5, 2015 OH  
 Project No.: PP105012 United States  
 Organization unit: OAPUS310 / OAPUS312 Tel: +1 614 761 1214  
 Report No.: 2015-04, Rev. 0  
 Document No.: 1E02G9N-4

Objective:

The primary objective of this report is to present the technical background, and provide best practice guidelines and summary criteria for pipelines collocated with high voltage AC power lines. The report addresses interference effects with respect to corrosion and safety hazards, and fault threats.

Prepared by:  Verified by:  Approved by:   
 Shane Finneran Senior Engineer Barry Krebs Principal Engineer Lynsay Bensman Head of Section, Materials Advisory Service

| Rev./Date | Date       | Reason for Issue | Prepared by | Verified by | Approved by |
|-----------|------------|------------------|-------------|-------------|-------------|
| Draft     | 2015-06-18 | First Issue      | SF          | BK          | LB          |
| 0         | 2015-10-05 | Final Issue      | SF          | BK          | LB          |

## EXECUTIVE SUMMARY

The primary objective of this report is to present the technical background, and provide best practice guidelines and summary criteria for pipelines collocated with high voltage AC power lines. The report addresses interference effects with respect to corrosion and safety hazards, and fault threats. The guidelines presented address mitigation and monitoring, encroachment and construction, risk severity classification, and recommendations for further industry development.

This report addresses the technical background to high voltage interference with respect to collocated and crossing pipelines, and presents basic procedures for dealing with interference scenarios. The provisions of this document are recommended to be used under the direction of competent persons, who are qualified in the practice of corrosion control on metallic structures, with specific suitable experience related to AC and/or DC interference and mitigation. This document is intended for use in conjunction with the reference materials cited herein.

Collocated pipelines, sharing, paralleling, or crossing high voltage power line rights-of-way (ROW), may be subject to electrical interference from electrostatic coupling, electromagnetic inductive, and conductive effects. If the interference effects are high enough, they may pose a safety hazard to personnel or the public, or may compromise the integrity of the pipeline. Because of increased opposition to pipeline and power line siting, many future projects propose collocating high voltage alternating current (HVAC) and high voltage direct current (HVDC) power lines and pipelines in shared corridors, worsening the threat.

Predicting HVAC interference on pipelines is a complex problem, with multiple interacting variables affecting the influence and consequences. In some cases, detailed modeling and field monitoring is used to estimate a collocated pipeline's susceptibility to HVAC interference, identify locations of possible AC current discharge, and design appropriate mitigation systems to reduce the effects of AC interference. This detailed computer modeling generally requires extensive data collection, field work, and subject-matter expertise. Basic industry guidelines are needed to help determine when more detailed analysis is warranted, or when detailed analysis can be ruled out based on the known collocation and loading parameters. A consistent technical guidance document will benefit the pipeline industry by increasing public safety and allowing for an efficient approach in assessment and mitigation of threats related to high voltage interference.

The INGAA Foundation contracted Det Norske Veritas (U.S.A), Inc. (DNV GL) to develop this guidance document. The project included a detailed industry literature review to identify applicable technical reports, international standards, existing guidance and operator procedures. In addition to the literature review, numerical modeling was performed to determine the effects of key parameters on the interference levels. The document addresses interference effects with respect to corrosion and safety hazards, mitigation, monitoring, encroachment and construction, prioritization and modeling. It also includes recommendations for further development.

The following severity ranking tables were developed for key variables and their impact on the severity of AC interference. Further background for the development of these rankings is provided throughout the report. Guidelines for determining the need for detailed analysis and applying these severity rankings are provided in Section 6.2.

**Table 3-Severity Ranking of Separation Distance**

| Separation Distance - $D$ (Feet) | Severity Ranking of HVAC Interference |
|----------------------------------|---------------------------------------|
| $D < 100$                        | High                                  |
| $100 < D < 500$                  | Medium                                |
| $500 < D < 1,000$                | Low                                   |
| $1,000 < D \leq 2,500$           | Very Low                              |

**HVAC Power Line Current**

**Table 4-Relative Ranking of HVAC Phase Current**

| HVAC Current - $I$ (amps) | Relative Severity of HVAC Interference |
|---------------------------|----------------------------------------|
| $I \geq 1,000$            | Very High                              |
| $500 < I < 1,000$         | High                                   |
| $250 < I < 500$           | Med-High                               |
| $100 < I < 250$           | Medium                                 |
| $I < 100$                 | Low                                    |

**Soil Resistivity**

**Table 5-Relative Ranking of Soil Resistivity**

| Soil Resistivity - $\rho$ (ohm-cm) | Relative Severity of HVAC Corrosion |
|------------------------------------|-------------------------------------|
| $\rho < 2,500$                     | Very High                           |
| $2,500 < \rho < 10,000$            | High                                |
| $10,000 < \rho < 30,000$           | Medium                              |
| $\rho > 30,000$                    | Low                                 |

**Collocation Length**

**Table 6-Relative Ranking of Collocation Length**

| Collocation Length: $L$ (feet) | Relative Severity |
|--------------------------------|-------------------|
| $L > 5,000$                    | High              |
| $1,000 < L < 5,000$            | Medium            |
| $L < 1,000$                    | Low               |

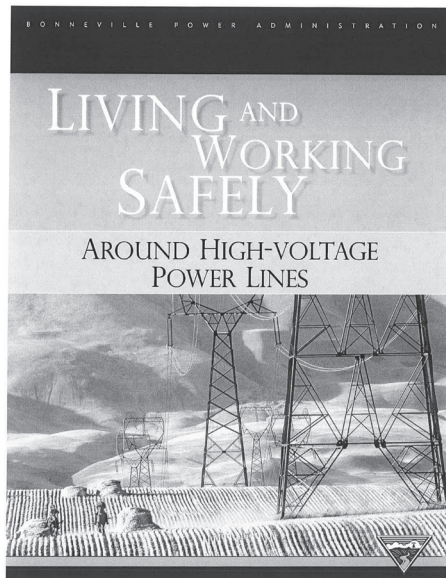
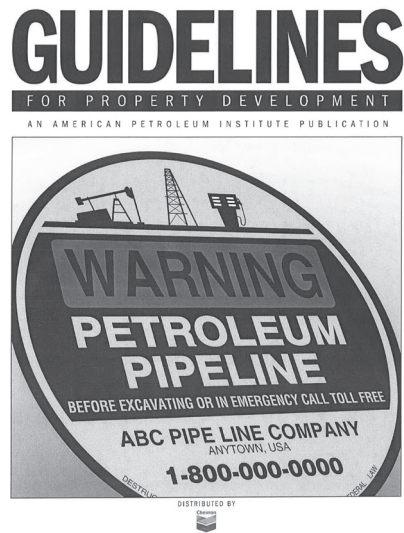
**Collocation / Crossing Angle**

**Table 7-Relative Ranking of Crossing Angle**

| Collocation/Crossing Angle - $\theta$ (°) | Relative Severity |
|-------------------------------------------|-------------------|
| $\theta < 30$                             | High              |
| $30 < \theta < 60$                        | Med               |
| $\theta > 60$                             | Low               |

The research and analytical studies accentuated the need for accurate power line current load data when assessing the susceptibility of a steel transmission line to high voltage interference. For this reason, collaboration between the respective pipeline and power line operators is advised to accurately determine where detailed assessment is required, and develop efficient mitigation where necessary.

The general safety recommendations and guidelines for interference analysis presented in Section 6 provide guidance on the relative susceptibility of AC interference associated with the selected variables. They primarily address the likelihood or susceptibility of AC interference, and do not address the consequence aspect of an overall risk assessment, as these details are specific to each individual assessment.



## Induced AC creates problems for pipelines in utility corridors

**Imbalance in power transmission systems, place operator safety, system integrity at risk**

**John S. Smart III**, John Smart Consulting Engineers, Houston, Texas; **Dirk L. van Oostendorp**, Paragon Engineering Services, Houston, Texas; and **William A. "Bud" Wood**, ARCO Pipeline Company, Houston, Texas

**AC** interference on pipelines located in utility corridors is a real and serious problem which can place both operator safety and pipeline integrity at risk.

Installing pipelines in energy utility corridors containing high-voltage AC transmission lines subjects the pipelines to induced AC voltages. This can be caused by an imbalance in the transmission system, and by high voltages near transmission tower grounding systems resulting from lightning strikes and phase faults.

When a long-term induced AC voltage exists on a pipeline, it can be dangerous and potentially life-threatening for operations personnel to touch the pipeline or appurtenances. In addition, pipe corrosion also can result from AC discharge.

COMPUTER MODELLING OF AC INTERFERENCE PROBLEMS  
FOR THE MOST COST-EFFECTIVE SOLUTIONS

R. D. Soutley & F. P. Dawalibi,  
Safe Engineering Services & technologies Ltd.  
1544 Viel, Montreal, Quebec, Canada, H3M 1G4  
E-Mail: info@sesech.com

ABSTRACT

AC interference from high voltage power lines can constitute an electric shock hazard and a threat to equipment integrity during both normal operation conditions and fault conditions. Simplified analysis methods can lead to millions of dollars in excess expenses due directly to overdesign or resulting from the consequences of underdesign. This paper presents a cost-effective AC interference mitigation method, which is made possible by the power of presently existing computer software. The importance of the soil's multilayer soil structure in determining the performance of mitigation systems is discussed. This mitigation method is compared with other types of mitigation systems.

Keywords: AC Interference Mitigation, Induced Voltages, Electric Power Transmission Lines, Conductive Through-Earth Coupling from Towers and Poles, Gas, Oil, Water Pipelines

INTRODUCTION

A pipeline which shares a common corridor with AC transmission lines becomes energized by the magnetic and electric fields surrounding the power system in the air and soil. This AC interference can result in an electrical shock hazard for people touching the pipeline or metallic structures connected to the pipeline... or simply standing nearby; furthermore, damage to the pipeline's coating, insulating flanges, rectifiers or even direct damage to the pipeline's wall itself can occur.

I78-G-1

- Is this EIS about a PSE need or a PSE customer need?
  - That decision must be made
- SEPA Handbook section 3.3.1 "Agencies are encouraged to describe a proposal as an objective...
  - Not a specific solution
- If it's about the cities and residents, the whole EIS objective must be recast in that context:
  - "Identify and address energy needs for the region in the next decade."
  - This opens up a wide spectrum of opportunities for a viable energy future
- If it's about PSE, Please delete all the irrelevant and erroneous statements regarding need
  - Just states PSE wants 230KV power lines

I78-G-2

- Seems apparent the DEIS carries significant bias
  - Need to clarify why

I78-G-3

- WAC 197-11-960 Environmental checklist.
  - 2. Air
    - a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.
    - b. Are there any offsite sources of emissions or odor that may affect your proposal? If so, generally describe.
- WAC 197-11-444 Elements of the environment
- (b) (i) Air quality

- I78-G -1 See response for Key Theme OBJ-1.
- I78-G -2 See response for Key Theme OBJ-1.
- I78-G -3 See response for Key Theme GHG-4.

- 178-G-3 • What exempts the DEIS from including Mercury and Air Toxics Standards (MATS) controlled air pollutants from consideration?
  - Just 1/70th of a teaspoon of mercury deposited on a 25-acre lake can make the fish unsafe to eat. - Union of Concerned Scientists
  - EPA ranks Colstrip power plant among worst in nation for mercury (2011)
- 178-G-4 • Why is ground water pollution from coal ash not considered?
  - Alternative 1 increases GHG and these toxic pollutants
- 178-G-5 • Alternative 2 reduces GHG and these toxic pollutants
  - Why is this ignored?

- 178-G-6 • Alternative 2 is a huge environmental benefit 24/7/365 not just during conditions stated by PSE
  - Off-peak wind and solar generation along with battery storage helps mitigate peak load generation (Colstrip) demand every day, not just a couple days a year
  - This reduces GHG and MATS emissions below current levels
- What allows these environmental benefits to be ignored?

- 178-G -4 See response for Key Theme WTR-3.
- 178-G -5 See response for Key Theme GHG-2.
- 178-G -6 See response for Key Theme ALT-1.



178-G -7 See responses for Key Themes EIS-1 and EIS-3, and Key Theme LU-2.

178-G-6

- There is a strong implication the sensible alternatives are being sandbagged by bad analysis in the DEIS
- Please state in the EIS why obvious environmental advantages of alternative 2 are being ignored
  - If it's not in my back yard I don't need to care? Is that the reason?
  - Please just be clear

178-G-7

- GMA and destruction of housing
- WAC 197-11-960 Environmental checklist.
  - 8. Land and shoreline use
    - a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.
    - d. Will any structures be demolished? If so, what?
    - e. What is the current zoning classification of the site?
    - f. What is the current comprehensive plan designation of the site?
    - l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
  - Existing Corridor 'M' powerline ROW is not wide enough
  - Why are none of these items addressed at least qualitatively in the DEIS?
  - You can at least list the neighborhoods destroyed by PSE's proposed action

COMMENT

RESPONSE

Brian Elworth  
8605 129<sup>th</sup> CT SE  
Newcastle 98056

The following questions and statements are on behalf of myself and residents and organizations impacted by this project.

I78-H-1

What are Bellevue’s standards of ethics regarding its EIS lead agency responsibilities to citizens in the region affected by the Energize Eastside EIS? What are Bellevue’s criteria for assessing compliance with its standards of ethics? What is Bellevue’s assessment of its compliance against its ethics compliance criteria regarding the Energize Eastside DEIS?

Since there are numerous false statements and omissions in the DEIS and since those false statements and omissions bias the DEIS in support of Alternative 1 and against other, superior alternatives, will Bellevue reissue a corrected DEIS or a supplemental DEIS to address the deficiencies in the DEIS? If not, why not?

I78-H-2

First paragraph page FS-i – The DEIS states: *“The project involves improvements to PSE’s electrical grid in the Eastside area of King County, Washington, to address a deficiency in electrical transmission capacity.”* Why does Bellevue assert a deficiency exists in electrical transmission capacity when there is no credible evidence supporting that claim? On what evidence is this claim based? Why does Bellevue accept a study on electrical transmission line capacity that is not based on sound requirements from governing agencies? Why does Bellevue allow overstated power demands, well beyond governing standards in the analysis of electrical demand? Why does Bellevue consider power siphoned off to Canada as a required load for PSE when no such demand needs to be considered as a PSE requirement?

Third paragraph page FS-i – The DEIS states: *“The purpose of the project is to address a projected deficiency in transmission capacity resulting from growth in electrical demand, which could affect the future reliability of electrical service for the Eastside.”* Why does Bellevue assert a deficiency exists in electrical transmission capacity when there is no credible evidence supporting that claim since there is not adequate generation capacity to meet the claimed shortfall? On what evidence is this claim based since it doesn’t address the generation capacity shortfall?

I78-H-3

Fourth paragraph page FS-i – The DEIS states: *“This Phase 1 Draft EIS evaluates the proposed 230 kV improvements as well as alternatives to PSE’s proposal.”* Why were the other alternatives identified in the verbal and written record rejected? What criteria was used? What assumption were made? Did Bellevue enlist independent electrical engineers and other technical experts to evaluate the alternatives? What are their credentials? Is PSE’s technical incompetence sufficient rationale for rejecting a well-established, technically feasible, and compliant alternative?

I78-H-4

Page fs-ii – The DEIS states *“The new transmission lines may be entirely within existing utility easements...”* Why is corridor M through the Olympus community in Newcastle considered in the proposed route since the existing ROW is too narrow to safely support Alternative 1 option A? Does Bellevue consider the safety risk of Newcastle residents not worthy of consideration in promoting PSE’s proposed alternative? If not, explain the discrepancy between the statement from the DEIS quoted above and the impacts resulting from safety mitigations requiring proper physical separation between the proposed transmission line and the hazardous liquid pipeline.

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- I78-H -1 See response for Key Theme EIS-1.
- I78-H -2 See responses for Key Themes OBJ-1 and OBJ-2.
- I78-H -3 See response for Key Theme ALT-1.
- I78-H -4 See responses for Key Themes ALT-1 and Key Theme LU-3.

I78-H-5

Page 1-1 last paragraph – The DEIS states: *“This set of facilities is proposed in order to address a deficiency in electrical transmission capacity during peak periods that has been identified by PSE through its system planning process. This deficiency is expected to arise as a result of anticipated population and employment growth on the Eastside, and it is expected to negatively affect service reliability for Eastside customers within the next few years. The project would improve reliability for Eastside communities and would supply the needed electrical capacity for anticipated growth and development on the Eastside.”* Why is this stated as fact when is it merely an opinion? Why are unsupported opinions stated as fact?

Washington Administrative Code WAC 197-11-400 *“An EIS shall provide impartial discussion of significant environmental impacts and shall inform decision makers and the public of reasonable alternatives, including mitigation measures, that would avoid or minimize adverse impacts or enhance environmental quality.”* The EIS is essentially a research document. Its purpose is to serve as an organized consolidation of factual information related to the environmental impact of a proposal.

The City of Bellevue as lead agency on PSE’s proposed Energize Eastside project must adhere to the highest standards of integrity, transparency, objectivity, and thoroughness in the conduct of the EIS process in compliance with spirit, intent, and letter of the WAC. The cities and residents of Redmond, Kirkland, Newcastle and Renton are depending on Bellevue as the lead agency and should be treated fairly and respectfully by Bellevue in this EIS process.

The integrity of the key product, the EIS document, is of utmost importance. There is an appearance that portions of the evaluation and analysis were ghost written by PSE rather than by someone independent, impartial, and objective. Credibility of the EIS requires neutrality.

I78-H-6

Errors and omissions in the DEIS must be corrected if the document is to be indicative of the true environmental impact. Contrary, incorrect, and/or unsupported statements in the document must be purged. Some sections of the EIS shows significant laps in factual accuracy. This also greatly undermines the credibility of the document and the process by which it was generated.

Complete truth should be your overarching objective.

SEPA Handbook section 3.3 states *“The lead agency is responsible for the content of the EIS...”* What that means is, regardless of its source, every word, sentence, paragraph, diagram, figure, and table in the DEIS is owned by Bellevue. If you put it in the EIS, you own it. This implies a trust that declarations of fact are vetted by Bellevue for accuracy and completeness. The EIS should meet the basic standards for research integrity. Anything less is betrayal of trust.

There is an apparent lack of research integrity in the DEIS If the concept of research integrity is not well understood or the process is unclear, one source of guidance is a book [On Being a Scientist: A Guide to Responsible Conduct in Research](#) National Academies Press. Another resource is: [Responsible Science, Volume I: Ensuring the Integrity of the Research Process](#). A number of other references can be found at: <http://www.nap.edu/catalog/12192/on-being-a-scientist-a-guide-to-responsible-conduct-in>

What research integrity training and mentoring on the proper conduct of research is being provided to the individuals who are responsible for the content of the DEIS to assure the DEIS is objective and factual.? If no formal training or mentoring is in place what is the plan to rectify this process deficiency and provide a DEIS for public review that is compliant with basic research standards of integrity?

I78-H -5 See response for Key Theme OBJ-2.

I78-H -6 See response for Key Theme EIS-2.

I78-H -7 See response for Key Theme EIS-2.

SEPA Handbook section 3.3.1 *"Agencies are encouraged to describe a proposal as an objective, particularly for agency actions. For example, a city could propose the construction of a series of settling ponds and a chlorination system at the wastewater treatment facility. Instead, the proposal could be described as meeting the wastewater treatment needs of future development for the next 15 years. This encourages the consideration of a wider range of alternatives, where different treatment processes, and even water reuse options are contemplated rather than limiting the consideration to size and location options."*

If this project is being considered as a potential EPF, that determination and the objective should be produced by the lead agency and partner cities. Instead, Bellevue is focusing the EIS on PSE's ill-conceived problem statement and inferior solution.

Paragraph 1.6 page 1-15 – The DEIS states: *"The EIS was developed under the direction of the City of Bellevue, working closely with its partner Cities and its consultants. As previously noted, the project is proposed by PSE, a regulated utility. Therefore, PSE developed the project objectives and helped to define alternatives that would attain or approximate the proposal's objectives, as required by SEPA."*

I78-H-6

At the very outset, the DEIS presumes a very narrow problem and solution. This distorts and distracts from the real dialog that Bellevue and the neighboring cities should be pursuing in regards to energy needs. Why does Bellevue use false statements from PSE as an objective instead of complying with the spirit and intent of the SEPA process by stating a citizen's needs focus? Rather than conjecturing a 74 MW shortfall and a draconian solution, a better objective would be to "Identify and address energy needs along with safe and environmentally sound solutions for the region in the next decade." That statement would be a more appropriate title to the real agenda that should be pursued in this region and shifts the dialog from the ridiculous to the practical and opens up the opportunities for the future. Each alternative is essentially a proposal to achieve a common objective. That common objective should be expressed in a fair and impartial manner. It should not be the extremely biased words from a profit motivated company. PSE owns their proposal but Bellevue, not PSE, owns the objective. Will Bellevue as lead agency step up its responsibilities to define a citizen oriented objective and seek solutions that benefit the citizens? Given the dangers of installation and operation of PSE proposed solution, shouldn't Bellevue as a minimum, include safety in the objective?

I recommend Bellevue step back, look at the real issues, get the proper research training, and pursue a solution for the common good. Energize Eastside and the current EIS process are not it.

Page 1-15 – The DEIS states *"Phase 1 EIS public scoping outreach was conducted to assist in identifying technically viable alternatives that address PSE's reported deficiency in electrical transmission capacity."* Contrary to this DEIS statement, a number of technically sound alternatives in use in the US and around the world were documented in the public record but were rejected and excluded from the DEIS without acknowledgement. Why did Bellevue reject these alternatives?

I78-H-7

Page 1-17 section 1.9.2 – The DEIS states: *"No new 230 kV transmission lines, substations, energy generation, or storage facilities..."* Why does Bellevue make this misleading statement since there are non-PSE options that ColumbiaGrid has available that solves the problem PSE states? No Action should be stated as No PSE Action. The correct statement is: *"No new 230 kV transmission lines, substations, energy generation, or storage facilities by PSE..."* ColumbiaGrid has resources that don't involve PSE projects.

Page 1-30 – For the No Action alternative, the DEIS states: *“No expanded transmission capacity could mean limits to peak energy availability, possibly with lower consumption of electricity than projected.”*

Page 1-36 – For the No Action Alternative, the DEIS states: *“Inconsistency with planning goals for adequate power supply could be a significant adverse impacts.”*

Why does Bellevue make these extremely misleading statements? This seems very deceitful. Per the Energize Eastside EIS website, ColumbiaGrid’s determination is: *“A downside of the Sammamish-Lakeside-Talbot project is that its south-to-north Total Transfer Capability (TTC) is 417 MW lower as compared to the Maple Valley-SnoKing reconductor with 680 MW of Puget Sound area generation, with Seattle City Light’s North Downtown Substation (with inductors).”* With the No Action Alternative, ColumbiaGrid has the option of proceeding with the preferred Maple Valley-SnoKing reconductor project if deemed necessary. This is a far less intrusive and lower cost (\$16M) solution. Why does Bellevue ignore the fact the No Action Alternative leads to a better solution and instead make false assertions?

Page 1-36 – The DEIS states: *“The No Action Alternative could lead to unavoidable significant impacts. If unreliable power supply were to result in growth that is inconsistent with regional growth plans.”* Why does Bellevue make this misleading statement since ColumbiaGrid has resources to solve PSE’s stated problem without PSE’s action?

Page 1-36 – For Alternative 1 the DEIS states: *“Moderate to significant land use impacts and housing impacts could occur because up to 327 acres of land could change to utility use, and some housing could be removed to accommodate new transmission lines.”* Given the extremely limited remaining property in Newcastle available for residential construction, why does Bellevue ignore the conflict between Alternative 1 and the spirit of the Growth Management Act?

Page 1-36 Mitigation Measures – The DEIS states: *“Provide relocation assistance”* What exactly is Bellevue’s qualitative intent here? Since there is very little property available in Newcastle for development, how is Bellevue going to assist in relocating displaced Newcastle residents to equivalent locations in Newcastle? How are displaced residents compensated? Why is does Bellevue gloss over Alternative 1 land use impact mitigation given these are the most significant impacts?

Page 1-36 Significant Unavoidable Adverse Impacts – The DEIS states: *“No significant unavoidable adverse impacts to land use or housing are expected. Alternative 1, Option A, could have significant impacts if a new corridor were required.”* Since Bellevue has been told sections of the corridor are too narrow and there are homes at the ROW boundary, e.g. through Newcastle, why does Bellevue assert this falsehood. Why does Bellevue ignore the housing impact resulting from widening the existing corridor?

Page 1-38 Views & Visual Resources Significant Unavoidable Adverse Impacts – The DEIS states: *“Significant impacts from Alternative 1 would be unavoidable if a new corridor were developed.”* Significant impacts from Alternative 1 would be unavoidable period. Why does Bellevue include the misleading condition on whether or not a new corridor was developed?

Page 1-46 – For the No Action Alternative, The DEIS states: *“Although a significant adverse impact could result if a pipeline explosion near the transmission line occurred, the risk is minimized by conformance with regulatory requirements and procedures that address pipeline safety.”* For Alternative 1, the DEIS

I78-H -8 See response for Key Theme OBJ-1.  
 I78-H -9 See response for Key Theme LU-1.  
 I78-H -10 See response for Key Theme LU-1.  
 I78-H -11 See response for Key Theme LU-2.  
 I78-H -12 See response for Key Theme VR-2.  
 I78-H -13 See response for Key Theme PLS-4.



I78-H-13 states: "Conformance with regulatory requirements and procedures would ensure that potential hazards are identified, and design plans developed, that minimize adverse effects from pipeline hazards." There is a far greater danger of pipeline explosion with collocated conductive metal transmission towers compared to the existing insulated structures. Why does Bellevue insinuate the No Action alternative is more dangerous than Alternative 1? Why does Bellevue insist on injecting these harmful biases?

I78-H-14 Page 1-48 – For the No Action Alternative, the DEIS states: "High electrical loads and lack of bulk transmission in the vicinity of the load could result in moderate to significant adverse impacts to electrical service reliability." Why does Bellevue ignore ColumbiaGrid resources as identified in the Energize Eastside EIS website?

I78-H-15 Page 1-48 – For the No Action Alternative, The DEIS states: "A potential significant adverse impact if Olympic Pipeline were damaged and explodes near existing PSE lines. Potential hazards minimized to minor levels with conformance to standards and requirements." There is a far greater danger of pipeline explosion with collocated conductive metal transmission towers compared to the existing insulated structures. Why does Bellevue insinuate the No Action Alternative is more dangerous than Alternative 1? Why does Bellevue insist on injecting these harmful biases? This seems extremely dishonest.

I78-H-16 Page 1-48 Utilities Significant Unavoidable Adverse Impacts – The DEIS states: "No Action Alternative – less reliable service could result in power disturbances and could increase likelihood of power outages." and "Alternative 2 – uncertainties about feasibility and performance, participation, and conservation levels would result in risk to reliability." Why does Bellevue make this false assertion? Why does Bellevue ignore ColumbiaGrid resources as identified in the Energize Eastside EIS website? Bellevue's statements seem extremely dishonest.

Page 1-50 Table 1-2

I78-H-17 What is the basis for Bellevue's conclusion that Alternative 1 option A has "Negligible" impact on Land Use and Housing given it causes so much destruction of housing? Why does Bellevue consider wiping out large sections of neighborhoods as a result of Alternative 1 option A "Negligible" impact instead of significant? What is the basis for that conclusion? That evaluation shows extreme bias by Bellevue against neighborhoods. What is the basis for the conclusion that the No Action Alternative has "Minor to Moderate" impact on Historic and Cultural Resources? That makes no sense since nothing is being constructed.

I78-H-18

Page 1-53 Table 1-3

I78-H-19 What is the basis for Bellevue's conclusion that the No Action Alternative has "Moderate to Significant" impact on Land Use and Housing when it has not impact at all? That makes absolutely no sense.

I78-H-20 What is the basis for the conclusion that the No Action Alternative has "Moderate to Significant" impact on utilities since ColumbiaGrid has resources to address PSE stated need? Since the No Action Alternative has no impact on ColumbiaGrid's pursuit of other options they've identified why isn't the impact on utilities for the No Action Alternative "Negligible"?

I78-H-21 Page 1-56 – The DEIS states: "Some members of the community reject the idea that the project is needed based on their understanding of how much energy actually needs to be transmitted through and into the Eastside area. Other members of the community accept PSE's assertion that the need is real and want

- I78-H -14 See response for Key Theme UTL-5.
- I78-H -15 See response for Key Theme PLS-4.
- I78-H -16 See response for Key Theme UTL-5.
- I78-H -17 See response for Key Theme LU-5.
- I78-H -18 See response for Key Theme H&C-1.
- I78-H -19 See Section 10.7.2 of the Draft EIS (page 10-23).
- I78-H -20 See response for Key Theme UTL-5.
- I78-H -21 See responses for Key Themes OBJ-1 and OBJ-2.

178-H-21

*only the most efficient and cost effective approach to addressing it.*" What percentage of the community reject vs accept PSE's assertion? At the public hearings on the DEIS it is 100% reject vs 0% accept. Why does Bellevue reject the needs of those *"want only the most efficient and cost effective approach"* by excluding the ColumbiaGrid preferred plan to reconductor the Maple Valley – SnoKing transmission line? Why does Bellevue exclude this alternative given it is more reliable and is much lower cost (~\$16M) than Alternative 1? Bellevue shows extreme bias in excluding this alternative.

Page 1-56 – The DEIS states: *"The purpose of this EIS is not to determine whether the project is needed, but to confirm that the methods used to define the need are consistent with industry standards and generally accepted methods."* Why does Bellevue continue to make unsupported statements of need through much of the DEIS given the methods are produce erratic and untrustworthy results?

Page 1-56 – The DEIS states: *"Several options suggested by community members would modify assumptions PSE made in its planning analysis regarding the need for the project, specifically around the use of additional power plants outside of the Eastside during peak demand periods, and prohibiting the flow of electricity to Canada during peak demand periods."* Is Bellevue twisting the facts regarding the flow of electricity to Canada given there are other ColumbiaGrid documented options to deliver even greater capacity to Canada that don't involve PSE?

Page 2-1 – The DEIS states: *"Under SEPA, alternatives evaluated in an EIS must feasibly meet or approximate the project objectives."* Why did Bellevue reject the feasible and reasonable alternative of conversion of control to a Puget Sound Public Utility District PUD? This alternative is fully compliant with all criteria identified in the DEIS? Given:

178-H-22

- PSE is only responsible to its owners
- A PUD is only responsible to its customers
  - The consequential difference is:
    - PSE's objective is to squeeze the maximum allowable profit from its customers
    - PUD's objective is to provide the best service and value to its customers
  - That's the difference between Seattle City Light being the greenest electrical utility and the neighboring PSE being the dirtiest
- PSE's objective:
  - Profit

178-H -22 See responses for Key Theme EIS-1 and Key Theme OBJ-1.

I78-H-22

- PUD's objective:
  - Better forecasting
  - Better management
  - Better service
  - Better efficiency
  - Better environmental stewardship
- Better value
- Better security

The PUD would establish customer oriented policies and rules for operating, maintaining, and upgrading electrical power transmission and distribution. PSE would retain ownership and control of Colstrip. Beyond the superior service, a PUD would allow the most cost effective and rapid departure from coal sourced power, particularly from Colstrip. With a PUD, Bellevue and partner cities would control their own destiny for forwarding looking and sustainable energy.

I78-H-23

Page 2-4 – The DEIS states: *“Following the FERC direction, as well as prudent planning and operating standards, PSE limits the number of transformers at substations to two 230 – 115 kV transformer banks. In other words, based on security threats to the physical electric infrastructure, it is not reasonable or prudent to ‘put all your eggs in one basket.’”* Is Bellevue stating additional redundancy is not “reasonable or prudent”. If so, that’s nonsense and why is Bellevue Is stating additional transformer redundancy is not “reasonable or prudent”?

Page 2-5 – The DEIS states: *“All PSE transmission lines of any voltage must remain equal to or below 95 percent of the emergency line-loading limit over the study period in order for a viable alternative to be considered a potential solution. This includes all periods of the year, whether the system is operating under normal or abnormal system configurations, or during light load or peak load conditions.”* Does Bellevue consider ambient temperature in the assessment of line and transformer load limits? If not, why not?

Page 2-8 2.2.1.10 – The DEIS states: *“As is typical of electric service providers, PSE does not use load shedding as a long-term solution to meet mandatory performance requirements. While NERC and WECC allow dropping load for certain contingencies, intentionally dropping firm load for an N-1-1 or N-2 contingency to meet federal planning requirements is not a practice that PSE endorses, because of the costs and inconvenience that outages impose on its customers.”* This is further proof that PSE’s needs assessment is not based on requirements. Why does Bellevue assert a capacity deficiency exists based on fictitious requirements? This seems dishonest.

Page 2-9 2.2.1.13 – The DEIS states: *“PSE will only accept solutions that will solve any existing or future anticipated loading issues of PSE equipment.”* Since Alternative 1 fails to address future load issues in generating capacity, Alternative 1 should be rejected. Why is Alternative 1 included since it violates PSEs conditions?

Section 2.2.2 is irrelevant to the DEIS and should be deleted.

I78-H -23 See response for Key Theme OBJ-1.



178-H-23

Page 2-10 – The DEIS states: “PSE must prepare for project construction several years in advance because some specialized equipment can take up to 3 years to procure. Alternatives must be reviewed to ensure they are reasonably constructible by the in-service target date of 2018.” Since there is essentially zero chance to meet an in-service date of 2018 for Alternative 1, why isn’t Alternative 1 rejected? Since the go-ahead date for any Alternative 1 options is likely not going to happen in 2016 – 2017 and the lead time for equipment is 3 years, another alternative is needed instead if PSE’s deficiency estimates are true. Why is this not being addressed by Bellevue? Why are ColumbiaGrid documented alternatives that can meet the required in-service date ignored?

Page 2-10 2.2.2.3 – The DEIS states: “To PSE, proven technology means technology that has been successfully operated with acceptable performance and reliability within a set of predefined criteria.” What is Bellevue’s assessment of these criteria? Why are these criteria not available to the public?

Page 2-10 2.2.2.3 – The DEIS states: “Proven technology must have a documented track record for a defined environment, meaning there are multiple examples of installations with a history of reliable operations. Such documentation must provide confidence in the technology from practical operations, with respect to the ability of the technology to meet the specified requirements.” Why does Bellevue state this requirement given Bellevue also states the DEIS only qualitative? Why is Bellevue applying a double standard and betraying the communities’ trust in Bellevue for a fair process?

Page 2-11 2.2.2.4 – The DEIS states: “After a project is complete and before the costs are allowed to be placed into the rate base, PSE must prove to the UTC that the cost to build a project is prudent and reasonable to ratepayers.” Since ColumbiaGrid has a documented solution that is approximately 10% to 20% of the cost of Alternative 1, the allowed costs should be zero. Why is Bellevue excluding this preferred solution?

Page 2-11 – The DEIS states: “PSE has a legal obligation to deliver safe, dependable power, and an obligation to do so at a reasonable cost. PSE continually balances these obligations in determining the best solutions to solve problems facing the electric system.” Why does Bellevue exclude lower cost options documented by ColumbiaGrid per the Energize Eastside EIS website?

Page 2-12 – The DEIS states: “In a typical year, the PSE system operates in an N-1-1 condition that causes customer outages about 15 to 30 times per year, each of which persists for approximately 4 to 12 hours, or less than 2 percent of the year.” The NOAA National Climatic Data Center has a database of daily minimum temperatures for Station GHCND:USW00024233 SEATTLE TACOMA INTERNATIONAL AIRPORT WA US. Based on 16170 daily minimum temperature measurements in a period between January 1st 1970 and April 9th 2014, ambient temperatures were at or below 23°F for 0.95% of the period. This is equivalent to 3.5 days per year. PSE claims there are two 4-hour peak power demand periods a day for a total of 8 hours per day. The number of peak demand hours occurring during conditions of ambient temperatures at or below 23°F is  $8 \times 3.5 = 28$  hours per year or 0.3% per year. A N-1-1 condition during the worst case low temperature condition would occur  $2\% \times 0.3\% = 0.006\%$  of the year or, on average, half an hour per year. Why does Bellevue ignore the extreme low likelihood of occurrence in its statements of deficiency? Why does Bellevue consider it a requirement to support full load demand under this extremely unlikely occurrence given WECC does not?

Page 2-12 – The DEIS states: “An N-2 outage is when a single event trips multiple facilities, such as certain instances when all the breakers in a substation trip offline, leaving several circuits without power,

or a problem occurs that affects both circuits of a double circuit transmission line (two transmission circuits located on one structure). This occurs when a problem is detected, or some sort of damage has occurred. It can also be a result of routine maintenance when multiple system components must be taken out of service. However, if at all possible, routine maintenance avoids multiple elements, and if necessary, would most likely not be scheduled during peak load periods or poor weather. In a typical year, the PSE system operates in an N-2 condition about 10 to 20 days per year, and persists for approximately 4 to 12 hours, or less than 1 percent of the year.” During the Community Advisory Group (CAG) period, Andy Wappler stated the problem that PSE asserted would not cause blackouts. This is true with proper management. On August 18, 2015, Andy Wappler stated to the Newcastle City Council that if PSE doesn’t get its way and the opportunity occurs, PSE will allow blackouts. Has Bellevue been threatened similarly? Is Bellevue’s bias towards Alternative 1 and away from the common sense alternatives a result of this threat?

Page 2-13 – The DEIS states: “The CAPs are seen as temporary measures used to keep the entire system operating, but they can place large numbers of customers at risk of a power outage if anything else on the system begins to fail.” What is Bellevue’s basis for this assertion? What is the number of customers affected? Where are the customers located? Are the customers in the Puget Sound region or in Canada? What does Bellevue mean by the phrase “anything else on the system”? Supplemental Eastside Needs Assessment Report Transmission System King County April 2015 Puget Sound Energy states: “NERC Standard TPL-001-4 allows CAPs to be used to meet the performance requirements for most N-1-1 and N-2 contingencies while specifying how long they will be needed as part of the CAPs.” Is Bellevue including failure conditions for which full demand support is not required?

178-H-23

Page 2-13 – the DEIS states: “Based on U.S. Census and Puget Sound Regional Council population forecast data, PSE’s analysis concluded that the population in PSE’s service area on the Eastside is projected to grow by approximately 1.2 percent per year over the next 10 years and employment is expected to grow by 2.1 percent per year, resulting in additional electrical demand (Gentile et al., 2015).” Given PSRC forecasts show a 1% population growth rate and a 1.1% employment growth rate from 2014 to 2030, what method and basis did Bellevue use to validate the very inconsistent analysis by PSE’s of population and employment growth rates?

Page 2-13 – The DEIS states: “If electrical load growth occurs as PSE has projected, PSE’s system would likely experience loads on the Eastside that would place the local and regional system at risk of damage if no system modifications are made.” Why does Bellevue make this misleading statement given ColumbiaGrid has documented options it can pursue that don’t require PSE involvement and do prevent the stated situation?

Page 2-15 – The DEIS states: “Distribution efficiency can include conductor replacement and conservation voltage reduction. Conductor replacement on existing lines could occur under the No Action Alternative as part of normal maintenance. However, these improvements would not substantially increase overall system capacity because capacity issues driving this project are typically associated with transformer overloads rather than conductor overloads.” Why does Bellevue make this false statement given reconductor projects that don’t involve PSE will increase overall system capacity and not cause transformer overloads. Bellevue’s statement seems very dishonest.

Page 2-15 – The DEIS states: “There are no currently known new technologies that PSE would employ that could substantially affect the transmission capacity deficiency on the Eastside. Under the No Action

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Alternative, PSE would not be precluded from seeking out new technologies, however.” Why does Bellevue exclude alternatives that don’t involve PSE? Why is Bellevue artificially limiting the alternatives given that superior alternatives not involving PSE exist?

Page 2-23 2.3.2.2.3 Much of planned construction for Alternative 1 is in direct conflict with OLYMPIC PIPE LINE COMPANY / BP PIPELINES NA INC GENERAL CONSTRUCTION & RIGHT OF WAY REQUIREMENTS (8/17/2010) which states: “The contractor shall not be permitted to transport construction materials or equipment longitudinally over the pipeline.” Since there is no access to the planned transmission line tower locations in some sections of the existing ROW, Alternative 1 is not viable and should be rejected. Why does Bellevue ignore the construction constraints imposed for pipeline safety?

Page 2-23 – The DEIS states: “The clear zone for an overhead 230 kV line could be approximately 120 to 150 feet wide. The transmission line could be located along existing 115 kV easements, which are typically 70 to 100 feet wide. Therefore, this analysis assumes that use of a 115 kV corridor could require the corridor to be widened by up to 50 feet. Section 2.3.5 summarizes the clear zone widths and other assumptions used for all alternatives in this EIS.” Why does Bellevue state this, given a 50-foot-wide hazardous liquid pipeline corridor is in the middle of the transmission line ROW in sections of the Alternative 1 route? Given the transmission tower base, grounding and support provisions must be a minimum of 50 feet from all underground pipe which requires more than 250-foot-wide ROW for the transmission line, why does Bellevue assert 150-foot-wide ROW is adequate? This seems very dishonest.

178-H-24

Page 2-23 – the DEIS states: “Coordination with Olympic Pipeline. If located along the existing 115 kV easement, construction of a 230 kV line has the potential to disrupt the Olympic Pipeline. Extensive coordination with the Olympic Pipe Line Company would be required during project design and construction to avoid disruption to the two lines, or to establish relocation procedures.” Why does Bellevue ignore the environmental impacts of pipeline disruption in the DEIS?

178-H-25

Page 2-23 – the DEIS states: “Approximately 100 pole foundations would need to be installed with a typical spacing between poles of 1,000 feet to extend the 18-mile distance between the Sammamish and Talbot Hill substations.” Given the transmission line ROW straddles the hazardous liquid pipeline ROW in some sections, twice as many poles are required in those sections. Given the overlap of transmission line and hazardous liquid pipeline ROWs why does Bellevue make a false statement of the number of transmission line tower foundations?

178-H-26

Page 2-32 – Alternative 2 is artificially narrow and excludes two key conservation drivers. The first issue is the statement of the alternative neglects to consider market forces driven by continual reduction in cost of conservation options and alternative local energy sources along with increasing costs of grid sourced energy. With the cost of grid energy going up, and costs of conservation and self-generation going down the reduction in grid demand will accelerate. Some regions have already reached the cross-over point. The Bullet building in Seattle profitably generates 60% more energy than it uses. Energy storage products is a \$3.5B local industry. Why does Bellevue ignore this economic driver?

The second issue is Alternative 2 does not address the impact of FERC Order 745 which will give rise to swift growth in demand response markets. FERC Order 745 most directly nullifies PSE’s forecasted peak loads claim. Why does Bellevue ignore the impact of FERC Order 745?

- 178-H -24 See response for Key Theme PLS-5.
- 178-H -25 See response for Key Theme LU-3.
- 178-H -26 See response for Key Theme ALT-1.

I78-H-27

Page 2-52 – The DEIS states “Although switching to DC could potentially address the problem by marginally increasing the capacity of the lines, it would add complexity to the system that would reduce operational flexibility, which could have adverse impacts to the reliability and the operating characteristics of PSE’s system. For example, if there was a problem within the DC portion of the system, it would not be possible to switch among other sources, as it is when the entire system is on AC. This alternative has not been included because avoiding such adverse impacts to reliability is one of PSE’s stated electrical criteria (electrical criterion #1).” Why does Bellevue ignore the fact that conversion of the existing 115 kV circuits provides far more capacity than PSE claims is needed, doubles the number of circuits with no change to the transmission line, and provides much more grid resilience for blackout restart conditions than Alternative 1? Why does Bellevue ignore the fact that a DC conversion fully supports a lakeside substation and doubles the redundancy for N-1-1 failure conditions? Why does Bellevue ignore the fact that a DC conversion eliminates the need for conductive metal towers near the hazardous liquid pipeline? Bellevue references U.S.-Canada Power System Outage Task Force. 2004. Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations. April 2004 which states on page 15: “The province of Québec, although considered a part of the Eastern Interconnection, is connected to the rest of the Eastern Interconnection only by DC ties. In this instance, the DC ties acted as buffers between portions of the Eastern Interconnection; transient disturbances propagate through them less readily. Therefore, the electricity system in Québec was not affected by the outage, except for a small portion of the province’s load that is directly connected to Ontario by AC transmission lines.” And on page 98 states: “Due to its geography and electrical characteristics, the Québec system in Canada is tied to the remainder of the Eastern Interconnection via high voltage DC (HVDC) links instead of AC transmission lines. Québec was able to survive the power surges with only small impacts because the DC connections shielded it from the frequency swings.” Why does Bellevue ignore its own references to the reliability advantages of a DC conversion? Is PSE technical incompetence sufficient reason to reject alternatives that are superior to Alternative 1?

Page 2-54 – The DEIS states: “Alternatives that would violate PSE’s Planning Standards and Guidelines (such as changing a transmission line from AC to DC) or that could harm other utilities in the region (such as disconnecting the Eastside from the regional grid during peak periods) would not become compliant by combining them with other alternatives (electrical criterion #1).” Given mixed AC and DC grids are in stable, mature, and reliable operation around the world, why does Bellevue assert this false claim?

Page 8-1 – The DEIS states: “This chapter provides a high-level discussion of four types of environmental health concerns raised during the scoping period”. Why does Bellevue ignore toxic emissions? The WAC 197-11-960 Environmental checklist includes:

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

b. Are there any offsite sources of emissions or odor that may affect your proposal? If so, generally describe.

WAC 197-11-444 Elements of the environment includes:

I78-H -27 See response for Key Theme ALT-1.

I78-H -28 See responses for Key Theme EIS-1 and Key Theme ALT-1.



I78-H-28 (b) (i) Air quality  
 What exempts the DEIS from including Mercury and Air Toxics Standards (MATS) controlled air pollutants from consideration? Per the Union of Concerned Scientists, just 1/70th of a teaspoon of mercury deposited on a 25-acre lake can make the fish unsafe to eat. The EPA ranks the Colstrip power plant among worst in nation for mercury (2011). Coal ash from the Colstrip power plant is a significant source of ground water pollution. Alternative 1 increases GHG and these toxic pollutants. Alternative 2 reduces GHG and these toxic pollutants. Alternative 2 is a huge environmental benefit 24/7/365 not just during conditions stated by PSE. Off-peak wind and solar generation along with battery storage helps mitigate peak load generation (Colstrip) demand every day, not just a couple days a year. This reduces GHG and MATS emissions below current levels. The spirit and intent behind SEPA is environmental protection. Why does Bellevue ignore very significant environmental benefits of Alternative 2 and the serious negative environmental impact of Alternative 1?

I78-H-29 Page 10-1 – The DEIS states: “The No Action Alternative would likely lead to declining reliability of the electrical power supply on the Eastside, which could be inconsistent with local planning policies and constitute a significant adverse impact.” Given the No Action Alternative places no constraints on ColumbiaGrid’s pursuit of equivalent options, why does Bellevue make this false assertion? This seems very dishonest.

I78-H-30 Page 10-6 – The DEIS states: “A determination of whether the Energize Eastside Project qualifies as an EPF would be made by the permitting agency at the time of permit preparation or submittal.” Since ColumbiaGrid has the option of pursuing other documented projects that achieve equivalent objectives, Alternative 1 is not an EPF.

I78-H-30 Page 10-16 – What is Figure 10-7 intended to represent?

I78-H-31 Page 10-19 – The DEIS states: “Negligible land use and housing impacts would be expected from project construction under any of the action alternatives.” Given sections of the ROW that cut through R-6 zoned areas are too narrow, what is Bellevue’s basis for determining housing impacts are negligible in Newcastle?

I78-H-32 Page 15-6 – The DEIS states: “Additionally, product shut-off valves, located at a distance of up to 5 miles, previously were turned by hand only, but are now automated so product flow can be shut off remotely and immediately (Anderson, 2015; Moulton, personal communication, 2015b).” How did Bellevue validate the automated system would operate correctly and provide correct status to the operator under a failure condition where the pipeline was energized to a high voltage due to a transmission line anomaly or failure?

I78-H-32 Page 15-15 – The DEIS states: “The IEEE guide is based on many years of research and practical experience. Engineers can control the conductor gradients by selection of conductor size (larger conductors have lower gradients), phase spacing and arrangement, and sometimes by bundling (use of multiple conductors per phase lowers the surface gradient).” Why does Bellevue include statement regarding bundling? Is Bellevue considering conductor bundling in the project? If so, why does Bellevue ignore the visual impact of bundled conductors?

Page 15-18 – The DEIS states: “The same types of hazards and potential need for emergency services related to operation of new 230 kV transmission lines in proximity to the Olympic Pipeline are already

- I78-H -29 See responses for Key Theme OBJ-4 and Key Theme LU-3.
- I78-H -30 Please refer to text.
- I78-H -31 See response for Key Theme LU-5.
- I78-H -32 See responses for Key Theme SVC-1, Key Theme PLS-3, Key Theme ECON-2, Key Theme VR-8, and Key Theme LU-1.

178-H-32

present with the existing 115 kV lines and would remain similar with a 230 kV line, even if it were to be located in a new right-of-way corridor." Since the 230 kV support towers are conductive and are grounded along a collocated pipeline and therefore far more dangerous than the relatively non-conductive 115 kV support poles why does Bellevue assert this falsehood? Why does Bellevue ignore the fact that collocation safety issues don't exist if the transmission line and Olympic Pipeline are not collocated? Bellevue's statement seems very dishonest.

Page 15-20 – The DEIS states: "A fiscal analysis prepared for the Project (FCS Group, 2016) utilized an estimate of a theoretical \$10 million decrease in assessed value to demonstrate the relative effect of such a decrease on property tax revenues in one of the study area communities (City of Bellevue)." Why did Bellevue choose to ignore the property tax loss resulting from condemnation of property? Well over \$30 million in property value would be lost from condemnation of property in Newcastle alone to widen the existing ROW. That represents a tax loss of over \$300,000 per year.

178-H-33

Page 16-30 – The DEIS states: "For example, maintenance activities on the transmission line could require heavy equipment to cross the buried Olympic Pipeline, or excavation at existing pole foundations could require excavation in proximity to the Olympic Pipeline. These same risks are already present with the existing 115 kV lines and would remain with a 230 kV line." Given the structure of the 230 kV and the 115 kV transmission lines are very different, on what basis did Bellevue determine the risks due to maintenance activities would be the same? Why does Bellevue imply the existing 115 kV poles have foundations given they don't have foundations?

Page 16-30 – The DEIS states: "As described under the No Action Alternative, conformance with industry standards and regulatory requirements ensure that potential hazards are identified and operations and maintenance procedures in place that minimize adverse effects from these hazards to minor levels." What basis does Bellevue use to validate this claim? A natural-gas explosion sourced by PSE destroyed three businesses in Greenwood on March 9, 2016. How would Bellevue contrast the standards and regulatory requirements levied on PSE that allowed the explosion vs those that "minimize adverse effects from these hazards to minor levels." Bellevue's statement appears to be very dishonest.

178-H -33 See response for Key Theme UTL-5.

1 Statement of Need

Page 1-5 – The DEIS states: *“This EIS will not be used to reject or validate the need for the proposal.”* Yet it contains many contrary and unsupported statements. At least seven unsupported statements in section 1 falsely state there is need:

- Page 1-1, 1-2 – *“This set of facilities is proposed in order to address a deficiency in electrical transmission capacity during peak periods that has been identified by PSE through its system planning process. This deficiency is expected to arise as a result of anticipated population and employment growth on the Eastside, and it is expected to negatively affect service reliability for Eastside customers within the next few years. The project would improve reliability for Eastside communities and would supply the needed electrical capacity for anticipated growth and development on the Eastside.”* This is an unsupported assertion and should be deleted.
- Page 1-2 – *“Based on federally mandated planning standards, PSE’s analysis found that the existing transmission system could place Eastside customers and/or the regional power grid at risk of power outages or system damage during peak power events due to cold or hot weather. PSE’s analysis concluded that the most effective solution was to add a 230-to-115 kV transformer within the center of the Eastside to relieve stress on the existing 230-to115[sic] kV transformers that currently supply the area.”* PSE’s analysis didn’t find anything. An analysis is an inanimate object. PSE may have concluded something regarding their analysis but that’s not relevant in this document. This statement should be deleted.
- Page 1-5 – *“Stantec prepared a memorandum evaluating the stated need for the project, and confirmed that PSE’s Eastside Needs Assessment was conducted in accordance with industry standards for utility planning (Stantec, 2015). See Appendix A for more information.”* This is another unsupported and irrelevant assertion. This statement should be deleted. Appendix A has no information on conducting a needs assessment in accordance with industry standards. Will this reference be corrected so it contains information on *“industry standards for utility planning”* as indicated?
- page 1-6 – *“Without adding at least 74 megawatts (MW) of transmission capacity for local peak periods in the Eastside, a deficiency could develop as early as winter of 2017 - 2018 or summer of 2018, putting customers at risk of load shedding (forced power outages) (Stantec, 2015).”* This is another unsupported and irrelevant assertion. This statement should be deleted.
- page 1-10 – *“The Energize Eastside Project is intended to address an identified deficiency in the capacity of PSE’s transmission system.”* This is another unsupported and irrelevant assertion. This statement should be deleted.
- Fact Sheet FS-i – *“The project involves improvements to PSE’s electrical grid in the Eastside area of King County, Washington, to address a deficiency in electrical transmission capacity.”* This is another unsupported and irrelevant assertion. This statement should be deleted.
- Fact Sheet FS-i – *“The purpose of the project is to address a projected deficiency in transmission capacity resulting from growth in electrical demand, which could affect the future reliability of electrical service for the Eastside.”* This is another unsupported and irrelevant assertion. This statement should be deleted.

178-H-34

178-H -34 See responses for Key Theme EIS-1 and Key Theme OBJ-2.

As cited above (page 1-5), "PSE's Eastside Needs Assessment was conducted in accordance with industry standards for utility planning (Stantec, 2015)." In 2014 PSE advertised Figure 1 (published in 2013) to the CAG as their demand forecast presumably based on the "industry standards for utility planning" PSE claims to follow. Their planning projected a demand of 660 MW in 2014 with approximately 1.15% demand growth per year between 2012 and 2014.

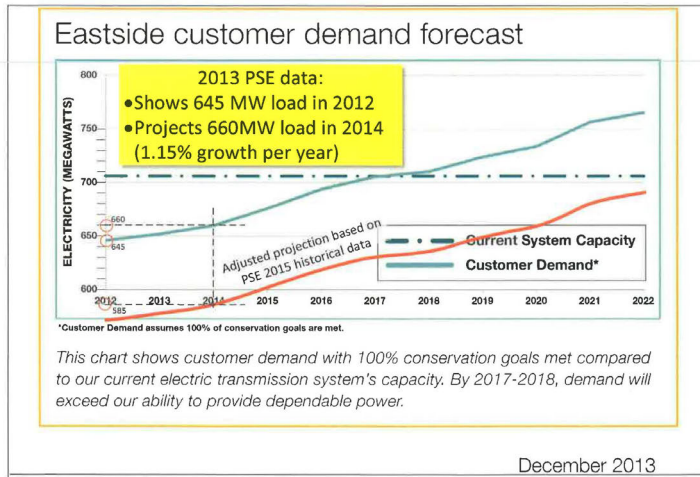


Figure 1

In 2015, PSE shows 2014 demand was 585 MW per Figure 2 (published in 2015). This is a 5% per year decrease, not the PSE projected 1.15% increase. This is a six-fold error in the rate of change. It is also in the opposite direction from what PSE projected. The magnitude of the error is a very significant 75 MW decrease. The 75 MW magnitude error exceeds the magnitude of the 74 MW shortfall projected by PSE. Why does Bellevue ignore this huge discrepancy in PSE's forecasted demand?

This is clearly indicative of poor near term forecasting accuracy. With the projected demand line normalized to PSE's 2014 historical data (shown in red in Figure 1) it shows significant positive margin out to 2022. Why is this ignored by Bellevue?

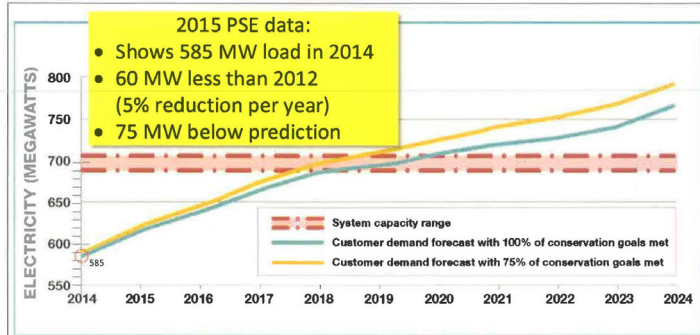
PSE's historical data shows poor projection accuracy and clearly undermines their claims regarding a projected shortfall in 2017 – 2018. Why is this ignored by Bellevue?

A truly independent, transparent, and objective assessment is required to forecast true demand and capacity. Without such, no statements regarding shortfalls should be contained in the EIS. Why does Bellevue fail to perform proper research in demand forecast?



Fundamentally, there is no justification for PSE’s shortfall claims.

Besides revealing PSE’s huge accuracy error, the completely different 2015 forecast from PSE based on the same “industry standards for utility planning” shows a wildly different projection.



Source: Gentile et al., 2015.

Bottom line: PSE simulation and prediction tools and methodology are not credible. True independent assessment is needed.

Figure 2

Accuracy and precision are both important qualities of a statistically significant measure or estimate. Accuracy is the proximity of a measurement and the actual value. Precision is the repeatability of a measurement. Figure 3 is an overlay of the two PSE forecasts published in 2013 and 2015. PSE’s own data shows forecast are both wildly inaccurate and wildly imprecise. Although based on the “industry standards for utility planning”, PSE’s forecasts are essentially worthless as support for PSE’s energy shortfall claims. Why does Bellevue state these worthless claims as fact?

The only statement that should be made in the EIS regarding a deficiency in electrical transmission capacity is that PSE’s assertions are baseless, statistically nonsignificant findings.

178-H-34

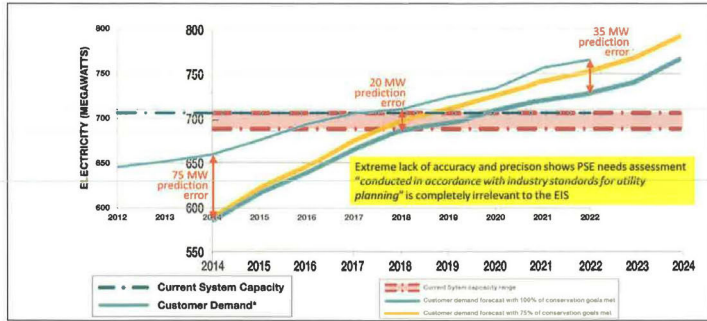


Figure 3

### 2 Alternative 1 Is An Inappropriate Solution

PSE projects that electrical power demand will begin to exceed peak power capacity by the year 2017. PSE further projects demand will exceed capacity by approximately 10% by 2022. The key point emphasized by PSE is the projected demand is based on days where the air temperature is 23°F or lower.

The question is whether the occurrence of the conditions is so frequent that PSE's intended solution with its enormous impacts is warranted and there are no alternatives, or is there something being left unsaid that indicates less aggressive solutions may be viable?

The NOAA National Climatic Data Center has a database of daily minimum temperatures for Station GHCND:USW00024233 SEATTLE TACOMA INTERNATIONAL AIRPORT WA US. Figure 4 is a summary of 16170 daily minimum temperature measurements in a period between January 1<sup>st</sup> 1970 and April 9<sup>th</sup> 2014. The horizontal scale is the daily minimum temperature in one-degree Fahrenheit increments from the lowest measured value in the period (7°F) to 23°F. The vertical scale ranges from 0% to 100% and is the percentage of the period in which each minimum temperature was recorded.

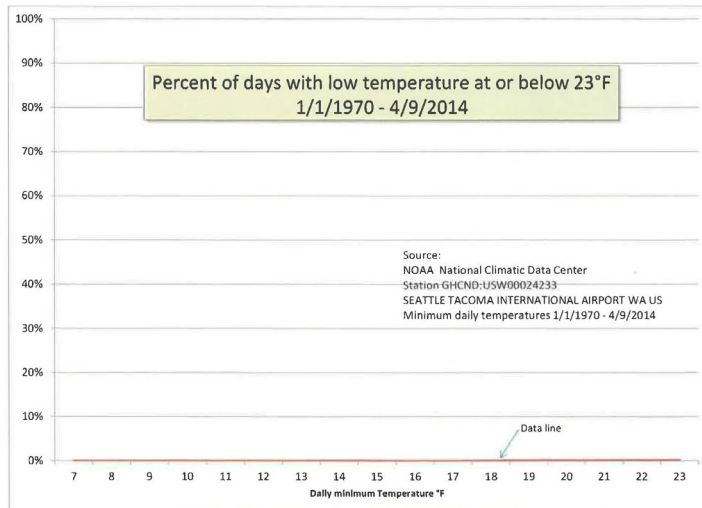


Figure 4

Since the occurrences of 23°F and lower temperatures days are extremely infrequent an expanded view of the bottom 1% is provided in Figure 5.

3/13/2016

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I78-H -35 See responses for Key Theme EIS-1 and Key Theme OBJ-2.

I78-H-35

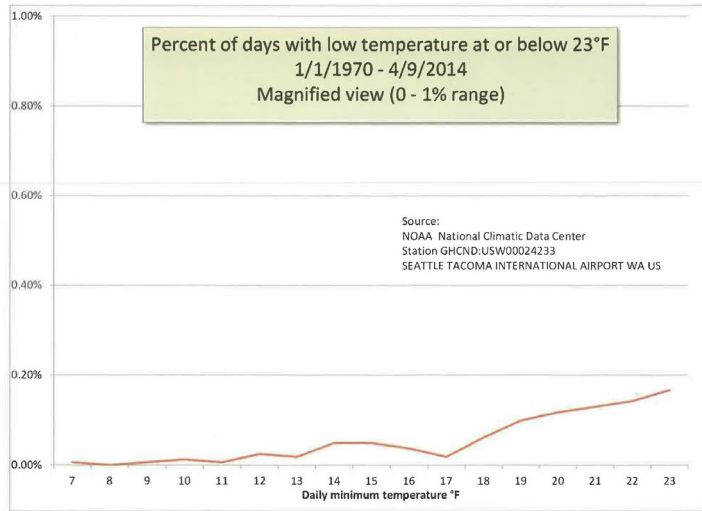


Figure 5

As can be deduced from the charts, the extreme conditions identified by PSE are very infrequent. The total percentage of days with minimums at or below 23°F is 0.95% (less than 1% of the time, or 3.5 days a year) for the entire period. This suggests that the problem stated by PSE is potentially solvable within the realm of smart power management policies without resorting to the unnecessary options within PSE’s narrow solution space. PSE has offered no defensible justification for excluding employment of a smart power management approach.

At less than one percent rate of occurrence, the number of days (that meet the conditions for which PSE claims this project is needed) over a ten-year period is: 0.95% x 365 days per year x 10 years = 34.7 days. PSE claims the cost will be as high as \$290 million. That cost spread across the number of occurrences in a ten-year period is \$290 million / 34.7 days = \$8.36 million per day for each low temperature day. PSE claims the periods of peak electrical demand are from 6:00 AM to 10:00 AM and from 5:00 PM to 9:00 PM. That is a total of 8 hours per day. Dividing \$8.36 million by 8 hours leaves the consumers paying over \$1 million dollars an hour. This is a very poor value to the customer and an unnecessary expense. PSE has offered no defensible justification for promoting such an expensive and limited value solution over lower cost, lower impact, and much higher value solutions.

178-H-35

I78-H-35

PSE statements during CAG process and PSE documentation

- PSE states peak demand shortfall under a transmission line failure condition is 55 Megawatts (MW)
- PSE projected demand is based on days where the air temperature is 23°F or lower
- PSE states peak demand occurs in two 4 hour periods (8 hours total per day)
- PSE intends to add 1407 MW (for N-1-1 conditions, two of four routes failed)
  - Replace 1620 Amp cable (Tern/ACSS/AW 795) with 2576 Amp cable (Falcon/ACSS/AW 1590)
  - $115 \text{ kV (line to line)} / \sqrt{3} = 66.4 \text{ kV line to neutral}$
  - $66.4 \text{ kV} \times 1620 \text{ Amp} \times 3 \text{ phases} = 645 \text{ MW existing capacity}$
  - $230 \text{ kV (line to line)} / \sqrt{3} = 132 \text{ kV line to neutral}$
  - $132 \text{ kV} \times 2576 \text{ Amp} \times 3 \text{ phases} = 2052 \text{ MW expanded capacity}$
  - $2052 \text{ MW} - 645 \text{ MW} = 1407 \text{ MW total increase from existing to expanded capacity under N-1-1 conditions}$

Background

- NOAA National Climatic Data Center has a database of daily minimum temperatures for Station GHCND:USW00024233 SEATTLE TACOMA INTERNATIONAL AIRPORT WA US
- Summary of 16170 daily minimum temperature measurements in a period between January 1<sup>st</sup> 1970 and April 9<sup>th</sup> 2014 by NOAA indicates air temperature is at or below 23°F a total of 3.5 days on average per year

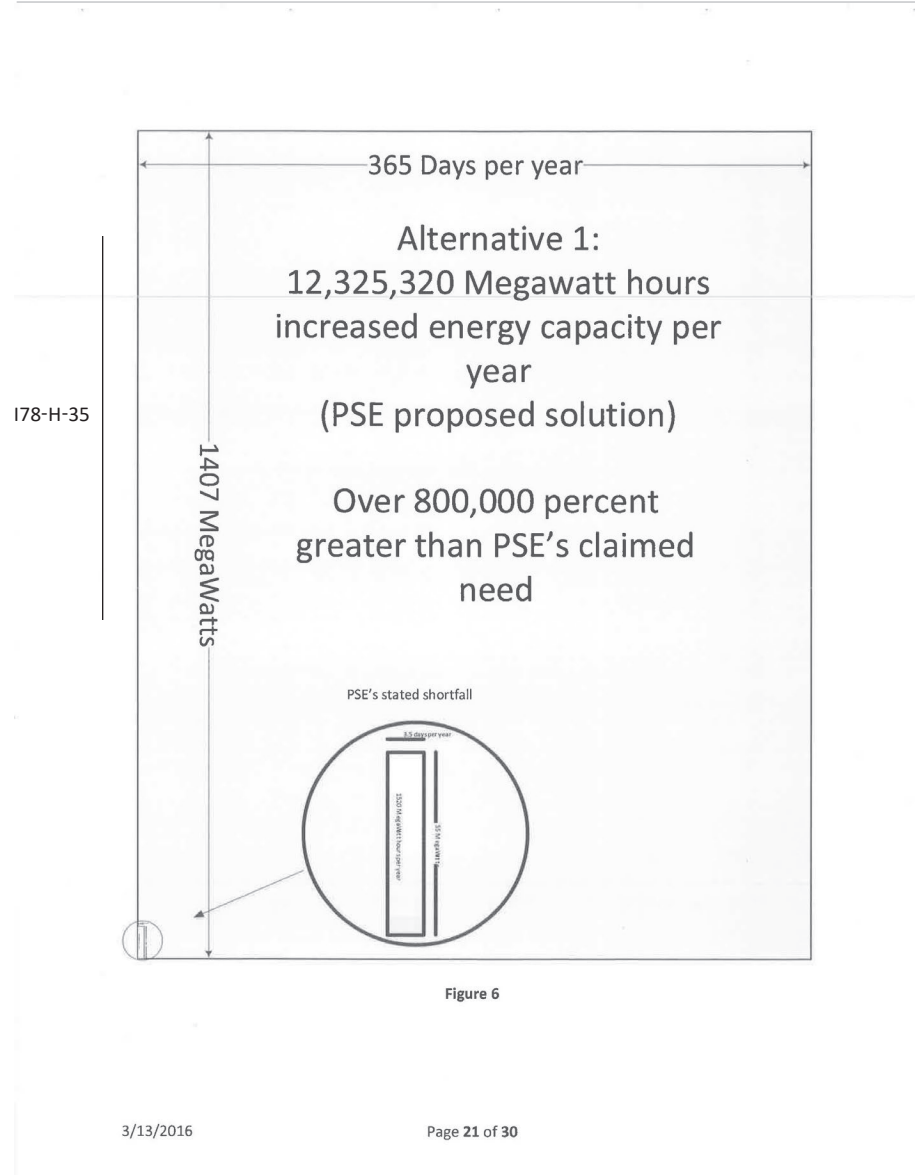
Analysis

- PSE claimed need:  $55 \text{ MW} \times 8 \text{ hours per day} \times 3.5 \text{ days per year} = 1520 \text{ MW hours (MWh)/year}$
- PSE intended increase in capacity:  $1407 \text{ MW} \times 24 \text{ hours per day} \times 365 \text{ day per year} = 12,325,320 \text{ MWh per year}$
- Percent increase in capacity vs need:  $12,325,320 \text{ MWh} / 1520 \text{ MWh} = 810,876\%$
- Conversely, percent increase needed vs capacity:  $1520 \text{ MWh} / 12,325,320 \text{ MWh} = 0.0123\%$

Figure 6 shows the relative scale of PSE’s proposed project vs PSE’s statement of need during the CAG process.

To be clear, the percent increase in capacity vs need as stated above is over 800,000 percent. An increase of this magnitude will never ever be needed in the PSE customer base area.

Why does Bellevue believe such an absurdly large growth in capacity is needed while rejecting more reasonable alternatives?



3 Scope

The EIS should include safety codes per RCW 81.88 including relevant inputs from CCOPS sanctioned by RCW 81.88.140. Why is CCOPS input and the impact of mitigating safety issues excluded from the DEIS?

178-H-36 The EIS should identify which alternatives are consistent with WAC 480-100-238 Integrated resource planning, specifically items 3a, 3b, 3c. Why are this items excluded?

The EIS should include positive environmental impacts where current ongoing environmental impacts are reduced. Why are the reduced impacts enabled by Alternative 2 excluded?

4 Safety

178-H-37 Safety is the utmost critical consideration and one that was completely ignored by PSE during the CAG process. The EIS should include all impacts caused by the mitigation of safety hazards. Like smoking, lead paint and asbestos, a lot has been learned in the last few decades about safety of transmission lines, hazardous liquid pipelines, and the catastrophic interactions between collocated high energy sources. If we could apply to past decisions what we know now about these interactions, likely we would not have allowed the existing thin safety margins. Like any new demolition/construction project, the new design and construction process must meet current 'code' not the obsolete standards applied and grandfathered along in the past.

178-H-38 The project should not impose safety risks, Therefore the EIS should include complete mitigation of safety risks including:

- Electromagnetic
  - Corrosion from induced AC currents
  - High energy events (e.g., lightning, arcing, structure failure)
- Thermal
  - Immediate breach – transmission line has 10,000 times the arc voltage needed to melt ductile iron pipe
  - Latent damage – event of sufficient energy to rupture cathodic protection insulation
- Mechanically induced failure
  - Immediate rupture
  - Construction induced latent failure (e.g., Bellingham disaster)
  - Long term stress from forces on transmission line structure

The project provides a 4X increase in energy available to aggravate a line fault condition. The mitigation for this is physical separation. But worse, the key change in the supporting structure is replacement of the relatively insulating wooden supports with highly conductive metal supports. The mitigation for this is physical separation. In addition, the AC magnetic field in the power lines induces a current in adjacent parallel pipes causing corrosion to the pipes and a shock hazard for personnel contacting the pipe, its fittings, and valves. The mitigation for this is physical separation.

In a perfect storm scenario, an arc to ground from a transmission line failure, weather, lightning or other event allows the hazardous liquid pipeline to be energized to the point of rupture requiring the pipeline to be shut down. But given the pipeline is energized at lethal potential, there is no automatic or manual

178-H -36 See response for Key Theme EIS-1.  
 178-H -37 See responses for Key Themes PLS-3 and PLS-5.  
 178-H -38 See response for Key Theme PLS-1.

178-H-38

means to shut it down. This runaway situation is quite possible. The mitigation for this is physical separation. Other colocation issues:

- Immediate or latent damage to the pipeline during construction. The mitigation for this is physical separation.
- Latent damage to the pipeline due to forces transmitted from the towers to the footing, and to the soil adjacent to the pipeline. The mitigation for this is physical separation.
- Damage to the pipeline cathodic protection insulation through heating caused by lightning strikes to towers conducted to the ground adjacent to the pipeline. The mitigation for this is physical separation.

178-H-39

In regard to facilities sharing a corridor, The Corridor Concept Theory and Application by Charles H. Weir, C.L.S., P.E.N.G and June P. Klassen states: *"The disadvantages include: Increased Disaster Potential. Should a natural catastrophe, a subversive action, or major facility failure occur, the potential for multiple facility failure is increased due to proximity."* It also states: *"The major conflict between power transmission lines and pipelines in corridors is an unavoidable result of proximity. Spacing between these two facilities should be in the range of 30 metres due to voltage and resultant current flows which may be induced in a pipeline from adjacent powerlines."* The mitigation for this is physical separation.

Page 1-32 - The DEIS states: "Risk to the public is not likely from constructing or operating the project near pipelines due to extensive safety policies and regulations." That statement is, in essence, completely meaningless since it is completely unsupported. The Bellingham disaster was 5 years after construction. The project leading to the Bellingham disaster was very closely monitored. A cursory review of data from US DOT Pipeline and Hazardous Materials Safety Administration on hazardous pipeline shows numerous incidents with "extensive safety policies and regulations" in place:

- ELECTRICAL ARCING FROM OTHER EQUIPMENT/FACILITY (06/12/2010 - 09/09/2015)
  - \$68,772,650
- THIRD PARTY EXCAVATION DAMAGE (01/09/1996 - 12/08/2015)
  - \$144,702,203
- UNSPECIFIED CORROSION (10/28/1997 - 11/19/2009)
  - \$6,062,845
- Miscellaneous
  - \$160,674,585
- Injuries and fatalities (02/27/1996 - 06/22/2015)
  - 34 injuries (8 in 06/10/1999 Bellingham Olympic Pipeline disaster)
  - 37 deaths (3 in 06/10/1999 Bellingham Olympic Pipeline disaster)

Why does Bellevue ignore the historical truth and make this unsupported claim regarding risk to public safety?

178-H-40

5 Inadequate Power Line Right Of Way Width

Figure 7 is a diagram of the current PSE power line Right Of Way (ROW) and the Olympic Pipeline Hazardous Liquid Pipeline ROW through the Olympus residential community in Newcastle. This is a segment of the proposed route 'M'. The hazardous liquids consist of highly flammable petroleum products (kerosene, jet fuel, diesel fuel, and gasoline). The liquid is pumped at very high pressure

178-H -39 See response for Key Theme PLS-3.

178-H -40 See response for Key Theme PLS-3.



(approximately 1400 pounds per square inch) through two pipelines within the pipeline ROW. In the Olympus neighborhood, the hazardous liquid pipeline ROW is 50 feet wide and centered within the 100-foot-wide PSE power line ROW.



Figure 7

Figure 8 shows the nominal location of 120-foot-tall monopole towers on 6-foot diameter footings to support the proposed 230 kV lines. The footings must be placed in undisturbed soil to be able to withstand lateral forces on the monopole. A minimum margin of undisturbed soil around the footing is required and must be within the PSE power line ROW. As can be seen, the footings can only be located within the outer 25 foot margins of the 100-foot-wide PSE power line ROW without directly violating the hazardous liquid pipeline ROW. The edge of the footing is potentially within 9.5 feet of existing and future residential structures given the current 100-foot-wide easement. This is far too narrow.

I78-H-40

178-H-40

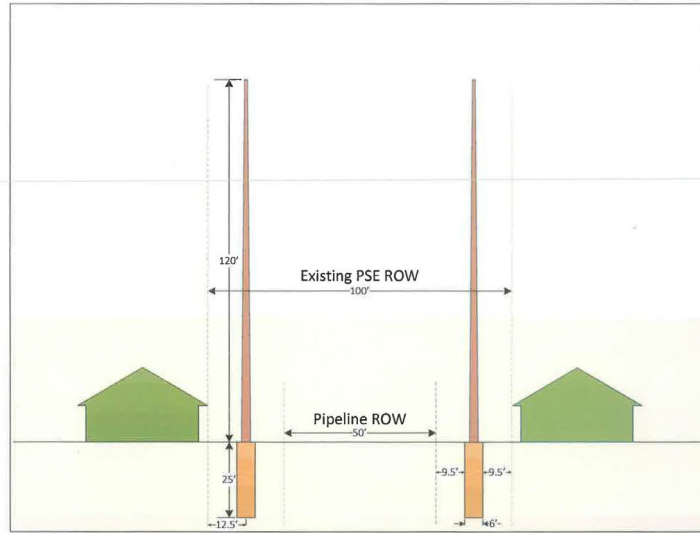


Figure 8

Modern standards of the U.S electrical power industry for 230 kV power lines include a minimum 150-foot ROW (nominally 75 feet on each side of the power line support centerline). As an example, PPL Electric utilities with 1.4 million customers and 48,000 miles of power lines in central and eastern Pennsylvania requires the 150-foot ROW (ref PPL Electric Utilities Transmission Line Design Criteria Version 0 12/18/2012). Other examples include: Tri-State Generation and Transmission Association, Public Services Company of Colorado Comanche Transmission Project; and Duke Energy Transmission Rights of Way – Ohio, Kentucky & Indiana.

PSE is ignoring modern standards in the selection of 230 kV power line routes through existing 100 foot ROWs. PSE points to historical examples where this has been done. These are artifacts of obsolete and outdated standards. PSE’s error is compounded by the location of the monopole supports. The location at the edge of the existing easement leads to an extremely skewed ROW offset with only 12.5 feet between the support centerline and the ROW boundary.

Chevron states: “All overhead cable should maintain a minimum height of 20 feet above grade for a distance of 25 feet each side of the pipeline. No part or portion of mechanical supports and service drops, including poles, towers, guy wires, ground rods and anchors, should be within 25 feet of the existing pipeline” ([www.chevronpipeline.com/pdf/Guidelines\\_for\\_Property\\_Development.pdf](http://www.chevronpipeline.com/pdf/Guidelines_for_Property_Development.pdf)).

178-H-40

The Bonneville Power Administration publishes their safety standards for transmission line installation (<http://www.bpa.gov/news/pubs/GeneralPublications/lusi-Living-and-working-safely-around-high-voltage-power-lines.pdf>). They state: "BPA operates one of the world's largest networks of long-distance, high-voltage lines, ranging from 69,000 volts to 500,000 volts. This system has more than 200 substations and more than 15,000 miles of power lines." One of their most critical safety requirements is:

**"Pipes and cables should not be installed closer than 50 feet to a BPA tower, any associated guy wires or grounding systems. These grounding systems are long, buried wires that are sometimes attached to the structures and can run up to 300 feet along the right-of-way." and "Proper positioning of underground utilities is required to prevent an accident in an extreme case when an unusual condition might cause electricity to arc from the high-voltage wire to the tower and then to ground. This could produce a dangerous voltage on underground piping or cable system."**

BPA, Chevron, Arco, NACE, DNV GL and many more experts realize significant hazards in colocation. A high energy ignition source next to a highly flammable material is not a good thing. Induced AC corrosion is not a good thing. For safety there must be a 50-foot separation between towers, supports, and grounding lines and all underground pipelines and hazardous liquid pipeline corridors. The existing ROW in the 'M' corridor is not wide enough.

178-H-41

Figure 9 shows the proper extent of a 230 kV power line ROW adjacent to a pipeline consistent with BPA standards. Although not as rigorous as other U.S electrical power industry standards it does present a moderate safety solution. As can be seen, the existing ROW has insufficient width to accommodate the proposed 230 kV power line. Clearly, the application of common sense modern standards precludes the routing of the 230 kV power line through route 'M' within the existing corridor.

178-H -41 See response for Key Theme PLS-3.

I78-H-41

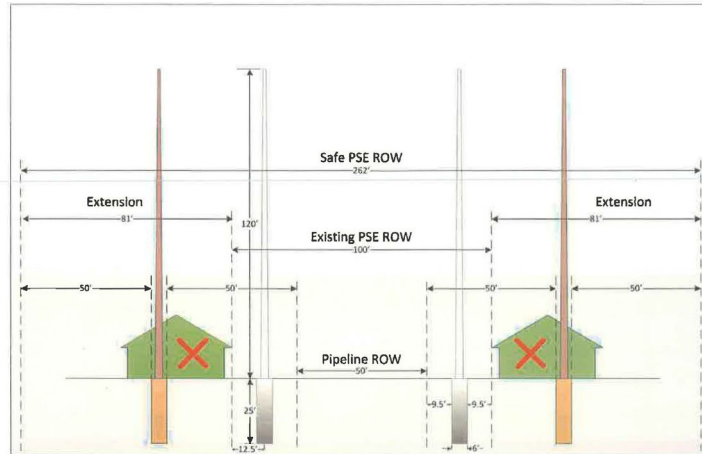
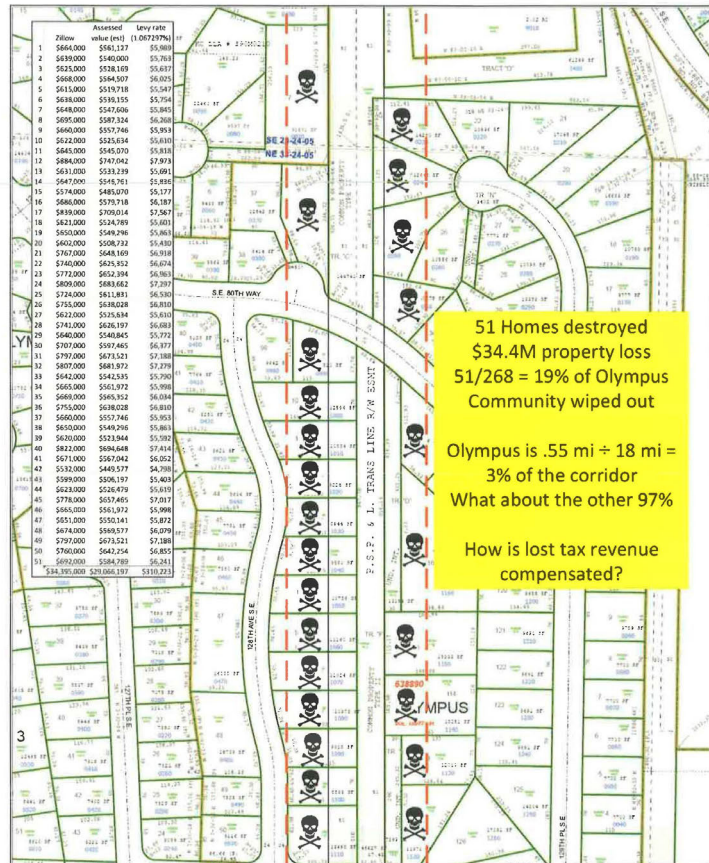


Figure 9

The EIS must address the impact of implementing this safety requirement. The transmission line corridor must be wide enough such that no tower will be within 50 feet of pipes including utility, hazardous liquid, or residential pipes. The current corridor is 100 feet wide. It must be expanded to approximately 260 feet (2.5 times the existing width) to ensure adequate safety. In addition, no tower should be located such that it is within striking distance of any structure subsequent to a structural failure of the tower. The EIS must address this impact.

Figures 10 and 11 show the location of homes wiped out in the Olympus Neighborhood in Newcastle to allow some margin of safety for location of large conductive transmission towers. Why does Bellevue ignore this impact?

178-H -42 See responses for Key Themes ECON-1 and ECON-2.



51 Homes destroyed  
 \$34.4M property loss  
 51/268 = 19% of Olympus  
 Community wiped out

Olympus is .55 mi ± 18 mi =  
 3% of the corridor  
 What about the other 97%

How is lost tax revenue  
 compensated?

178-H-42

Figure 10

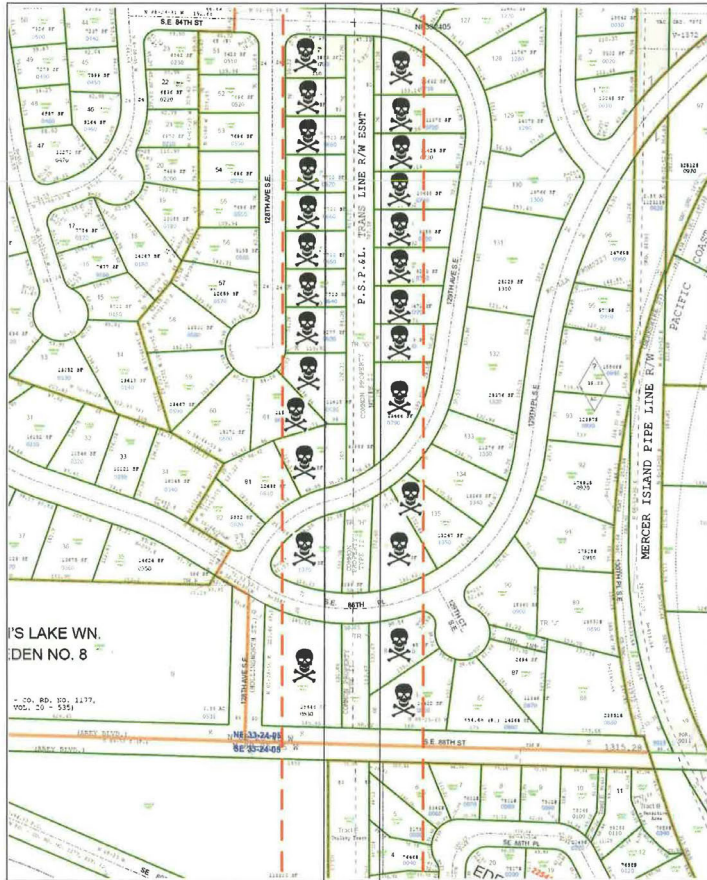


Figure 11

I78-H

COMMENT

RESPONSE

I78-H-43

Many homes will be condemned and destroyed to make Alternative 1 safe. Up to 51 homes in Olympus will be gone in order to widen the existing corridor. These are not just concrete, 2x4s, and drywall structures. These are homes of families. Homes are places where children sleep at night. Homes are where neighbors have been neighbors for over a quarter century. Homes are where families enjoy life. Homes are part of a community. In Olympus, 20% of a well-established community erased. How is the impact of this loss being addressed. What's the visual character of a former neighborhood with metal towers replacing destroyed homes? Why does Bellevue these impacts in the DEIS?

I78-H -43 See response for Key Theme VR-5.

3/13/2016

Page 30 of 30



**From:** Brian [<mailto:br98799@comcast.net>]  
**Sent:** Monday, March 07, 2016 7:44 PM  
**To:** Tim McHarg  
**Cc:** 'Sue Stronk'; 'Brian & Lori Elworth'  
**Subject:** Energize Eastside DEIS questions

Tim,

Section 1.12.1 of the DEIS (page 1-56) states: *“The purpose of this EIS is not to determine whether the project is needed, but to confirm that the methods used to define the need are consistent with industry standards and generally accepted methods. **After determining that PSE’s evaluation process has been conducted according to industry standards, the lead agency and the partner Cities have worked to understand the nature of the need that PSE has identified,** and to look broadly at the possible alternatives that could address that need. This Phase 1 Draft EIS reflects the Cities’ concern that the alternatives should include more options than alternative routes for 230 kV transmission lines.”*

I78-J-1

There are several statements in the DEIS similar to this indicating partner cities are in agreement with positions taken by Bellevue. This one in particular stands out because it implies Newcastle agrees the need is real and the conclusion is justified. Is that really true? Has Newcastle determined “that PSE’s evaluation process has been conducted according to industry standards”? To the many of us who have been involved the last couple of years, PSE has never presented anything supporting their claims.

Is there any opportunity to shape this DEIS so the objective is focused on the real needs of the citizens instead of PSE’s needs? Bellevue let PSE state the objective. Seems like PSE should own its proposal (Alternative 1) but Bellevue and the partner Cities should own the objective.

Thanks,

Brian Elworth

I78-J -1 See responses for Key Theme EIS-1 and Key Theme OBJ-2.



*Submitted Renton Phase 1  
DEIS public hearing 2.25.16*

FROM: Lori Elworth  
TO: Eastside City Councils  
DATE: 25 February, 2016  
RE: Energize Eastside DEIS Public Comment

One aspect of the project that has not been addressed in the DEIS is the need. It states on page 1-56 that the purpose of the DEIS is not to determine that the project is needed as if that is a given however I question that claim and believe that PSE has done a poor job establishing the necessity of the Energize Eastside project.

CENSE a citizens group asked nationally recognized power and transmission planners Richard Lauckhart and Roger Schiffman who have specific knowledge of the Northwest power grid to study this project. On November 18, 2015 they concluded their study of the project titled *Load Flow Modeling for Energize Eastside*. The study found that the current system has sufficient capacity and will continue to meet customer demands until the year 2058, without any improvements. Unless PSE can offer a legitimate explanation for where they got their assumptions, and why they claim that customer demand will exceed the system capacity in 2018 then the need remains in question. This project should be paused until need is demonstrated.

Continuing on with a project without a need established is a pointless exercise that serves no purpose other than to waste the time of the cities and tax payer money.

My question for the City Councils is why was the need not addressed in the DEIS and in light of recent conflicting studies will a independent Load Flow Study be performed?

Thank you for your time,



Lori Elworth  
8605 129th Ct SE  
Newcastle, WA 98056

179-B -1 See response for Key Theme OBJ-3.

179-B-1

*Comments at Redmond Public Hearing DEIS 2.29.18*

FROM: Lori Elworth  
 TO: Eastside City Councils  
 DATE: 29 February, 2016  
 RE: Energize Eastside DEIS Public Comment

My comments tonight are directed mainly at Alternative 1, option A. I live with my husband and our two kids just a few miles from where we grew up in Newport Hills, and where our parents still live. The PSE/Olympic Pipeline corridor ~~has~~ allows us to easily walk and bike over to their houses while avoiding the busy streets and traffic along Coal Creek Parkway. My 90 year old mother takes advantage of the corridor to go on 4 mile round trip walks to the Newcastle Safeway. She has been doing this daily for the last 25 years, and it has helped her remain in excellent health. But we are not the only people who enjoy use of the utility corridor. Countless other families, bikers, dog walkers, and even some horse riders all can be found out and about getting their exercise along the pipeline at all times of the day.

179-D-1

The utility corridor is a significant part of the Newcastle trail system. Every resident that enjoys making use of it will be negatively impacted by any restrictions of access that the Energize Eastside project will cause. The DEIS fails to adequately or reasonably address how much this project will adversely affect these people. We live in a hilly area that sees more and more traffic every day. The flat, sheltered trail that is the corridor is a blessing for senior citizens, people with young children or strollers. I know this first hand. I have lived here my entire life.

179-D-2

Never mind all the beautiful trees that will be destroyed, and the many houses that will need to be condemned to ensure that the power lines are installed at a safe distance from the gas pipeline. This unnecessary project will destroy some of the neighborhood character that makes this area a great place to live.

Thank you,

Lori Elworth  
 8605 129th Ct SE  
 Newcastle, WA 98056

- 179-D -1 See response for Key Theme REC-1.
- 179-D -2 See responses for Key Theme VR-5 and Key Theme OBJ-1.

FROM: Lori Elworth, CENSE Member  
 TO: Eastside City Councils  
 DATE: 11 March, 2016  
 RE: Energize Eastside DEIS Written Public Comment

I am a current resident of the Olympus neighborhood in Newcastle, where I have lived with my husband for 28 years. We chose to live in a new housing development, where we could be close to our families and raise our children. I grew up in Bellevue and have lived on the Eastside my whole life. This is our home. Please see attached pictures.

**DEIS FACT State of Washington Department of Ecology**

*Q: Are there page limits for an EIS?*

*A: Yes, the text of an EIS shall not exceed 75 pages, except for proposals of unusual scope or complexity, which shall not exceed 150 pages [WAC 197-11-425(4)]. If appendices and background material exceed 25 pages and together the entire EIS would exceed 100 pages, they must be bound in a separate volume.*

Energize Eastside DEIS is 715 pages.

**PSE's preferred plan Alternative 1 Option A, Energize Eastside is a 230kV extra high voltage** electric transmission line replacing the existing wooden poles of 115kV high voltage power lines with metal poles 85'- 100' in height (essentially lightning rods). These new metal poles would require footings 24'- 50' deep along a shared easement with two aging high pressure jet-fuel gas pipelines.

179-E-1

**230kV extra high voltage electric transmission lines which are used for long distance, very high power transmission.** 230kv high voltage electric transmission lines should not be installed next to an aging high pressure jet-fuel pipeline operated by Olympic Pipeline Company (OPC). The OPC has a number of safety violations currently. Does the city investigate these safety standards? What is being done about current violations?

179-E-2

230kV high voltage electric transmission lines should not be installed in a highly densely populated housing area through neighborhood communities and schools. Does the city have knowledge of other cities of similar living standards (city in a park) allowing this?

To safely collocate 230kV electric powerlines with two high pressure jet-fuel gas pipelines should be determined. Who will determine this? What are the set-backs used to safely collating these utilities within a residential neighborhood? CENSE has provided the report "Safety of Collocation of Electric Power Lines and Pipelines" by Dr Frank Cheng. There is extensive testing that should be done to assure this to be safe.

**DEIS Fact Sheet FS-1 Project Description** states the purpose of this project is to address a projected deficiency in transmission capacity resulting from growth in electrical demand, which could affect the future reliability of electrical service for the Eastside. This statement is not factual and should not be stated as such.

179-E-3

**DEIS Construction Timing For The Project FS-iii**

PSE studies show that Eastside customer demand will reach a point when the capacity of electric transmission system on the Eastside could experience a deficiency as early as winter 2017 -2018. To be an effective solution, a project must be completed and in service by identified target need date. This statement is not factual and a matter of opinion. An audit should be done to determine the demand forecast. A DEIS must be factual and scientific. This is another statement that doesn't belong here unless it has been properly determined, this states what PSE's studies show. The timing for Energize Eastside will not meet the objective. Today's date is 3/11/16.

- 179-E -1 See response for Key Theme PLS-5.
- 179-E -2 See responses for Key Theme EMF-1 and Key Theme PLS-3.
- 179-E -3 See response for Key Theme OBJ-1.

**DEIS Chapter 1 Introduction and Summary** I do not understand the purpose and need statement in the DEIS. The need for Energize Eastside is questionable. If there isn't a need, then the purpose is irrelevant. It is important to have facts. The process must be unbiased. I understand that the city of Bellevue is the lead agency of the five cities involved. Bellevue is responsible for making the EIS an unbiased process. I have the understanding that all of my questions will be answered in this SEPA process by Senior Planner Heidi Bedwell. Providing effective comments requires the public to understand the purpose and need, and the responsibilities of the lead agency, the city of Bellevue. I have read this 716 page document. My comments are relevant as a property owner, concerned citizen, and rate payer of PSE.

179-E-3 **DEIS Chapter 1 What is Purpose and Need?** 1.3 *This EIS will not be used to reject or validate the need for the proposal. Rather, the EIS is intended to identify alternatives that could attain or approximate PSE's objectives at a lower environmental cost.* I am on the Executive Board of CENSE. I agree with, and attach my name to the public comments of supporters of cense.org. This grassroots effort has spent many hours of volunteer time providing review and comment on PSE studies. Bellevue EIS, Bellevue Comp Plan; and providing education and outreach through community meetings, testimonials, talking with neighbors, and lobbying. CENSE hired technical, legal and PR experts. Their expertise expanded our knowledge and credibility on complex issues. CENSE has submitted EIS and EQL documents, and the *Lauckhart Schiffman Load Flow study*. CENSE will continue to pursue the best for *Eastside*. 1-2 Eastside Customer Demand Forecast on page 1-6 represents an assumption by PSE (10 years, 2014- 2024) The Lauckhart Schiffman Demand Forecast graph shows the System capacity (from transformer capacity) above 900 megawatts with the demand growth well under this capacity over the same ten year period from 2014- 2024. These Demand Forecasts are very different. Will the city of Bellevue have an *independent* load flow study done, not a load flow study using numbers given by PSE (as in the case before), to determine the need? Continuing on a project without a need established is a pointless exercise that serves no purpose other than to waste the time of cities and tax payer money. I keep coming back to need because it is important. To comment effectively on a DEIS the public must understand the purpose and the need.

179-E-4 **DEIS Chapter 2 Project Alternatives** Alternative 1 Option A is PSE's preferred option and very expensive. There were so many alternatives in scoping. We live in a beautiful parklike area populated by educated, forward thinking people. The *7th Northwest Power Plan* released by *NW Energy Council* published 2/10/16 and an article in *The Seattle Times* dated 02/16/16 *Forecast: Conservation can meet most NW Power Needs* confirms we can look ahead to the near future and plan to save power and money. CENSE believes this can be done by an integrated approach on the Eastside. We can maximize cost effective energy efficiency with the proper alternatives. Alternatives mentioned in the DEIS just aren't using the technologies that are both effective and forward thinking. Alternative 1 Option A is old technology and expensive. Alternative 2 has not been designed well, done properly the integrated research approach is a much better solution. An article in *Consumer Reports* magazine "Power Struggles- Energy efficiency is good for the planet and your wallet, but behind the scenes, industry forces want consumers to foot the bill for lost revenues", issue date of October 2015. Instead of building massive infrastructure utilities are working with their communities and regulators to come up with innovative solutions. Utilities can be forward thinking with new technologies. This seems a better fit for our Eastside cities. We are diverse, intelligent, and technology motivated. Bellevue has the opportunity and resources to think

179-E -4 See response for Key Theme ALT-1.  
 179-E -5 Comment noted.  
 179-E -6 See response for Key Theme ALT-1.



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|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 179-E-6  | <p>globally and act locally. A citizens group, CENSE, a grassroots effort with environmental awareness. CENSE has found answers by engaging with industry experts. Unfortunately a few questions asked of PSE about their demand forecast have remained unanswered.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 179-E -7 See response for Key Theme EARTH-1.            |
| 179-E-7  | <p><b>DEIS Chapter 3 Earth</b> The Seattle Fault-line is less than five miles from our neighborhood. The high pressure gas pipelines and the electric power lines running parallel in a shared corridor cross perpendicular to the the fault-line The height of 130 foot pole, the weight and size of the lines, with 230kv of power next to an aging pipeline going through any community in range of this earthquake zone is not safe. An earthquake could occur anytime and liquefaction through the Eastside needs to be properly evaluated. There is significant risk in this area. At the Newcastle Public Comment meeting on 2/27/16 public comments spoke of this concern. Steve O'Donnell, CENSE has also referred to the significance of earthquakes and safety.</p>                                                                                                                                                                                                                                                                                                                                                                                                                    | 179-E -8 See response for Key Theme GHG-1.              |
| 179-E-8  | <p><b>DEIS Chapter 4 Greenhouse Gas Emissions</b> Alternative 1 Option A creates a permanent clear zone. The elimination of 18 miles along the route. Trees, 8000 mature trees are not easily replaced. The vegetation and undergrowth will suffer. Trees reduce our emissions. The quality of our air will suffer. We need trees, large trees, to reduce emissions. The carbon dioxide is absorbed by these 8000 trees. The DEIS implies there is no significant or unavoidable adverse impacts because carbon credits can be purchased and more vegetation will be planted. This is not a true statement. Small trees do not replace large mature trees. The DEIS fails to adequately address the value of trees. The city of Bellevue has the responsibility to protect and to demonstrate ownership of it's city in a park concept. The clear zone would destroy many trees. Please take the lead in adequately placing value on our beautiful trees.</p>                                                                                                                                                                                                                                     | 179-E -9 See response for Key Theme WTR-3.              |
| 179-E-9  | <p><b>DEIS Chapter 5 Water Resources</b> Alternative 1 Option A The terrain in Newcastle is sloping along the easement and a few streets are down slope from the easement. There are properties along 129th St SE in Olympus constantly draining water, underground streams of water, or groundwater as referred to in the DEIS. At the time of construction the basements of two homes were flooding due to the constant flow of groundwater, where the easement runs parallel to the two streets. This would be a problem area. The DEIS refers to this as insignificant and will use "best management practices". Digging and placing the foundations for the metal poles can change the flow of groundwater. It bothers me that construction negligence could cause the groundwater to flood homes.</p> <p>5.5.3.1.6 Potential Pipeline Damage. The DEIS considers this unlikely due to the measures that PSE and the pipeline operator employ. Is the city of Bellevue aware of the violations each of these companies have on record in Washington. This is not at all reassuring. Neither of these companies are safe. Significant adverse effects depending on how large the rupture.</p> | 179-E -10 See responses for Key Themes PLS-2 and PLS-3. |
| 179-E-10 | <p><b>DEIS Chapter 6 Plants and Animals</b> Alternative 1, Option A The impact of significance.</p> <p><b>DEIS Chapter 7 Energy -Natural Resources</b> Alternative 1, Option A The impact of significance.</p> <p><b>DEIS Chapter 8 Environmental Health</b> Alternative 1, Option A is not safe. The 50 foot corridor owned by the Olympus Homeowners and the 25' easement into private properties on either side totals 100 feet. There are two aging gas pipelines, one of the two gas pipes is located in the center of the easement between our homes. These pipelines pump jet fuel 1000-pounds-per square-inch pressure in this shared easement. This is the same aging</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                         |



179-E-10

pipeline which exploded in Bellingham in June 1999 killing three people. The placement of new 100 foot metal 230kV high voltage electric power poles has not been determined. The Olympic Pipeline Company representative at the Olympus Homeowners Association meeting on 2/24/2015 stated they were not at all in favor of the construction of PSE's Energize Eastside project on this easement corridor co-located with the gas pipeline. An email from Olympic Pipeline by Kim West to Dave Edmunds of Olympus was read at the Public Scoping meeting in Renton on 5/14/15 and entered into the record by my neighbor Sue Stronk. A report by Dr Frank Cheng, an expert in Pipeline Engineering, report on "Safety of Collocation of Electric Power Lines and Pipelines" dated 2/15/16. This document was submitted to the record by CENSE and further validates PSE's preferred plan is not safe.

179-E-11

**DEIS Chapter 9 Noise** Alternative 1, Option A, I have heard the sound of buzzing, corona discharge, from the 230kV powerlines on a foggy day. Some people are more sensitive to this noise. It is very annoying and doesn't belong in a densely populated area. Neighborhood character is important to uphold. The corona discharge isn't going to occur everyday but with the moist climate in the pacific northwest it does happen frequently. There are people who avoid outdoor activity anywhere near the 230kV high voltage powerlines due to the corona discharge. This would be significant impact if this was near my home. The DEIS 9.6.3.1.1 finds the corona noise to be negligible. I disagree as I am sensitive to the buzzing sound.

179-E-12

**DEIS Chapter 10 Land use and Housing** Alternative 1, Option A It bothers me property and homes in my neighborhood of Olympus will be destroyed to make room for a PSE's Energize Eastside project when the need has not been determined. This should be vetted properly and transparently. PSE is promoting a scheme to make money. The numbers don't correspond to the trend of energy use. Safety is also a concern. PSE has changed the numbers again. The Tables 1-2, and 1-3 Construction Impacts Comparison on page 1-50 and page 1-51 Question: Is a No-Action Alternative Impact Negligible? That is wrong and not fact. Question: Is Alternative 1, Option 2 Impact Minor or Moderate? This chart has assumptions, not factual. These are opinions that do not belong in an EIS. Table 1-3 Operation Impacts page 1-53 showing the No Action Alternative has minor or moderate impacts. This is questionable. These appear to be opinions.

10.7.1 Alternative 1 Option A Will have **significant** adverse land use and housing impacts.  
10.7.3.1 Alternative 1 Option A States the impact could range from **minor to significant** depending on location.

10.7.3.1.2. Alternative 1 Option A Using an existing corridor may require widening to accommodate the new utility; up to 50 feet of additional clear zone would be needed through the corridor. This could require removal of some structures (houses). **High** consequence land use, if located in the vicinity of a hazardous liquid pipeline, would present **an unusually high** risk in the event of a pipeline failure.

Alternative 1 Option A has either **significant or high consequence** and is PSE's preferred plan.

179-E-13

**DEIS Chapter 11 Views and Visual** Alternative 1, Option A Table 1-2 Construction Impacts Comparison and Table 1-3 Operation Impacts Comparison A "clear zone" with an 130 ft Electric Fence along 18 miles of the Eastside will be a significant visual impact from the territorial view standpoint. This will make a scar on the view looking from the SpaceNeedle east or Mt Si west. It will be noticeable for years as the "clear zone" will remain bare of trees. The Eastside, with the reputation of being parklike will appear more prison-like, industrial blight might be a better term.

179-E -11 See response for Key Theme NOI-1.

179-E -12 See response for Key Theme LU-1.

179-E -13 See responses for Key Themes VR-4 and VR-1.

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 179-E-14 | <p><b>DEIS Chapter 12 Recreation</b> Alternative 1, Option A -My husband and I chose our home in Newcastle for the location on the Eastside. We have lived on the Eastside since the early 1960's. Our parents, our children's grandparents, live in the houses we grew up in just a few miles from us in Newport Hills. We often walk or bike the five mile round trip, much of this along the shared corridor of our Olympus Trail system.<br/>Picture attached: Olympus Trail</p> <p>Alternative 1 Option A would have <b>significant</b> impacts on our trail in Olympus. This is a trail used daily by residents. 230kV lines buzz when there is moisture in the air which is frequent in this area. The trail is heavily lined with trees and shrubs and according to the DEIS this area would be widened and cleared impacting the beautiful maintained trail used daily. Imagine an 18 mile clear zone, 150' wide destroying the Eastside making room for the electric infrastructure resembling a prison fence.</p>                                                                                                                                                                                 | <p>179-E -14 See response for Key Theme REC-1.<br/>179-E -15 See response for Key Theme H&amp;C-3.<br/>179-E -16 See responses for Key Themes TRAN-1 and TRAN-3.<br/>179-E -17 See response for Key Theme SVC-3.<br/>179-E -18 See response for Key Theme UTL-1 and Key Theme ALT-1.<br/>179-E -19 See response for Key Theme ALT-1.<br/>179-E -20 See response for Key Theme EIS-2.</p> |
| 179-E-15 | <p><b>DEIS Chapter 13 Historic and Cultural</b> Alternative 1, Option A<br/>Where in the DEIS is it addressed how to work around the Historic Newcastle Cemetery? Newcastle has a rich history, it is one of the oldest cemeteries in our area. The corridor passes on a hilly terrain above where it slopes down toward the cemetery. In consideration of families that would be effected by disturbances or impacts at the burial ground of relatives and loved ones buried there, will they be notified? Who notifies them? How will they be notified?</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                          |
| 179-E-16 | <p><b>DEIS Chapter 14 Transportation</b> Alternative 1, Option A, How does the 18 mile project get divided so the significant unavoidable adverse impacts are properly, and appropriately mitigated? How and when will the new poles (80- 130' metal poles) be transported? This is a concern.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                          |
| 179-E-17 | <p><b>DEIS Chapter 15 Public Services</b> Alternative 1, Option A Safety is a number one concern. There have been three gas leaks in as many days recently (Greenwood, Lynnwood, and Tukwilla). In Greenwood there was a huge explosion which sent seven fireman to the hospital. The firefighters were waiting for PSE to arrive at the scene because they are the experts and it is up to them to shut off the gas. Our first responders are put at risk. The emergency response time for PSE and the Olympic Pipeline Co is critical. What are the safety measures?</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                          |
| 179-E-18 | <p><b>DEIS Chapter 16 Utilities</b> Alternative 1, Option A The 230kV poles are 4-8' diameter and extend approximately 25-50 ' deep. DEIS 16.6.3.1.2 Accidental Disruption -If a gas ruptures during construction due to an accident there would be a disruption of service. This seems relevant but the DEIS downplays the significance of this because PSE and OPLC follow industry standards and regulatory requirements.</p> <p><b>DEIS 16.6.3.2.1 Utility Conflicts and Service Disruption Rebuilding of the Maple Valley-SnoKing 230kV</b> ColumbiaGrid's preferred Maple Valley SnoKing reconductor project option. Why did PSE scrap that plan and decide "Energize Eastside" was the need? Is it more profitable? Is this PSE's need and purpose. I have a feeling MOB could shed some light on that one. MOA Contract #11TX-15450 page 5 of 12 (d) <i>Preferred Plan Project Not Planned for Construction Based on the Construction of the Puget Preferred Plan Projects</i> document negates the need for the construction of the Maple Valley to SnoKing Reconductor Project. This was the original plan of PSE back in 2010 when the first "Energize PSE" preferred plan was being planned.</p> |                                                                                                                                                                                                                                                                                                                                                                                          |
| 179-E-19 | <p><b>DEIS Alternative 2: Integrated Resource Approach</b> demonstrates a lack of knowledge or thoughtful consideration to develop an adequate alternative. There are new technologies being used elsewhere and this alternative doesn't expertise or experience to properly</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                          |
| 179-E-20 | <p>Is PSE regulated? The UTC partially regulates them. As far as need and design of the Energize Eastside proposal PSE appears to be unregulated. FERC has determined Energize</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                          |

COMMENT

RESPONSE

- 179-E-20 | Eastside is a "local" project and decisions regarding the project are left with the city of Bellevue, and ultimately PSE.
  
- 179-E-21 | Safety is the number one concern. During the scoping public comments there were a number of people concerned with Safety. PSE's spokesperson, Mark Williamson from Wisconsin has told the Newcastle City Council that it is safer to collocate PSE's electric powerlines with the Olympic Pipeline Company gas pipelines. PSE has had several occurrences over the last three days of a pipeline explosion due to gas leak in the Greenwood area of Seattle, the powerline falling down and causing the fire of two homes in Lynnwood, and the gas leak at the mall in Tukwilla.  
  
The City of Newcastle issued a moratorium. Safety is a concern for Newcastle residents and the city.
  
- 179-E-22 | The DEIS Chapter 1.14 Figure 1-7 *Environmental Impact Statement Process* Why does the city not issue a final draft for Phase 1 of the EIS before Phase 2 begins? CENSE has requested of the city to finalize Phase 1. Is it common for the city of Bellevue to process an EIS in this manner? Has this schedule been done before where Phase 2 begins before there is a final of Phase 1? This is clearly in favor of PSE, and therefore biased. CENSE has requested the city to pause. The Bellevue City Council has asked some really good questions. I have attend many of the meetings. At the meeting of 2/22/16 I watched as the council asked questions of the staff. It bothers me they are not making comments because the city staff has told them not to comment. Has the council engaged legal council on this? There has been questions by the council at other meetings and I am not sure if the city staff has followed up their questions with answers. The DEIS does not support the need
  
- 179-E-23 | statement, the housing impact is not fully disclosed, impact of pipeline induced AC corrosion mitigation completely ignored. Can at the city substantiate the unsupported assertions in the DEIS. Get the facts and the not opinions of PSE. The DEIS does not meet the criteria set forth by the state.
  
- 179-E-24 | PSE's recommendation Alternative 1, Option A does not demonstrate improvements in reliability. The comp plan must demonstrate improvement in reliability and cost benefit. Impacts are detrimental to the public (cost, lost homes, safety, blight/view "city in a park", and property value).
  
- 179-E-25 |

- 179-E -21 See response for Key Theme PLS-5.
- 179-E -22 See response for Key Theme EIS-2.
- 179-E -23 See response for Key Theme EIS-2.
- 179-E -24 See responses for Key Theme EIS-1, Key Themes LU-1 and LU-2, and Key Theme UTL-3.
- 179-E -25 See responses for Key Theme OBJ-1, and Key Theme ALT-3.



FROM: Lori Elworth  
 TO: Eastside City Councils  
 DATE: 1 March, 2018  
 RE: Energize Eastside DEIS Public Comment

*CENSE member  
Lori*

179-G-1

I'm bothered by the DEIS claims that the need for the project has already been determined. How have the city councils established that this project is necessary? Have they done an independent load flow study to confirm the veracity of PSE's claims? CENSE performed their own study despite PSE's refusal to share their data regarding the project and found that the assumption put forth by PSE are at best faulty, and possibly even fraudulent.

If PSE fails to provide new information to explain themselves, or if an independent study done by the cities does not corroborate with PSE's claims then this project must be paused immediately.

PSE's preferred route, Alternative 1, has **significant** impacts for my neighborhood Olympus, Newcastle. I am grateful to the city of Newcastle issuing a moratorium two weeks ago on permit applications for new transmission lines in our city and to give the Newcastle Planning Commission time to review its utility codes. This demonstrates that the Newcastle city council is listening to the people.

I live in one of the 51 homes along the 100 ft corridor in Olympus, next to the existing high-pressure jet fuel pipeline. PSE's preferred plan would be to install 230kV lines on 85-100 ft metal poles (essentially lightning rods) along the aging pipeline.

**Chapter 10.7.1 Alternative 1 Option A** Will have **significant** adverse land use and housing impacts.

**Chapter 10.7.3.1 Alternative 1 Option A** States the impact could range from minor to **significant** depending on location.

**Chapter 10.7.3.1.2. Alternative 1 Option A** Using an existing corridor may require widening to accommodate the new utility; up to 50 feet of additional clear zone would be needed through the corridor. This could require removal of some structures (houses). **High** consequence land use, if located in the vicinity of a hazardous liquid pipeline, would present an unusually high risk in the event of a pipeline failure.

**Alternative 1 Option A** has either **significant** or **high** consequence and is PSE's preferred plan.

179-G-2

How will this process be mitigated? When I lose my home, when my neighbors lose their homes, we will be leaving behind our neighborhood. We have been active, engaged neighbors in a community much like that of a family, we have invested time with our neighbors, community, our family. How is this addressed in the DEIS? This is what some of us will face\_ we will be displaced, and no longer have our homes, depression, impacts related to relocation, trying to find a home where housing is already limited. How do we find a place where we have the community and support that has taken us 28 years to create? How will we be compensated for this loss? Shouldn't this be addressed in this DEIS?

Thank you for your time.

Lori Elworth  
 8605 129th Ct SE  
 Newcastle, WA 98056

179-G -1 See response for Key Theme OBJ-2.

179-G -2 See response for Key Theme LU-1.

*Submitted Repton  
DEIS public hearing 2.25.16*

Subject: **Energize Eastside Draft EIS Comments**  
 Date: 25 February, 2016  
 From: Curtis Allred  
 13609 SE 43rd Place  
 Bellevue, WA 98006

point 1

I have a big problem with charging ahead on this EIS for a massive, expensive project without being convinced of the need.

What we know is that PSE really wants to build this powerline.

And they claim they've done an analysis that proves we need it.

But it looks suspicious:

- they assumed a much higher growth rate than other regional planners are using.
- they're sending three times more power to Canada than the "normal" WECC base case
- they turned off 6 local power generating stations

So an independent power expert (Rich Lauckhart) ran his own analysis using the same software and initial data, and found that there is no need for extra capacity in the next 30 years.

Of course PSE refutes this study, but they will not share their data so it can be independently verified. Essentially they're saying "we're the experts, trust us"

Which brings us to this EIS, which is being conducted assuming the need is there.

point 2

But the EIS process is also misleading.

It leads us to believe there are alternatives being considering and the best alternative will be chosen based on the outcome of the EIS. But I've recently learned that this is not true.

It is actually PSE who makes the choice, and they have already made their choice clear. Its the 230V above ground power lines running along the existing corridor.

180-B -1 See responses for Key Themes OBJ-2 and OBJ-3.

180-B -2 See response for Key Theme OBJ-1.

180-B-1

180-B-2



Date: 10 March 2016

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
450 110th Ave NE  
Bellevue, WA 98004

From: Curtis Allred  
13609 SE 43rd Pl  
Bellevue, WA 98006

Dear Heidi,  
The more I learn about PSE's deceit in the Energize Eastside project, the more infuriated I become. This project has to be stopped. I have summarized the situation as seen by those of us following developments. Following are details on the summary points.

**SUMMARY**

**Financial Motivation:** PSE is financially motivated to build a rate-payer subsidized power line through the eastside. Besides being paid for by us, the customers of PSE, it will also boost the sale value of the company and give them a 9.8% return on capital, guaranteed by the state and covered by us, the customers of PSE. They may also be using this project to boost capacity so they can move more power to Canada, further enhancing their potential revenue and company valuation.

I80-C-1

**Fabricated Demand:** PSE is using a fabricated and flawed power simulation to try to scare residents into supporting and funding this lucrative project. Based on a recent load flow analysis by two industry experts, one of them a former Puget Sound Power planner, it is evident that PSE faked the input data and parameters in their flow analysis to justify the need for the power lines.

**Flawed EIS:** The current Environmental Impact Study starts with the assumption that the additional power capacity is needed, and accepts PSE's analysis as-is without question. Further, PSE has attempted to discredit the other two EIS alternatives to the powerline, again by faking the numbers, and saying that new technology and conservation measures will not work.

I80-C-2

**Cost:** It is estimated that this project will cost PSE customers between one and two billion dollars over the life of the project (see references). This is money that should be spent on conservation, demand side management, and modern grid technologies. Thousands of trees will be cut down and our city will be scarred with ugly power lines for generations to come. For us, it's a big cost with no benefit. The only ones benefiting are PSE executives and shareholders.

I80-C-3

I80-C-4

I80-C-5

This level of deceit and opaqueness by a private company for a public works project is reprehensible. It has to be illegal, and therefore stoppable by local governments. Otherwise we will need to take legal action against PSE.

I80-C-6

Please do everything possible to stop this project.

**DETAILS**

Following are details on the above points.

- I80-C -1 See responses for Key Theme ECON-4 and Key Theme OBJ-2.
- I80-C -2 See response for Key Theme ECON-4.
- I80-C -3 See response for Key Theme ECON-4.
- I80-C -4 See response for Key Theme VR-4.
- I80-C -5 Comment noted.
- I80-C -6 Comment noted.



**Financial motivation:**

Why is PSE so motivated to build these powerlines? Washington state policy guarantees PSE a return on investment of 9.8% per year for infrastructure projects. A low estimate of the cost of the project is \$250 million. It will probably be higher due to complications (relocating families, dual poles in some areas, having to deal with existing power lines, pipeline safety issues, etc.). Using the low estimate of \$250M means the PSE will charge us ratepayers \$24.5M per year. This is money that could be used for energy conservation, alternative energy sources, and modern grid technology. So they charge us \$250M to install it, then bill us an extra billion or two over the next 40-50 years. It is speculated that PSE's Australian parent company is gearing up to sell PSE and wants to maximize its market value. In fact, the parent company's original stated intent of buying PSE was to turn around and sell it after 10 years. Is it any wonder they're going to such lengths to force this project through, going so far as to fabricate a study to justify the project and lying about it to the public?

**Fabricated demand:**

Based on a recent independent load flow simulation, it is evident that PSE faked the inputs to the load flow simulation in these ways:

- Overstated population and demand growth
- Estimating too much power going to Canada
- Turned off 6 local power sources
- Used lower transformer ratings
- Did not take into account power line resistance

180-C-7

This created an invalid and impossible scenario that could only be solved by adding power lines coming from the Cascades. Using a realistic worst-case scenario with industry-standard assumptions, the project cannot be justified.

The above simulation "errors" are summarized below, and explained in detail in an independent study by power industry experts Richard Lauckhart and Roger Schiffman, available on the CENSE website. Richard Lauckhart has 40 years experience in power planning and was Vice President of Power Planning for Puget Sound Power & Light before becoming a power planning consultant. Roger Schiffman has 23 years of energy industry experience including simulation modeling, utility resource planning, and electricity market evaluation.

Richard and Roger gained CEII clearance from FERC, which should have granted them access to PSE's load flow simulation data. However, PSE rejected their request, saying they did not have a "justifiable need" for the data. (CEII is intended to protect against criminals and terrorists, not citizens trying to validate a power study.) So Rich went to FERC who gave him the data PSE submitted for the WECC Base Cases. They ran this data on the industry standard load flow analysis simulation software and published their findings in the report: Load Flow modeling for Energize Eastside, by Richard Lauckhart and Roger Schiffman, February 18, 2016.

Summary of the above 5 "errors" in PSE's simulation, detailed in the Lauckhart/Schiffman report:

Overstated population and demand growth: PSE projected 2.4% growth per year which is way higher than other estimates by governments and agencies. PSE themselves forecast 0.5% to the WECC.

Too much power going to Canada: PSE ran the simulation with triple the WECC base case of 500 MW, amping it up to 1500 MW for their scenario. Why would we be transmitting three times the normal power to Canada during an emergency? Normal procedure during a power emergency would be to cut all power to Canada.

180-C -7 See responses for Key Theme ECON-4, Key Theme VR-5, and Key Themes OBJ-1 and OBJ-3.

180-C-7 Turned off 6 local power sources: With the local power sources turned off, more power distribution burden was transferred onto the high voltage long distance power lines. The rationale for turning off 6 local power generation stations could not be explained by independent power industry experts, including Richard Lauckhart and Roger Schiffman. PSE will of course not explain.  
  
Still, the above errors cannot fully justify the power line. Richard and Roger suspect altered the simulation data in other ways:

180-C-7 Used lower transformer ratings: They seem to have used "summer normal" instead of the much higher "winter emergency" value for transformer ratings. The summer normal rating is only 700 MW, while the winter emergency rating is 950 MW.

180-C-7 Did not take into account power line resistance: It appears that they turned off the power-line resistance aspect of the simulation to make the flawed simulation run. Otherwise the power from the Cascades would show too much voltage drop, resulting in brownout, and the simulation would fail.

180-C-8 **Environmental Impact Statement flaws:**  
The EIS accepts PSE's flawed justification study and assumes the power problem needs to be solved. Since the justification is not valid and the need does not exist, the "No Action" alternative should be chosen and EIS halted.

**Comments on the EIS Alternatives:**

180-C-9 Alternative 1 is the power line option. It is based on a fraudulent power analysis, and therefore invalid. PSE should be punished and fined for their deception and this alternative thrown out.

180-C-10 Alternative 2 calls for technology and conservation solve future energy shortfalls. This was rejected by PSE as infeasible based on outdated data and PSE's inexperience in this area. It needs to be revisited by experts in new conservation, generation, and distribution technologies, not by PSE who has every motivation to disqualify it to justify their lucrative power line project.

180-C-11 Alternative 3 originally called for simply adding transformers. But PSE demanded that power lines be added to this alternative, thus making it less attractive. The solution does not actually require new transmission lines. Those transmission lines are only needed to supply Canada with an inflated power estimate (triple the base case as explained earlier).

180-C-12 The "No Action" alternative is the only sensible choice at this time. There is no short term need for increasing power capacity, and Alternative 2 can be revisited and implemented on a gradual timeline.

180-C-13 **Cost:**  
Including the hundreds of millions of initial cost, the project will cost taxpayers and ratepayers many times more in subsequent years. The "Energize Eastside Economic Analysis" study (on CENSE website) estimates \$1.5B to \$2B over the life of the project. In addition, property values will decrease, impacting homeowners and reducing property tax revenues. An estimated 8000 trees will be removed over the length of the power line. Our neighborhoods will be scarred with the loss of trees and ugly industrial power poles and lines dominating the skyline.

180-C -8 Comment noted.  
180-C -9 See response for Key Theme OBJ-2.  
180-C -10 See response for Key Theme ALT-1.  
180-C -11 See response for Key Theme OBJ-1.  
180-C -12 Comment noted.  
180-C -13 See response for Key Theme ECON-4.  
180-C -14 See response for Key Theme ECON-2.  
180-C -15 See responses for Key Themes VR-3 and VR-4.



I80-C-16

**Legal issues:**

It appears that PSE is exploiting a weakness in the Washington state law and regulatory process. According to Richard Lauckhart, PSE would not be able to exploit the public like this in California and most other states due to stricter oversight. PSE's deception and fraud in Washington has to be considered criminal! The energy system is public works infrastructure. I refuse to believe PSE is legally able to deceive and exploit the public in this way, and to be so opaque as to not reveal their simulation data.

I urge you to halt the EIS process and investigate these matters thoroughly.

Thank you,

Curtis Allred  
13609 SE 43rd Place; Bellevue, WA 98006

**References**

- Lauckhart-Schiffman Load Flow Study: <http://cense.org/Lauckhart-Schiffman%20Load%20Flow%20Study.pdf>
- CENSE: <http://cense.org>
- Energize Eastside Project Phase I Draft Environmental Impact Statement: <http://www.energizeeastsideeis.org/draft-eis.html>
- Energize Eastside Economic Analysis: <http://cense.org/Lifetime%20Cost.pdf>

I80-C -16 See response for Key Theme OBJ-3.

Date: 10 March 2016

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
450 110th Ave NE  
Bellevue, WA 98004

From: Curtis Allred  
13609 SE 43rd Pl  
Bellevue, WA 98006

Dear Heidi,  
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**SUMMARY**

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180-D-1

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180-D-2

Cost: It is estimated that this project will cost PSE customers between one and two billion dollars over the life of the project (see references). This is money that should be spent on conservation, demand side management, and modern grid technologies. Thousands of trees will be cut down and our city will be scarred with ugly power lines for generations to come. For us, it's a big cost with no benefit. The only ones benefiting are PSE executives and shareholders.

This level of deceit and opaqueness by a private company for a public works project is reprehensible. It has to be illegal, and therefore stoppable by local governments. Otherwise we will need to take legal action against PSE.

Please do everything possible to stop this project.

**DETAILS**

Following are details on the above points.

180-D -1 See responses for Key Theme ECON-4 and Key Theme OBJ-2.

180-D -2 See responses for Key Theme ECON-4 and Key Theme VR-4.

Turned off 6 local power sources: With the local power sources turned off, more power distribution burden was transferred onto the high voltage long distance power lines. The rationale for turning off 6 local power generation stations could not be explained by independent power industry experts, including Richard Lauckhart and Roger Schiffman. PSE will of course not explain.

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180-D-3

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The EIS accepts PSE's flawed justification study and assumes the power problem needs to be solved. Since the justification is not valid and the need does not exist, the "No Action" alternative should be chosen and EIS halted.

**Comments on the EIS Alternatives:**

180-D-4

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180-D-5

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180-D-6

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180-D-7

The "No Action" alternative is the only sensible choice at this time. There is no short term need for increasing power capacity, and Alternative 2 can be revisited and implemented on a gradual timeline.

**Cost:**

180-D-8

Including the hundreds of millions of initial cost, the project will cost taxpayers and ratepayers many times more in subsequent years. The "Energize Eastside Economic Analysis" study (on CENSE website) estimates \$1.5B to \$2B over the life of the project. In addition, property values will decrease, impacting

180-D-9

homeowners and reducing property tax revenues. An estimated 8000 trees will be removed over the

180-D-10

length of the power line. Our neighborhoods will be scarred with the loss of trees and ugly industrial power poles and lines dominating the skyline.

- 180-D -3 See response for Key Theme OBJ-3.
- 180-D -4 See response for Key Theme OBJ-2.
- 180-D -5 See response for Key Theme ALT-1.
- 180-D -6 See response for Key Theme OBJ-1.
- 180-D -7 Comment noted.
- 180-D -8 See response for Key Theme ECON-4.
- 180-D -9 See responses for Key Themes ECON-1 and ECON-2.
- 180-D -10 See responses for Key Themes VR-3 and VR-4.



To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 450 110th Ave NE  
 Bellevue, WA 98004

From: Curtis Allred  
 CENSE member  
 13609 SE 43rd Pl  
 Bellevue, WA 98006

Subject: **Comments on Energize Eastside Phase 1 Draft EIS - Historic and Cultural Resources**

Date: 14 March, 2016

**Section 13.5.4**

This section suggests Alternative 2 could have significant impacts to archaeological and historical resources, based on the quantity of sites in the study area:

*13.5.4 Alternative 2: Integrated Resource Approach*

*The components being considered under Alternative 2 have the potential for minor to significant impacts to archaeological resources, if present, depending on the proposed locations. If the historic properties are King County Landmarks, a Certificate of Appropriateness (COA) may be necessary depending on the terms of the designating ordinance.*

*The Alternative 2 study area contains 39 historic register properties (the second highest amount of the three study areas) and 43 recorded archaeological resources (the least of the three study areas). Existing surveys provide coverage of about 25 percent of the study area, which is the highest amount of all the alternatives. The Alternative 2 study area includes the eastern shoreline of Lake Sammamish. There are many recorded archaeological resources along these shorelines. Alternative 2 contains the same 8 recorded historic period cemeteries as Alternative 1 and impacts would be the same.*

This is misleading, as Alternative 2 has considerable flexibility in the location of the distributed power components, and thus can avoid disturbing important sites. Construction sites in other alternatives are relatively fixed and rigid, thus increasing the risk that Archaeological and Historical sites will be disturbed. For example, in Alternative 1, power lines must be placed in a fixed corridor and poles planted in specific locations based on engineering requirements. In contrast, Alternative 2 components such as power storage facilities and solar farms have much more flexibility with respect to location, so they can be placed in locations which minimize disturbance to important Archaeological and Historical sites.

It should be stated that Alternative 2 would actually have minor impact, because solution components would be sited in locations which do not disturb important Archaeological and Historical sites.

page 1 of 2

I80-E -1 See response for Key Theme H&C-1.

I80-E-1



180-E-1

**Section 13.5.4.5**

This section discusses impacts of construction of Peak Generation Plants.

We believe that Alternative 2 does not require construction of additional generation plants. When Alternative 2 is updated to reflect modern, proven technologies, it will not be necessary to build Peak Generation Plants to meet the requirements for Energize Eastside. This section should be removed, or at least rewritten to make it clear that additional generation is an option and will likely not be required for Alternative 2.

**Sections 13.5.4.1 and 13.6.4.1**

These sections discuss the Construction phase and Operation phase, respectively, of the "Energy Efficiency Component" of Alternative 2, concluding that there could be "significant impacts" to historic properties and archaeological resources:

*13.5.4.1 Energy Efficiency Component*

*The types of potential impacts from energy efficiency efforts may include modifications to existing buildings (weatherization, efficient lighting). Weatherization could include replacement of original windows which has the potential to diminish a building or structure's integrity of design, materials, workmanship, and feeling, if the replacement windows are not in-kind with their original architectural character, thus impacting the property's potential for conveying its historical significance (Myers, 1981). Any modifications that are permanent have the potential to impact a property's ability to convey its historical significance, which would be significant impact, as described in Section 13.4. ... Continued implementation of existing energy efficient improvements may result in minor to significant impacts to historic properties and archaeological resources.*

*13.6.4.1 Energy Efficiency Component*

*An increase in energy efficiency implementation (for example, replacement of windows with styles that are not in-kind with the original architectural style) may reduce the integrity of the design, materials, and workmanship of historic resources, if present. This may result in minor to moderate impacts to historic and cultural resources, as described in Section 13.5.1.*

It should be stated here that buildings of historical significance will be exempt from energy efficiency upgrades in cases where the upgrade would moderately or significantly impact their cultural or historical value.

Such exemptions would have no impact on achieving the conservation goals of Alternative 2, as the number of buildings would represent a negligible portion of the total regional power consumption.

Therefore, the EIS document should state that the use of exemptions in these cases will result in an overall "minor impact" to historically significant buildings.

Thank you,  
Curtis Allred

page 2 of 2

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
450 110th Ave NE  
Bellevue, WA 98004

From: Curtis Allred  
CENSE member  
13609 SE 43rd Pl  
Bellevue, WA 98006

Subject: **Comments on Energize Eastside Phase 1 Draft EIS - Transportation**

Date: 14 March, 2016

**14.5.3.2 Construction Impacts of 230kV Transmission Lines**

This section discusses construction impacts of installing new 230 kV transmission lines, and concludes the impact to be "moderate" at worst. I believe it underestimates the disruption to all modes of transit. Roadway, Alleys & Driveways, Sidewalks, Bicycles and Transit will all be impacted "significantly".

The installation of hundreds of power poles through this crowded and congested corridor will certainly result in "Significant" impact, "*prohibiting access to residences and businesses, and prohibiting travel through a major corridor*" at multiple times during construction. The recommended power line routes all have many roads, houses, schools, parks, trails, bike routes, and bus stops on or adjacent to the construction area.

The following anticipated activities involve very large equipment and construction activity over a wide area over a significant time period, and will certainly cause road and property blockage for significant periods of time throughout construction:

1. Removal of homes will require demolition equipment, keep-out area, and dump trucks to haul debris
2. Digging the holes required for pole footings will require large digging equipment and a wide keep-out area
3. Trucks hauling the large power poles will certainly be very long, slow moving vehicles requiring road closures wherever they travel, and blocking roads and access wherever they are parked for loading and unloading.
4. Large cranes to install the poles: The equipment used to upright the poles will require a wide safety keep-out area wherever they are working, and cause road closures as they move from point to point along the route.
5. Stringing wires over streets, homes, businesses, and public spaces: I have no idea how this is done but the EIS should study this and include the impacts on roadways and property keep-out restrictions while these high-tension lines are strung hundreds of feet between poles.

Besides normal street and driveway closures, there will certainly be unanticipated complications and accidents which further impact transportation throughout the area. The EIS should anticipate this.

The mitigation measures in 14.7 do not address the impacts sufficiently to claim "minor to moderate" impact. Restricting the most disruptive construction to night time hours could relieve some impact, but is not mentioned, and may not be feasible.

pg 1 of 3

180-F -1 See response for Key Theme TRAN-1.  
180-F -2 See response for Key Theme TRAN-4.

180-F-1

180-F-2



180-F-3

**14.5.3.2.9 Olympic Pipeline damage Risk**

This section states that the possibility that the Olympic Pipeline would be damaged during construction is considered low, but does not provide any justification for that statement other than "regulatory requirements and safety practices that govern construction near the pipeline". In spite of those regulatory requirements, there have been construction-related accidents causing damage to the pipeline over the years. In some cases, the damage is not discovered until a fire or explosion occurs some time after the construction.

Even with low historic level of construction activity around the pipeline, there has been accidents causing damage. Compared to this past minimal construction activity, the construction of power lines along the pipeline will be orders of magnitude higher intensity construction, and therefore higher risk. The power line construction will involve constant activity by heavy equipment and digging on or near the pipeline.

I do not have references to provide on past construction accidents, other than from the August 2004 document referenced below which states that "43 spills have been reported since 1965 totaling almost 821,000 gallons."

The EIS must research the construction damage history and include an estimate of the risk of pipeline damage of different severity levels, based on multiplying past accident rate by a factor that represents this extended period of intensive construction activity.

**14.5.3.2.9 Olympic Pipeline damage Impact to Transportation**

This section also understates the impact of pipeline damage to local and air transportation:

*"if significant damage to the pipeline were to occur, or if there is a planned temporary disruption during project construction, petroleum products normally transported in the pipeline would be transported by other means, primarily by trucks using interstate highways. This would be expected to generate up to a few hundred truck trips per day, resulting in a minor impact when distributed throughout the day and across the interstate highway system."*

180-F-4

This is not accurate, the actual case is much worse. According to the 2004 document referenced below, the pipeline carries the equivalent of 1800 tanker truck per day. This is the only distribution route for refineries from northwest Washington to Portland and interim destinations. One of those destinations is Sea-Tac airport which relies on the pipeline for 100% of its jet fuel.

Besides there being six times more trucks than the EIS estimates, those trucks would not be "distributed ... across the interstate highway system" as stated. These trucks would all be on the I-5 corridor between Whatcom county and Portland, the most congested corridor in the region. Further, the transport direction is 100% southbound, so there would need to be 1800 trucks per day heading southbound, plus 1800 trucks per day returning north for refill. This would have a major highway transportation impact in the region.

The following statement also underestimates the risk to air travel:

*"No disruption in petroleum product supply to airports or other customers of the Olympic Pipeline would be anticipated for any planned temporary shutdown or relocation. If there were an accidental shutdown, short-term disruption could occur until trucking could be arranged."*

pg 2 of 3

180-F -3 See response for Key Theme PLS-1.

180-F -4 See response for Key Theme TRAN-2.

I80-F-4

In the case of an unplanned accidental shutdown, this "short-term disruption" could be many days to weeks to mobilize a tanker-truck fleet sufficient fill the gap. This would be a significant disruption in air travel as Sea-Tac airport gets 100% of its jet fuel from the pipeline.

**References**

City of Kent's Hazardous Materials Emergency Response Plan

- <https://www.kentwa.gov/content.aspx?id=9466>
  - which contains this link:
    - the City of Kent Comprehensive Emergency Management Plan (CEMP)
    - <https://www.kentwa.gov/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=3924>
- The Pipeline-specific section is also available here:
  - <https://www.kentwa.gov/WorkArea/DownloadAsset.aspx?id=8096>

Excerpt:

*August 2004*  
**HAZARDOUS LIQUID PIPELINE**  
*Definition of Hazard*  
 The Olympic Pipe Line Company consists of over 400 miles of pipelines extending from refineries in northwest Washington to Portland Oregon. These pipelines carry refined liquid petroleum products: diesel, aviation fuel, (basically a form of kerosene) and gasoline. Underground high pressure pipelines remove the equivalent of 1,800 tanker trucks from the regions roadways each day and carry 441,000 barrels or 18,700,000 gallons of fuel each day.

Additional Olympic Pipeline info is available on the website of the State of Washington Energy Facility Site Evaluation Council: [www.efsec.wa.gov/oplarchive/proj-sum.pdf](http://www.efsec.wa.gov/oplarchive/proj-sum.pdf)

Excerpt:

*May 1998*  
**OLYMPIC PIPE LINE COMPANY**  
 For 30 years, OPL has operated 400 miles of underground petroleum product pipelines in western Washington that were constructed prior to the creation of EFSEC. This existing pipeline system begins at the four oil refineries in Skagit and Whatcom Counties, transports refined petroleum products south to Seattle, then continues to Portland, Oregon. The OPL system consists of two parallel lines, a 16-inch and a 20-inch, starting near the refineries and running south to Renton. After delivering fuel to Seattle and Sea-Tac International Airport, the two lines combine into one 14-inch line that proceeds south to Portland. Virtually all of the gasoline, diesel, and jet fuel consumed in western Washington is transported by OPL. Today, OPL transports over 4 billion gallons a year of refined fuels through its western Washington system.

Based on this data, it would require at least 1992 single tanker trucks, or 944 double:

- 4 billion gallons per year = 11 million gallons per day
- Tanker truck capacity ranges from 5,500 to 11,600 US gallons

Thank you,  
 Curtis Allred

pg 3 of 3

I80-F -5 See response for Key Theme TRAN-2.

I80-F-5

**From:** Curt  
**To:** [info@energize-eastside.org](mailto:info@energize-eastside.org)  
**Cc:** [els@cense.org](mailto:els@cense.org); Curt@  
**Subject:** Comments on Energize Eastside Phase 1 Draft EIS - Pipeline Safety  
**Date:** Monday, March 14, 2016 5:48:09 PM

**To:** Heidi Bedwell, Energize Eastside EIS Program Manager  
 450 110th Ave NE  
 Bellevue, WA 98004

**From:** Curtis Allred  
 CENSE member  
 13609 SE 43rd PI  
 Bellevue, WA 98006

**Subject:** **Comments on Energize Eastside Phase 1 Draft EIS - Pipeline Safety**

**Date:** 14 March, 2016

The EIS does not adequately address safety issues related to powerline and pipeline co-location. Pipeline safety issues related to co-located High Voltage AC (HVAC) lines are serious and well known in the pipeline industry, yet are barely mentioned in the Draft EIS document.

The EIS must address and provide mitigation for issues raised in the 2 documents cited below. It must also state the potential for a major disaster, and that the City of Bellevue has said that it does not have sufficient emergency response personnel and resources to deal with a pipeline explosion.

Documents:

<!--[if !supportLists]-->1. <!--[endif]-->The INGAA document "Criteria for Pipelines Co-Existing with Electric Power Lines" (<http://www.ingaa.org/File.aspx?id=24732>) lists five criteria that determine the risk of accelerated corrosion when pipelines and transmission lines are located in close proximity. When the Olympic pipeline is paired with PSE's proposed transmission line, at least 4 of the 5 risk criteria are raised to the highest level of risk. It considers a co-location length of 5000 feet or more to be "high risk". The co-location distance for Energize Eastside power lines and the Olympic Pipeline will be 20 times this high-risk threshold! This seems like a major red flag that must be addressed by the EIS.

I80-G -1 See response for Key Theme PLS-3.

I80-G-1

<!--[if !supportLists]-->2. <!--[endif]-->Dr. Frank Cheng, an internationally recognized pipeline safety expert created a report "Olympic Pipeline" (<http://cense.org/Olympic%20Pipeline.pdf>) which considers the safety risks of putting high voltage transmission lines so close to petroleum pipelines. He describes 3 mechanisms by which High Voltage AC adversely effects the integrity and safety of buried pipelines that are collocated with electric power lines, all of which are able to result in pipeline failures.

---

*submitted Renton Phase 1  
PEIS public hearing 2-25  
2016*

Darius Richards, residing at 3605 Lake Wash. Blvd. N., in the Kennydale neighborhood of Renton.

- Thanks to all of you for your efforts in preparing this Draft EIS; as a retired electrical engineer and Environmental, Safety & Health engineer, I can certainly understand the amount of work involved
- Throughout 2014, served as a member of PSE’s Community Advisory Group, to help ensure open communications between PSE and the residents of Kennydale and the residents of the Lake Lanes community to our North.
- During that time, I also became a member of the citizen group CENSE: **Coalition of Eastside Neighbors for Sensible Energy**
- Due to that experience and my evaluation of the project Alternatives offered in the D. EIS, I strongly believe that Alt. 2, the **Integrated Resources Approach**, is clearly the best choice.
- It is the only choice that provides a path for PSE to move forward into the 21<sup>st</sup> century while avoiding all of the negatives that go along with Alternative 1A: such as safety challenges , increased charges to the Eastside’s ratepayers, decreased quality of life due to visual pollution, spoiling of our environment, devalued neighborhoods, and more.
- In closing, please consider Eastside flow studies other than those PSE or others may have provided.
- Specifically, I am asking you to read the Load Flow Study that was commissioned by CENSE in November 2015 and conducted by Richard Lauckhart, former PSE Vice President of Power Planning, and ~~Richard~~ *Richard ROGER* Schiffman, a 23 year veteran of the energy industry. Their Study provides a credible challenge to PSE’s **Eastside Customer Demand Forecast** and thus supports the viability of Alt. 2. I have 2 summary copies for you, and the entire report is available at CENSE.org .
- Thank you for this opportunity to present my views tonight.

181-B-1

181-B-2

- 181-B -1 See response for Key Theme ALT-1.
- 181-B -2 See response for Key Theme OBJ-3.



COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timestamp            | First Name | Last Name  |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|------------|
| I86-A-1 | I am extremely concerned about building high voltage power lines so close to the Olympic gas pipeline in an earthquake prone area. Please refer to the link to the independent study by Dr. Frank Cheng on "Safety of Collocation of Electric power lines and Pipelines" on CENSE.org. Living close to high voltage power lines is a health risk, especially for children, pregnant women, elderly and for people with compromised immune systems. High voltage power lines should not go through residential neighborhoods, schools and hospitals. | 3/2/2016<br>19:41:25 | Sirisha    | Dontireddy |
| I86-A-2 | I oppose Alternate 1 as proposed by PSE.<br>Thank you for your consideration,<br>Sirisha.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |            |            |

I86-A -1 See response for Key Theme PLS-3 and Key Theme EARTH-1.  
I86-A -2 Comment noted.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                       | Timestamp | First Name | Last Name |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| 187-A-1 | I prefer Alternative 4. PSE has not proved the need for any additional work/capacity.                                                                                         | 3/2/2016  | Sam        | Fetchero  |
| 187-A-2 |                                                                                                                                                                               | 22:01:30  |            |           |
| 187-A-3 | Bellevue is supposed to be a city in a park. The three alternatives make that vision less of a reality. We don't want Alternative 1, 2, or 3. Listen to us. We don't want it! |           |            |           |

- 187-A -1 Comment noted.
- 187-A -2 See response for Key Theme OBJ-1.
- 187-A -3 See response for Key Theme VR-4.

From: [Barbra Chevallier](mailto:Barbra_Chevallier@EnergizeEastsideEIS.org)  
 To: [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
 Subject: Phase 1 Draft EIS  
 Date: Thursday, March 03, 2016 9:58:10 PM

To: Heidi Bedwell, Energize Eastside EIS Program Manager

Dear Ms. Bedwell,

I88-A-1

I am deeply concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A). I contend herein that Alternative 1A is unnecessary, risky, unsightly, inflexible and overly expensive, in both environmental and financial terms, and, furthermore, that a better option exists.

I88-A-2

PSE tries to justify the need for the project using an extreme scenario that would cause regional blackouts. According to the Lauckhart-Schiffman Load Flow Study, from February 2016, this scenario is not merely extreme, but impossible. There is no discernible need on behalf of Eastside residents for the project that PSE is favoring. Furthermore, their insistence on the behemoth that is Alternative 1A to the effective exclusion of other options, such as Alternative 2, does not inspire confidence.

I88-A-3

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Construction alone could cause damage to one or more of these lines, and it may cause them to deteriorate more rapidly than otherwise, creating a costly and potentially dangerous situation years from now. Responsible safety standards require at least a 50 foot separation. Can this be guaranteed given that the proposed power lines will cross not only existing PSE easements but also established neighborhoods? Would such a guarantee require the relocation of those utilities? What would that cost? A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS, nor is Alternative 2 properly considered as a way to mitigate such risks.

- I88-A -1 Comment noted.
- I88-A -2 See responses for Key Theme ALT-1 and Key Theme OBJ-3.
- I88-A -3 See response for Key Theme PLS-2 and Key Theme EARTH-1.

COMMENT

RESPONSE

188-A-3 Alternative 1A further fails to adequately address safety concerns related to potential natural disasters. This is especially relevant given that the area in which the power lines are to be constructed is prone to landslides and would be at great risk in the event of an earthquake. Alternative 2 would rely on a more dispersed system and therefore be more resilient in the event of a localized disaster such as a landslide or lightning strike.

188-A-4 Alternative 1A fails to account for the almost certain impacts that their enormous power lines would have on residential communities and property values. They cite a lack of conclusive evidence, but studies, and common sense, are available that would suggest otherwise. As a business charged with doing the best for its customers, a primary goal should be to maintain the livability of residential neighborhoods and not to scar them with industrial infrastructure. Because it does not propose to build on such a truly gigantic scale, Alternative 2 alleviates this concern.

188-A-5

188-A-6 Lastly, the lack of flexibility and opportunity for innovation created by construction of a series of 230kV transmission lines is a real concern. PSE is asking the Eastside to hitch its wagon to a technology and structure that will almost certainly be outdated and unnecessary within the next 20 years. Our future demands action and improvement now to lessen our environmental impact and increase sustainability. Alternative 2 doesn't lock us into decades of the same system and would enable us to incorporate future technology as it arises.

188-A-7 In summary, Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative that won't saddle Eastside residents with an expensive, unnecessary, permanent and unsightly electrical system. As a smaller option, it is less likely to have negative impacts on a large number of people, and it is projected to shrink our environmental footprint. The discussion of this alternative provided in the

188-A-8 EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side

188-A -4 See response for Key Theme ECON-1.  
 188-A -5 See response for Key Theme VR-5.  
 188-A -6 See response for Key Theme ALT-1.  
 188-A -7 See response for Key Theme ALT-1.  
 188-A -8 See response for Key Theme EIS-1.



COMMENT

RESPONSE

I88-A-8

Management and Distributed Energy Resources. The costs and capabilities included in the Draft are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment. The burden is on PSE to demonstrate why this option is not viable. Their lack of good faith in this regard is not encouraging.

I88-A-9

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for either financial or political reasons.

I88-A-10

Ratepayers are being asked to spend more than a billion dollars, and perhaps closer to 2 billion, over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future. In its current incarnation, it fails to do so by a wide margin.

Thank you.

Sincerely,

Barbra Chevalier  
Bellevue resident

I88-A -9 Comment noted.

I88-A -10 See response for Key Theme EIS-1.

COMMENT

RESPONSE

**From:** [Pete.Mansfield](mailto:Pete.Mansfield@energize-eastside.org)  
**To:** [info@energize-eastside.org](mailto:info@energize-eastside.org)  
**Subject:** FW: Energize Eastside EIS Phase 1 Draft Comments  
**Date:** Thursday, March 03, 2016 12:11:25 PM

Re: Energize Eastside EIS Phase 1 Draft Comments

Thank you for this opportunity to comment on the Energize Eastside IES Phase 1 Draft, dated January 2016.

My contact information is included at the end of this email.

Page 1-5: "Stantec prepared a memorandum evaluating the stated need for the project, and confirmed that PSE's Eastside Needs Assessment was conducted in accordance with industry standards for utility planning (Stantec, 2015). See Appendix A for more information."

189-A-1 COMMENT: Stantec needs to review and comment on modeling assumption questions raised in the [Lauckhart-Schiffman Load Flow Study](#) as submitted to the review process by CENSE. It seems to me that this step is a fundamental gateway to any further EIS actions.

189-A-2 Page 1-37: "Although views of transmission lines can negatively affect property values, studies are inconclusive on the duration of negative effects."

189-A-2 COMMENT: Please reference studies. I don't understand how property values are not negatively affected permanently unless land-use/zoning designations change (e.g from residential to industrial).

189-A-3 Page 1-38: "View obstruction or changes to viewpoints or visual resources could result from placement of new infrastructure."

189-A-3 COMMENT: Change "could" in above statement to "will" or describe scenarios in which new infrastructure would not result in any view obstruction or change in viewpoints.

189-A-4 Page 1-38: "Extent of impact would depend on the degree of contrast, number of viewers, duration of impact, and the sensitivity of the viewers."

189-A-4 COMMENT: Suggest adding: "For those with unobstructed views that would become obstructed with power poles and/or power lines the contrast would be high and obstruction permanent."

189-A-5 Page 11-1: "Specific potentially affected neighborhoods will be evaluated as part of the Phase 2 EIS."

Page 11-4: Section 11.2.3 Bellevue  
 Page G-1: Table with Bellevue documents listed

189-A-5 COMMENT: To help fully appreciate and understand the intent, importance and considerable effort put into protecting views in the Somerset neighborhood (Bellevue community) please recognize and refer to the following document in your current study and Phase 2 study.

[http://www.somerset98006.org/uploads/4/7/5/8/47585659/view\\_guidelines.pdf](http://www.somerset98006.org/uploads/4/7/5/8/47585659/view_guidelines.pdf)

- 189-A -1 See response for Key Theme OBJ-3.
- 189-A -2 See responses for Key Themes ECON-1 and ECON-2.
- 189-A -3 See response for Key Theme VR-1.
- 189-A -4 See response for Key Theme VR-2.
- 189-A -5 See response for Key Theme VR-2.

189-A-6

**Final Comments:**

Speaking as a Somerset neighborhood resident with a valued (and valuable) view, this is quite outrageous to even have to discuss. I would like to make the following points regarding the impact of this project on my neighborhood and beyond:

- 1) The only visible lines in this neighborhood are the existing lines along the pipeline. ALL other lines of any type are underground for good reason – to protect the view.
- 2) As referenced above, the Somerset community has adopted property covenants which require that we protect our neighbor's view lines. This entire neighborhood is fundamentally organized around the view. Homes were constructed to maximize it.
- 3) The proposed project not only impacts those with homes adjacent to the line but hundreds of additional homes.
- 4) We have regular visitors to the neighborhood who park on the public streets to enjoy the view, particularly on evenings with nice sunsets. We also have visitors on July 4<sup>th</sup> who climb the hill to enjoy fireworks displays from all around.
- 5) The view from below will make the hill appear industrially blighted and an eyesore to the public in general. Everyone passing by on I-405 and I-90 would be negatively impacted.
- 6) If this is approved, what is to stop PSE from constructing an even larger capacity, say 750 kV, line in the future, further disrupting views and property values?
- 7) Yes, as cities grow, more power is needed, but you don't see suspended high voltage lines running through urban residential areas. At some point it simply makes sense to put it underground.
- 8) A parcel of undeveloped land at the base of Somerset Place, adjacent to the Somerset Recreation Club has remained privately owned for some time. The potential for this project to obstruct the view from any home constructed on this parcel is high. This parcel went on the market within the last year and remains unsold in an otherwise booming market. Was the timing just coincidence or did the owner (unknown to me) realize better to try to sell now than risk power lines making the land significantly less attractive? I suggest this be investigated and incorporated into any further studies.

**Thank you!**

Peter K. Mansfield, Ph.D.  
 4568 Somerset Place, SE  
 Bellevue, WA 98006  
[petermansfield@comcast.net](mailto:petermansfield@comcast.net)

189-A -6 See responses for Key Themes VR-7, VR-1, and VR-2, and Key Theme ECON-1.

Speaker #23 Public Hearing Phase 1  
DEIS Bellevue 3.1.16

DEIS comments presentation: NEED

My name is Richard Kane and I'm a member of CENSE. I live at 6025.....

In Chapter 1.3 of the DEIS, PSE determines that "there is a need to construct a new 230kV bulk electrical transmission line." Despite their assertions, it is NOT a foregone conclusion that this project is needed. PSE states they ran thousands of scenarios. They have had independent analysis that shows they used the correct variables. However, the data they used in those variable slots was not reviewed and is, in fact, incorrect.

The Lauchhart-Schiffman load-flow study that has been provided to you highlights multiple flaws:

- 1) PSE submitted to the Western Electric Coordinating Council (WECC) a rate of growth in electrical demand of 0.5% per year. Yet in their justification for Energize Eastside they used 2.4% per year. This is almost 5 times greater than what they submitted to the federal agencies.
- 2) Transformer capacity is limited by overheating. The amount of electricity a transformer can handle is significantly less in the summer than in the colder winter months. PSE used summer normal load numbers which limit the electrical load to 700mW. By contrast, if winter emergency loads are used the peak load increases to 930mW.
- 3) It should also be noted that during this winter emergency, PSE has NONE of its 6 local generation plants in service. The 1,400mW of energy they generate is more than enough to cover any shortage.
- 4) PSE has included sending 1,500mW North to Canada during this emergency scenario. This is an untenable assumption on many fronts. Most models use 500mW and there is no federal mandate that requires this exaggerated amount of energy to be transferred North in an N-1-1 emergency. But the most absurd aspect of this scenario is that sending that much energy North during an emergent situation would cause blackouts in the entire Puget Sound Region, not just the Eastside. The WECC would never allow this to happen.

As Lauchhart-Schiffman illustrates, when the proper data is plugged into the variable slots of the modeling programs, there is no shortage until 2058. Energize Eastside is the wrong project and is aimed at the wrong issue. The only way it makes sense is if the primary goals are profit and the transmission of energy North-south. Perhaps that gives a better understanding of this memo dated 2/21/2013 from the ColumbiaGid to the WECC stating the Project Purpose is to "Improve South-to-North transfer capability between the Northwest and British Columbia" as the primary goal.

Suddenly, the NO BUILD option seems the most ...sensible!

*YOU CAN'T GET ENOUGH ENERGY ACROSS THE CASCADES TO KEEP THE LIGHTS ON + SEND THAT MUCH ENERGY NORTH*  
*THESE MEMOS: THE FIRST*  
*THE SECOND IS PSE'S 2013 ANNUAL REPORT TO WECC REGARDING TO THE 2011 REPORT ON TRANSMISSION EXPANSION TO SUPPORT WINTER*  
*REPORT TO WECC REGARDING TO THE 2011 REPORT ON TRANSMISSION EXPANSION TO SUPPORT WINTER*  
*HERE IS THE ORIGINAL LINK*  
*S -> N TRANSFERS*

- 190-A -1 See responses for Key Theme OBJ-3 and Key Theme EIS-1.
- 190-A -2 Comment noted.

190-A-1

190-A-2





ENERGIZE EASTSIDE: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

Comments submitted by Richard A. Kaner, MD. Member of CENSE.

6025 Hazelwood Lane SE

Bellevue, WA 98006

thekaners@comcast.net

Chapter 1.3 of the DEIS discusses PSE determining "there is a need to construct a new 230 kV bulk electrical transmission line" This is not an accepted fact despite PSE's assertions that the EIS is not to assess need and that need has been unequivocally established. The Lauckhart-Schiffman load-flow study dated February 18, 2016 shows multiple flaws in PSE's assumptions:

- 1) PSE submitted a rate of growth in energy demand of 0.5%/year to the federal agency Western Electricity Coordinating council (WECC). This is similar to that of the Seattle submission for their rapid growth in apartments and South Lake Union. For the EE project they submitted 2.4%/year which is closer to the population growth projections; NOT energy demand growth.
- 2) They used **summer normal** ratings for their existing transformers which limits load to 700mW. If **winter emergency** ratings are used (as they should be for this **WINTER EMERGENCY**) the loads increase 30% to 930mW.
- 3) PSE has turned **OFF** all 6 of their existing power plant generators during this **WINTER EMERGENCY**.
- 4) PSE has factored in sending 1,500 mW of power North to Canada during this **WINTER EMERGENCY**.

If the proper data is used, there is **NO SHORTAGE** until 2058. **40 years** further down the road!

In short, a project of this size is not needed and the NO BUILD OPTION (Alternative 4) actually becomes the most logical if the Eastside needs are the driving force. The fact, however, is that the Eastside needs are not the driving force; transfer of electricity to and from Canada and the profit to be made from that transfer are amongst the main reasons for Energize Eastside(EE). This is outlined in the 2013 Annual Report from PSE to WECC and the 2013 memo from ColumbiaGrid to WECC that I submitted 3/1/16 for the record. The latter states that the purpose of EE is to "improve South-to-North transfer capability between the Northwest and British Columbia."

I90-B -1 See responses for Key Theme OBJ-3 and Key Theme EIS-1.

I90-B-1

190-B-2

ALTERNATIVES:

In reviewing the alternatives proposed, the only alternative not preferable to Energize Eastside (1-A) is alternative 3 which would add a spider web of new wires. Use of the Seattle City Light (SCL) corridor (1-B) is preferable since it already exists and would have little additional impact on corridor size, trees and property values. We have been told that this is off limits since SCL will not grant access. Options to underground and submerge (1-C & 1-D) are preferable options that are safer with less impact on property and environment. We have been told flat-out that both of these options are cost prohibitive.

190-B-3

Therefore, if the NO BUILD option is dismissed and the project moves forward, I am in support of alternative 2 that is referenced in chapter 2.3.3. PSE has claimed in the DEIS that this option is risky and undesirable. In fact, the presentation of this alternative was not created nor evaluated by analysts familiar with the technologies and policies involved. I feel that an evaluation of the data shows that it is derived from studies that are now outdated with the rapid changes in technologies. As an example, the article on Forbes.com January 13, 2015 titled "Battery Revolution: A Technology Disruption, Economics and Grid Level Application Discussion with EOS Energy Storage." highlights the improvements in capacity and drop in prices seen with battery technology. Throughout this document, verbiage is used to magnify the possible impact of Alternative 2 and minimize the impact of Alternative 1-A.

PSE has been disingenuous raising the estimate of winter peak load from 123 mW in April 2015 to 205 mW mentioned in a recent memo without documentation of how they arrive at their figures. Energize Eastside 1-A certainly has capacity and the greater the shortfall the less desirable other options become.

Alternative 2 allows us to add improvements and capacity to the existing grid as needed. It won't involve tearing down 8,000 mature trees, disrupting the existing pipeline, invoking Eminent Domain with its significant associated costs and it avoids blighting the character of our neighborhoods. Since it doesn't rely on a single line, Alternative 2 is a more reliable alternative. The DEIS seems to minimize the benefits of Alternative 2 and minimize the adverse impacts of Alternative 1-A. We should be investing in 21<sup>st</sup> century technology to create a better energy future for our children and preserve our "city in a park."

190-B-4

SAFETY:

We live in a seismic zone and the fault line is the I-90 corridor. Chapter 8.5.1.3 talks only about earthquakes during construction. Why is there no discussion of risk after construction?

190-B-5

Dr. Frank Cheng's study on "Safety of Collocation of Electrical Power Lines and Pipelines" (on CENSE.org) discusses the arcing that can occur. We have citizens in the Bridle Trails Community who have dealt with this involving lower voltage lines after windstorms. Furthermore, his report discusses the effects of EMF accelerating metal corrosion.

190-B-6

The proposed route of Alt 1-A does not meet industry standards and federal guidelines for separation of these 2 entities-power poles and gas lines. Any type of disruption from corrosion, earthquake or

- 190-B -2 See response for Key Theme ALT-1.
- 190-B -3 See responses for Key Themes ALT-1 and ALT-3.
- 190-B -4 See responses for Key Themes PLS-1 and EARTH-1.
- 190-B -5 See response for Key Theme PLS-3.
- 190-B -6 See response for Key Theme PLS-3.

190-B-6 | terrorist action is a recipe for disaster. Have we already forgotten the lessons of the 1999 Bellingham pipeline disaster?

190-B-7 | EMF effects on humans are hard to prove and controversial. There are multiple articles in the medical and general literature discussing EMF. While it is difficult to get a study population large enough to show statistical significance, many authorities agree that EMF proximity is associated with increased numbers of bone marrow cancers in growing children and brain cancer in adults. If EMF accelerates metal corrosion, it is hard to imagine no impact upon the human body. The DEIS fails to adequately discuss this controversy. Certainly, regardless of your position, this should be part of an environmental assessment. Beyond people's home, these lines will run in close proximity to at least 2 schools.

The discussion of Alternative 1-A again minimizes these risks which are nearly non-existent in Alternative 2.

ENVIRONMENT:

190-B-8 | Chapter 6.6.3.1.1 describes impacts on widening the corridor in Alternative 1-A. I cannot overemphasize the impact of losing 8,000 trees (roughly 500 trees/mile) and clear-cutting 327 acres of vegetation (11.6.3.5.1). Whether you look at impact on carbon footprint, animal habitat, noise buffering, water and soil stabilization or the destruction of neighborhood character and addition of visual blight, "significant" just doesn't do justice to the devastating impact and permanent damage to Eastside neighborhoods.

Alternative 2 avoids this horrific impact by utilizing and upgrading existing infrastructure.

NEIGHBORHOODS:

Bellevue is touted as a "City in a Park." The surrounding Eastside cities of Redmond, Kirkland, Newcastle and Renton take equal pride in their lush greenery and surrounding beauty. Chapter 10.7.3.1.2 under-emphasizes the need to invoke Eminent domain to widen the corridor. In addition to removing these homes from the tax base, a whole new group of homes will now border the corridor and suffer depreciated values. The DEIS is deficient in that it minimizes the true impact of Alternative 1-A on lost revenues to the cities and lost value to the Eastside neighborhoods.

190-B-9 | In 10.7.1.4, the DEIS uses 1 study by The Electric Power Research Institute (EPRI). This study was prepared by the power industry, which has a vested interest in property not being devalued by transmission lines, and does not use recognized real estate experts. Using that study, the DEIS declares that impacts on values are "inconclusive" even while they cite 10 aspects that can have impact on values. Over half are negative and apply to the situation at hand. In their discussion, they acknowledge that an ~6% depreciation could be expected and further quote their sources as stating that "*Higher-end properties are more likely to experience a reduction in selling price than lower end properties.*" The Eastside is by any measure considered higher-end. How is that inconclusive and how hard is it to extract real estate data on home values in our area when a new corridor is created. This is, in fact, the situation when by Eminent Domain the corridor is widened, existing homes are destroyed and new

190-B -7 | See responses for Key Themes EMF-1 and EMF-3.

190-B -8 | See response for Key Theme ALT-1.

190-B -9 | See response for Key Theme ECON-1.

COMMENT

RESPONSE

- I90-B-9 | homes become adjacent to the corridor when before they were buffered from it. The DEIS fails to address this issue and trivializes a major issue impacting most people’s largest investment.
  
- I90-B-10 | Chapter 11.6.3.5.3 discusses pole height going from the current 65 feet to the proposed 85-135 feet. This will impact the entire Eastside. These poles exceed the height of the tree canopy in many places and blight the views of many homes at varying heights including high-rise condos being constructed in downtown Bellevue. People on East Mercer Island will be seeing these poles and wires and are already expressing concern. This amounts to a much greater impact than the 100 lots/mile referenced in the chapter.
  
- I90-B-11 | While the impact of Alternative 1-A is consistently downplayed, 10.7.4.2 acknowledges the negligible land use impact of Alternative 2. If EE is to be built, Alternative 2 is the only option that consistently has minimal impact while allowing for growth in load to be met with augmented supply and flow using smart grid technologies, demand-side management and distributed energy resources.

- I90-B -10 See response for Key Theme VR-1.
- I90-B -11 See response for Key Theme ALT-1.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                         | Timestamp            | First Name | Last Name |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I90-C-1 | The DEIS discusses how the different identified pieces of Alternative 2 don't satisfy the shortage predicted by PSE. This is discussed in Chapter 2.3.3 and expanded further in 2.4.2, 2.4.3 and 2.4.5. In light of the Lauckhart-Schiffman report, it is clear that all of these options should, indeed, be back on the table. | 3/5/2016<br>20:24:11 | Richard    | Kaner     |
| I90-C-2 | It is further disappointing to see that PSE sold the Schuffleton Peaker Plant, pocketed the money and now predicts shortages. At a minimum, PSE should be obligated to contribute the proceeds of that sale to the upgrade of the grid.                                                                                         |                      |            |           |
| I90-C-3 | The DEIS is deficient in that the discussion of the components of Alternative 2 was done without the input of experts in these respective fields.                                                                                                                                                                               |                      |            |           |

- I90-C -1 See response for Key Theme ALT-1.
- I90-C -2 See response for Key Theme ECON-4.
- I90-C -3 See response for Key Theme EIS-1.

Speaker #14 Newcastle Public Hearing  
Comments Submitted 2.27.16

Oral and written remarks concerning the draft EIS for Energize Eastside  
Submitted by Gary Cliff on 2/27/16 at the Newcastle Elementary School

.....

My name is Gary Cliff and I have lived at 8435 128<sup>th</sup> Ave. SE in the Olympus subdivision of Newcastle for the past 18 years. I retired 2 years ago after working 38 years in the IT industry. I want to thank you in advance for giving me the opportunity to express my concerns.

I have many concerns regarding the Energize Eastside project, but due to the time constraints, I will only focus on two.

191-A-1

My first concern is very fundamental and straight forward – Is Energize Eastside really needed? PSE conducted a Load Flow study which is the definite study for justifying the need for this project. Such critical data must be scrutinized and challenged when necessary. It should not be taken at face value as factual. CENSE has teamed with nationally recognized power and transmission experts with specific knowledge of the Northwest power grid to conduct a Load Flow study to validate PSE’s findings. The result of this study contradicts many of PSE assumptions and conclusions regarding need. CENSE has submitted this document for your review and I am asking that MS. Bedwell and team provide a written response to our citizens detailing your areas of agreement or disagreement regarding the CENSE study.

191-A-2

I am also concerned with the safety of this project regarding the installation and removal of poles and other construction activity so close to a petroleum pipeline. I know PSE states they have done this before and not to worry. My guess is the citizens of Bellingham were also told not to worry and we know how that turned out. I have no idea of the probability of a catastrophic event similar to Bellingham’s, but even if it is a fraction of 1 percent, it is too high a risk to take with our lives and property.

191-A-3

My concluding remarks are directed towards the decision makers in this process, the city councils and various other administrators representing us. Very few people in their careers have the opportunity and responsibility to make a decision that is truly meaningful and impactful. Whether you want to or not, the choices you make this year will leave a lasting legacy. It will be either be a positive legacy that you will be proud of in the years to come because you stood up against a large corporation that did not have the best interests of its customers at heart, or you will leave a negative legacy of 18 miles of hugh poles and wires that were not needed. How will you explain to your children and grand children that you did not make the tough decisions when so many people were relying on you?

And please remember that the citizens of the East Side expect you to do your duty. Thank you.

- 191-A -1 See response for Key Theme OBJ-3.
- 191-A -2 See responses for Key Themes PLS-1 and PLS-2.
- 191-A -3 Comment noted.

Speaker # 13 Newcastle Public  
Hearing Comment 2.27.16

GOOD AFTERNOON MY NAME IS WARREN HALVERSON AND I RESIDE AT 13701 NE 32<sup>ND</sup> PLACE. I AM A MEMBER OF THE COALITION OF EASTSIDE NEIGHBORHOODS FOR SENSIBLE ENERGY.

MY PURPOSE IS TO SHARE WITH YOU THREE MAJOR CONCERNS THAT I HAVE WITH THE EIS PROCESS (I KNOW YOU WILL THINK ONLY THREE BUT I HAVE ONLY 3 MINUTES).

FIRST, THE CURRENT DEIS DOES NOT MEANINGFULLY CONSIDER THOSE CITIZEN COMMENTS WHICH WERE PROVIDED IN THE *DRAFT 1 EIS SCOPING SUMMARY AND FINAL ALTERNATIVES CITY OF BELLEVUE, 2015. (SEE ITEM 2 P1-15 DEIS INTRODUCTION AND SUMMARY).*

FOR EXAMPLE, IN THE SCOPING DOCUMENT, CITIZENS IDENTIFIED 10 KEY COMMUNITY ISSUES TO HELP GUIDE THIS DEIS (PGS 67-92 & FIG 4). FOUR ARE NOT CONSIDERED AND THE OTHER SIX ARE LIGHTLY COVERED AND BURIED IN THIS 715 PAGE DOCUMENT.

FURTHERMORE, IF YOU READ THE INTRODUCTION TO THE SCOPING DOCUMENT, IT CONCLUDES (AND I QUOTE): ‘IN GENERAL MOST COMMENTS EXPRESSED CONCERN OR OPPOSITION TO PSE’S PROPOSAL.’ THEN ON PAGES 73-77 .... “THE MAJORITY OF COMMENTS INDICATED A LACK OF SUPPORT FOR ALTERNATIVE 1 .... MANY SUPPORTED ALTERNATIVE 2 OR SOME ASPECT OF IT”.

I92-A -1 See response for Key Theme EIS-2.

I92-A-1

COMMENT

RESPONSE

PAGE – 2 DEIS COMMENTS BY W. HALVERSON

192-A-1 AS I READ THE 715 PAGES, THESE ISSUES AND CONCLUSIONS ARE NOT AT ALL EVIDENT. THIS IS CONTRADICTORY TO YOUR DEIS INTRODUCTORY STATEMENTS. REFERENCE 1.6 AND 1.7.

192-A-2 FRANKLY, IF YOU ARE NOT GOING TO FULLY CONSIDER THE COMMUNITY TESTIMONY OR EVEN YOUR OWN CONCLUSIONS ABOUT ALTERNATIVES, THE DEIS METHODOLOGY APPEARS BIASED AND FLAWED.

192-A-3 SECONDLY, WHILE THE COMMUNITY DID RECOMMEND SEVERAL ALTERNATIVES, -- PARTICULARLY ALTERNATIVE 2 – THE DEFINITIONS ARE LACKING IN THE DEIS. IN ADDITION, THE INTEGRATED RESOURCE ALTERNATIVE IS SCALABLE AND PROVIDES UNIQUE OPPORTUNITIES TO COMBINE SOLUTIONS. THE DEIS PROVIDES NO INSIGHT INTO A COMBINATIONS OF THESE SOLUTIONS. FINALLY, IN EVALUATING

192-A-4 ALTERNATIVES AGAINST THE ELEMENTS, THE DEIS USES CATEGORIES OF MINOR, MODERATE AND SIGNIFICANT. THIS PROVIDES A VERY BROAD BASIS OF EVALUATION. THE ASSESSMENT THEN INCORPORATES LAWS, REGULATORY ENVIRONMENT, ALL SORTS OF MITIGATION, (PARTICULARLY RELATED TO ALTERNATIVE 1) AND EVEN POSITIVE COORDINATION OF WORK GROUPS. IN MY OPINION RATHER THAN CLARIFYING ALTERNATIVES THIS SKEWS ALL RATINGS TOWARD MINOR

192-A -2 See response for Key Theme EIS-1.  
 192-A -3 See response for Key Theme ALT-2.  
 192-A -4 See response for Key Theme ALT-2.



PAGE 3 - DEIS COMMENTS BY W. HALVERSON

THIS SKEWS THE EVALUATION TOWARD ALTERNATIVE 1. IT CERTAINLY APPEARS THEN THAT ALTERNATIVES ARE NOT BEING ANALYZED AT A PROPER LEVEL OF DETIAL OR IN A COMPARABLE MANNER.

192-A-4

FINALLY, MINDFUL OF THESE CONSIDERATIONS AND THE IMPORTANCE OF THIS DEIS, MY THIRD COMMENT IS ACTUALLY A SUGGESTION. THE EIS TEAM SHOULD INITIATE A REVIEW PROCESS BY THE PUBLIC OR AN UNBIASED HEARING EXMINER ONCE THE EIS TEAM HAS INCORPORATED PUBLIC INPUT.

THANK YOU.

  
WARREN HALVERSON  
13701 NE 32<sup>nd</sup> PLACE  
BELLEVUE, WASHINGTON 98005  
2/29/2016

March 9, 2016

Ms. Heidi Bedwell, Senior Planner  
 Land Use Division – Development Services, City of Bellevue  
 450 110<sup>th</sup> Avenue NE  
 Bellevue Washington 98004

RECEIVED  
 MAR 15 REC'D  
 Development Services

Re: Comments concerning DEIS process for Energize Eastside

On behalf of myself and CENSE, I am writing you to share three major concerns that we have with the EIS process.

First, the current DEIS does not meaningfully consider those citizen comments which were provided in the Draft 1 “EIS Scoping Summary and Final Alternatives City of Bellevue, November 2015” (See Scoping Item 2 & pgs 1-15; Also, “DEIS Introduction and Summary 1.7 1-16 & 18).

For example, in the scoping document, citizens identified 10 key community issues to help guide this DEIS (pgs 67-92 & Fig 4). Four are not considered and other six are lightly covered and buried in this 715 page document.

192-B-1

Furthermore, if you read the introduction to the scoping document, it concludes: “In general, most comments express concern or opposition to PSE’s proposal i.e. Alternative 1a”. Then on pages 73-77: “The majority of comments indicated a lack of support for Alternative 1 .... Many supported Alternative 2 or some aspect of it”.

Within the 715 pages, these issues and conclusions are not at all evident. This totally contradicts the DEIS introductory statements in Sections 1.6 and 1.7. And, frankly, if you are not going to fully consider community testimony and/or even your own conclusions about alternatives, one must conclude that the DEIS is very biased and flawed.

192-B-2

Secondly, while the community did recommend several alternatives – particularly Alternative 2 – the definitions in the DEIS lack specificity. The DEIS team should seek out expertise to fully define and explain these non- transmission alternatives. It is apparent that these alternatives are the least costly and most scalable providing a unique opportunity for PSE to meet its objectives while adapting to a rapidly changing electrical industry environment.

192-B-3

Finally, in evaluating alternatives against the elements, the DEIS uses categories of “Minor”, “Moderate” and “Significant”. The definitions of these categories are very broad, so broad that one cannot use them to meaningfully evaluate the alternatives. This assessment is further diluted by including all sorts of mitigative actions. The mitigation includes almost everything imaginable, for example, laws, codes, regulations and even

- 192-B -1 See responses for Key Themes EIS-1 and EIS-2.
- 192-B -2 See responses for Key Theme EIS-1 and Key Theme ALT-2.
- 192-B -3 See responses for Key Themes EIS-1 and EIS-3.

Page 2 Comments concerning DEIS process for Energize Eastside

192-B-3

coordination amongst work groups. This is especially true as to the evaluation of Alternative 1a. The cost of mitigation in this DEIS is no-where to be found. Rather than clarifying alternatives in Section 1 Tables 1, 2, & 3 pgs 1-51 thru 55 , the evaluation of alternatives then is creatively skewed toward Minor. Therefore, one concludes alternatives are not being analyzed at a proper level of detail or in a comparable manner.

192-B-4

I hope you will take my constructive criticism as being useful in developing a more objective DEIS. Thank you!

Sincerely,



Warren E. Halverson  
13701 NE 32<sup>nd</sup> Place  
Bellevue Washington 98005

192-B -4 Comment noted.

**Liv Benson**

**From:** whalvrsn1@frontier.com  
**Sent:** Monday, March 14, 2016 1:38 PM  
**To:** info@EnergizeEastsideEIS.org  
**Subject:** DEIS comments Property Values and Property Tax Revenues  
**Attachments:** PSE - DEIS Comment - Pvalue.docx

Dear Ms. Bedwell:

I92-C-1

Please accept my attached comments concerning Energize Eastside's DEIS - Property Values and Property Tax Revenues. These subjects are totally lacking in coverage and show an extreme bias to Alternative 1a, thus making comparisons between Alternatives in adequate and in an unequal manner

Thank you

Warren E. Halverson  
 13701 NE 32nd Place  
 Bellevue Washington 98005

sent on March 14th @ 1:37 p.m.

I92-C -1 See responses for Key Themes ECON-1 and ECON-2.

March 11, 2016

Ms. Heidi Bedwell, Senior Planner  
 Land Use Division – Development Services, City of Bellevue  
 450<sup>th</sup> Avenue NE  
 Bellevue, Washington 98004

Dear Ms Bedwell:

I would like to comment on your DEIS evaluation of the cost impacts on property values (Chapters 10.7.1.4 pgs 21& 22 & 11.6.1.4.9 pgs 29-30); property tax revenues (Chapters 15.6.4.5 pg 20); and, the great omission. I am a 40 year resident of Bellevue and an active member of the Bridle Trails Association; Canter Greens HOA, and Coalition of Eastside Neighborhoods for Sensible Energy.

Property Values (Chapter 11.6.1.4.9 pgs 29-30)

This issue seems to be minimized (dismissive in fact) as it is tucked away in the “Views and Visual Resources” and “Land Use and Housing” Chapters. It seems strange that so little ink is spent on such a major issue. The DEIS analysis is almost exclusively based upon a study done by The Electric Power Research Institute (EPRI) titled “Transmission Lines and Property Values: State of Science” in 2003 and another obscure author named William N. Kinnard Jr from 1990. Using such biased sources it is not surprising that they conclude that property values are minimally impacted and that impact dissipates over time. (This conclusion sounds very familiar to PSE’s arguments before the Hearing Examiner concerning the Lake Hills 148<sup>th</sup> Transmission Line proposal; and, contrary to local real estate brokers and homeowners. I find this unusual.)

I would request that you consider property values in the context of current and local analysis and studies. For example, if you talk with the Northwest Broker’s Association, they will tell you the impact on property sales/values is huge, including major discounts in price to a complete unwillingness of some brokers to show the property. In talking to the King County Assessor’s Office, many property owners have been told that while one really needs to analyze each property individually, the discount will be somewhere between 10 % - 30%. You can verify this by speaking to the appellate group at King County or independent consultants like Hoppe & Associates. Obviously, this analysis should be completed in the full context of 230KV lines located “on top of” two major pipelines owned by Olympic Pipeline and located in the same easement.

I92-C-2

I92-C -2 See responses for Key Themes ECON-1 and ECON-2.

**P. 2 DEIS comments about Property Values and Revenues**

While this analysis is very biased to support Alternative 1a, the DEIS must be factual. Alternative 1a will impact 500+/- homes valued @ \$1,000,000 @ say 20%. Do the math?

Finally, The DEIS analysis hides some interesting issues such as clear zones and the use of eminent domain. The impacts of these actions need to be addressed to truly compare alternatives e.g. How many houses will you need to condemn and at what price if 1a is selected?

Property Tax Revenues (Chapters 15.6.4.5, pgs 20-21)

Much of the aforementioned conclusions are applicable to property tax revenues and the financial impact is significant. The analysis of the property tax impact on the city's revenues is very confusing. It, too, is incomplete and incorrect. The major conclusion is: "... The impact of Alternative 1a on Bellevue's \$35 million dollar budget is small and would not affect the Cities' ability to adequately fund public services." This analysis shows a budgetary reduction of \$9800 which is based upon a \$10,000,000 reduction in property values. Once again, this whole analysis is slanted, favoring Alternative 1a.

A more thorough analysis would develop the facts and vet the assumptions. A more thorough analysis would complete a "Best case" and "Worst case" scenario of the number of properties and houses impacted and the decrease in assessed value plus the value of possible condemnations. It is totally unrealistic to assume that property owners along this route will not challenge their property tax assessments under a 1a scenario. Therefore, it is the duty of the authors to be as factual as possible in representing these facts to citizens and cities. Don't be surprised if the \$9800 number actually is more like \$100K or more.

In conclusion, the analysis of the impacts to property values and property tax revenues is totally inadequate and biased. Unless a further fact based local analysis with detailed assumptions is made one can only conclude that these topics are dealt with in such a biased manner that alternatives are not being compared equally.

Sincerely

Warren E. Halverson; 13701 NE 32<sup>nd</sup> Pl; Bellevue, Washington 98005

192-C-2

Speaker #1 Newcastle Public Hearing  
Comments 2.27.16 /

Comments Regarding Energize Eastside EIS

Dr. Anthony(Tony) Sutey – Retired Engineer

8117 128<sup>th</sup> AV SE  
Newcastle, WA 98056

RECOMMENDATIONS:

REJECT Alternative 1  
ACCEPT Alternative 2

BASIS FOR REJECTION of Alternative 1

Recently two Deal Breakers associated with Eastside Power Demands have “Come to Light” which justify rejection of Alternative 1.

- 1) The Northwest Power and Conservation Council 20 Year Plan(Seattle Times-Feb 10, 2016)  
-“By investing in energy efficiency.. we’ll be able to grow without an aggressive program to build new power generation resources and keep Northwest electricity rates low”.  
-Since 1995 annual energy loads grew at a rate of only 0.4 %.

Therefore, why does PSE need to construct major new 230kV power lines 80-100-130 feet high through our residential areas impacting our homes and environment?

- 2) The Lauckhart-Schiffman Load Flow Study (Sponsored by CENSE.org)  
- Existing distributed grids using critical transformers operating at only 85% of winter emergency ratings provide enough capacity for Eastside growth for the next 20 to 40 years.  
- Analysis used a power growth rate of 0.5% per year which is the number provide by PSE to WECC and is consistent with the 0.4% projection of the Northwest Power and Conservation Council  
- Contrast with the 2.4% growth per year used by PSE to justify Alternative 1.

Further Analysis

PSE assumes all new power demands are electrical only and refuses to consider natural gas to supply more efficiently a major portion of energy for home and commercial heating in the winter (and air conditioning in the summer) without the need for additional high voltage electrical power lines

PSE Demand Study Conclusions

- Overstates demand by 5 times.
- Inconsistent with NW Power and Planning Council and Lauckhart- Schiffman studies.
- Undervalues existing power grid components and sub-elements.
- Triples power transmission to Canada from 500MW to 1500MW to justify needs
- Inconsistent with NW Power and Planning Council and Lauckhart- Schiffman studies.
- Fails to include the role of natural gas to meet power demand.
- Lifetime Cost \$1.4-2.0 Billion

This is not rocket science- this can be understood by all of us!! The Power Demand and Needs analysis by PSE is irresponsible!! Power Demands do not justify Alternative 1. PSE has provided bogus and inflated analysis to justify a \$1.4 -2.0 Billion capitalization project which will result in a 9.8% Windfall Profit (allowed by the WUTC) for their offshore owners—paid by PSE rate payers!!

193-A -1 See response for Key Theme OBJ-3.

193-A-1

2

193-A-2

3)ALTERNATIVE 1 Will Cause Major Environmental and Loss of Home Value Impacts

Option A (PSE Preferred Option)

- Increases existing power lines from 115kV to 230kV over an existing dual petroleum pipeline
- Increases power line height from 70 to 85-100-135 feet
- Widens the power line right-of-way by 20 to 50 feet.
- **Devalues and removes homes** and businesses along the 18 mile route from Renton to Newcastle to Bellevue to Redmond
- **Directly devalues our home** at 8117 128<sup>th</sup> AV SE, Newcastle which overlooks the power lines by at least 20% and possibly more if the homes along the east side of 128<sup>th</sup> AV SE are removed.
- **Substantially increases the risk** for loss of property and life due to potential earthquakes associated with the Seattle Fault Line which crosses major portions of the combined power line/petroleum line
- If we survive the earthquake—not sure if we will survive the explosions and fireball?? -Ha

193-A-3

Further Discussion:

- The EIS does not address the effect of doubling the voltage over the pipeline
- Safety of the pipe line and the powerlines are evaluated separately
- Analysis is required to evaluate scenarios considering the combined hazards associated with the simultaneous rupture of the dual pipeline and the power lines/towers under the event of an earthquake along the Seattle Fault Line

193-A-4

Conclusions regarding Environmental/Home Value Impacts:

-Why should we as citizens and rate payers be asked to pay for the environmental impact and devaluation or loss of our homes and communities for the Alternative 1-Option A project that is not needed and has not been justified!! Alternative 1 Options B, C, and D are also rejected since they are not needed.

**CONCLUSION REGARDING ALTERNATIVE 1 - REJECT**

BASIS FOR ACCEPTANCE OF Alternative 2

193-A-5

- Includes Energy Efficiency, Demand Response, Distributed Generation, Energy Storage and Peak Generation
- Cost effectively meets future power needs of the Eastside with low environmental impacts and minimum loss of home and community values.

SUMMARY

**REJECT Alternative 1**  
**ACCEPT Alternative 2**

- 193-A -2 See responses for Key Theme ECON-1, Key Theme EARTH-1, and Key Theme PLS-2.
- 193-A -3 See responses for Key Theme PLS-2 and PLS-4, Key Theme EMF-4, and Key Theme EARTH-1.
- 193-A -4 See responses for Key Themes ECON-4 and ECON-1, and Topic OBJ.
- 193-A -5 See responses for Key Themes ALT-1 and ALT-3.



*Speaker #12 Newcastle Public Hearing comment 2.27.16*

Sue Stronk  
 12917 SE 86th Place  
 Newcastle, WA 98056

The DEIS states the “need” for the project is already determined. The Lauckhart Schiffman load flow study disagrees. This process should be halted now and reviewed by a Hearing Examiner to determine the **NEED** before proceeding.  
 No need—no problem! No project!

194-A-1 When the story changes, so does the need!  
 PSE said 1500 MW of power was needed to Canada. Dan Koch said this project is not about Canadian power—that would be sent outside this area. The USE study said without power to Canada there may be a shortage of 74 MW. Alternatives can supply this minimal power **safely**—without condemning homes, destroying neighborhoods and degrading home values.  
**Technical expertise** in evaluating alternatives is lacking in this DEIS.

194-A-2 Hiring PSE contractors to make this document is a conflict of interest. PSE footprints are all over this 715 page document. PSE’s favored route through Olympus is rated “**significant impact**” in many categories—however with a few tiny words—all is dismissed. Such as **safety risk** along the gas pipelines is minimized by saying “**safe practices will be employed**”.

The Olympus corridor is “**most significantly**” affected by home acquisition. Yet mitigation says “**PSE will assist in relocation**”.

194-A-3 Experts in electromagnetic interference, causing pipeline corrosion, need to be hired. Power and pipes —running parallel

- 194-A -1 See response for Key Theme OBJ-3.
- 194-A -2 See response for Key Theme EIS-2.
- 194-A -3 See responses for Key Theme EMF-1 and Key Theme PLS-3.

- 194-A-3
— is off the charts at 5000 feet for causing corrosion—yet PSE’s favored solution will parallel this scenario for 16 of the 18 miles.
- 194-A-3
If EMF’s corrode pipes—then there has to be EMF damage to humans. What are safe distances from wires to homes—especially now that poles are lowered to 85 feet?
- 194-A-4
It is obvious already— the document is biased—that Alternative 1-option A will be the DEIS favorite to proceed for construction.
- 194-A-5
**Define the NEED first— before you fast forward to a solution.**
- 194-A-6
An over-scaled, over-priced, unnecessary project— paid for by ratepayers — **is nothing short of consumer fraud!**

I am a CENSE member and Board member!

- 194-A -4 See response for Key Theme EIS-2.
- 194-A -5 See response for Key Theme OBJ-1.
- 194-A -6 See responses for Key Theme ECON-4 and Topic OBJ.

*Speaker #15 Public Hearing Phase 1 DEIS  
Bellevue 3.1.16*

Sue Stronk ---12917 SE 86th Place--- Newcastle, WA 98056

My neighbors are here tonight —the Elworths. We live 100' apart— adjacent to the Olympic Pipeline corridor in Newcastle and have been neighbors for the past 28 years. If PSE has their way—**one of us will stay— and one will go!**

—I have watched Lori and her husband, Brian, raise their two kids— Daniel and Mary—from infants through high school and college graduation. **That is a generation!**

—We have been there for each other over the years and work together on the Olympus Homeowners Board.

—We re-established Block Watch and put on the annual neighborhood garage sale.

—We share outdoor movies and evenings around a campfire- in the back yard or camping on Hood Canal.

—We host neighbors, for the National Night Out event, on our front lawns as well as drink wine together at the annual Wine, Women, and White Elephant party at Christmas.

—We are friends!

This is Neighborhood Character that PSE will shatter!

PSE's favored route along this corridor will take one of our homes— and probably another 25— to accomplish an un-needed project. It is the **duty** of the DEIS and Bellevue's **obligation** to halt this process and have Rich Lauckhart — meet with PSE's experts— before the WA state EFSEC—to settle the NEED of this project once and for all. You cannot accept blindly that PSE speaks the truth— when there is evidence to the contrary.

**Be accountable now or face this in court.**

194-B -1 See response for Key Theme LU-1.

194-B-1

Neighborhood destruction rates “**Significant**” in your impact rating!

194-B-2

“**Unacceptable**” is our response. PSE’s favored route is the most dangerous and most destructive of all the plans by placing the project along the pipelines— mixing tall towers and deep footings underground all in an earthquake fault zone. “**INSANE**”-is the word!

194-B-3

If rate payers are charged for an over-scaled, over-priced and unnecessary project—it is nothing short of **consumer fraud!**

Lori and I sign Birthday and Holiday cards as “your neighbor for life”.

**AND we intend to remain that way!**

194-B -2 Comment noted.

194-B -3 See responses for Key Theme ECON-4 and Topic OBJ.

From: [Sue Stronk](#)  
 To: [Energize Eastside EIS](#)  
 Subject: PSE EE DEIS comment  
 Date: Friday, March 11, 2016 8:43:26 PM

March 11, 2016

Comments from:  
 Sue Stronk  
 12917 SE 86th Place  
 Newcastle, WA 98056

I am a CENSE board member and incorporate my comments with CENSE President Don Marsh. I live in the Olympus Neighborhood in Newcastle.

194-C-1

1. First-- the project NEED has to be defined since the story keeps changing by PSE. If there is NO NEED, there is NO PROJECT! Therefore, the No Action Alternative has to be selected. The CENSE Lauckhart-Schiffman load flow study will prove that.

194-C-2

2. If when Lauckhart-Schiffman and PSE can agree to a NEED—then the project should be scaled to that for finding a solution. 1500MW of power is not needed to Canada. PSE admits—power to Canada would not go through this area. This is a “local” project says the FERC complaint filed by CENSE. Any small need should be addressed by Alternative 2: Integrated Resource Approach. However these methods outlined in the DEIS are not the most reasonable solutions and to PSE’s credit—they dismiss them as viable. Further study needs to be done to find proven reliable methods now being used in other US cities. CENSE will provide some info on what could be used. These 21st century methods can address needs incrementally without overbuilding an unsafe, and environmentally destructive project which we will have to live with for decades. Only PSE ratepayers will be happy by overbuilding an unnecessary scaled project. Not the local PSE ratepayers paying for it for years!

194-C-3

3. Alternative 1-Option B—using the Seattle City Light Corridor or obtaining power from them is a viable option. Under FERC 1000- utilities should work together as one to solve needs. That should be enforced if workable. In the CAG—this was the supposed number one choice—PSE preferred to use but only said SCL would not grant them use here. FERC should force this co-location.

194-C-4

4. The worst possible option is Alternative 1-Option A—along the Olympic Gas Pipeline for safety reasons, home acquisition for widening the ROW and devaluation of remaining homes, and destroying residential character --of tall steel poles right through a dense residential neighborhood. All destroying 8000 trees and 327 acres of vegetation. Risking pipeline explosions, leaks and making further corrosion problems by EMF’s over the aging gas pipelines.

194-C-5

- 194-C -1 See responses for Key Themes OBJ-1 and OBJ-3.
- 194-C -2 See response for Key Theme ALT-1.
- 194-C -3 See responses for Key Theme ECON-4 and Topic OBJ.
- 194-C -4 See response for Key Theme ALT-1.
- 194-C -5 See responses for Key Themes ALT-1 and ALT-3.

COMMENT

RESPONSE

194-C-6 | Best scenario—PSE abandons their 115kV corridor altogether along the  
194-C-7 | pipelines and sells the ROW to Olympic Gas Pipeline. PSE puts their  
power under the lake in cables out of sight and Olympic can reconstruct  
their corroding pipelines. And we all live happily ever after!

194-C -6 See response for Key Theme LU-2.  
194-C -7 Comment noted.

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March 2016

Comments from:  
Sue Stronk  
12917 SE 86th Place  
Newcastle, WA 98056

My comments on PSE Energize Eastside DEIS.

I am a CENSE Board member and I am incorporating by reference to CENSE documents submitted by CENSE President Don Marsh.

First and foremost—This project is **NOT NEEDED!** Lauckhart-Schiffman load flow study proves that and DEIS needs to address and answer **NEED!** This DEIS needs to pause and have a Hearing Examiner now review and determine if this project should continue to save time and money for all involved. PSE cannot continue to hide—they need to be transparent and should welcome our concerns since we will be paying for the project. If all is above board—PSE should have no worries. Honesty is always the best policy.

Answer now or answer in court. If this project proceeds over-scaled, over-priced and unnecessary —it will be nothing short of consumer fraud! Access to PSE's load flow study cannot continue to be denied.

**I will address the DEIS. My comments are mostly related to the insanity of Alternative 1 - Option A —co-locating new wires and related construction within an existing pipeline corridor, in an earthquake fault zone, all within a dense residential area!! INSANE!!! This is where I live!**

**I AM DEEPLY CONCERNED ABOUT ALTERNATIVE 1-OPTION A**—overhead solution using the existing PSE 115kV power corridor paralleling the Olympic Gas Pipelines. Both cut through my Olympus neighborhood and adjacent to my house. Safety is the primary concern! If this "preferred route" of PSE's is chosen, I stand to loose my house as well as a row of 25 more homes adjacent to this corridor as outlined in this EIS summary in the Olympus neighborhood alone. Maybe 2 rows of homes will go—since it is not identified how or where PSE would be obtaining the defined extra 20'-50' of right of way space to accomplish this construction since the gas pipelines run the center. The EIS study defines this corridor as able to be "safely" mitigated. I totally disagree!

Any construction of this magnitude along this corridor— even with widening the ROW —will not be safe in this close proximity to residents with construction vehicle weight over these aged gas lines and the drilling of footings 25'-50' deep along this corridor with poles 85'-100' in height. The result, in this residential neighborhood, is totally out of character—this area is zoned residential not industrial. With so many options outlined here—this will be one of the most dangerous and costly to execute—hard to argue eminent domain of our properties. You have other less destructive choices—IF this is **NEEDED** at all!

My comments are directed to how my neighborhood and the city of Newcastle will be impacted by such an ambitious, unnecessary, over-scaled, and expensive project—which will be charged back to us—the PSE ratepayers—at a rate of return of almost 10%—granted by the WUTC!

I94-D -1 See response for Key Theme OBJ-3.

I94-D-1



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Wouldn't we all like that return for our investments. PSE—a foreign owned entity from Australia —will award their shareholders at our expense. PSE could care less if they spend more money —they will just profit more in the end. But the only oversight they see is AFTER the project is completed—they go before the WUTC—which can deny project costs if not prudent and reasonable. Which the UTC has never done—until perhaps this project will result in a lawsuit at that level if it gets that far. PSE however, has had many safety violations imposed on them by the WUTC—I'm sure they are on their radar!

Here is a list:

- [?] 2007: the UTC fines PSE \$1 million for illegally selling 65,000 customers' private data to an outside marketing firm;
- [?] 2008: the UTC fines PSE \$1.25 million for intentionally falsifying gas pipeline safety inspection records over the course of 4 years, the biggest fine ever imposed on a utility in Washington State;
- [?] 2008: PSE settles with the UTC for \$500,000 for failing to resolve 67 gas pipeline safety violations dating back to 2003;
- [?] 2010: fined again \$250,000 for violating an order to correct specific customer accounts;
- [?] 2011: fined again another \$104,300 for continuing the same violations among low-income customers;
- [?] 2012: fined again \$430,000 for improperly charging residential disconnect-visit fees;
- [?] 2013: fined again \$275,000 for violating gas-safety rules when responding to gas leaks in Seattle, where due to those violations a family's house exploded -- fortunately, nobody was killed;
- [?] 2014: just last month, December 14, the Attorney General sued PSE, claiming this "private utility's ... profit margins are unjustifiably high. Customers are collectively being *overcharged by about \$35 million a year.*"
- [?] PSE generates nearly a third of the energy it sells to ratepayers via the Colstrip dirty coal plant in Western Montana, making PSE a major air polluter and the 8th largest greenhouse gas emitter in the U.S.

Google "WUTC fine" and you'll find most hits are about PSE. PSE is a serial bad actor not to be trusted. It may go bankrupt from the AG's lawsuit and Colstrip fines or shutdown alone. No wonder PSE is so frantic to get this project permitted ASAP.

How can we trust them with safety and honesty? Their track record doesn't instill confidence, especially in a time where US utilities are building infrastructure solely for profit—see Wall Street Journal article in 2014—"Utilities' Profit Recipe: Spend More"—outlines exactly what this project is—a money maker by building un-needed infrastructure. We will prove this before built!

I94-D-1



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194-D-1

I have followed this project since the first postcard I received—December 2013, through the manipulated CAG process, from the PR "campaign style" tactics of Mark Williamson—of Madison Wisconsin, hired by PSE to get this "project completed and done on time" before "rolling blackouts" hit the Eastside. The story has since changed from the CAG—now all of a sudden there is no talk of 1500 MW of power needed to send to Canada as stated by Dan Koch of PSE at the Newcastle Planning Commission meeting in December 2015—we have it on tape!! Dan Koch of PSE, along side of Mark Williamson, told Newcastle Planning Commission that EE was not about power to Canada—if power was sent to Canada it would go outside this area. We have that on tape. Just last week, Todd Anderson video taped Mark Williamson at the Bellevue DEIS comment event saying—this is about power to Canada! You can't have a local project—like FERC ruled it was "local" in the FERC complaint by CENSE—and have power going to Canada. PSE can't get their own story straight—so how can you know what the need is?

City of Bellevue hired **U.S.E.** to do a study—and they only verified the PSE process and did not do a load flow study on their own. This is documented in Bellevue City meeting when USE presented to the council. The Mayor was livid! Either the city didn't ask for the right info or USE did not perform—it would be interesting if USE got paid their \$100K for that worthless information. However, in the study—USE said without 1500 MW of power to Canada—there was only a small amount of **shortage of 74MW!** So what is the **NEED?** You can't propose a project until you know the scale —then determine the solution accordingly.

More about story change—Just March 4, 2016 at the WUTC meeting in Olympia—PSE presented their IRP. Guess what? PSE now changes their growth forecast from 1.7% annually to .7% annually—that is a 60% decline in projections. That should change the parameters of this project also. The web of lies and deceit continues to grow!

So in Bellevue City Council meeting March 7, Keri Pravitz, PSE employee, addressed the council in comment period—that indeed the 1500MW of power to Canada is real and needed. So PSE, when you get your story straight—let the public know please!! Both of these employees are on tape—fun time in court for PSE to explain their confusion!

**So if it is about 74 MW of power that can be solved in number of 21st century Alternatives without wires—ways PSE would not profit by \$1-2 billion in the life of this project at our expense.**

194-D-2

There is a huge **conflict of interest** in hiring Stantec, a PSE contractor, to write this DEIS. This document has PSE bias all over it. Stantec also is not an expert in 21st century Alternatives— You need to hire someone that can provide workable solutions to the smaller problem that is now defined by PSE. Solutions that work for cities and communities safely without risking total destruction. Any risk on pipeline accidents is too grave. Alternative solutions are the only way to incrementally scale this project—no one knows what the future holds in power resources. We should not invest in a solution that is from the 20th century. That is why only an expert specialized in these alternatives can offer viable solutions that will work. Alternative 2 in the DEIS are not the best solutions available.

194-D -2 See responses for Key Theme EIS-1, Key Theme PSL-3, Key Theme ALT-3 and Key Theme EARTH-2.

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194-D -3 See response for Key Theme LU-1.

194-D-2

PSE always said they could construct in the existing 100' right of way. Now that changes—we all knew better—120'-150' ROW —says AEP OHIO as you state in the DEIS. That is great—but that distance is for one 230kV project —not two!! And not with 2 high pressure hazardous liquid pipelines in the same ROW all along an active earthquake fault zone. There is no place in the US that has this dangerous situation exists in combo in a small ROW amongst a dense neighborhood. I contacted David Parrish, Manager of Transmission Line Standards, of AEP Ohio, he said if 2-230kV lines are in a ROW—there would have to be more space allotted than the 120'-150'. When I told him there are two pipelines down the center —he said that would need more independent study to address that risk. When I told him the power lines follow the pipelines for 16 miles of this project—he said that is **definitely a concern** and studies would have to be done by experts in EMF around gas lines for sure. Also the risk of pipelines and towers with deep footings needs to be addressed by seismic experts. This easement is overburdened as is. This needs to be studied by PHMSA—which I contacted the Western Regional office and they were very concerned about electromagnetic interference —corroding the pipelines. Which now we find Olympic pipeline has been on notice since 2014 to fix corrosion. We need to find out where and the severity of this situation already existing with the Olympic Gas Lines before any consideration of construction can be made of any kind around them.

What needs to happen—is that PSE needs to sell their easement to Olympic Pipeline and the only construction allowed is for PSE to vacate this corridor and not continue to cause corrosion problems—and remove the 60' tall wooden poles here currently with 115kV power. Then the pipeline company needs to install new pipes to get the jet fuel to the airports in this ROW safely. PSE needs to relocate power somewhere else or co-locate with Seattle City Light as in FERC order 1000—where companies need to work together as one to solve regional problems. Then combine alternatives for future growth management.

When I say PSE footprints are over the DEIS —we all know PSE wants Alternative 1 —Option A —as all through DEIS—most significant impacts are in this particular option—yet all goes away with "safe practices" —like the risk of horrendous pipeline explosions—UNACCEPTABLE! If PSE was an honorable company —they would not ever think of constructing near this aging pipeline in the a densely populated area—the 5th largest city/area in Washington State.

Why no cost estimates in DEIS on any Alternatives? Hard to imagine trying to evaluate honestly without costs—unacceptable to review without costs. Costs needs to be included. Now that many homes are going to need to be torn down in my neighborhood alone—Cost become a major factor. When PSE purchases 26 homes to widen the ROW by 20'-50' or more—that cost would equal the cost to underground. Or would PSE just prefer to pull our homes from us! Again, PSE great stewards of the environment!! Also the under-grounding technique PSE or Stantec discusses is not the most cost effective. Everything in this DEIS favors a wired solution just like PSE favors a wired solution! Poor job of cover-up in this DEIS. As to cost—if overhead wires are \$4 million per mile to construct—times 18 miles—that would be \$72 million project estimate. However PSE throws around \$250 million project cost—guess they are able to buy many homes for that dollar amount!! And make more money in the long run.

194-D-3

Also to eminent domain in PSE's desire to take our homes—there are attorneys lined up to argue this case. With the proof we have this project is not needed—there are no worries my home or others will be taken. **Without Need—you have no case.** The City of Newcastle will

194-D-3 never let you construct in our city along these gas pipelines and destroy our neighborhood and city.

**Addressing DEIS by sections:**

My comments are in brackets( ). **Text is copied directly from the EIS document under sections as noted in bold text.**

194-D-4 **RE: DEIS: Intro and Summary section:**  
 (EIS is flawed —should have Hearing Examiner evaluate project after this phase—would save time and money not to continue project review. We can limit further discussion, time, money of studying alternatives that are not needed, over-built and over-budget based with facts found to date and submitted by CENSE. —ie, the Load Flow study (Lauckhart-Schiffman) CENSE’s submittal disproves the NEED of Energize Eastside—contrary to what PSE claims! They never thought a citizens group would pursue as far as CENSE has gone to date!)

**Stantec prepared a memorandum evaluating the stated need for the project, and confirmed that PSE’s Eastside Needs Assessment was conducted in accordance with industry standards for utility planning (Stantec, 2015)**  
 ( This is conflict of interest —Stantec involved in the EIS as they have worked for PSE interests in the past and now hired to prepare DEIS—obviously slanted to this Alt.1- Option A solution. Stantec should not be involved in the EIS as PSE pays for their services routinely—why would they not be biased in favor of PSE—their business profits from this relationship. When something is deemed of "significant" impact—always it is rated no concern by DEIS!!—Safety around gas pipeline and earthquakes—which I’ll say more later is downplayed as being of no significance when this is clearly the biggest risk factor in this DEIS.)

**This EIS will not be used to reject or validate the need for the proposal.** (Disagree—The NEED has not been established according to a "local" project. Also the story continues to change—define the need, then find suitable solution.)

194-D-5 **Without adding at least 74 megawatts (MW) of transmission capacity for local peak periods in the Eastside, a deficiency could develop as early as winter of 2017 - 2018 or summer of 2018, putting customers at risk of load shedding (forced power outages) (Stantec, 2015).** (Your words—no 1500MW to Canada!)

**PSE is a regulated utility that serves approximately 1.1 million customers** (Who has oversight over PSE before a project is built? I want that answer. Who reviews their ROW distance with gas pipelines, pole heights, deep footings in an earthquake fault zone—all within a neighborhood of homes? I will not take PSE’s word for establishing safety! The ratepayers will pay for a bogus project that will profit PSE between \$1-\$2 billion over the life of the project. Nothing short of consumer fraud if this project gets built as proposed. The project has been overblown for profit and or perhaps why SCL did not want to get involved with their sham from the onset. You can’t have power to Canada and also have "local" project. You can’t have it both ways. PSE ratepayers will pay the bill to fulfill a BPA treaty agreement/and or Columbia Grid agreement. PSE always says FERC has oversight—then use FERC order 1000 to work and rebuild SCL corridor like PSE said they originally wanted to do —if by any remote chance there

194-D -4 See responses for Key Theme EIS-2 and Key Theme OBJ-3.

194-D -5 See response for Key Theme EIS-1.

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is any way an overhead solution is required. Order 1000 requires all utility companies in a region to work as one in planning infrastructure and cost sharing. This would save both utilities time and money in upgrading that corridor—share costs since SCL says they want to upgrade it in the future. No homes or right of way space has to be acquired—will **save project costs** immensely since **cost is a major factor determining alternatives** in this EIS process. If PSE proceeds with this bogus expensive, over-scaled project along their existing 115kV corridor—it will result in consumer fraud and will be challenged. There is no way this project can pass the test of eminent domain—PSE will spend years trying to negotiate with people and destroy our neighborhood, build unsafely along hazardous gas pipelines with 25'-50' footings in close proximity along hazardous gas pipelines along major earthquake fault zone. PSE will not recoup project costs from UTC if project placed along the existing 115kV corridor. PSE may be challenged also at WUTC to recoup costs of these bogus claims for all CAG costs, EIS process, and all PR expenses and promotional advertising in trying to push this EE project through—if this project is not NEEDED and we were lied to.

**The plan is reviewed annually with periodic updates to the plan. PSE's revised plan was submitted to the UTC November 30, 2015, but was not included in this Draft EIS because it was completed too late in this EIS process. It will be considered in Phase 2. The 2015 Integrated Resource Plan (PSE, 2015) is available for review on PSE's website at <https://www.pse.com/aboutpse/EnergySupply/Pages/Resource-Planning.aspx>. (IRP states that PSE has now revised their growth from 1.7% to 7%—thus again changing the project parameters!! A 60% reduction in NEED!! PSE— go back and start over with new graphs and charts—those shown to date are obsolete!)**

194-D-5

**The Eastside Cities (Bellevue, Kirkland, Newcastle, Redmond, and Renton) determined that a Phased EIS (WAC 197-11-060(5)), supported by the EIS Consultant Team and in collaboration with the applicant, PSE, would be the best approach to adequately evaluate the proposal.**

(Nice PSE gets so much input on an important part of this process—why does PSE determine the rules?—Explain that please! There should be Hearing Examiner review now after this EIS comment period—which could shut down or severely alter this project or force it to start over. This EIS process is not standard—why? Because it supports PSE getting their way! This will be visited by a court of law. The public will not stand for your mis-steps to protect PSE and PSE calling the shots in their own review process! Obviously PSE thinks if they pay for this EIS process—they get to slant it their way.)

**The project is proposed by PSE, a regulated utility. Therefore, PSE developed the project objectives and helped to define alternatives that would attain or approximate the proposal's objectives, as required by SEPA.** (However no oversight by any agency verifying their studies—Which CENSE finds bogus and over-stated with generators turned off to affect results of PSE's load flow study. Hints to collusion and corruption in many power agencies working together in a coverup. Why should taxpayers and citizens spend their money to prove deceit and fraud when government agencies should be doing this for the public? It is interesting if PSE worked on this DEIS selecting "acceptable alternatives"—they came up with so many that would fit their project objective—INCLUDING—a NO ALTERNATIVE solution!—thus proving Alt. 1-Option A —along the existing 115kV line —would not meet a satisfactory requirement of eminent domain to take ROW space and property. You said it here!! So interesting you send notices of your meetings to those along this corridor—but you don't notify residents along the SCL corridor that their properties and homes could be in jeopardy and make them aware to



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194-D-5

make public comment!! Nice public relations! When PSE takes the SCL corridor for construction—you will not have adequately notified those residents—and your process will need to start all over again! Or did you never notify people along that corridor because you already knew you'd never use it?)

**1.7 HOW HAS PUBLIC INPUT BEEN INCORPORATED INTO THE EIS PROCESS?** (We had to fight in the Scoping meetings to include SAFETY which should be the number one factor in a project—and to include Property Values and View Hindrances—something PSE could care less about and will not compensate—both is of SIGNIFICANT IMPORTANCE TO RESIDENTS. Again DEIS—downplays what is important to the residents requests—Trying to ignore what we, the people, feel is most important to us! The PSE train keeps rolling down the tracks!)

**The purpose and need for the project, summarized in Section 1.3, helped to define PSE's broad objectives for the project, which are as follows:**

- **Address PSE's identified deficiency in transmission capacity;**( Disproven by CENSE load flow study experts Lauckhart and Schiffman)
- **Find a solution that can be feasibly implemented before system reliability is impaired;**( Obviously many solutions —so it is easy to site—115kV corridor is not the only nor the best solution by far.)
- **Be of reasonable project cost;**( Interesting that no cost estimates are given for these alternatives—so we are kept in the dark—hard to analyze objectively —cost estimates should be provided at his time—since cost is a major factor in the EIS—another EIS flaw.)

194-D-6

- **Meet federal, state, and local regulatory requirements;** ( Please provide what all these requirements are—and who if anyone has oversight over PSE before a project is built?—besides residents using their own time and money to get to the truth! We can find no oversight except this flawed EIS process—doing a great job of protecting PSE wishes and not listening to those giving input and those affected. If only the birds, squirrels and trees could speak.)

- **Address PSE's electrical and non-electrical criteria for the project (described in further detail in Chapter 2).**( how about reviewing the profit gained by a foreign owned company for building infrastructure at 10% UTC

approved return—Where can I sign up for that? Read Article from Wall Street Journal 2014—of utilities building infrastructure for profit—since power sales are flat! Also in Macquarie/First Trust Global Infrastructure/ Utilities Dividend & Income Fund Annual Report—states on page 5 —November 30,2015, -Underperformance from Pipeline sector, —Weakness from the Electric Utility and Transmission sectors; and -Positive performance from Toll Road and Water Sectors.)

- **PSE's broad objectives for the project, which are as follows:-**

- **Be of reasonable project cost** (Major point to get WUTC rate INCREASE PASSED ON TO RATEPAYERS TO PAY FOR COVERING PROJECT COSTS! PSE may get stuck covering their costs on EE!)

**Summary of Impacts by Alternative: ALTERNATIVE 1 — = Risk of accidental rupture and explosion of Olympic Pipeline would increase during construction but be minimize by employing best management practices.**(“Significant Risk”—played down by EIS—no problem

194-D -6 See responses for Key Themes EIS-1, EIS-2, and EIS-3, and Key Theme OBJ-3.

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194-D-6

—everyone will be careful during construction—no worries—then why when PSE replaced a pole behind my house years ago—The worker told me the day the work would be done and suggested I not be home that day! What will PSE do when working here for weeks—ask us to all leave during construction for our safety? Maybe weekly trips to Disneyland should be in our mitigation package? Or Tahiti trips?)

**From Introduction and Summary sections:**

**This set of facilities is proposed in order to address a deficiency in electrical transmission capacity during peak periods that has been identified by PSE //power outages or system damage during peak power events due to cold or hot weather/// Discussions between partner Cities and PSE determined that the proposal is likely to have significant adverse environmental impacts**(EIS is flawed —should have Hearing Examiner evaluate project after this phase—would save time and money not to continue project review.)

**The EIS Consultant Team, represented by Stantec (an electrical system planning and engineering subconsultant working in support of the Energize Eastside EIS effort), has reviewed this background information and studied the process used by PSE to establish a need for the proposed Energize Eastside Project. Stantec prepared a memorandum evaluating the stated need for the project, and confirmed that PSE's Eastside Needs Assessment was conducted in accordance with industry standards for utility planning (Stantec, 2015)**

( This is conflict of interest Stantec involved in the EIS as they have worked for PSE interests in the past and now hired to prepare EIS—obviously slanted to this Alt.1-Option A solution. Stantec should not be involved in the EIS as PSE pays for their services —why would they not be biased in favor of PSE—their business profits from this relationship)

194-D-7

**This EIS will not be used to reject or validate the need for the proposal.** (Disagree—until you define the need—there can be no solutions to propose. CENSE challenges the need PSE states.)

**The deficiency in transmission capacity on the Eastside //Arises from a changing regulatory structure that requires a higher level of reliability than was required in the past.** ( Not N-9 reliability! So what is that change that has taken place—let's get that in writing from the source and date of change PSE states as significant.)

**By the end of the 10-year forecast period, a large number of customers would be at risk, and the load shedding requirement could be as high as 133 MW (Stantec, 2015).** ( USE study said 74MW—another need conflict!)

**PSE is a regulated utility that serves approximately 1.1 million customers** (The ratepayers will pay for an bogus project that will profit PSE between \$1-\$2 billion over the life of the project. Nothing short of consumer fraud if this project gets built as proposed.

**PSE's electric delivery system is regulated and coordinated by several state and federal agencies, including FERC, North American Electric Reliability Corporation (NERC), Western Electricity Coordinating Council (WECC), and Washington Utilities and**

194-D -7 See responses for Key Themes EIS-1 and EIS-2, and Key Theme LU-1.

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194-D-7

**Transportation Commission (UTC). PSE cooperates and supports ColumbiaGrid in its regional planning processes.**  
 (In the FERC Complaint filed by CENSE—FERC said this was a “local” project—therefore 1500 MW power PSE always mentioned in the CAG process for Canada—is not a valid use for this corridor project. Therefore we are talking about 74 MW of power. or 133 MW per Stantec above.  
 The project has been overblown for profit and or perhaps why SCL did not want to get involved with their sham from the onset. You can’t have power to Canada and also have it be “local” project. You can’t have it both ways. PSE ratepayers will pay the bill to fulfill a BPA treaty agreement/and or Columbia Grid agreement. PSE always say FERC has oversight—then use FERC order 1000 to work and rebuild SCL corridor like PSE said they originally wanted to do if by any remote chance there is any way an overhead solution is required. Order 1000 requires all utility company in a region to work as one in planning infrastructure and cost sharing. This would save both utilities time and money in upgrading that corridor—share costs since SCL says they want to upgrade it in the future, no homes or right of way space has to be acquired—will **save project costs** immensely **since cost is a major factor determining alternatives** in this EIS process. If PSE proceeds with this bogus expensive, over-scaled project along their existing 115kV corridor —it will result in consumer fraud and will be challenged. There is no way this project can pass the test of eminent domain—PSE will spend years trying to negotiate with people and destroy our neighborhoods, build unsafely along hazardous gas pipelines with 25'-50' footings in close proximity along hazardous gas pipelines all within a major earthquake fault zone.)

194-D-8

**The Eastside Cities (Bellevue, Kirkland, Newcastle, Redmond, and Renton) determined that a Phased EIS (WAC 197-11-060(5)), supported by the EIS Consultant Team and in collaboration with the applicant, PSE, would be the best approach to adequately evaluate the proposal.**  
 (Why PSE gets so much input on an important part of this process—why does PSE determine the rules?)  
**The project is proposed by PSE, a regulated utility. Therefore, PSE developed the project objectives and helped to define alternatives that would attain or approximate the proposal’s objectives, as required by SEPA.** ( However no oversight by any agency verifying their studies—Which Cense finds bogus and over-stated with generators turned off to affect results of their load flow study. Hints to collusion and corruption in many power agencies working together in a coverup. Why should taxpayers and citizens spend their money to prove deceit and fraud when government agencies should be protecting the public? It is interesting if PSE worked with you on this EIS selecting **acceptable alternatives**—they came up with so many that would meet their project objectives—thus proving Alt. 1-Option A —along the existing 115kV line/Pipeline —could not meet a satisfactory requirement of eminent domain to take ROW space and property. There are plenty of other options and with energy developments now in the near future. Putting off this project will benefit all of us.)

194-D -8 See responses for Key Themes EIS-1 and EIS-2.

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194-D-9

**3 Earth:**  
**Significant Unavoidable Adverse Impacts summary:**  
 ■ Under all alternatives there is an unavoidable seismic risk. New facilities built to current standards reduce risks, and “no significant impacts are likely.” (What you say about Seismic later is staggering—there will very likely be seismic activity that could severely affect the life of this project—how can you gloss over this unsafe situation of tall poles and deep underground footings so close to pipelines and homes! Where is the logic in a reasonable person?)

194-D-10

**4 Greenhouse Gas Emissions:**  
**Summary of Impacts by Alternative**  
**ALTERNATIVE 1**  
 ■ Option A could result in CO2 sequestration losses from tree removal that exceed the state’s GHG reporting threshold and could be a potentially significant adverse impact.  
**Mitigation Measures:**  
 ■ Vegetation replacement could reduce sequestration losses under Alternative 1-Option A, and Alternative 3 to a moderate level.  
 If mitigation measures are employed, there would be no significant and unavoidable adverse impacts related to GHG emissions associated with any of the project alternatives. (Really—how do you mitigate removing aged trees with shrubs not growing taller than 15’? Another example—where you are falsely ignoring impact to suit PSE objective.)

194-D-11

**5 Water Resources:**  
 (In the middle of the Olympus neighborhood in Newcastle—there are springs or source of water runoff that makes the pipeline /115KV corridor swampy almost all year. Basements have flooded from this and will make driving of heavy equipment difficult as well as locating power poles in the soil next to hazardous gas lines and in close proximity to homes. PSE soil tests were not done in this area—south of SE 84th Street in the Olympus neighborhood.)

194-D-12

**6 Plants & Animals:**  
**ALTERNATIVE 1**  
 ■ Construction of any of the Alternative 1 options could cause minor to significant impacts from: habitat alteration; interference with critical survival activities; or direct injury, death, or harassment of some species. Impacts would depend on the scale of habitat alteration and species disturbance, and species affected. (We have deer, coyote, bobcat, owls in the large fir trees, raccoons that frequent this greenbelt area and our neighborhood in Olympus—we love our wild animals—also Newcastle is a noted “Tree City” proud of our green spaces we have—and do not want our tree cover disturbed.)  
 ■ Significant Unavoidable Adverse Impacts with Alternative 1 could result in significant unavoidable impacts due to habitat loss, and if threatened or endangered species or species of concern are affected. (This is an EIS—you can’t mitigate plants and animals sufficiently—it is “Significant”—deemed by the EIS statement.)

194-D-13

**7 Energy & Natural Resources:**  
**Affected Environment:**  
 -The Energy Independence Act of Washington State requires that PSE must obtain 15 percent of its electricity from new renewable resources by 2020, as well as undertaking cost-effective energy conservation. (Get on with it! No better time too start.)

- 194-D -9 See response for Key Theme EARTH-1.
- 194-D -10 See response for Key Theme GHG-1.
- 194-D -11 See response for Key Theme WTR-1.
- 194-D -12 See responses for Key Themes P&A-1 and P&A-5.
- 194-D -13 See response for Key Theme EGY-3.



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**8 Environmental Health:**

**Affected Environment:**

- Hazardous materials are likely in electrical infrastructure (e.g., oil-containing transformers, High Pressure Fluid-Filled [HPFF] power lines used in some underground lines).
- Pressurized flammable petroleum products transported in the Olympic Pipeline, which shares a corridor with a PSE transmission line, and is located in other portions of the combined study area.
- Some risk of fire or explosion at substations or transmission lines exists due to damage from earthquakes or lightning strikes.
- Power lines, electrical wiring, and appliances produce EMF and corona ionization is likely occurring around existing transmission lines; associated health risks for both have not been definitively identified through ongoing research.

(Any risk of above is too much! No construction of this corridor should happen with power, fuel and earthquakes in combo in close proximity to homes. Accidents are called accidents because they are not planned—RISK is too great!!)

**Risk to the public is not likely from constructing or operating the project near pipelines due to extensive safety policies and regulations.**(Again EIS—dismissing the potential of a huge catastrophic event—even with the slightest chance of accident—could result in huge loss of life and property that is unnecessary. Other options are available with less risk. Earthquakes or lightning strikes could damage transformers or drop power poles or lines, but potential public safety risks are not likely and you say-“negligible to minor” impacts could be expected. DISAGREE)

- **-Risk of accidental rupture and explosion of Olympic Pipeline would increase during construction but be minimize by employing best management practices.**(Huge catastrophic possibility—downplayed by soft words—“best practices”. Accidents are never planned.)
- **-With new equipment being installed, greater potential for spills of hazardous materials during construction and operation.** (Why risk any type of potential accident along a gas pipeline.)

**Mitigation: Use best management practices for spill containment and cleanups.** (A bit hard to stop a high pressure jet fuel pipeline spill—again gloss over by EIS— the worst nightmare that could possibly happen—a pipeline explosion. You have other solutions less risky—and cheaper. How much insurance does PSE and Olympic Pipeline have to carry in case of a disaster during construction—\$500 million enough?)

**Local governments and PSE would further evaluate the PIPA recommendations to determine if any additional safety practices could be implemented for Energize Eastside Project.**(Yes—nice to include—Pipeline safety!! Let us know what they say about a combo of construction, power poles, high pressure hazardous gas pipeline, corrosion effects, deep footings, tall poles amongst a high density residential neighborhood and an earthquake fault zone area. I want that in writing from PIPA or PHMSA. This isn't a project in an open rural area in the plains or the Alaska wilderness—it is within feet of homes in an upscale residential neighborhood. Remember Kim West's letter, an employee of Olympic Pipeline, sent to Dave Edmonds of the CAG after an Olympus Homeowner Association meeting with residents—she would not recommend the use of this gas line corridor for this project because of safety reasons! See her letter below)

- 194-D -14 See response for Key Theme PLS-2 and Key Theme EARTH-1.
- 194-D -15 See responses for Key Themes PLS-1, PLS-3, and PLS-4, and Key Theme SVC-1.
- 194-D -16 See responses for Key Themes PLS-1, PLS-5, and PLS-6.

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194-D-15

194-D-16



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Hi David,

I would like to offer my sincere thanks and appreciation for inviting us to your Olympus Homeowners Association meeting on Monday, February 24. It is a rarity when people have the opportunity to gather together and communicate their differences face to face. It was an opportunity for us to learn about our shared concerns over the future projects in Newcastle. As a follow-up to the meeting, I would like to recap some of the highlights that Mr. Ed Cimaroli, Vice President of Olympic Pipe Line Company discussed.

Olympic has two pipelines that run approximately the entire length of segments C, E, J, and M in a shared easement within Puget Sound Energy's electric transmission corridor. The location of the pipelines may be found anywhere within the easement from the center of the Right-Of-Way to either side and can run together or separate.

The route selection will be our prime concern for a variety of reasons including safety, impact to landowners, future maintenance, and customer impacts to name just a few. Therefore we feel that segments B, F, H, and L best address the concerns mentioned above.

Should the pipeline be required to relocate, the pipeline design and precise impacts cannot be determined until PSE selects a final route and develop a final design. The schedule and timeline are also dependent on the route selection and as a recent example, a pipeline reroute was required because of the city of Bellevue's culvert relocation project at Coal Creek. It took over four years from conception to construction completion and involved many hours of working with property owners, permitting through wetlands and parks before we could complete the project. It is important to note that anytime a permit is required there can be a reiteration of the design before the final design can be created which can push out the project schedule.

Unfortunately we were running out of time at the end of the meeting and I wanted to mention that a source for locating pipelines in the state of Washington can be found at the Washington Utilities and Transportation, Pipeline Safety map website at:<http://www.utc.wa.gov/regulateIndustries/transportation/pipeline/Pages/pipelineMaps.aspx>

Hopefully this email will be the first step in a process to work toward a project of mutual concern. Again, I would like to thank you for extending an invitation for us to hear your Homeowner's concerns. Please feel free to forward these discussion points forward to whomever you feel would benefit from knowing more about the Olympic Pipeline. I look forward to working together on this project.

Kindest regards,

*Kim*

Kim L. West,  
Area Maintenance Engineer  
BP Pipelines and Logistics (North America) Inc.  
Operating Agent for Olympic Pipeline Co.  
600 SW 39th ST, Suite 275  
Renton, WA 98057  
Office: 425-981-2541

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To comply with federal regulations, the Olympic Pipe Line Company has an integrity management program, including requirements to regularly inspect and monitor both natural gas and petroleum pipelines. Inspections are performed using a combination of tools to determine the suitability of the pipeline based on any anomalies detected, including corrosion, dents, or actual wall loss (loss of material on the inside or outside of the pipeline due to corrosion) (West, personal communication, 2015). (What are the issues with regards to Olympic Pipeline corrosion problems they have been put on notice to correct. Where are they, how severe? When and how will they correct the problems?)

194-D-17

**Significant Unavoidable Adverse Impacts:**  
 ■ **Significant impacts would be avoided through compliance with all applicable regulations and industry safety standards.**(Again DEIS gloss over of huge "Significant" impacts—which I have to ask—in this DEIS—did you find any "significant" areas —you couldn't play down? I didn't find any that remained "significant"—after you glossed over the importance of them. Did PSE have input in these responses also?)  
 ■ **Electric and Magnetic Fields: The City of Bellevue has adopted comprehensive plan policies that encourage City and utility involvement with regional or statewide agencies when and if they are developing policies regarding exposure to EMF. The policies also address intent to stay abreast of new accepted scientific research of potential health impacts, revise policies if the situation warrants, and require a reasonable balance between potential health effects and costs of mitigating for such impacts in the planning, siting, and construction of electrical infrastructure.** (There has to be EMF experts studying the effects and reviewing distances from pipelines for corrosion as well as proximity to homes and people.)

194-D-18

■ **Electric and Magnetic Fields and Corona Ionization: There has been substantial research into the possibility of health effects from EMF, as well as potential effects from corona ionization. There is substantial agreement among experts that there are no confirmed adverse health impacts from 60 hertz (Hz) 3 EMF exposure. Scientific evidence remains inconclusive on risk of childhood leukemia in homes with stronger magnetic fields, and research on this topic continues. However, while it does not appear that EMF and corona ionization are in fact a hazard, they are discussed in this document due to public concerns raised during EIS scoping. Magnetic fields, however, pass through most materials without change.** (Needs proper expert review)

194-D-19

■ **Even though electrical equipment, appliances, and transmission lines produce both electric and magnetic fields, most recent research has focused on potential health effects of magnetic field exposure. This is because some epidemiological studies have reported an increased cancer risk associated with estimates of magnetic field exposure.** (Perhaps that is why I know 7 people with or had cancer in Olympus—5 of them live right along the existing 115kV power lines running through our neighborhood! Coincidence or true—EMF's are not healthy. If they corrode pipes—they must do something to humans!)  
 ■ **For overhead lines, the magnetic field typically decreases in strength with the square of distance (1/d<sup>2</sup>) from the transmission line (EnerTech, 2016).**( When PSE lowers pole heights for 230kV lines to 85' tall—we need to know if homes will be a safe distance away and what those readings will be.)

- 194-D -17 See response for Key Theme EIS-1.
- 194-D -18 See response for Key Theme EMF-1.
- 194-D -19 See responses for Key Themes EMF-1 and PLS-3

194-D -20 See responses for Key Themes EMF-1 and EMF-4.

194-D -21 See responses for Key Theme EMF-2 and Key Theme PLS-1.

194-D-20

- **Ongoing Research and Unresolved Issues:**
    - Work is still underway to find answers to questions about EMF and possible health effects. Some examples include the following:
      - • Research on childhood leukemia – Large studies continue, with one being conducted in California sponsored by the Electric Power Research Institute.
      - • Research on co-carcinogenesis – Questioning whether one or more agents, such as EMF plus a biochemical, environmental, chemical, or physical agent, act together to exacerbate the growth and expansion of tumor cells, while alone one such agent may not have an effect.
      - • Research on neurodegenerative diseases – There are suggestive findings of a connection between neurodegenerative diseases, particularly amyotrophic lateral sclerosis (ALS), and magnetic fields, though there is no known mechanism for such an effect. Worker studies are in process to examine the possibility that frequent electric shock may increase the risk of ALS, rather than EMF.
      - • Research on EMF interference with implanted medical devices – Longstanding research has concerned possible interference with the functioning of implanted devices such as cardiac pacemakers, which is of most concern within occupational environments. However, certain devices in use close to very high-voltage electric fields remain a potential concern for the general public. Exposure guidelines have been developed for workers, and manufacturer data sheets provide limitations on device performance during EMF exposure. Work is continuing to develop laboratory bench testing and a more precise understanding of EMF tolerances of these devices.
- (Any risk or unnecessary exposure to EMF should be limited as not proven if harmful—when in doubt—take the cautious side! Stay away from homes and schools.)

194-D-21

**8.3.6 Corona Ions:**  
 The health concern with corona ions is related to how they may combine with airborne pollutants to create health impacts. As airborne pollutants enter the body by inhalation, they may be deposited in the respiratory system. The extent to which inhaled particles deposit in the various regions of the respiratory system depends upon physical factors such as their size, shape, and density, as well as charge. The extent of effects of corona ions on health will depend upon the increase in individuals' exposure to pollutants and the extent to which these pollutants are causes of disease. //However, Professor Henshaw's theoretical mechanisms involving corona ions and pollutant particles have not been proven by health studies on populations near transmission lines. (Why risk potential harm?)

**8.5.1.2 Public Safety Risks – Activities Near Pipelines**  
 Construction of the project could theoretically damage the hazardous liquid pipelines operated by OPLC and other gas lines mentioned in Section 8.3.2, creating an explosion risk if safety policies and regulations were not implemented as required. The UTC identifies five major reasons why gas pipelines leak or fail, potentially creating a public safety hazard: (1) third-party excavation damage; (2) corrosion; (3) construction defects; (4) material defects; and (5) outside forces resulting from earth movement, including earthquakes, washouts, landslides, frost, lightning, ice, snow, and damage done by authorized on-site personnel. The UTC also notes that other causes of failure can include cast-iron bell joint leaks and human error (UTC, 2015). Holes in pipelines can also be created by electrical arcing from downed transmission lines, leading to gas leaks and potential explosions (UTC, 2012). Construction equipment can create pipe gouges,



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194-D -22 See response for Key Theme NOI-1.

194-D -23 See responses for Key Themes LU-2, LU-3, LU-4, and LU-5.

194-D-21

dents, scrapes, and cracks in the pipeline. This type of damage can grow and lead to a catastrophic failure (UTC, 2015). Although a significant adverse impact to public safety could occur if a leak or an explosion of any of these types of gas lines resulted from the project, this type of event would not be likely to occur because PSE would comply with all applicable regulations and requirements in place for pipeline safety, including local land use requirements for siting facilities of this type. Site-specific investigations would be conducted during design to avoid existing gas lines by maintaining appropriate separation between existing and proposed facilities. Close coordination with potentially affected utilities would also be done, and the design and construction would be conducted consistent with all applicable requirements. Given these safeguards, the probability of a pipeline disruption resulting in an explosion is low, but the potential magnitude of the impact is potentially significant if this unlikely event were to occur. Because compliance with all applicable requirements would help to reduce the probability of an occurrence to a very low likelihood, potential adverse impacts associated with construction of the project are characterized as minor. (Here again DEIS takes a "significant" impact—reduces it to minor impact—when Safety is our utmost concern—keep construction out of the gas pipeline corridor!)

194-D-22

**9 Noise:**  
 -Corona discharge from existing transmission lines may be audible, but it is a relatively low noise level. (I think residents living close would be the judge of that!) Existing transformers and ancillary equipment may be audible at adjacent sensitive land uses.  
**Significant Unavoidable Adverse Impacts:** There would be no significant unavoidable noise impacts. (Again a gloss over by EIS—what if homeowners complain—what is our recourse after built—will there be mitigation after installation?)

194-D-23

**10 Land Use & Housing:**  
 Of the action alternatives, Alternative 1- Option A has the greatest potential to create significant adverse land use and housing impacts. The magnitude of probable impacts ranges from minor to significant, depending on final project location and adjacent uses. (There is no compensation enough to take one's home, destroy neighborhood character and impact home values of those left. You can't put a price on one's home, upgrades made, style, location, privacy, views, friends, kids in schools, etc—you have no idea what all you are destroying!)

Comprehensive plans also include goals and policies that establish a 20-year vision and roadmap for each study area community's anticipated future. Goals and policies that relate to electrical infrastructure can be grouped into the following broad topics:

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**1. Encouragement of energy efficiency and conservation - Goals and policies generally promote investment in, and proliferation of, renewable energy resources and reduce the demand for fossil fuels.** (Great idea—why doesn't PSE practice this)

**2. Hazardous pipeline safety - Goals and policies generally require coordination between the pipeline operator, development project proponents, and local jurisdictions to examine the potential for construction and operational conflicts, and to avoid, minimize, or mitigate for such conflicts.** (There is no mitigation for destroying neighborhoods, uprooting families, risking safety along an aging gas pipeline—there is nothing that can guarantee our safety—the area should not be disturbed—period. Today—in news—Greenwood/Seattle natural gas explosion levels 3 buildings—PSE at the helm—no one can be careful enough!! There are enough accidents without risk to a catastrophe around the pipelines!)

**3. Utility corridor development/management - Goals and policies generally promote co-location and shared use of utility corridors in order to minimize impacts, except when major adverse safety or land use consequences could result. Timely improvements to infrastructure are encouraged in order to meet anticipated energy demands.** (“except when major adverse safety or land use consequences could result.” You couldn't say it better)

**4. Protection of community or neighborhood character and safety - Goals and policies generally support siting and designing utilities to minimize conflicts with community character and maintain safety.** (Removing homes to accomplish an over-scaled electrical project is unjust. See you in court. The judge will see if this warrants taking of homes.)

194-D-23

**7. Undergrounding of utility lines - Goals and policies support undergrounding existing and new or expanding lines where safe, practical, and in accordance with rules, regulations, and other utility- and site-specific factors.** ( PSE covered their bottoms at WUTC long ago as to under-grounding—More bad acting by PSE)

**8. Shoreline management – Goals and policies generally discourage locating non-water-related utilities in the shoreline jurisdiction, particularly in-water. Uses that negatively impact ecological functions are generally prohibited.** (That eliminates under-watering—so why was it listed? Just because it sounds like the easiest, cheapest, safest, and most reasonable to avoid high density and preserve the cities involved?)

(RE: Above—PSE is a bad actor. PSE wants the most destructive plan because they have a ROW existing—any responsible utility would not risk a catastrophe in a densely populated area for any profit. It is proven —co-location of power and pipes makes corrosion—not a benefit to co-locate in this scenario, arcing to ground for fires and explosions. Just today—3/10/16 two homes catch on fire in Lynnwood due to tree blowing on line—touching ground and homes and starting a fire in a natural gas line between both homes. Accidents DO happen! This corridor is overburdened already—PSE should give it up to Olympic Pipeline and remove the existing poles so Olympic can redo their corroded pipes that PSE lines have contributed to over the years. PSE should co-locate with Seattle City Light to rework that corridor where it is safer—keeping power together —not over gas!! Co-location n=means power and power together—not power, pipelines, homes and fault zones. Olympic purchasing the corridor rights from PSE will help pay for the PSE project.)

**Essential Public Facilities (EPF) are defined by state law (RCW 36.70A.200 and WAC 365-196-550) as necessary facilities that are typically difficult to site. The GMA requires planning so that such facilities can be placed appropriately.** (EE is NOT NECESSARY at scale proposed!)

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**A determination of whether the Energize Eastside Project qualifies as an EPF would be made by the permitting agency at the time of permit preparation or submittal.** (Hopefully all cities see through the destruction this would create and preserve our areas for years to come. I can guarantee my city of Newcastle will never allow homes taken for an unnecessary project, that will blight and scar our city for years—see you in court. The Attorneys are lined up—you can not prove this is needed for Eastside power!! We will not tolerate paying for this and destroying our neighborhoods for PSE to profit.)

**It is indicative of the land use planning strategy seen throughout the Eastside communities, which is to preserve existing single-family residential neighborhoods while fostering population growth in high-density housing in the urban areas.** (Then don't threaten eminent domain!!)

**Housing impacts would occur in the event that residences needed to be purchased and removed in order to build the project. PSE confirms that due to safety regulations, transmission lines would never be placed directly over homes (Strauch, personal communication, 2015).**(Really!! Who asked if they could run the wires over homes—PSE?)

**Setback distance, ROW landscaping, shielding of visual and aural effects, and integration of the ROW into the neighborhood can significantly reduce or eliminate the impact of transmission structures on sales prices;**( How do you hide metal poles that are 85'-100' tall—in a clear space of 150' wide with plants no taller than 15'—We want to see that mitigation—or PSE magic perhaps? Yes—devaluation of up to 20% on a \$700K home —impact is severe—\$140K!! Mitigate that cost to the many homes facing industrial scaled poles.)

**Examples of Goals and Policies for Reliable Energy Provision**  
**Redmond Policy UT-59: Work with energy service providers to promote an affordable, reliable, and secure energy supply that increases development and use of renewable and less carbon-intensive sources, and that minimizes demand and consumption.**  
**Kirkland Policy U-7.3: Work with and encourage PSE to provide clean and renewable energy that meets the needs of existing and future development, and provides sustainable, highly reliable, and energy-efficient service for Kirkland customers.** (Not only work with PSE—DEMAND OF PSE—or start a PUD for King County!)

**10.7.3.1 Option A: New Overhead Transmission Lines**  
**Overall, the potential impacts to land use and housing with the transmission lines of Alternative 1- Option A could range from minor to significant depending on specific location and whether a new or existing corridor were used for the facility.**(Amen to that.)

**10.7.3.1.2. Existing Corridor**  
**Placing the line through existing PSE corridors or other dedicated utility easements, or along roadways, would be more consistent with land use and utility policies supporting utility co-location, although it could still result in some conversions of adjacent properties or purchases of housing. These conversions could occur in the event that the corridors needed to be widened to accommodate the new utility and allow an adequate clear zone between the lines themselves and between lines and other structures. Up to 50 feet of additional clear zone could be needed throughout the corridor. This could require removal of some structures, including housing, and would reduce the availability**

194-D-23

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of vacant land for additional housing or other development. The use of an existing shared corridor would have a lower potential for impacts from property conversion than a new corridor. Impacts would range from minor to moderate, depending on location and actual design. (HOW on earth would DEIS describe the above as minor to moderate impact? Just shows how slanted this is—if 26 homes need to go to widen 50' ROW in my neighborhood alone—you call that minor? Unbelievable conclusion. Maybe you should loose your homes since you have no mercy for others? Totally unacceptable on DEIS part!)

I94-D-23

Alternative 1- Option A would be generally consistent with local planning policies listed in Appendix F except in the event that PSE intended to co-locate the transmission line with the Olympic Pipeline Company (OPLC) high pressure pipeline described in further detail in Chapter 16. While some local planning policies encourage co-location with utilities where safe (see Chapter 8), three study area communities (King County, Redmond, and Kirkland) have policies or regulations that could specifically prohibit combining new or expanded transmission lines (which are considered high consequence land uses) with hazardous material pipelines. Development regulations would need to be consulted for all study area communities. The City of Bellevue, for instance, has one code section (LU 20.20.255) which would disfavor site selection in residential areas. (Smart cities—that is why Newcastle has placed a moratorium on PSE—to write codes to prevent the unthinkable! Construction along aging, corroding gas pipelines! Thank you Newcastle—you will do the right thing.) High Consequence Land Use is a use which, if located in the vicinity of a hazardous liquid pipeline, would present an unusually high risk in the event of pipeline failure due to its function, including utilities providing regional service.(Disaster —is too risky with other options available )

Table 10-2. Potential Land Use Restrictions for Alternative 1 Study Area Community  
 Newcastle Utility yards not allowed in: Mixed Use, Urban Residential, Neighborhood Business zoning districts(Thank you Newcastle)  
 (Sounds like other cities already have protection in place for co-locating work along the gas pipelines that would be hazardous—in residential areas.)

I94-D-24

10.8 WHAT MITIGATION MEASURES ARE AVAILABLE FOR POTENTIAL IMPACTS TO LAND USE OR HOUSING?  
 To limit impacts associated with conversion of properties to utility uses, PSE could apply the following measures:

I94-D -24 See response for Key Theme LU-2.



194-D -25 See responses for Key Theme ECON-1; Key Themes VR-4, VR-1, and VR-3; Topic PLS; and Topic EMF.

194-D-24

• **Use existing utility corridors or properties already in PSE-ownership to the extent feasible. ( Gas line Corridor is unsafe)**  
 • **Underground all or part of the line, or place the line through Lake Washington. ( Makes great sense—but PSE will not do)**  
 • **Provide relocation assistance for any residents displaced or businesses purchased.**  
 ( WOW—that is so reassuring to those of us loosing our homes—just what I want is PSE help! You will pay dearly if you approach me for my home of 28 years)  
**No significant unavoidable adverse impacts to land use or housing are expected with any of the action alternatives. Alternative 1- Option A, would likely have significant impacts if a new transmission corridor was developed, but mitigation is available as discussed above.** ( There is not enough mitigation available to move—see you in court! By that time the rolling blackout will have already hit the Eastside according to PSE. When actually I just read Canada has more than enough power right now and with their new dam built soon—they need to have a place to send that power—sounds like another unnecessary profit project by someone. So is this PSE line to send power south from Canada and the new dam? A joint effort for PSE ratepayers by Columbia Grid, PSE, BPA to get a project paid for by PSE’s so called “clueless” ratepayers? Nothing short of fraud on all levels if that is the case.)

**Chapter 11—Views and Visual Resources:**

**Views and Visual Resources Key Findings**

**Alternatives 1 and 3 could cause significant impacts to views and visual resources due to vegetation removal and obstruction of scenic views. Overhead transmission lines have the greatest potential to affect residential views. Of all overhead options, 230 kV lines in a new corridor would have the greatest visual impact (Alternative 1, Option A), the taller poles used in Alternative 1 would have a greater contrast with the existing visual setting. Assessor’s information also identifies properties with a view of a power line that, in the judgment of the Assessor, lowers the property valuations.**(There needs to be mitigation for all those affected by home devaluation—not just the ones that are stripped of their homes and property rights! No one should suffer for PSE to profit \$1-2 billion—they can pay for their destruction to families’ biggest asset—home ownership and equity.)

194-D-25

**11.2.9 Newcastle**

**The Draft 2015 City of Newcastle Comprehensive Plan states that the city is “a small town situated in a lush green setting” (City of Newcastle, 2015a). The draft plan also states that utilities, including electricity, should be provided to serve the projected population growth within the planning area in a manner that is aesthetically acceptable to the community (City of Newcastle, 2015a).** (Aesthetically acceptable—Newcastle said it all!)

**Specifically, the plan states that utility lines should be placed in shared utility corridors, and that utility providers should minimize visual impacts of overhead transmission lines on adjacent land uses (City of Newcastle, 2015a).** ( Shared corridors with SCL line—not shared with aging gas pipelines!)

**11.3 WHAT ARE THE VISUAL RESOURCES, VIEWPOINTS, AND VIEWS IN THE COMBINED STUDY AREA?**

**11.3.1 Visual Character on the Eastside**

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194-D -26 See response for Key Theme EIS-4.  
 194-D -27 See responses for Key Themes VR-7, VR-5, and VR-3.

194-D-25

**Mount Rainier, the tallest peak in the Cascade Mountain Range, provides a visual landmark for the greater Seattle area (Figures 11-4, 11-6). At 14,410 feet tall, Mount Rainier “visually dominates the skyline” from numerous locations throughout the combined study area, and up to 100 miles away (The National Geographic Society, 2015).**  
 ( I have a beautiful Mt. Rainier view from my deck as do other homes in Olympus —definitely worth increase in home valuation.)

**11.3.3 Public Viewpoints**—(Ugly views of tall poles from prestigious Newcastle Golf Course— dining and events from there. That is the best view from a public space on the Eastside!! Tragic to view a wider corridor littered with tall power poles—not the definition of a “lush green city” Newcastle portrays—a designated TREE CITY—yet you want to cut and strip one of our most beautiful resources—just for poles and wires and power not needed to this scale!! )

**Figure 11-12. Percent of Private Viewpoints Identified by King County Assessor in Study Area Communities**

**Source: King County, 2012**—(This show Newcastle with NO MT. Rainier views—however, my home and many in Olympus neighborhood have stellar MT. Rainier views!! Needs further review to impact of home values as these polls will degrade our homes as well as great territorial views obstructed by many more homes here.)  
 (Your property view scoring map Figure 11-13—is definitely incorrect! Come see our views from Olympus neighborhood!—Or was it too cloudy that day you were writing the DEIS?)

**Chapter 11-21 states— The 230 kV lines are typically suspended on steel poles that are 100 to 135 feet tall and 200 to 1,000 feet apart (Corbin, 2007).**( So why is PSE saying they will suspend the 230kV lines on 85' Tall poles—Unacceptable for safety to EMF in dense residential area as well as EMF causing pipeline corrosion. PSE needs to use industry standard practices instead of bending safe practices to earn them less resistance in the community from visual blight!)

194-D-26

**Figure 11-17 shows PSE Eastside electrical infrastructure.** (A second 230kV line should be placed along the existing one showing to the far east of the drawing —away from homes and views and gas pipelines. Why was that routing not studied?)

194-D-27

**Table 11-2. Impact Assessment Criteria**

**In most cases, viewers who are closer to new electrical infrastructure would be subject to greater visual impacts than those located farther away from the project.**( You couldn't say it better—huge impact to those closest!)

**Significant - If the duration of impact would be permanent, the degree of contrast would be high, and there would be a medium to high number of viewers with medium to high sensitivity to the change in the visual environment.**(Wow—you used the word “significant” finally and realize there is no mitigation that can help with a industrial towers in a residential area. Your DEIS words—1st found in Chapter 11 to acknowledge this is a severe impact to residents on a permanent basis. However taking my home is not rated “significant” by DEIS! Amazing piece of work this DEIS is.)

**Clearing and grading can result in a visual impact because areas that were once vegetated would be cleared, and natural undulations in the topography would be graded. Clearing and grading has the potential to permanently change the character of the area,**

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194-D-27

particularly if a substantial amount of taller vegetation (such as trees) is removed or if grading noticeably alters any existing landforms. Alternatives 1 and 3 present the greatest potential for visual impacts during construction, (You said it again—visual impact will be definitely noticed)

Vegetation clearing during construction can be either temporary or permanent. Temporary vegetation removal that can be restored after construction is discussed in Section 11.5. (Removing tall trees and replacing with low bushes will not do anything for hiding 100' tall towers. More PSE magic needed here!)

Changes to visual character can occur through introduction of new infrastructure that creates contrast against the natural or built environment due to its height or geometric form. Changes to visual character can also occur as a result of introducing a clearing or opening in an area that was previously forested. (150' wide cleared ROW will be seen from many places.)

194-D-28

Several studies have found that areas adjacent to major transmission lines have lower property values than comparable properties where there is no view of a transmission line. The studies indicate a range of 1 to 20 percent reduction in property value. (Ask realtors in the area—some will not show homes next to power lines—perception of safety and EMFs—20% decline or more is more appropriate to home de-valuation) Despite the varying conclusions on whether or not views of transmission lines translate into reduced property values, the King County Assessor's Office noted that factors such as construction of a view-obstructing transmission line could result in a negative influence on property values (FCS Group, 2016). The Assessor's Office noted that when a property value appears to be affected by the presence of a power line, the Assessor of the property adjusts the assessed value downward (Prins, personal communication, 2015). (King County Assessor knows for sure)

The EIS Consultant Team could not determine the degree to which these various factors negatively impacted the property assessment. (Try harder!! Talk about stacking the deck to PSE favor!!—Unbelievable statement in DEIS! Let a judge decide how our home values will be changed!)

It is reasonable to assume that some existing properties would have lower property values following construction of an overhead transmission line. (Very reasonable to assume—you should have erased the statement above—your words! DEIS is flawed—as you can see)

194-D-29

PSE may be able to reduce the required clear zone, in which case impacts would be less than assumed for this phase of the EIS. (NO PSE MAY NOT change safety standards—at their own whim!! Safety standards are made for our protection—not to be altered by a greedy for profit company!)

Easements allow PSE to remove anything located within the right-of-way (such as lawn furniture and other landscaping). (Removing trees and plantings with potential/ or taller than 15' is inexcusable—and replanting with small shrubs—how do you mitigate the look of a 100' tall power pole?)

194-D -28 See response for Key Theme ECON-1.

194-D -29 See responses for Topic VR and Key Theme ECON-1.

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In areas where trees would be removed, the transmission lines and poles would be visible to nearby viewers. Clear zones can result in impacts by changing the visual character of the area (removal of trees, landscaping, and structures) and by opening up views of transmission lines and/or other features of the landscape that were previously obscured by vegetation. (DEFINITE ugly impact—won't regrow for years—or in my lifetime!)

The clear zone for an overhead transmission line in a new corridor in a wooded area would produce a higher degree of contrast. (YES!!) Visible from homes and vistas from afar!! Unreasonable contrast to existing. Because the Eastside is predominantly single-family residential, there is a high likelihood that any overhead transmission corridor would affect sensitive viewers.

Poles and wires for overhead lines have the potential to impact views by introducing structures that may be of a different scale than existing structures in the area. They may also impact the enjoyment of visual resources by partially obstructing views.(View hindrances need to be mitigated by all involved—part of the project cost)

Long-term visual impacts associated with Alternative 1- Option A include changes to visual character through introduction of new electrical infrastructure, partially obstructing views of visual resources, and maintenance of clear zones. Some viewers would likely perceive a significant impact.(AMEN—you finally said something that makes sense!!)

It is anticipated that Option A would require a clear zone between 120 and 150 feet wide, requiring clearance of up to 327 acres of vegetation. Existing transmission corridors in the combined study area vary in width. If an overhead transmission line were placed in an existing transmission right-of-way, the existing right-of-way would need to be extended to meet clear zone requirements.(Exactly why Alt. 1-Option A is the most undesirable of all options! Destroy the environment—isn't that what this DEIS is all about? Saving environment and our natural resources or is it just an exercise to satisfy the government? Do you heed what it actually does to the environment or to people or is this all about the exercise?)

The presence of transmission lines often results in a sharp contrast with the surrounding landscapes. The size of transmission line poles and the material they are made of can influence the amount of impact they create. It is anticipated that 85- to 100-foot-tall steel or wood poles would be used for the 230 kV lines. Depending on topography the pole height may vary, with the tallest height being approximately 135 feet if a highway is crossed (Corbin, 2007).(Or view contrast from Newcastle Golf Course)

Placement of poles can also determine the degree of impact. When placed in relatively unobstructed skylines, transmission lines can become the dominant structure on the horizon, create contrast against the sky, and result in a more noticeable visual impact. (Yes taller poles dividing my Olympus Neighborhood would be a disaster!! Oh sorry "disaster" would be when the gas line explodes from a construction accident!!)

Topography can also play a role in the visibility of the poles(Especially in Olympus on a hill —many more homes to west will see these taller poles in their views of Mt. Rainier and territorial views.) Overhead transmission lines can impact views of visual resources from surrounding properties. (Your words— the approximately 18-mile length of the corridor and

194-D-29



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the predominance of residential land uses, a high number of viewers with high sensitivity would likely be impacted. Again DEIS states high sensitivity—yet Alt. 1-option A will be chosen since it is PSE favorite—biased outcome before process is even submitted.)

**Views from the east looking west toward downtown Bellevue would be less likely to be impacted because the infrastructure would share the horizon with the tall buildings located behind it.** (How Absurd!—Figure 11-19—just what you want is horizontal lines through your picture!! Come on!! Somerset views are their legacy—PSE would love to destroy—then say—we don't compensate for view hindrance—go back to Australia and wreck your own land!! They would not allow this there in that beautiful land!!)

194-D-29

**Replacing an existing 115 kV transmission line with a taller set of poles could affect a similar number of parcels as a new corridor, but the change in contrast between the transmission lines and the surrounding environment would be less noticeable than from a new line because the existing lines already affect some views. Typically, properties within approximately 500 feet of and either uphill from or at the same elevation as existing transmission lines have views that are already affected. Replacement with new taller transmission lines could increase the effect on those properties as well expand the area impact by approximately 250 feet because of the increased height. However, the greater the distance, the greater the likelihood of intervening features such as vegetation, other structures, and changes in topography that would obstruct views of the power lines. For immediately adjacent properties with small structures such as single-family homes, taller poles would appear out of scale.**  
 (Oh how true is that—a 25' tall home adjacent to a 100' poles—with a 4 foot wide base structure—try covering up that view!!)  
**Your mitigation:Using aesthetically pleasing materials and landscaping to shield electrical equipment from public view. For steel poles, using paint colors that reduce the contrast of the poles with the surrounding environment;(and what color would that be to hide a 130' tall pole? I don't think there is one—can you identify that color please as part of your DEIS things you need to answer.)**

**Best Mitigation I have read:**

**Placing portions of the transmission line underground (as in Alternative 1, Option C) or underwater (as in Alternative 1, Option D) in areas where significant impacts would occur from overhead lines;(—Excellent ideas to preserve neighborhoods, and views and most of all safety along a gas pipeline!)**

194-D-30

**Under Alternative 1, potentially significant impacts to visual resources are likely with any overhead line alignment because of the high number of sensitive viewers and the high degree of contrast that would be created. Significant impacts would be unavoidable with development of a new overhead transmission line corridor. If existing corridors are used, significant impacts**

194-D -30 See response for Key Theme VR-7.

194-D-30

**may occur, but could be reduced through installation of underground lines.**( Now you are making some sense! Do not destroy neighborhoods and risk safety along the pipelines. Take the project outside of this corridor.)

194-D -31 See responses for Key Themes REC-1, REC-3, and REC-4, and Key Theme NOI-1.

194-D -32 See response for Key Theme H&C-3.

**Chapter 12-Recreation:**

**12.6.3.1.1 Permanent Infrastructure within a Recreation Site**  
 If transmission lines are located in recreation sites they could impact recreation users. There would be permanent loss of vegetation, including trees, because a 230 kV transmission line would require a cleared corridor of 120 to 150 feet wide (or up to 50 feet of clearing where the existing PSE easement is used). Impacts from vegetation loss would be considered significant if there is a permanent conversion of vegetation type (e.g., from forested to low-growing vegetation) that would substantively change or negatively impact the scenic nature of a recreation site.(Many residents walk the pipeline corridor daily with their dogs—that is our space for recreation—you will be taking that away for many months.)

**Noise from transmission lines may be audible in recreation sites,** (As well as homes nearby! Glad you recognized noise—as PSE always played this down with new wires—there is no noise audible they say.)

**Transmission line noise could have a minor impact on recreation.**( and a big impact on residences nearby)

194-D-31

The most likely future action that could alter or affect recreation sites within the Energize Eastside project area is Sound Transit's East Link project, which could be constructed during the same general time frame. The East Link project will impact some parks in Bellevue, Redmond, and King County (Sound Transit, 2011). In combination with the East Link project and other projects planned in the project area, the Energize Eastside project could potentially cause cumulative impacts on recreation if the same recreation sites are affected or if construction periods overlap. Energize Eastside may avoid direct impacts on recreation sites by siting facilities outside of designated park or recreation areas. Construction of the East Link project is anticipated to occur between 2015 and 2021. Construction for the Energize Eastside Project may occur during this same period; however, construction could be planned to avoid working in the same areas concurrently. Construction activity throughout the region could result in potential impacts to parks and other recreation sites. Coordination with potentially affected cities will help to reduce potential impacts through facility siting, and would comply with all applicable permitting requirements to mitigate impacts. (I thought Route L along Lk. Washington Boulevard and the "Rail Trail" were taken off EE project—why are you now mentioning this?)**Significant impacts could occur.**

194-D-32

**Chapter 13-Historic and Cultural Resources:**

( Newcastle Historic Cemetery is right adjacent to the existing 115kV lines and the pipelines— Rest in peace—do not disturb this area)

**Chapter 14-Transportation:**  
**14.5.3.2.9 Olympic Pipeline**  
**The possibility that the Olympic Pipeline would be damaged during construction is considered low, because of regulatory requirements and safety practices that govern construction near the pipeline. However, if significant damage to the pipeline were to occur, or if there is a planned temporary disruption during project construction, petroleum products normally transported in the pipeline would be transported by other means, primarily by trucks using interstate highways. This would be expected to generate up to a few hundred truck trips per day**  
 (Should pipeline damage result during construction or after construction and pipelines would have to be shut down —resulting in trucking of fuels from Anacortes to Portland along busy freeways—would cause significant highway safety risk to the public with this many trucks daily transporting hazardous liquids. **Significant—in my words**—adverse affect and dangerous situation)  
 (Transporting heavy equipment over pipelines is not safe and liquid soils between SE 84th Street and 129th Ave SE in Olympus—will result in trucks getting stuck—water in this area all year from springs)  
**After utility poles are installed, transmission wire would be strung between the poles. During the period in which wire is pulled, no vehicular traffic could be allowed on roadways or sidewalks located beneath the areas of pulling activity.**(Very inconvenient in Olympus—only one exit to Coal Creek Parkway)

194-D-33

**CHAPTER 15- PUBLIC SERVICES:**  
**15.3.1.2 Electrical Incidents**  
**The capacity for harm and damage can be minimized if operating under large overhead wires can be avoided.** (YES—the gas lines would be right under for 16 of the 18 miles—NOT SAFE!)

194-D-34

**15.3.1.3 Pipeline Fire or Explosion**  
**The Olympic Pipe Line Company (OPLC) Facility Response Plan (FRP) provides guidelines to respond to a spill from the Olympic Pipeline, and supplements responders' training and experience during an actual response. Study area communities located along the pipeline corridor have adopted emergency response plans outlining procedures for responding to pipeline incidents (Anderson, personal communication, 2015)** (Unfortunately these shut off areas are few and far between and gas personnel only can shut them off—meanwhile thousands of gallons are spilling into neighborhoods)

194-D-35

**Stronger laws are in place that require monitoring for digging that occurs near the pipeline (Anderson, personal communication, 2015).** (What are those new laws—outline those please for us. Olympic Pipeline told me they want to know any vehicles driving over their corridor—even cars—because pipelines are buried at different depths. These areas should be blocked off so no unauthorized motor vehicles can drive over them—but they are not! You see heavy trucks there many times during the year.)

194-D-36

**During the period in which wire is pulled, no vehicular traffic would be allowed on roadways located beneath the areas of pulling activity. These delays and closures could delay response by requiring emergency service and other public service providers to use**

194-D-37

194-D -33 See response for Key Theme TRAN-2.  
 194-D -34 See response for Key Theme SVC-2.  
 194-D -35 See responses for Key Themes SVC-1 and SVC-3.  
 194-D -36 See response for Key Theme SVC-3.  
 194-D -37 See response for Key Theme TRAN-1.

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- 194-D-37 | **a less direct route.**(Shutting off streets during construction can hinder emergency responders to our homes for fire, police and ambulance—if they come upon road closures and have to detour for miles as in the case of my Olympus neighborhood. Lives could easily be at stake.)
  
- 194-D-38 | **A potential significant adverse impact on public services could occur if a rupture and explosion of a pipeline occurred requiring response from both local and regional emergency service providers. Depending on the magnitude of the incident, the response could be large and involve multiple regional agencies and responders. However, as described in Chapters 8 and 16, conformance with industry standards and regulatory requirements would ensure that potential hazards are identified and design plans developed to minimize adverse effects from these hazards to minor levels.**(Here again DEIS takes a significant risk of pipeline accidents and minimizes them to minor just by using words! Any risk is too great for lives at stake!)
  
- 194-D-39 | **For new projects, such as the Energize Eastside Project, electrical engineers will usually design overhead transmission lines to comply with recommended maximum conductor surface gradient values set forth in the Institute of Electrical and Electronics Engineers.** (Love how PSE will “usually” design to these standards—will they or won’t they? Unsatisfactory response.)
  
- 194-D-40 | **Gap discharges (where electricity crosses tiny gaps between mechanically connected parts) can also generate noise.** (What is mitigation if this noise does occur to residents?)
  
- 194-D-41 | **Communication interference is dependent upon the frequency of the system in use, the relative locations of the transmitters and receivers with respect to one another, and other parameters (Enertech, 2015). Overhead transmission lines do not, as a general rule, interfere with radio or TV reception.** (This is huge for enjoyment of life in your home—what can you do if interference is there?)  
**Corona-generated radio frequency noise decreases with distance from a transmission line and also decreases with higher frequencies.**(Many homes will be close to the 230kV lines)
  
- 194-D-42 | **Chapter 16-Utilities:**  
**Although a significant adverse impact on utilities could occur if an explosion of any of these types of lines resulted from the project, the risk is minimized by conformance with industry standards, regulatory requirements, and construction and operational procedures that address pipeline safety.**(Again —most significant consequence is minimized by words—RISK along pipelines is dismissed again!)
  
- 194-D-42 | **These goals and policies are generally focused on the following:**
  - **Ensuring that adequate public utilities and facilities are planned for, located, extended, and sized consistent with planned growth;**(How about utilities sized as need is proven! Smart Alternative solutions apply here which CENSE will provide soon.)
  - **Ensuring utility systems are constructed in a manner that minimizes negative impacts to existing development and utilities;**( Think pipeline safety and taking of homes and disruption communities)

- 194-D -38 | Comment noted.
- 194-D -39 | See response for Key Theme SVC-2.
- 194-D -40 | See response for Key Theme NOI-2.
- 194-D -41 | See responses for Key Theme SVC-2 and Key Theme NOI-1.
- 194-D -42 | See responses for Key Theme UTL-3, Topic ALT, Topic PLS, and Topic EARTH.



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• **Minimizing and preventing unnecessary risk due to hazardous liquid pipelines.**(You can accomplish this by using any other alternative but Alt.1-Option A—stay away from the gas pipelines!)

**In addition, some study area communities include policies encouraging the use of new or innovative technologies to increase the quality and efficiency of utility service.** (Great idea—hope Newcastle adopts this!)

**Depending on their services, utilities not managed by Cities are state regulated, federally licensed, and/or municipally franchised providers.**(Except PSE—there is no over-sight—a huge flaw in Washington State that needs to be corrected. How can we get to this stage when we can prove this is not necessary to the scale PSE proposes—yet because they are a private company they don't have to be transparent? Where has all this slipped through the cracks? Doesn't even sound possible—when I have to obtain a permit to put in a water heater. PSE has no oversight before a project is built. I think the WUTC has had enough of PSE —sounds like WUTC ripped them apart recently in Olympia with their IRP. And should this project happen —the WUTC will not grant them ability to pass these bogus, unnecessary charges on to us ratepayers! Soon the demise of PSE—here comes KING PUD!)

**The UTC identifies five major reasons why pipelines leak or fail: (1) third-party excavation damage; (2) corrosion; (3) construction defects; (4) material defects; and (5) outside forces resulting from earth movement, including earthquakes.**(If UTC has oversight of pipelines and NOT PSE—then WUTC should stop this project being built over these hazardous gas pipelines. Especially since we have recently learned Olympic Pipeline in 2014 has been put on notice to make corrosion repairs —which to date have not been done.)

**Information currently available from UTC indicates that the leading cause of gas distribution pipeline failures in 1998 was excavation damage, causing 58 percent of leaks that occurred in Washington State. Construction equipment can create pipe gouges, dents, scrapes, and cracks in pipelines. This type of damage can grow and lead to a catastrophic failure (UTC, 2015).**(Glad UTC recognizes the danger—why can't PSE see it)

**The pipelines are considered hazardous liquid pipelines, as designated by RCW 81.88.040 and WAC 480-93-005. Hazardous liquid pipelines, if ruptured or damaged, can cause large explosions and/or fires due to high operating pressure and the highly flammable and explosive properties of the transported products.**(AMEN)

**16.3.6 Submerged Utilities and “Lake Lines”**

**Several existing pipes and cables are located along the bottom of Lake Washington and Lake Sammamish. Many of them provide electricity, gas, communications, wastewater, and water service to Mercer Island from the Eastside (Power Engineers, 2015).** ( If PSE can submerge lines to Mercer Island—then they can travel through Lake Washington and safely provide power they need north to south.)

**16.3.7 What is pipeline corrosion and why is it a concern?**

**As described in Chapter 8, high-voltage transmission lines produce electric and magnetic fields. Electric fields are produced by the voltage in use and magnetic fields are produced by current. The strength of the electromagnetic field (both electric and magnetic fields, also known as EMF) decreases rapidly with distance from the source. A consequence of high-voltage power lines and buried petroleum pipelines sharing a corridor is that electromagnetic interference can be introduced on the pipelines, which**

194-D-42

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can cause corrosion on the pipeline over time. Corrosion accounts for about 23 percent of the significant failures in both hazardous liquid and gas pipelines (Baker, 2008). Electromagnetic interference, or induction, on pipelines occurs when there is extended and close parallel routing with three-phase overhead transmission lines (Figure 16-4). The voltage is due to any phase imbalance in the lines. Electromagnetic fields from high-voltage power lines are especially a concern where the pipeline route is in parallel with, or crosses, high-voltage power lines. The corrosion concern depends on the currents flowing in the pipeline, which result in a voltage difference between the pipeline and the surrounding soil. The corrosion potential is influenced by various parameters such as soil properties, pipeline to transmission line distance and configuration, and the overhead line's operating current (Baker, 2008). (Great reason for PSE to abandon their 115kV corridor all together and let Olympic Pipeline have it and they can rebuild their corroding pipelines here and can we all live happily ever after—safely!)

As described by Baker (2008), from a scientific point of view, corrosion is well understood, both in terms of cause and method of control. However, despite the level of industry knowledge, pipelines continue to experience failures due to corrosions. Factors cited include the following:

- The chemical properties of the environment surrounding a buried pipeline are not adequately understood.
- Variations in the oxygen content, moisture content, and chemical composition of the soil along the pipe length and from top to bottom of the pipe can act as concentration cells that promote corrosion.
- Moisture content and oxygen content of the soil vary with time.
- Coating quality varies along the length of a pipeline.
- Coatings sometimes become disbonded from the pipe surface, allowing groundwater to contact the steel but shielding the steel from cathodic-protection currents.
- Disbonded coating will prevent aboveground survey detection of underlying corrosive conditions.
- Physical variations in soil characteristics and placement (gaps, etc.) affect the distribution of cathodic-protection current.
- Visual inspection of the outside of the pipe and the coating require excavation.
- Stray currents from nearby buried structures can interfere with a pipeline's cathodic-protection system (Baker, 2008). (PSE can abandon the pipelines all together—you are causing big safety problems—put a 500kV line in Lake Washington!)

Although a pipeline-related explosion as a result of project construction appears unlikely given the regulatory framework now in place (see Chapter 8), such an event would equate to a moderate to significant impact depending on the size of such an event, the number of customers affected, and the time needed to restore service. (WOW—again DEIS—size of the event—customers still living will be affected for sure—those dead won't give a damn!)

Construction would involve the use of heavy equipment and excavation activity. If this work occurs within existing utility corridors, it would have the potential to cause utility conflicts and service disruption. (Thank you for acknowledging a problem would exist—finally in the last few pages.)

194-D-42

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If located along the existing PSE 115 kV easement, construction of a 230 kV line has the potential to disrupt existing natural gas lines or the Olympic Pipeline.( You said it)

Construction risks associated with the Olympic Pipeline include potential for compression damage from heavy vehicles or machinery driving or placed above the buried lines, potential for pipe disturbance during excavations for new poles, and potential for pipe disturbance from removal of current poles. Certain machinery, such as auger equipment, can be a particular concern because of how heavy the equipment is. (Not safe!)

A potential significant adverse impact on utilities could occur if a rupture and explosion of a pipeline occurred during construction resulting in widespread service disruption and difficulties in reestablishing service. (Yes—great reason to avoid being around the pipelines)

If a pipeline rupture and explosion also damaged the 230 kV transmission lines, there could be substantial and long-term power outages to PSE customers. ( Now you have more than rolling blackouts—a real problem! That is why Smart Alternatives described soon by CENSE will eliminate any risk of this.)

The Eastside is located in a seismically active region, and existing infrastructure is at risk of damage in the event of an earthquake. Due to the close proximity of other utilities to existing electrical infrastructure (substations, transmission and distribution lines), damage to electrical infrastructure from an earthquake poses risks that could potentially damage nearby utilities. Similarly, electrical infrastructure could be damaged by lightning strikes that could generate fires. Both earthquakes and lightning strikes could also cause damage to nearby buried utilities.(Again—why complicate a potential problem that will occur in this project lifetime—why does PSE need to build here when all risks are present—when other alternatives would work much better)

**16.7.3.1.1 Consistency with Applicable Plans and Policies**  
A new 230 kV line within PSE's existing 115 kV line easement may not be consistent with goals and policies of some study area communities that specifically discourage co-location of critical utilities with hazardous fluid pipelines like the Olympic Pipeline. (Newcastle will soon enact these policies in line with other cities to protect their citizens.)

Compared to a 115 kV line, EMF is stronger with the higher voltage of a 230 kV line, but higher voltage requires more ground clearance which can mitigate this stronger field to some extent. The closer to the ground the lines are, the stronger the electric field at the surface (Marrinan, personal communication, 2015).( So why is PSE now proposing poles 85' and 100' tall when they originally said they would be 95'-130' tall all through the CAG process. If pipes corrode from EMF's—then they have to affect humans—this is not right!)

Given the higher voltage of the 230 kV line, there is potential for the new line to increase cathodic-induced corrosion of steel or other metallic pipelines, if present, which could lead to long-term accidental system disruption of such pipelines.(Not Good!)

Appendix K-Interview questions for Fire Departments:  
(No question to gas pipeline explosion—or how they will handle a catastrophe!)

194-D -43 See response for Key Theme SVC-1.

194-D-42

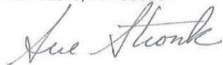
194-D-43

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I hope you had as much fun reading this as I did your 715 page DEIS document. Thank you for taking my concerns to heart to preserve safety in my community—Olympus neighborhood in Newcastle—and to preserve my home and many others subject to the wrecking ball for an unnecessary project.

- 194-D-44 | Alternative 1-Option A —has by far the most adverse affects—even the DEIS agrees in many places. The best Alternative 2 is yet to come. CENSE believes Alternative 2 solutions are not the best as outlined in this DEIS and probably PSE wrote these in so they can be refuted as viable solutions. CENSE will propose the most effective and proven, workable solutions cities are now using—smart 21st century solutions that can be incrementally installed as power needs change. These will be accomplished safely away from gas pipelines, more cost efficient, and less destructive to our environment than widening ROW's, cutting trees, driving and drilling over corroding gas pipelines. I'm sure you will agree—or this process is rigged for PSE to benefit in a fraudulent scheme to have ratepayers paying for PSE shareholders to profit.
- 194-D-45 |
- 194-D-46 |
- 194-D-47 |

Sue Stronk  
 12917 SE 86th Place  
 Newcastle, WA 98056



**A CENSE board member!**

*See attached Wall Street Journal Article:  
 Utilities' Profit Recipe: Spend More*

- 194-D -44 Comment noted.
- 194-D -45 See response for Key Theme ALT-1.
- 194-D -46 See response for Key Theme ALT-3.
- 194-D -47 See responses for Key Theme ECON-4 and Topic OBJ.

COMMENT

RESPONSE

**From:** [Sue Stronk](#)  
**To:** [Energize Eastside EIS](#)  
**Subject:** Comment to DEIS for PSE EE Project  
**Date:** Monday, March 14, 2016 10:24:46 PM

Comment from: 3/14/16

Sue Stronk  
 12917 SE 86th Place  
 Newcastle, WA 98056

A few things I just realized that make this process DEIS inexcusable:

I94-F-1

- 1) Your "quick form online" to send in comments does not work—therefore discouraging people from commenting. Unacceptable! You cannot enter your info over the examples shown there or erase those examples to input your information.
- 2) When you actually click on -- info@EnergizeEastsideEIS.org—to make an email comment —that takes you to --info@EnergizeEastside.org—which makes me wonder —without the "EIS" portion in the e-mail address—do these comments actually go to where they are intended—or into some box never to be read? Thus, voices are not heard.
- 3) In DEIS Fact Sheet section—page FS-ii—it describes Alternatives & Options as:  
 —NO ACTION ALTERNATIVE  
 —ALTERNATIVE 1  
 —ALTERNATIVE 2  
 —ALTERNATIVE 3  
 However on your online comment form page you describe Alternatives differently:  
 —ALTERNATIVE 1  
 ---ALTERNATIVE 2  
 ---ALTERNATIVE 3  
 —ALTERNATIVE 4: NO ACTION  
 There has never been mention of an Alternative 4 in the DEIS book—thus causing more confusion.

I94-F-2

- 4) How again, can you use a PSE employee to make comments in the DEIS book? How biased is that? Such a conflict of interest. Really—you didn't even try to provide objective points of view. Specifically—Bradley Strauch—quoted many times in DEIS chapters—works for PSE land use and environmental permits. Another fatal flaw in DEIS.  
  
 I am a CENSE Board Member and proud to be honest and transparent following this project for over 2 years which is full of PSE lies and deceit at every turn including this EIS process the City of Bellevue is obviously partnering with PSE to get rammed through Bellevue and the other cities. How do many of you keep a straight face? Karma will catch up to you eventually.

- I94-F -1 See response for Key Theme EIS-2.
- I94-F -2 See response for Key Theme EIS-1.

Comments on the 18 mile Energize Eastside transmission line:

Living in Northwest earthquake country we all know that "the big one" is coming. We have been hearing that for years. We get reminders in the news about the landslides, tsunamis and ground ruptures that will occur when the Cascadia subduction zone quake occurs but we get complacent about these warnings. On July 20, 2015 The New Yorker published an article "The Really Big One" by Kathryn Schulz. I have enclosed a copy of this article which should be read by anyone contemplating installing 18 miles of 230 kV lines alongside a petroleum pipeline (the article is also available online). In her article, Schulz enables us to understand the scenario that will take place and it is very, very frightening.

One of PSE's consultants, Mark Williamson, has stated in discussing running the 230 kV lines along the petroleum pipeline "If you are more than 50 feet from a lattice tower or more than 25 feet from a single monopole you don't need to do any engineering studies. That's far enough that you can just be laissez-faire and let it go." The definition of laissez-faire is "a policy or attitude of letting things take their own course, without interfering".

I95-A-1

This attitude is not acceptable considering the high risk involved in running the 230kV power lines together with the petroleum pipeline in a part of the country where a 9.0 earthquake is expected to occur in the near future. The people of the Eastside deserve to see a thorough study of this situation.

Sallie Herling  
13825 Somerset Lane SE  
Bellevue, Wa. 98006  
425-746-9072

*Sallie Herling*  
*July 25, 2016*

I95-A -1 See responses for Key Theme PLS-2 and PLS-3, and Key Theme EARTH-1.



To: Heidi Bedwell, Energize Eastside EIS Program Manager:  
 From: Tom and Kristi Weir  
 4639 133<sup>rd</sup> Ave SE  
 Bellevue, WA 98006

We have lived Somerset for 45 years and are a half a block from the pipeline and over head power lines.

There are many reasons that the PSE Energize Eastside (Alternative 1A) should not go forward.

196-A-1

**First and foremost, the is the project is not needed.** PSE claims we will have the possibility of blackouts by 2018 under extreme weather conditions. This conclusion is based on unrealistic assumptions. PSE has assumed demand grows at 2.4% per year. Yet, the Northwest Power and Conservation Council says for the next twenty years most electricity needs can be met through conservation. The Council also states that since 1995 annual energy load grew at an average rate of only 0.40%! PSE has also underestimated transformer capacity in many ways. According to the independent study by Lauckhart-Schiffman, "the current system has three of four decades of capacity left in it."

196-A-2

The project is **highly risky** and could cause damage to homes and people as the proposed high voltage transmission lines will be placed above the Olympic gas pipeline.

196-A-3

Harm to the environment. This project will entail cutting down 8000 trees. We need these trees for carbon capture as well as preserving the aesthetics of Bellevue's noted "city in a park".

196-A-4

This project would cost ratepayers over \$1 Billion dollars over the lifetime of the transmission lines. This does not include the loss in property values and loss in property tax revenues to city governments.

196-A-5

Energize Eastside would leave us with an obsolete technology. We recommend reading the enclosed article by the Environmental Defense Fund (EDF) entitled "Welcome to the New Energy World." Here is a small excerpt:

*Over 3,000 electric utilities make up the U.S. power grid, which is sometimes called the largest machine in the world. But it's an antiquated system—largely unchanged from horse and buggy days. Because of this, electricity generation is today the single largest contributor to U.S. global warming. Now, change is coming. Big energy states are boldly reimagining how electricity is produced and distributed, making the system cheaper and cleaner.*

196-A-6

**Alternative 2**, the Integrated Resources Approach, would be safer and better for the environment. However, the solution described in the EIS is highly inadequate with costs and capabilities at times based on inaccurate and obsolete studies. See the enclosed article for many new ideas of how to rely on new energy sources which are far friendlier to the environment.

- 196-A -1 See responses for Key Themes OBJ-1 and OBJ-3.
- 196-A -2 See response for Key Theme PLS-3.
- 196-A -3 See responses for Key Theme GHG-1 and Key Theme VR-3.
- 196-A -4 See responses for Key Themes ECON-4, ECON-1, and ECON-2.
- 196-A -5 See response for Key Theme ALT-1.
- 196-A -6 See response for Key Theme ALT-1.

*Speaker # 21 Public Hearing  
Newcastle submitted 2.27.16*

**Response to Phase 1 Draft EIS, Energize Eastside**

Alicejean (AJ) Sutey 8117 128<sup>th</sup> Ave. SE Newcastle, WA 98056

My husband and I purchase our home in Newcastle's Olympus neighborhood over 20 years ago. We love our views of Cougar Mountain, the Cascade foothills and, sometimes, Mt. Rainier. Our neighborhood is a wonderful mix of cultures and people - it's a peaceful, warm and pretty place. We have worked very hard to make our home, yard and garden our retreat...a haven where we can grow very, very old.

197-A-1 Energize Eastside, Alternative 1A, will change a great deal of all that we love about our retreat and our neighborhood character. Our home is directly across the street from the houses whose backyards face the Olympic pipeline and the current 115KV transmission lines. In addition to the sadness of losing the entire row of neighbors on that side of our street due to required Alt. 1A home buy-outs, we will be forced to look out on a bleak void...a long linear scar...a permanent clear zone, occupied by buried dual high pressure liquid fuel pipelines and towering 230 KV transmission lines.

197-A-2 Safety will be an even higher concern and one not addressed in the Phase 1 draft EIS. This is the combination of the high pressure dual fuel pipeline, the Alt. 1A 230KV transmission lines and the very real threat of the Seattle Fault earthquake potential in the route PSE has chosen for Alt. 1A. Although there has been mention of seismic hazards (3.3.3.4) in this EIS, the work done in this document is either very poor or deliberately misleading.

197-A-3 3.3.3.4 Where the three types of Puget Sound earthquakes are listed and explained, the second one is the Seattle Fault Zone. This paragraph dramatically minimizes this fault, the location of potential damage and is misleading as to when the last earthquake occurred (just 1000 years ago as opposed to 11,000 years ago). When describing the third type of earthquake, the Seattle Fault Zone is mentioned and correctly labeled as dangerous due to its shallow nature. This statement belongs in the description of the Seattle Fault Zone paragraph.

197-A-4 3.3.3.4 In the Seismic hazards definition, it outlines both the primary and secondary effects of earthquakes, with ground rupture being a primary effect and liquefaction a secondary effect. And then the EIS continues the further define these scenarios and in 3.3.3.4.2 the EIS discusses liquefaction. In the middle of this paragraph there is a reference to seismic hazard areas identified in Figure 3-2 (which is on page 3-10). This map is completely incorrect. It shows an olive green shading that the key labels "seismic hazard area" and is actually the liquefaction area. I have compared this map to the ASCE 5<sup>th</sup> US conference on Lifeline Earthquake Engineering USGS map and it coordinates perfectly with the mislabeled EIS liquefaction map and leaves out completely the seismic hazard areas (ground rupture areas) which pass through a large portion of the area where Alt. 1A 230KV transmission lines will coexist with the dual high pressure fuel pipeline in populated areas. This EIS uses a liquefaction map to show seismic hazards.....use the one the earthquake engineers use with the accurate seismic hazard information!

- 197-A -1 See response for Key Theme VR-5.
- 197-A -2 See response for Key Theme PLS-2 and EARTH-1.
- 197-A -3 See response for Key Theme EARTH-1.
- 197-A -4 See responses for Key Theme EIS-4 and Key Theme EARTH-1.



197-A-5

3.4 There is no mention in this section of the Seattle Fault Zone at all. In a call placed to the Pacific Northwest Seismic Network and a discussion with the Bill Steel, the Director of Outreach and Information Service, regarding seismic issues facing the Puget Sound area, he referred me to the Earthquake Engineering Research Institute's web page for the research and report on the Seattle Fault Zone. It is titled "Senario for a Magnitude 6.7 Earthquake on the Seattle Fault". This report shows several maps that clearly define the high risk through which PSE's Alt. 1A route passes.

In the same way we all must face being ready for the inevitability of a large earthquake in Puget Sound, by preparing our homes and making disaster plans with our families, this EIS MUST face this as a very serious threat where a combination of high voltage power lines are placed over high pressure liquid fuel lines in populated areas. Correct the errors in this EIS and respond to our concerns for safely.

Now.....overriding everything and based on very recent information:

197-A-6

1. Northwest Power and Conservation Council power needs forecast (Seattle Times, Feb. 10, 2016) no need for new power generation in the PNW for the next 20 years
2. The Lauckhart-Schiffman load flow study (cense.org) providing validation that PSE has greatly overstated the need for Alternative 1A
3. Realization of the motivation for offshore PSE owners to push for a capital project due to a 9.8% automatic profit
4. Refusal of PSE to share their data used in their load flow study so that their needs forecast can be validated by independent experts

197-A-7 & -8

I recommend critical thinking. There is no need to risk the safety and well-being of our citizens and communities when there is strong evidence that the Energize Eastside project Alternative 1A is NOT NEEDED! I recommend rejection of Alternative 1 and selection of a scalable Alternative 2.

*Alicia Jean Sutley*

2

- 197-A -5 See responses for Key Themes EARTH-1, PLS-2 and PLS-3.
- 197-A -6 See responses for Key Theme EIS-1 and Key Theme OBJ-3.
- 197-A -7 Comment noted.
- 197-A -8 See response for Key Theme ALT-1.

Speaker #24 Phase 1 DEIS Public Hearings  
Bellevue 3.1.16

**Janis Medley**

4609 Somerset Drive SE • Bellevue, WA 98006 • 425 922 7415

March 1, 2015

Comments submitted to the Energize Eastside DEIS at the Bellevue Comment Meeting, March 1, 2015

Janis Medley  
4609 Somerset Dr SE  
Bellevue, WA 98006

My comments relate to the chapter on Environmental Health.

Section 8.9 reads:

*"There is a risk of damage and subsequent explosion whenever construction or operations and maintenance occur near buried natural gas lines or the Olympic Pipeline."*

I think we all agree with THAT.

And it concludes by saying:

*"However, that risk is not considered an unavoidable significant impact because the probability of damage occurring is minimized by conformance with industry standards, regulatory requirements, and construction and operational procedures that address pipeline safety."*

I think that's saying: the likelihood of anything really bad happening will be minimized by conformance to all the rules and regulations that are listed in Appendix M.

OK, so Let's look at how well OPL is conforming to regulations.

OPL's conformance to PIPELINE SAFETY is monitored by the WUTC and the Federal Pipeline and Hazardous Materials Safety Administration. On numerous occasions, OPL has been cited for: *"Failing to correct identified deficiencies in its corrosion control system within a reasonable time and to take prompt action to address all anomalous conditions."* And just for the record, in 2008, PSE, the self-described pipeline expert, was fined \$1.25 million for fraudulent gas pipeline inspection records.

OPL's conformance to RESPONDING TO SPILLS is regulated by The WA Dept of Ecology. The BEST SPILL RESPONSE takes a minimum of 15 minutes. That's a long time when flaming jet fuel is approaching your home and family.

OPL knows a little about this. In 2004, an employee at the OPL pumping and control station in Renton, heard an explosion and looked out the office window to see flames shooting 20 feet in the air. This explosion was caused by a leak in a test line connected to the pipeline. How safe should we feel if OPL can't prevent an explosion at its own headquarters?

There is another danger not addressed in the EIS. What is the probability that vibration from heavy machinery will disturb the soil supporting the pipeline and create hairline cracks? Like the Bellingham explosion, which occurred 5 years after the pipeline was damaged, will this project create a ticking time bomb?

198-A -1 See responses for Key Themes PLS-1, PLS-2, and PLS-5.

198-A-1

I98-A-1

**Janis Medley**

4609 Somerset Drive SE • Bellevue, WA 98006 • 425 922 7415

The construction and operations impacts on Environmental Health were rated as negligible or minor.

Of course that might be true in a perfect world where OPL and PSE conform to all the regulatory requirements. But in the real world, ignoring their history of non-compliance is irresponsible and dangerously simplistic. Section 8.9 as written is unacceptable.

Attachments:

Eight Communications between Olympic Pipeline and WUTC and the Pipeline and Hazardous Materials Safety Administration

FROM:  
Janis Philbin Medley  
4609 Somerset Dr SE  
Bellevue, WA 98006

*Janis Medley*

RECEIVED

MAR 15 REC'D

Development Services

TO:  
Ms. Heidi Bedwell, Senior Planner  
Land Use Division-Development Services  
City of Bellevue  
450 110<sup>th</sup> Ave NE  
Bellevue, WA 98004

RE:  
**Comments on the Phase I Draft EIS for PSE's Energize Eastside Transmission Line Project**  
Submitted on behalf of CENSE Coalition of Eastside Neighborhoods for Sensible Energy

March 11, 2016

**CHAPTER 1 INTRO & SUMMARY**

**1.8 / p 1-16 What are Applicants Objectives**

*Address PSE's identified deficiency in transmission capacity*

198-B-1

Refer to Laukhart-Schiffler Load Flow Study to see arguments against PSE's claim of deficient transmission capacity.

**Tables 1-2 and 1-3 / p 1-50 to 1-55**

*Impact Categories*

The impact categories assume that if all local, state, and federal regulations are followed, then impacts will be minor. This totally dismisses the very real possibility of human error during construction and operation of all alternatives. It also dismisses the very real fact, that Olympic Pipeline has both been sited and fined for a variety of pipeline safety violations, and still has not completed all required repairs required by OPS. (refer to letters submitted with my oral comments at the March 1 Comments Meeting in Bellevue)

198-B-2

**1.12.3 / p 1-57 Impacts from Project**

*Although significant impacts could occur with any alternative, the most controversial impacts relate to concerns about the visual impacts and potential for conflicts between electrical and flammable-liquid pipelines. Fear of these and other impacts led to concerns in the community about reduced property values, degradation of neighborhood character, and public safety. The Phase 1 Draft EIS acknowledges these concerns and provides the results of relevant studies prepared by local and national experts on the topics.*

Many of the "relevant" studies used in the DESI are very dated. Other comments by CENSE have addressed the inadequacies of the research data used to create the components of Alternative 2, and I refer you to those submitted by EQL.

198-B -1 See response for Key Theme OBJ-3.

198-B -2 See response for Key Theme PLS-4.

**CHAPTER 2 PROJECT ALTERNATIVES**

**2.3.2.2 / p 2-21 & 22 Option A: New Overhead Transmission Lines**

*While there is not an immediate need for a second 230 kV circuit through the Eastside, there are cost efficiencies with installing a second circuit transmission facility in the same corridor as the proposed 230 kV line. PSE will consider this as part of efforts to identify the least costly infrastructure to serve its customers.*

If there is a possibility of installing a second 230kV line, will there be another EIS to determine the impacts of construction and operation of that second line? What are the SEPA requirements for installing a second line?

**2.3.2.2.1 / p 22 Overhead Transmission Line Locations**

*Consideration is also made to avoid placing poles in environmentally critical areas like wetlands and unstable slopes.*

What does **consideration** mean? Just thinking about avoiding environmentally critical areas and unstable slopes does not avoid damaged areas if not concrete preventative or avoidance actions are taken.

**2.3.2.2.2 / p 2-22 Pole Types and Heights for Overhead Lines**

*Generally, for a double circuit system, pole heights would range from 85 to 100 feet. In some configurations that could occur under Alternative 1, Option A, a double circuit would incorporate an existing 115 kV line with a new 230 kV line on poles similar to those shown in Figure 2-2. In special cases, such as crossing a ravine or highway, pole heights could be shorter or taller.*

What would be the maximum height of pole used?

**2.3.2.2.3 / p 2-23 Construction Option A-1**

*In practice, PSE may be able to reduce the required clear zone, in which case impacts would be less than those assumed for this phase of the EIS.*

What would PSE do to reduce the required clear zone? This needs to describe specific actions taken.

*The clear zone for an overhead 230 kV line could be approximately 120 to 150 feet wide. The transmission line could be located along existing 115 kV easements, which are typically 70 to 100 feet wide. Therefore, this analysis assumes that use of a 115 kV corridor could require the corridor to be widened by up to 50 feet. Section 2.3.5 summarizes the clear zone widths and other assumptions used for all alternatives in this EIS.*

The bolded words in the paragraph above are so conditional, they do not give a clear, accurate or honest statement of the range of feet the corridor would be widened. It begs the question if a 230 kV line could also be wider than 150 feet. If a property owner is next to an easement that is currently 70 feet wide, then it could require an additional 80 feet to create a 150 foot wide clear zone, which is 30 feet wider than "could require the corridor to be widened by up to 50 feet.

*Coordination with Olympic Pipeline. If located along the existing 115 kV easement, construction of a 230 kV line has the potential to disrupt the Olympic Pipeline. Extensive coordination with the Olympic Pipe Line Company would be required during project design and construction to avoid disruption to the two lines, or to establish relocation procedures.*

What does "potential to disrupt" the Olympic Pipeline mean. The specific disruptions need to be described.

Submitted by **Janis Philbin Medley** 4609 Somerset Drive SE • Bellevue, WA 98006 • 425 922 7415  
on behalf of **CENSE** Coalition of Eastside Neighborhoods for Sensible Energy

198-B -3 See response for Key Theme ALT-1.

198-B-3

198-B-3

**p 2-23 continued**

*Pole installation. Poles can be directly embedded in the ground or utilize an anchor bolt cage, which is a drilled pier foundation that involves setting the anchor bolt cage in a poured column of concrete. Foundations for new 230 kV poles are typically **augered (drilled) 4 to 8 feet in diameter** with steel reinforcements that **could extend 25 to 50 feet deep depending on the structure type**. Steel poles are set and anchored to the foundations. In some cases, a caisson foundation is used for greater stability. (No foundations are used for wooden poles.) Approximately 100 pole foundations would need to be installed with a typical spacing between poles of 1,000 feet to extend the 18-mile distance between the Sammamish and Talbot Hill substations.*

The drilling activity described in the bolded words would certainly increase the probability of damage to the Olympic pipeline. While construction equipment is listed in Appendix B, there is no indication of the dimensions or weight of each piece of equipment, nor is there a description of where equipment would be located when in use. Would it be operating in the right of way, where would it be in juxtaposition to the pipeline, (above, how many feet away from the pipeline.)?

**CHAPTER 3 EARTH**

**3.6.1.5 / p 3-14 Olympic Pipeline**

*In addition to the aforementioned hazards, portions of the existing 115 kV overhead easement corridor are shared with the Olympic Pipe Line Company (OPLC) which operates two steel pipelines that transport petroleum products. The pipelines are 16 inches and 20 inches in diameter and buried approximately 3 to 4 feet below the ground surface. Construction of new transmission lines in the vicinity of the petroleum pipelines or other earthwork activities in or near these pipelines could represent potential hazards from inadvertent contact, causing excessive ground vibrations, or result in damage from erosion. **Although a significant adverse impact could occur during construction near petroleum pipelines, these potential hazards do not constitute a probable impact due to existing regulations and practices in place for pipeline safety. OPLC has stringent construction requirements in the area of its pipelines and would continue close coordination with PSE for all construction activities located adjacent to these pipelines. Therefore, no potentially significant adverse impacts related to work near pipelines are expected under any of the alternatives.***

198-B-4

*and* **p 8-28**

Because compliance with all applicable requirements would help to reduce the probability of an occurrence to a very low likelihood, potential adverse impacts associated with construction of the project are characterized as minor

198-B-5

Dangerously simplistic thinking to state that potential hazards do not constitute a probable impact because regulations and practices for pipeline safety will eliminate any significant adverse impacts related to work near pipelines. Semantics and statistics do not negate the dangers of digging holes up to 50 feet deep near *the pipeline.*

**CHAPTER 5 WATER**

**5.5.1.6 / p 5-12 Potential Pipeline Damage**

*While unlikely due to measures employed to prevent such accidents, it is possible that the Olympic Pipeline could be damaged during construction. A pipeline rupture could have significant adverse effects on surface water and groundwater quality, depending on the location, size, and length of time of the rupture.*

198-B-6

Drilling holes 6-8 feet wide and 25 -50 feet deep, using large cranes to install a power pole, then filling the holes with concrete greatly increases the risk of damage to the pipeline. Even if small cracks are not detected during the construction phase, construction activities near the Olympic pipeline might create

- 198-B -4 See response for Key Theme EARTH-3.
- 198-B -5 See responses for Key Themes PLS-1, and PLS-5.
- 198-B -6 See responses for Key Themes PLS-1, PLS-2, and PLS-4.

198-B-6

a ticking time bomb like occurred in Bellingham. In that case, excessive pressure in the pipeline due to a malfunction of a block valve and human error resulted in a devastating explosion erupting from a construction nick that occurred 5 years earlier.

**CHAPTER 8 ENVIRONMENTAL HEALTH**

**8.2.2.1 / p 8-2 Activities Near Pipelines**

*Appendix M provides a list of identified regulations that apply to pipelines, along with response plans implemented by the Olympic Pipeline Company (OPLC) in particular, since OPLC's facilities were identified as a source of concern during EIS scoping. Some of the regulations are described here.*

198-B-7

It is an oversimplification to assume that if all local, state, and federal regulations are followed, then impacts will be minor. This totally dismisses the very real possibility of human error during construction and operation of all alternatives. It also dismisses the very real fact, that Olympic Pipeline has both been cited and fined for a variety of pipeline safety violations, and still has not completed all required repairs required by OPS.  
(refer to letters submitted with my oral comments at the March 1 Comments Meeting in Bellevue)

**8.2.2.1 / p 8-4 Box** *questions on page 5 relate to the following section*

*To comply with federal regulations, the Olympic Pipe Line Company has an integrity management program, including requirements to regularly inspect and monitor both natural gas and petroleum pipelines. Inspections are performed using a combination of tools to determine the suitability of the pipeline based on any anomalies detected, including corrosion, dents, or actual wall loss (loss of material on the inside or outside of the pipeline due to corrosion) (West, personal communication, 2015).*

*and* **16.3.3 p 16-11&12 Petroleum Pipelines**

*OPLC operates its lines pursuant to its own easements and, where they overlap, subject to agreement with PSE and PSE's prior rights. In entering this agreement with PSE, OPLC agreed to: (1) install its pipeline at a depth and in a manner that would not interfere with PSE's facilities; (2) install and maintain permanent markers to give notice of the location of the pipeline; and (3) adjust and/or relocate the pipeline in the event of a conflict with PSE facilities.*

198-B-8

*Hazardous liquid pipelines are regulated by federal and state rules (see Appendix M, Pipeline Safety Requirements and Plans Relating to Petroleum Pipelines). The standards and enforcement actions are the responsibility of the federal Office of Pipeline Safety (OPS), as described in Chapter 8. Through passage of the Washington Pipeline Safety Act of 2000 (E2SHB 2420), the UTC was directed and obtained the authority from the OPS to inspect interstate hazardous liquid pipelines in Washington State in accordance with federal standards (UTC, 2015). OPLC is subject to full compliance with the applicable provisions of Title 49, CFR Part 195 for hazardous liquid pipelines, and as reinforced by the company's franchise agreements with the study area cities. These regulations address safety in design, construction, testing, operation, maintenance, and emergency response for pipeline facilities. In accordance with 49 CFR Part 195, regular inspections and monitoring of the pipelines are performed using a combination of tools to determine the suitability of the pipeline based on any anomalies detected, including wall loss, corrosion, or dents. The pipelines through the combined study area are currently on a 5-year general inspection schedule. If anomalies were to be detected, this timeframe would be shortened in accordance with federal requirements (West, 2015).*

*if OPLC becomes aware that a third party conducts any excavation or other significant work that may affect the pipeline, the company is required to conduct such inspections and testing as is necessary to determine that no direct or indirect damage was done to the pipeline and that the work did not abnormally load the pipeline or impair the effectiveness of the cathodic protection system (City of Bellevue, 2005; City of Kirkland, 2011; City of Newcastle, 2008; City of Renton, 2006).*

*and* **16.3.3.1.1 / p 21**

*If located along the existing PSE 115 kV easement, construction of a 230 kV line has the potential to disrupt existing natural gas lines or the Olympic Pipeline. Extensive coordination with OPLC would be required during project design to avoid disruption to the two lines, or to establish relocation procedures. For large projects, such as Energize Eastside, OPLC would establish a team to review design, identify any vulnerabilities, and identify measures to avoid potential impacts, in coordination with the project proponent (West, 2015). Construction risks associated with the Olympic Pipeline include potential for compression damage from heavy vehicles or machinery driving or placed above the buried lines, potential for pipe disturbance during excavations for new poles, and potential for pipe disturbance from removal of current poles. Certain machinery, such as auger equipment, can be a*

Submitted by **Janis Philbin Medley** 4609 Somerset Drive SE • Bellevue, WA 98006 • 425 922 7415  
on behalf of **CENSE** Coalition of Eastside Neighborhoods for Sensible Energy

198-B -7 See responses for Key Themes PLS-4 and PLS-5.

198-B -8 See response for Key Theme UTL-4.



198-B-8

*particular concern because of how heavy the equipment is. If there is a concern, measures can be used to avoid crossing the pipeline by taking a different route, or reducing or eliminating the concern by placing matting or other material to distribute the load to acceptable levels or relocating the pipeline.*

- When was the last inspection date for the section of the pipeline that is collocated with EE project?
- Were any anomalies found?
- If found have they been repaired?
- Would the increase from 115 kV to 230 kV require changes in your cathodic protection system?
- If yes, what changes would be required and how and when would they be implemented?

- What percentage of pressure drop in the pipeline is required to set off an alarm in HCA's?
- When a pipeline is located under a street, how is a leak detected?
- What is the minimum acceptable thickness of the pipeline wall to meet all OPS regulations
- On page 16-21 of the DEIS, you stated that construction of a 230kV line has the potential to disrupt existing natural gas lines or the Olympic Pipeline. What exactly do you mean by the word DISRUPT?
- Is it legally possible for OPL to say NO PSE's Energize Eastside Project?
- If not, why not?
- If there were a pipeline explosion during construction, how would liability be assigned to OPL, PSE, Sub contractors other entities?

*• How often are Block valves tested? Are results available to public?*

**8.2.2.1 / p 8-5**

*The combined study area communities (Alternatives 1, 2, and 3 as depicted on Figure 1-4 in Chapter 1) do not directly regulate pipeline safety, but they have the authority to regulate land uses near pipelines within their jurisdictions to protect public health and safety. Some communities encourage co-location of pipelines with other utilities where safe, while others specifically co-location of critical utilities with hazardous fluid pipelines like the Olympic Pipeline.*

Why does Bellevue City Council believe they do not have the authority to regulate land uses near pipelines in their jurisdiction? Yes, they are the "legislative" branch of the city government, but they are also the managers of the "Executive" branch and are elected by the citizens to look after the best interests and safety of our community.

From MRSC - Municipal Resource Service Center in Seattle, WA:

<http://mrsc.org/Home/Explore-Topics/Public-Safety/Special-Topics/Pipeline-Safety/Planning-Near-Pipelines.aspx>

**Planning Near Pipelines - Stakeholders**

"Before considering changes to local land use procedures and regulations concerning transmission pipelines, it is necessary to understand who is involved (the stakeholders) and their respective roles in the process.

**Stakeholders and Their Roles**

Local Governments. Cities and counties have primary authority to establish land use regulations within their jurisdictions, including all lands crossed by or near transmission pipeline easements.

Developers. Developers of residential or commercial projects (both large and small) are frequently

Submitted by **Janis Philbin Medley** 4609 Somerset Drive SE • Bellevue, WA 98006 • 425 922 7415  
on behalf of **CENSE** Coalition of Eastside Neighborhoods for Sensible Energy

198-B -9 See response for Key Theme PLS-4.



198-B-9

direct landowners or have an ownership interest in properties crossed by or near transmission pipeline easements. They often are not knowledgeable about pipeline safety issues.

Private Landowners. They typically own most of the land crossed by the pipeline operators' easements or near the easements. They will be directly affected by any new land use regulations that impose restrictions on development. [Keep in mind that transmission pipeline easements also cross public lands owned by federal, state, local and tribal governments, or use rights of way controlled by local governments.]

Pipeline Operators. Easements provide pipeline operators the right to install, operate and repair their pipelines, and to place limits on what can be done by private and public landowners within those easements.

There Are Three Options Open to Local Governments ↴

- Do nothing and keep your fingers crossed, hoping that no serious pipeline failures occur within your jurisdiction. There are no federal or state "mandates" requiring that you consider these pipeline safety issues.
- Assume the worst and impose draconian regulations to safeguard the public from all possible risk in the event that a pipeline does rupture and ignite.
- Choose from a wide range of "recommended practices" that seek to protect the pipeline from damage and lessen the injuries and damage if a pipeline failure occurs.

Options one and two are extreme positions, and are probably not consistent with the values of your populace. Option three requires that planners and local government officials educate themselves about pipeline safety concerns and the recommended practices discussed here, assess the level of safety concern in their community, then adopt reasonable measures to promote the health and safety of the community.

Submitted by **Janis Philbin Medley** 4609 Somerset Drive SE • Bellevue, WA 98006 • 425 922 7415  
 on behalf of **CENSE** Coalition of Eastside Neighborhoods for Sensible Energy

8.2.2.1 / p 8-6

The City of Kirkland's comprehensive plan includes policies that: establish standards to minimize pipeline damage, prohibit new **high consequence land uses**<sup>1</sup> from locating near a hazardous liquid pipeline corridor, support coordination with the pipeline operator when developments are proposed near the pipeline corridor, and require maintenance of the hazardous liquid pipeline corridor through their franchise agreement and other mechanisms (City of Kirkland, 2015).(City of Newcastle, 2015).

Footnote 1 regarding High Consequence Land Uses is defined in the DEIS as

*1 High Consequence Land Use: A land use that if located in the vicinity of a hazardous liquid pipeline represents an unusually high risk in the event of a pipeline failure due to characteristics of the inhabitants or functions of the use. High consequence land uses include: 1. Land uses that involve a high-density on site population that are more difficult to evacuate. These uses include: continued on next page*

198-B-9

- Schools (through grade 12)
- Hospitals, clinics, and other facilities primarily for use by the elderly or handicapped, other than those within single-family residences.
- Stadiums or arenas.
- Day care centers, and does not extend to family day care or adult family homes.

A list of sensitive areas in the 18 miles transmission corridor follows.

The source is:

FACILITY RESPONSE PLAN pages 6-23 to 6-25

BP Pipelines (North America)

U.S. Pipelines and Logistics

Northwest Pipelines District

Prepared for:

Northwest Pipelines

600 SW 39th Street, Suite 275 Renton, WA 98057

Submitted by **Janis Philbin Medley** 4609 Somerset Drive SE • Bellevue, WA 98006 • 425 922 7415  
on behalf of **CENSE** Coalition of Eastside Neighborhoods for Sensible Energy

*Speaker #35 Public Hearing Phase 1 DEIS  
Bellevue 3.1.16*

Good Evening, my name is Kelly Bach at 12519 NE 29<sup>th</sup> Street. I am a second generation Bellevue/Bridle Trails resident who loves this city and cherishes the character of the neighborhood I live in. My husband and I, although we both work in Seattle, intentionally chose to live on the Eastside and raise our 3 children here.

199-A-1

Energize Eastside Alternative 1A's clear cutting of 327 acres of vegetation is devastating. These trees are not replaceable.

Visibly- it will forever change the landscape of our city, not to mention the 85-100ft poles that will be replacing them; our already fragile ecosystem will also be impacted- animals will lose their homes, storm water will no longer be absorbed by the earth and air quality will decrease without the natural "purifier" that trees offer. Bellevue prides itself on the image of a "city in a park"- by agreeing to this proposed plan by PSE we are compromising the value and character of our city for the financial gain of this company. I believe that each and every one of you are intelligent people, so I'm not going to spend time on the fact that these proposed lines will be on top of two major petroleum gasoline lines- that's just a no brainer that this is a terrible idea. It is also obvious to me that you cannot mitigate all the neighborhood concerns that are related to alternative 1A.

199-A-2

On previous occasions, I have shared with you my background as a pediatric nurse. I have also shared with you my concerns of

199-A -1 See response for Key Theme P&A-2.

199-A -2 See response for Key Theme VR-4.

199-A-3

the impact on the health of our citizens due to the increased EMF by the proposed 230 KV line. On multiple occasions I have read and heard the DEIS downplay of this impact on citizen health. However much this disappoints me to read these unsubstantiated findings, this does not surprise me. These people have a vested financial interest in this project. I do not. For me, professional success is not determined by a paycheck or closing of a deal. It is by caring for and curing those who seek medical care. Here's the hard thing about cancer, cardiac conditions, seizures and other health problems- although our scientists work hard, we don't have all of the answers. The answers come after decades of work in identifying a common thread in the patients. Sometimes it impacts subsequent generations.

What I ask of you is to not downplay the health impact of these lines. It is real. Take a quiet moment and look at yourself in the mirror. Ask yourself this question. Is the financial gain of this "deal" worth the health and well-being of the citizens who make up this city? If your parent, your spouse or your child is looking back at you in that mirror- is **their** health and well-being worth the risk?

199-A-4

A few nights ago I was at work. I hugged a mom as she cried after learning of the cancer diagnosis of her child. For a multitude of reasons I am so mad at the thought of PSE coming at Bellevue with such force on this issue. What is the value of a life? Paying off a hedge fund? These people aren't part of our

199-A -3 See response for Key Theme EMF-1.

199-A -4 Comment noted. Also see responses for Topic PLS.

community, and show no regard to those who are in it. What is the value of health? What is the value of you not being that mom or dad, grandma or grandpa, sibling or patient who I will take in my arms as YOU learn of that life altering medical diagnosis. Think about it.....

Kelly Bach

12519 NE 29<sup>th</sup> Street

Bellevue, WA

98005

425-861-7978

Name: (Maria Vlachopoulos)

Speaker #29 Public Hearing Phase 1  
DEIS Bellevue 3.1.16

Address: 14708 SE 15th Pl., Bellevue, WA 98007

EIS public comment (3/1/2016)

Thank you for giving us the opportunity to express our concerns about the Energize Eastside project.

A quick summary of my background; I am an electrical and computer engineer who worked at the Pacific Northwest National Lab here in WA state. While at the lab, I worked as an energy researcher on various projects including energy forecasting. My team worked with various utilities, like ~~PGE~~ BPA in WA state, Pacific Gas and Electric (PG&E) of Northern California, Southern California Edison, e.t.c.

I100-A-1

I moved to Bellevue two years ago, and PSE's Energize Eastside project immediately caught my attention. I have been following PSE's, Quanta's, USE's, Stattec's, and CENSE's postings and comments on the project. I have real concerns about the methodology PSE has followed to justify the necessity of this project; an at-least 215-million-dollar project that we the citizens will have to pay for.

I100-A -1 See response for Key Theme OBJ-3.

I100-A-1

To start, I would like to point out that PSE's simulation is for an extreme weather condition scenario of a very cold winter day (23°F) and peak electricity load conditions. The scenario projects for the year 2017-2018. While it is expected for a utility to simulate extreme weather conditions, PSE simultaneously simulates pushing 1500MW of energy to Canada. Usually, under such conditions utility operators significantly reduce additional energy outflows to secondary areas. PSE has not done that on their simulation. Why does even simulate a 1500MW flow to Canada in the first place?

Additionally, PSE simulated six local generators being out-of-service. I don't see how and why those generators would not be functional. Even more concerning, it has been pointed out that PSE ran the simulation using summer normal conditions for the transformers. That would drastically change the results of the simulation, and it would be just flat out wrong.

*Speaker # 29 cont'd.*  
I ask PSE to give us access to the input data they used to run their simulation. The Federal Energy Regulatory Commission (FERC) has already determined we have a legitimate need to access the data PSE used to set up the simulation, since we pose no security threat.

I100-A-1

Finally, why is PSE using a 2.4% energy demand growth for the eastside, while they could use their own estimate of 0.5% energy demand growth for their entire 8-county area? The power grid is interconnected, so large <sup>energy</sup> demands on one side of the grid usually do get compensated by other parts of it.



Name: Maria Vlachopoulou  
Address: 14708 SE 15<sup>th</sup> Pl, Bellevue, WA 98007

Thank you for giving us the opportunity to express our concerns about the Energize Eastside project.

A quick summary of my background; I am an electrical and computer engineer who worked at the Pacific Northwest National Lab here in WA state. While at the lab, I worked as an energy researcher on various projects including energy forecasting. My team worked with various utilities, like BPA in WA state, Pacific Gas and Electric (PG&E) of Northern California, Southern California Edison, e.tc..

I moved to Bellevue two years ago, and PSE's Energize Eastside project immediately caught my attention. I have been following PSE's, Quanta's, USE's, Stantec's, and CENSE's postings and comments on the project. I have real concerns about the methodology PSE has followed to justify the necessity of this project; an at-least-215-million-dollar project that we the citizens will have to pay for.

To start, I would like to point out that PSE's simulation is for an extreme weather condition scenario of a very cold winter day (23 F) and peak electricity load conditions. The scenario projects for the year 2017-2018. While it is expected for a utility to simulate extreme weather scenarios, PSE simultaneously simulates pushing 1500MW of energy to Canada. Usually, under such conditions utility operators significantly reduce additional energy outflows to secondary areas. PSE has not done that on their simulation. Why do we even simulate a 1500MW flow to Canada in the first place?

I100-B-1

Additionally, PSE simulated six local generation plants being out-of-service. I don't see how and why those generators would not be functional. Even more concerning, it has been pointed out that PSE ran the simulation using summer normal conditions for the transformers. That would drastically change the results of the simulation, and it would be just flat out wrong.

I ask PSE to give us access to the input data they used to run their simulation. The Federal Energy Regulatory Commission (FERC) has already determined we have a legitimate need to access the data PSE used to set up the simulation, since that we pose no security threat.

Finally, why is PSE using a 2.4% energy demand growth for the eastside, while they could use their own estimate of 0.5% energy demand growth for their entire 8-county area? The power grid is interconnected, so large energy demands on one side of the grid usually do get compensated by other parts of it.

I100-B-2

In summary, we don't need this project; we have enough capacity for years to come. If the city insists on increasing the system capacity I would suggest Alternative 2.

I100-B -1 See response for Key Theme OBJ-3.  
I100-B -2 Comment noted.

*Speaker #3 Public Hearing Phasel DEIS  
Pat Hansen 3851 136 ave NE Bellevue 98005 Bellevue  
 3.1.16*

For the record, I am a member of Cense and the Bridle Trails Comm. Club.

**My comments apply to EIS Chapter 8 - Environmental Health, Chapter 10 - Land Use and Housing and Chapter 11 - Views and Visual Resources**

We have had testimony re technical aspects of project Energize Eastside.

I would like to share with you a more emotional/relationship side of this project.

During the CAG process it was easy to figure out where PSE planned to put these new lines. The pictures they showed were very telling -- they pictured neighborhoods encumbered by wires in front of homes. Then they showed how it would look in Bridle Trails area where there is more land and the open space looked less encumbered.

Telling it like it really is for this property owner w/PSE line encumbrance, plus BP high pressure gasoline lines (2), it certainly is a burden because we cannot use our property in a way others nearby can. We have maintenance crews for both easements at will. PSE seems at any time to be able to add things in this easement, such as communication lines, give permission for certain cell tower use and needed equipment, also potentially additional petroleum lines.

I101-A-1

These electrical lines at times give way and fall to the ground I know of two such incidents (one involving our property) both in Bridle Trails. Imagine if you or someone else was under the line that fell - or an animal/pet! Could this ignite the high pressure gasoline line? Will this take legal action for property rights and resolve -- if we survive? I might mention there are others directly affected by these easements--those who live adjacent to those of us with these easements!

I101-A-2

When speaking about necessity, it is being proved that the need now is not present and won't be for a number of years, if then. There are so many advancements in technology that might not require these imposingly tall structures.

I101-A-3

Should those of us who've been carrying this burden of use and safety, property devaluation and so forth be the ones to continue carrying this burden for all for

I101-A -1 See responses for Key Themes PLS-1 and PLS-2.

I101-A -2 See response for Key Theme OBJ-1.

I101-A -3 See responses for Topic ECON.

COMMENT

RESPONSE

*Speaker #3*

I101-A-3

the next 90 years or more--the easement was granted in 1929 when it was country and undeveloped land?

Just so you know, PSE and BP do not compensate the property owners burdened, and yet they are allowed to control so much and enjoy financial gain to their Australian/Canadian hedge fund. Adding lines is one major way they increase their profit.

When we mention the possibility of undergrounding if this work is needed in the future, they remind us that we would then be responsible for the exorbitant charges for the work. Do they show appreciation to those of us who have been providing the land they need?

I101-A-4

Personally, I believe the City of Bellevue and their staff should be looking out for the safety and welfare of all Bellevue communities, not just the growing downtown business and condo community (where electrical services are underground and sub-stations are not viewed) and then there's the Spring District! When Bellevue brings in new areas requiring new and updated services, Bellevue should require those new areas/developments to provide the additional needed services rather than look to existing communities to carry the burden.

I101-A-5

Thank you for your time this evening. I would ask that you think about and consider the testimony you hear throughout this EIS process, that you think out of the box on ways to solve this problem. In my opinion, 100Ft plus poles in residential areas is not beautiful, not park like and does not fit a City in a Park

I101-A-6

theme of Bellevue. Stringing up Bellevue should be against the law!

- I101-A -4 See response for Key Theme ECON-4.
- I101-A -5 Comment noted.
- I101-A -6 See response for Key Theme VR-4.

**From:** [BaTra\\_Shiv](mailto:BaTra_Shiv)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov)  
**Subject:** Energize Eastside  
**Date:** Monday, March 07, 2016 10:09:49 AM  
**Attachments:** [3422DCAE-1D00-4A1E-BB1D-ADB0D18E35E1.png](#)  
[DD211CA8-FC03-49E3-B8E5-800CB2968DDE.png](#)  
[B8CDDC07-6CFD-4DF0-A0C8-411255C8EC91.png](#)

March,7, 2016

Heidi Bedwell  
 Energize Eastside EIS Program Manager  
 City of Bellevue Office of Planning & Community Development 450 110<sup>th</sup> Ave NE  
 Bellevue, WA 98004

Dear Ms Bedwell:

Thank you for the opportunity to submit comments into the Energize Eastside Phase 1 DRAFT EIS.

I appreciate that the five jurisdictions are working together under the lead of the City of Bellevue to review and analyze various alternative solutions to meet the growing electrical needs of the Eastside. In doing so I encourage you to ensure that the alternatives that are studied are viable and possible. Much talk has been heard regarding using Seattle City Light lines for this project. I understand this solution has been “asked and answered” so I am hoping we don’t waste time and energy on studying this as a solution.

I also have heard much discussion about option 2 – the demand side reduction/non-wire technologies. PSE has done an incredible job with its conservation efforts over the past years and I anticipate this will continue. However, the notion of batteries as a solution (as has been discussed) does not preclude the use of new transmission lines to connect those batteries. And, as far as I have come to understand, batteries are untested at this size and scope of need. Also, social engineering (forcing people to conserve, swap our electric heat for natural gas, etc) does not work because people don’t want to be told what to do in their own homes.

Thus I request that only solutions that are technically feasible to continue without delay– that we know will work (versus that we HOPE will work) – and be studied as viable options to meet this critical need of our growing City and Region, which is clearly identified as Alternative 1a in the Draft EIS.

I102-A -1 See response for Key Theme ALT-1.

I102-A-1



I102-A-2

In my career I have built economic infrastructure projects of all sizes and scope all over the world. Energize Eastside is a critical economic infrastructure project – a local project meeting local need for our growing Eastside communities – and as such must be designed and built to guarantee our region’s electrical reliability. **This must be done in a timely manner so as not to risk reliability for our residents and our businesses.**

Thank you again for the opportunity to comment.

Sincerely,

Shiv Batra,

**Shiv Batra** | Management.Management VII.  
Business +1 (425) 635-1000 | Fax +1 425 635 1150 | Mobile +1 206 999 6507 | [Shiv.Batra@tetratech.com](mailto:Shiv.Batra@tetratech.com)

**Tetra Tech** | Complex World, Clear Solutions™  
400 112th Ave., Bellevue, WA 98004 | [tetratech.com](http://tetratech.com)



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I102-A -2 See response for Key Theme OBJ-1.

From: [sdofour@aol.com](mailto:sdofour@aol.com)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: Re: DEIS/EIS Comments  
 Date: Monday, March 14, 2016 11:57:57 PM

EIS Officials,

Re: PSE's proposed EE project

My name is Steve O'Donnell. I am a Co-Founder of CENSE.org The Coalition of Eastside Neighborhoods for Sensible Energy (think smart alternatives to above ground legacy configurations). I serve on the CENSE Executive Board.

Also, I'm a life long Washingtonian, a 44 year resident of Bellevue and 40 year resident of Somerset and have served on it's Community Association Board for the past ten years having served as it's President for two terms. And I served on the PSE EE Citizen's Advisory Group 'CAG' for a year.

I agree with all of the points that CENSE has made and submitted.

I103-A-1

Also, PSE has dodged answering the question as to whether two sets of poles and wires will be allowed...both the 115KV and the 230KV. There are obvious significant adverse impacts to either or both and the EIS must study the impacts of having both sets remaining.

I103-A-2

The EE Project as proposed is nothing short of Industrial BLIGHTING of dozens of residential neighborhoods...ALL IMPACTS to all of the effected neighborhoods MUST be studied.

Very Sincerely,

Steve O'Donnell  
 C/O CENSE  
 12819 SE 38th St. #294  
 Bellevue, WA. 98006

(C) 206-953-6483

I103-A -1 See the Phase 2 Draft EIS and Final EIS for project-level analysis of alternatives.

I103-A -2 See response for Key Theme VR-4.

I103-B

COMMENT

RESPONSE

**From:** [sdofour@aol.com](mailto:sdofour@aol.com)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** Re: EIS  
**Date:** Monday, March 14, 2016 11:59:56 PM

---

EIS Officials,

I103-B-1

The Lauckhart-Shiffman Load Flow Study MUST be studied.

Steve O'Donnell  
CENSE

I103-B -1 See response for Key Theme OBJ-3.

Submitted at Renton Public Hearing  
Phase 1 DEIS 2.25.16

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
Feb 26, 2016  
From: Mel and Helen Zoerb  
8408 129th Ave SE  
Newcastle, (Olympus Section), 98056

**Dear Ms. Bedwell,**

My wife and I are very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (called Alternative 1A). Part of this project would be adjacent to our home in the Olympus area of Newcastle.

**Energize Eastside's Attempted Justification**

PSE tries to justify the need for the project by using totally unreasonable (virtually, if not completely impossible), scenarios and therefore claiming that not building this line system would cause regional blackouts. However, according to a Lauckhart-Schiffman Load Flow Study of the area's power needs, available at CENSE.org., the PSE scenarios are not realistic and should not be used. Reasonable power demand assumptions on the other hand show clearly that this entire project is not necessary.

I104-A-1

We therefore request a Study to include a full face-to-face coordination effort between the appropriate PSE representatives and Lauckhart-Schiffman regarding Load Flow Studies for this area to develop reasonable conclusions in support of the EIS effort. We submit that if PSE has valid data to justify their proposal they should not be afraid to share the details of it with Lauckhart-Schiffman and appropriate members of Cense.

**The Right of Way Width Problem**

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. An equivalent accident in our highly congested area would have vastly greater and more serious consequences. This risk is not adequately addressed in the EIS and alone is sufficient justification to rule out Alternative 1A from any further consideration. The current PSE declaration of acceptable widths is not adequate, nor have they been willing to share their rationale.

I104-A-2

We request a new Study of the right of way issue to include not only PSE representatives but citizens from Cense and especially Olympus to establish technically viable width requirements. Again, if PSE has a logical technical position they should not be afraid to share it.

**The Threat of Home Condemnation(s)**

In addition to the above, Alternative 1A by virtue of right of way lateral (width) constraints will require purchase and removal of certain homes near the right of way according to PSE statements which say that "only" five (5) homes will have to be removed. This is outrageous in any situation – but especially so considering that a reasonable power demand requirement (as noted above) does not warrant the proposed power line development. If the line is ultimately built then routings must be adjusted so that no homes are threatened with condemnation/removal action. This must become an integral part of the EIS effort. Removal of homes is an unacceptable impact on our local environment.

I104-A-3

PSE has not been willing to identify which specific homes are threatened yet we area residents are expected to comment intelligently on the DEIS. This is all but impossible.

We request a definition of homes that are threatened in current PSE plans to be supplied before the DEIS comment period closes.

I104-A -1 See response for Key Theme OBJ-3.

I104-A -2 See response for Key Theme PLS-2.

I104-A -3 See response for Key Theme LU-5.



Letter to Heidi Bedwell, EIS Program Manager, continued

**Other Alternatives**

It is understood that there are other alternatives such as Alternative 2 (a safer and less costly alternative) which have not received appropriate attention in the EIS. This must be corrected so that Alternative 2 is addressed in proper detail in a coordinated manner involving all affected entities to avoid the problems inherent in Alternative 1. For PSE to consider home condemnation for the power line system upgrade without considering practical alternatives such as Alternative 2 is unbelievably arrogant towards our area residents.

An honest Study of Alternative 2 is required with coordination and involvement of PSE and the proper Cense/ Olympus representatives.

Thank You



Mel and Helen Zoerb

I104-A -4 See response for Key Theme ALT-1.

I104-A-4

I105-A-1

Name: Robert Jones Address: 8434 128 Ave SE Newcastle WA 98056

**Summary:** Section 1.3 says that determining the need for a project is part of defining the project. PSE claims there is an immediate need. No state or Federal agency is concerned with this 18 mile long local project. Only the cities involved have oversight over Energize Eastside. PSE used industry standard methods to create its Eastside Needs Assessment but the data was based on implausible assumptions. The Needs Assessment produced by Lauckhart and Schiffman using the same method and database but with logical assumptions indicates there is no immediate need for the transmission line. So the best alternative for Energize Eastside is the no action alternative.

**According section 1.3** of the draft Environmental Impact statement

"It is the responsibility of the lead agency to make certain that a proposal that is the subject of an environmental review is properly defined as outlined in WAC 197-11-060 (3)(a)".

And "the process of defining the proposal includes an objective understanding of the need for the project".

So it was perfectly logical for the EIS consultant team to engage Stantec to represent them to review internal utility planning and operations information used by PSE in developing the Energize Eastside Project proposal. Stantec in a memorandum confirmed that PSE's Eastside Needs Assessment was conducted in accordance with industry standards for utility planning.

I105-A-2

Stantec simply validated the method used by PSE without questioning the assumptions made in PSE's Needs Assessment. No one is questioning the method used by PSE to assess the need for a new transmission line. The method consists of entering data into a computer simulation program for load flow modeling then looking at the results. The results however depend on the data entered. And the data used by the computer depend on the assumptions of those running the program.

To illustrate the effect of different assumptions, Richard Lauckhart and Roger Schiffman acquired a license to run the industry standard simulation software known as "GE PSLF"1. They ran the program with the same database used by PSE but with different assumptions. The result indicates that there is no immediate need for a new larger transmission line.

PSE Assumptions Changed by Lauckhart and Schiffman

PSE assumed that the amount of electricity sent to Canada would triple from 500 MW to 1500 MW while at peak demand locally.

Lauckhart and Schiffman assumed that during a local peak power load in below freezing weather the power sent to Canada would be reduced from 500 MW to 0 MW during peak time.

PSE assumed that the power generated by local generation plants would be reduced from 1,654 MW to 259 MW during the 10 winter days of peak load.

Lauckhart and Schiffman assumed that only 2 transformers were totally out of service in accordance with federal reliability standard N-1-1.

PSE used the WECC "summer normal" reduced transformer capacity ratings.

A transformer produces heat which it must dissipate. During summer, radiation is more difficult so transformer ratings are reduced for summer use. Excess heat breaks down the insulation in a transformer causing them to fail.

Lauckhart and Schiffman assumed that the below 23 degrees F temperature occurred in the winter and so used the higher winter emergency capacity ratings of the transformers instead of the summer ratings.

I105-A -1 See response for Key Theme OBJ-2.

I105-A -2 See response for Key Theme OBJ-2.

The unlikely assumptions of PSE that determined what data to enter into the computer caused the program to produce the need for a larger transmission line.

The more reasonable assumptions of Lauckhart and Schiffman indicate that there is no immediate need for a larger transmission line.

**Section 1.3** also states that “This EIS will not be used to reject or validate the need for the proposal.” Then who is responsible for establishing the need. Only the cities are overseeing the PSE Energize Eastside project because it is classified as a local project.

The Federal Energy Regulatory Commission, FERC, regulates interstate transmission of electricity. So the FERC has no jurisdiction and is not interested in the project.

The North American Electric Reliability Corporation, NERC, is concerned with the reliability of the North American bulk power system so NERC does not have jurisdiction over the project.

The Western Electric Coordinating Council, WECC, is the western region of the FERC which deals with the bulk power systems so WECC does not have jurisdiction over the project

The Washington Utilities and Transportation Commission, WUTC, regulates the rates and services of utility companies to ensure that services are fairly priced, available, reliable and safe and so has no jurisdiction over the need for, planning of, or construction of transmission lines in general and this project in particular.

I105-A-3

Validating or rejecting the project is necessary in deciding which alternative best meets the purpose of the EIS. No action is a valid alternative to adding 18 miles of transmission line through 4 cities. If there is no need for additional power then no action is the best alternative.

**Section 1.3** of the draft EIS states “the EIS is intended to identify alternatives that could attain or approximate PSE’s objectives at a lower environmental cost and disclose potential significant adverse environmental impacts associated with all alternatives identified.”

I105-A-4

What was Puget Sound Energy’s goal when they set up a very unlikely scenario in order to justify Energize Eastside? PSE is allowed to make 10% above the cost of the project so the more it costs the more they can legally charge its customers. The only way for PSE to meet this goal is by the EIS committee’s allowing Energize Eastside to be completed as PSE wants it. I don’t think that is what the EIS committee wants to do.

Why are we wasting time and money on Puget Sound Energy’s proposal when it is not needed, not safe, a blight on the communities involved, and its only purpose is to make money for its investors?

I105-A -3 See response for Key Theme OBJ-1.

I105-A -4 See response for Key Theme OBJ-2.

*Public Comment  
Renton 2/25/2016*

I106-A-1

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities known in the Draft EIS as Alternative 1A, which I oppose. Further, I want the flaws and unanswered questions in the DEIS addressed regarding Safety, Environment, Economic and Neighborhood Character Impacts.

I106-A-2

The assumptions and solutions described in the DEIS were not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies.

PSE tries to justify the need for the project using an impossible scenario that would actually cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I106-A-3

I ask you to support Alternative 2, the Integrated Resources Approach, a safer and less costly alternative.

I106-A-4

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line proposal. The Draft EIS must address the flaws and unanswered questions in order to convince residents that we are getting the best possible plan for our energy future.

- I106-A -1 Comment noted.  
 I106-A -2 See responses for Key Theme OBJ-3 and Key Theme ALT-1.  
 I106-A -3 See response for Key Theme ALT-1.  
 I106-A -4 See response for Key Theme OBJ-1.

Ross Jacobson  
 5804 167th Avenue S.E.  
 Bellevue, Washington 98006

March 9, 2016

Ms. Heidi Bedwell  
 Energize Eastside EIS Program Manager  
 City of Bellevue, Development Services Department  
 450 110th Avenue N.E.  
 Bellevue, Washington 98004

RE: Energize Eastside Phase 1 Draft EIS Comments

Dear Ms. Bedwell:

My family has lived in Bellevue for more than 30 years. During that time I have had the privilege of serving in a variety of leadership roles in the community including Chair of each of the Bellevue Downtown Association, Bellevue Rotary, Bellevue Chamber of Commerce, Bellevue Economic Partnership, and KidsQuest Children’s Museum. My purpose has been to give back to the community in which I have raised my family, and to do my part to help grow our community into the place it has become.

I107-A-1

I am very concerned about what I am hearing from the opposition group related to Energize Eastside. Our community and our economy rely on infrastructure to keep up with the growth we have seen, and the growth that we will continue to experience in the years ahead. Energize Eastside is part of that necessary economic infrastructure for our community and we must move forward with environmental review and into construction as soon as possible. The “no action” alternative, and/or delay of any kind, will result in devastating, long term negative economic impacts due to the chilling effect of the prospect of rolling blackouts. Additionally, we need to be looking to replace the aging infrastructure with proven solutions – the risks of using untested technology, or waiting for yet-undeveloped technologies, to solve this problem are not acceptable.

I107-A-2

Leadership is sometimes difficult. That said, our city staff and leaders must demonstrate leadership and move forward to solve this problem, and do so in a way that protects the long term interests, and protects the investment we all have made to get to where we are today. Candidly, I understand that those living along the existing alignment either bought or built their houses with the existing utility alignment in place. That said, PSE’s proposed Alternative 1a – utilizing an existing utility corridor – makes the most sense.

5727268.2

I107-A -1 See response for Key Theme ALT-1.  
 I107-A -2 Comment noted.



I107-A

COMMENT

RESPONSE

Ms. Heidi Bedwell  
March 9, 2016  
Page 2

I107-A-3

Our community is counting on our city staff and leadership to keep this project moving and to not succumb to opposition demands or spend any more money on further studies – money that could be used in much more productive ways to support the arts, our human services needs, parks, etc. Our economic future depends on it. Our community's ongoing health relies on it.

Thank you for the opportunity to provide comments for the DEIS and thank you for your work in leading this effort on behalf of our city and the Eastside.

Sincerely,



Ross Jacobson

5727268.2

I107-A -3 Comment noted.

COMMENT

RESPONSE

I108-A -1 See response for Key Theme PLS-3.  
 I108-A -2 See response for Key Theme OBJ-1.

|          | Comment                                                                                                                                                                                                                                                                                                    | Timestamp            | First Name | Last Name |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I108-A-1 | I would like to urge PSE to cancel the proposed new high power lines. There are health consequences when putting such high power lines near the Olympic Pipe Line. This is an accident being prepared to happen. How can our City let this happen to it's residence. PSE has not proven this is necessary. | 3/7/2016<br>20:46:07 | Maxine     | Voetberg  |
| I108-A-2 | Selling power to Canada is not a necessity. The City has received enough information from CENSE to halt this from happening. PLEASE, DO NOT bury you head in the sand and let this happen.                                                                                                                 |                      |            |           |

I109-A-1 | These comments for the DEIS concerns the **Coal Creek Basin**. The Coal Creek Natural Area is an integral part of Bellevue's Parks and Recreation system; the Lake Washington Watershed (WRIA 8) totals 3,990 total acres (11% of the City). The dense forest protects water quality and erosion. The drainage jurisdiction(s): 2,181.7 acres in Bellevue; 1,275.7 acres in King County and 532.1 acres in Newcastle. Coal Creek: State Stream #08-0268.

I109-A-2 |

I109-A-3 | This basin supports habitat for Chinook, Rainbow and Cutthroat trout, Coho, Sockeye and Steelhead. (Chinook and Coho are listed as species of Local Importance: *Bellevue Land Use Code 20.25H.150A*) (Chinook is listed as a Federal Endangered Species).

I109-A-4 | The tree canopy in the Coal Creek basin varies between 58%-85%. Chapter 6.4.1.5 describes Coal Creek Park Natural area as providing a forested riparian corridor adjacent to Coal Creek - a diverse fish and wildlife habitat. (reference: MyParksandRecreation.com)

I109-A-5 | **Figure 16-1**, illustrates Existing Electrical Transmission and natural gas/petroleum pipelines. This map shows the convergence of the Olympic Pipeline with the overhead existing PSE 115kV line. If the proposed 230kV PSE Energize Eastside overhead lines, as suggested in Alternative 1 - Option A, were approved - they would also intersect in the Coal Creek Basin. This natural area is already **overburdened** with transmission lines and pipelines. Good judgment would dictate avoiding any additional burden on this Basin.

I109-A-6 | **Figure 3-1**, illustrates Landslide and Erosion Hazard Areas. Note the high hazard zone around the Coal Creek Basin.

I109-A-7 | Chapter 5.5.3.1.4 acknowledges the potential impact on water resources from heavy machinery and excavation for the installation of 100 foot power poles. Please think again of what this could do to an area like the Coal Creek basin.

I109-A-8 | Chapter 5.5.3.1.6 regarding Potential Pipeline Damage: "The Olympic Pipeline, which parallels one of PSE's 115kV transmission lines, could be damaged during construction under Alternative 1, Option A." It continues: "a rupture could have significant adverse effects on groundwater quality and other surrounding water resources depending on the location, size and length of time of the rupture."

I109-A-9 | There is continued concern about pipeline safety as documented by Dr. Frank Cheng: *Criteria for Pipelines Co-Existing with Electric Power Lines*. (Dr. Cheng's report was submitted by Don Marsh, President of CENSE, on March 1, during the DEIS comment meeting in Bellevue.)

I109-A-10 | Chapter 5.5.4 referring to *Alternative 2* states that an integrated resource approach has a lower potential for impact to water resources than Alternative 1 A, because construction would be smaller in scale.

I109-A-11 | Chapter 6.6.3.1.1 states that Alternative 1 Option A - the "construction of new overhead transmission lines would result in permanent impacts on plants and animals and their habitats." A new corridor for a 230kV line would be approximately 120-150 feet wide, wider than a 115kV line at 30-40 feet. Trees would be removed in this corridor, along with trees posing a threat to transmission lines outside the corridor. There could be up to 327 acres of vegetation and up to

I109-A -1 | See response for Key Theme REC-3.

I109-A -2 | Comment noted.

I109-A -3 | See response for Key Theme P&A-1.

I109-A -4 | See response for Key Theme P&A-1.

I109-A -5 | See response for Key Theme EARTH-3.

I109-A -6 | See responses for Key Theme WTR-4 and Key Theme PLS-3.

I109-A -7 | See response for Key Theme P&A-2.



I109-A-7 131 acres of tree canopy cover removed with this option. These facts are clearly acknowledged in the DEIS. Bellevue, the *City in a Park*, deserves better than this.

Key findings in Chapter 6: Alternative 1 and 3 have the most potential to cause significant impacts on plants and animals.

I109-A-8 Chapter 11.6.3.6.1 states that under Alternative 1 Option A **permanent clear zones would be required**. The clear zones would be between 120 and 150 feet wide requiring clearance of up to 327 acres of vegetation. Surely a *City in a Park* deserves better than this!

I109-A-9 Chapter 6.6.4.2 states that with a distributed generation component (Alternative 2) construction could result in only short term impacts on plants and animals.

I109-A-10 In addition to this - it was just in late 2014 that the *Coal Creek Parkway Culvert and Bridge* replacement was finished. This was built to provide a pedestrian walkway connected to the trail but the stream was also restored to improve salmon passage. (from the City of Bellevue website)

I109-A-11 Over and over again the DEIS states that a new overhead line will create significant and unavoidable adverse impacts to our environment, plants and animals. *No* amount of mitigation can counter the impact of the PSE's preferred Alternative 1 A proposal. There cannot be enough small areas or parks that could counter the damage through 18 miles of neighborhoods.

I109-A-12 On top of this, if there indeed is no immediate pending disaster need, as supported by the *Lauckhart-Schiffman Load Flow Study* - why are we as a City not supporting 21st Century resolutions for our electrical system. (The *Lauckhart-Schiffman Load Flow Study* was submitted by Don Marsh, President of CENSE, on March 1 during the DEIS comment session in Bellevue.)

As a Board Member of CENSE, I support the documents submitted by Don Marsh, President CENSE, at the March 1, 2016 Comment Meeting in Bellevue, WA.

Karen Esayian  
CENSE Board Member

4601-135th Ave. SE  
Bellevue, WA 98006

KEsayian@aol.com

I109-A -8 See response for Key Theme VR-3.  
I109-A -9 See response for Key Theme P&A-2.  
I109-A -10 See response for Key Theme REC-3.  
I109-A -11 See response for Key Theme ALT-1.  
I109-A -12 See responses for Key Themes OBJ-1 and OBJ-3.

I109-B-1 The following comments will address **Residential and Environmental Impacts** that are associated with the proposed PSE Alternative 1 Option A in Energize Eastside as outlined in the DEIS. Chapter 10.1 Key Findings states that "of the action alternatives, Alternative 1, Option A has the greatest potential to create significant adverse land use and housing impacts." This is a definite understatement! Chapter 6.6.3.1.1 states that with PSE preferred plan of new overhead transmission lines, the new corridor for a 230 kV line would be approximately 120-150 feet wide, wider than a 115kV line at 30-40 feet. Trees would be removed in this corridor, along with trees posing a threat to transmission lines outside the corridor. There could be up to 327 acres of vegetation and up to 131 acres of tree canopy cover removed under this option.

I109-B-2 In addition to this, Chapter 11.6.3.5.1 states that under Alternative 1 Option A, a "**permanent clear zone** would be required." "Because the clear zone would create views of the transmission line, placing a new transmission line in a residential area.....would have a significant impact on the visual character of the area adjacent to it." In this description the greater Eastside would have an 18 mile, 150 foot wide clear zone marring and destroying the natural environment which in turn would ruin the livability of our neighborhoods.

I109-B-3 The concern for endangered species, nesting birds, fish habitat, is noted in Chapter 6, Plants and Animals. Section 6.4.1.5 describes the forested riparian corridor and diverse fish and wildlife habitat provided by the Coal Creek Park Natural area. Cutting a **clear zone** through this Coal Creek Basin which is already **overburdened** with the Olympic Pipeline and existing overhead 115kV transmission lines would eliminate any previous positive environmental goal.

Chapter 6.6.4.2 states that with a *distributed generation component*, construction could result in only short term impacts on plants and animals. It could be added that the impact on humans (i.e. residents of neighborhoods) would also be short term using Alternative 2.

I109-B-4 Chapter 10.7.3.1.2 acknowledges that using an existing corridor may require widening to accommodate the new utility -" up to 50 feet of additional clear zone would be needed through the corridor. This would require removal of some structures, including housing, and would reduce the availability of vacant land for additional housing..." Further stated: "*High Consequence Land Use* is a use which, if located in the vicinity of a hazardous liquid pipeline, would present an unusually high risk in the event of pipeline failure due to its function, including utilities providing regional service." The Alternative 1 A routes proposed run through residential neighborhoods and would co-locate with the Olympic Pipeline - a high pressure pipeline described in detail in Chapter 16. WHY would any governing body allow the **high consequence of pipeline failure** in addition to removal of residential homes in well maintained neighborhoods and risk the disenfranchisement of its citizens.

I109-B-5 Chapter 11.1 - Key Findings: "Alternate 1 and 3 could cause significant impacts on views and visual resources due to vegetation removal and obstruction of scenic views. Overhead wires have the greatest potential to affect residential views. The addition of 230kV lines would have the greatest impact." Because of the hilly terrain on the Eastside and the hilly proposed PSE routes for Energize Eastside, the potential 130 foot high power poles will be seen for miles and miles - impacting more than individual neighborhoods, impacting the downtowns (Bellevue)

I109-B-6 also. The DEIS minimizes the impact on property values; there are no reports from those

I109-B -1 See response for Key Theme LU-5.  
 I109-B -2 See response for Key Theme VR-3.  
 I109-B -3 See response for Key Theme P&A-1.  
 I109-B -4 See response for Key Theme PLS-3.  
 I109-B -5 See response for Key Theme VR-1.  
 I109-B -6 See response for Key Theme ECON-1.

I109-B-6

involved with residential real estate. It must be remembered that the reason most of us live on the Eastside, in Bellevue in particular, is because of the "livability" - the ambiance of neighborhood character. Power poles, **130 feet in height** and potentially 3 to 6 feet in diameter at the base, belong in an industrial setting - NOT in *anyone's* neighborhood. The City of the future should be looking for 21st Century solutions for any potential electric power deficiency.

I109-B-7

Our home for the past 40 years is in Somerset - along the easement for the PSE 115kV transmission line. The Olympic Pipeline runs down the middle of the street a half block away. We have landscaped our property to hide the view of the power poles as much as possible; this will not be possible with industrial sized poles needed for 230kV overhead transmission lines. The potential use of a route through Somerset would devastate the livability of the Somerset community. This is a community of intensely supportive and involved residents. There are other communities along the proposed PSE preferred route that could be described in the same way. It is incumbent for those making the decisions on this proposal to keep in mind the citizens they represent.

I109-B-8

Chapter 2.3.2.2.2 describes the Alternate 1 monopoles to likely be steel or wood with a width at the base between 2-4 feet in diameter while "typical *corner and termination poles* may need to be **4-6 feet in diameter at the base.**" In the Somerset neighborhood where the current 115kV transmission lines make a turn, these PSE proposed 230kV line, 6 foot in diameter poles would be on both sides of Somerset Blvd. One or two would straddle the tennis courts on the Somerset Recreation property. This property also sits on a steep slope. It should be obvious that this potential siting ranks high in residential and environmental impact.

I109-B-9

It has been mentioned that the old 115kV transmission lines would be removed if the proposed 230kV monopole transmission lines were built, but there is **no** specific construction analysis regarding this in the DEIS.

Chapter 8.6.1.3 describes natural phenomena and acknowledges "*lightning strikes* directly to electrical infrastructure could occur" and that "transmission lines located near gas pipelines (such as in the existing corridor where PSE's 115kV transmission line co-exists with **OPLC's petroleum lines**) could pose a particular safety concern." The paragraph continues: "energized transmission lines on the ground after an *earthquake*, lightning strike...could send electric current to anything else metal in the vicinity, such as utilities (including pipelines)." (One such incident occurred early this year in the Bridle Trails area.) This scenario would definitely have a major environmental and residential impact.

The continued concern about pipeline safety is documented by Dr. Frank Cheng: *Criteria for Pipelines CO-Existing with Electric Power Lines.* (Dr. Cheng's report was submitted by Don Marsh, president of CENSE, at the March 1, 2016 DEIS Comment session in Bellevue, WA.)

Chapter 16.3.7 discusses pipeline corrosion stating that "a consequence of high-voltage power lines and buried **petroleum pipelines** sharing a corridor is that *electromagnetic interference* can be introduced on the pipelines, which can cause corrosion on the pipeline over time." "Corrosion accounts for about 23 percent of the significant failures in both hazardous liquid and gas pipelines (Baker, 2008)."

I109-B-7 See response for Key Theme LU-4.

I109-B-8 See the Phase 2 Draft EIS and Final EIS for project-level analysis of construction impacts.

I109-B-9 See responses for Key Themes PLS-2 and PLS-3.

I109-B -10 See responses for Key Themes PLS-2, PLS-3, and PLS-4, and Key Theme EARTH-1.

I109-B -11 See response for Key Theme OBJ-1.

I109-B -12 See response for Key Theme ALT-1.

I109-B-10

Chapter 8.5.1.3 titled Public Safety Risks, natural phenomena, only talks about an earthquake happening during construction - **not** about risks associated with 230kV power lines permanently situated in the same corridor as the Olympic Pipeline.

Chapter 8.6.1.2 titled Public Safety Risks, activities near pipelines states: "ongoing maintenance activities during operation could theoretically damage or break the **OPLC pipelines** or other pipelines in the area, leading to a chemical release or explosion..." It continues: "if transmission lines were improperly designed or located relative to pipelines, or if pipelines themselves were not properly designed with cathodic protection, pipelines could be damaged by stray electric current, leading to risk of chemical release or explosion."

Chapter 16.6.3.1.1 states that with Alternative 1 Option A (PSE's suggested plan) and if located along the existing PSE 115kV easement, construction of a 230 kV line has the potential to disrupt existing natural **gas lines or the Olympic Pipeline**. On March 9, 2016 a PSE natural gas pipeline exploded in Seattle. Jet fuel, which the Olympic Pipeline carries, is much more volatile than natural gas - it needs less oxygen and a lower temperature to ignite. The potential to disrupt is **not** an imagined consequence.

Compared with Alternative 1 A - Chapter 16.6.4.3 in describing *Distributed Generation Components*, states" there may be *minor* impacts to existing buried or overhead utilities if present."

Chapter 8.5.4.2.2 referring to **Alternative 2 Distributed Generation Component** states: "the risks during construction of distributed generation facilities would be lower than with Alternative 1 because there would be greater flexibility in location the facilities away from pipelines."

The Olympic Pipeline is mentioned throughout the DEIS, but its significance as a potential source of disaster is minimized - the conclusion being that current regulations and best practices and coordination will take care of any safety concerns. One small error will have a **major impact** on the environment and residential areas along the Eastside.

I109-B-11

If there is no immediate pending disaster need for redundancy in the electrical system supplying Bellevue and eastside cities, as supported by the Lauckhart-Schiffmann Load Flow Study - then why are we as a City not supporting 21st Century resolutions for our electrical system. (The Lauckhart-Schiffman Load Flow Study was submitted by Don Marsh on March 1, 2016 at the DEIS Comment session in Bellevue, WA.) The **Alternative 2** options would give greater flexibility with proven technologies that can be added incrementally to meet any increased demand for electricity. These alternatives need to be studied further, by consultants with a proven track record in smart grid solutions.

I109-B-12

Karen Esayian  
CENSE Board Member

4601 135th Ave SE  
Bellevue, WA 98006  
KEsayian@aol.com

From: [KEsnyan@aol.com](mailto:KEsnyan@aol.com)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: DEIS Comment  
 Date: Saturday, March 12, 2016 5:03:07 PM

February 1, 2016 comments to Council members,

CENSE appreciates being invited to comment on the Draft EIS for Energize Eastside.

Tonight let's look at the broad picture. The Draft EIS presents three alternatives for our energy future.

I109-C-1

The first alternative is a 230 kV transmission line through the Eastside. Four variations are studied: two different overhead lines, an underground line, and a line submerged in Lake Washington. Let us be clear. Because of the state tariff on undergrounding enforced by the Washington Utilities and Transportation Commission, only the overhead lines operated by PSE or Seattle City Light are economically feasible. Since Seattle City Light removed their line from consideration, PSE's transmission line is the only serious option under Alternative 1.

I109-C-2

Alternative 2 uses innovative technology and policy solutions to address the peak load problem PSE says we have. This is the smart way to grow our electric system.

I109-C-3

Alternative 3 would build three times as many transmission lines all over the Eastside. No one considers this to be a realistic option, and it is included just to make the first alternative look less horrific. Gamesmanship like this makes residents cynical about the EIS process.

I109-C-4

Having identified the red herrings in the EIS, let's look at the two remaining options: Alternative 1, PSE's transmission line, and Alternative 2, the smart technology solution.

I109-C-5

PSE's transmission line is a solution that is vastly bigger than we need. The line will have a capacity exceeding 1,000 megawatts when only 70 megawatts are required in the foreseeable future, according to PSE's graphs. CENSE has reason to believe even this figure has been exaggerated to justify the project. The transmission line option would put all our eggs in one basket. Ratepayers would finance a huge

I109-C-6

upfront cost of more than a quarter billion dollars to build a transmission line that has reliability and security risks. The transmission line would be vulnerable to extreme weather, fires, landslides, terrorism, solar flares, pipeline accidents, and errors of human judgment. If only one power pole falls, a big piece of our electricity supply would be out of service.

I109-C-7

Alternative 2, the smart solution, envisions a 21<sup>st</sup> century distributed energy network that is much more flexible and adaptive. It's more

I109-C -1 See response for Key Theme ALT-1.  
 I109-C -2 Comment noted.  
 I109-C -3 See response for Key Theme ALT-1.  
 I109-C -4 See response for Key Theme OBJ-1.  
 I109-C -5 See responses for Key Theme ECON-4.  
 I109-C -6 See response for Key Theme PLS-2.  
 I109-C -7 See response for Key Theme ALT-1.

I109-C -8 Comment noted.

reliable, because multiple elements can fail without impacting overall reliability.

It's also more attractive financially, because it can be built incrementally. We can make smart decisions about how much additional infrastructure we need each year. For example, if the economy slows down and electricity demand plummets like it did in 2009, the level of investment could be adjusted to match the new consumption pattern. If a new kind of battery comes along that solves our problems more efficiently, it could be incorporated into the energy grid. This strategy would better support local companies like Mukilteo-based UniEnergy, which is developing batteries that will be used by utilities all over the country. By contrast, there is no local company that makes the steel monopoles used in PSE's transmission line.

I109-C-7 Be ready for PSE's arguments against the smart solution. PSE prefers building transmission lines because it is more profitable for them. The company has disparaged Demand Response, a proven way to handle peak loads. The power plan about to be released by the Northwest Power and Conservation Council says, "Under a wide range of future conditions, energy efficiency consistently proved the least expensive and least economically risky resource. In more than 90 percent of future conditions, cost-effective efficiency met *all* electricity load growth through 2035. It's not only the single largest contributor to meeting the region's future electricity needs, it's also the single largest source of new winter peaking capacity."

Energize Eastside is all about winter peaking capacity, but PSE argues that the Eastside is an anomaly in its service area, that growth has brought us to the brink of a crisis, and a larger transmission line is our only solution.

I109-C-8 Citizens do not want a solution that despoils our neighborhoods, cuts down our trees, and increases risk of devastating pipeline fires. Instead we want an energy solution that is forward-looking, reliable, safe, cost-effective, and environmentally sound. The only alternative in this EIS that fills these criteria is Alternative 2.

Thank you. Don Marsh

submitted by Karen Esayian, 4601 135th Ave SE Bellevue, WA 98006  
Cense Board member

From: [KEsnyan@aol.com](mailto:KEsnyan@aol.com)  
To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
Subject: DEIS Comments  
Date: Saturday, March 12, 2016 5:06:47 PM

February 22, 2016 comments to Bellevue Council by Don Marsh

Tonight I'd like to present to you the results of a new load flow study of PSE's Energize Eastside project. A load flow study is a detailed simulation of how an electric grid functions in a given scenario.

The two analysts who ran this study are Richard Lauckhart, former VP of power planning for PSE, and Roger Schiffman, an industry expert who has run many load flow studies during his career.

Lauckhart and Schiffman acquired a license to use the same analysis software PSE uses, and they obtained the same base case data from the Western Electricity Coordinating Council.

However, Lauckhart and Schiffman's results differ from PSE's. When PSE's assumptions were entered into the computer model, namely three times as much energy going to Canada, and most of the local generation plants located in the Puget Sound area turned off, Lauckhart and Schiffman discovered something pretty shocking. These assumptions would boost the amount of electricity required from central Washington to exceed the capacity of the 11 transmission lines that cross the Cascades. Let me repeat that – the transmission lines crossing the Cascades would become overloaded, not our transmission

I109-D -1 See response for Key Theme OBJ-3.

I109-D-1

lines on the Eastside. PSE's proposal wouldn't make any difference at all, and PSE's scenario would put the Puget Sound area from Olympia to Bellingham at risk of blackouts.

Well, that's what the simulation says would happen. In reality, grid operators would never allow that scenario to occur. They would simply turn on local generation plants and reduce the optional flow of electricity to Canada. In that case, what would happen to us during an N-1-1 failure occurring simultaneously with heavy winter peak loads? Lauckhart and Schiffman ran another simulation to find out. And their answer is: nothing unusual would happen -- no overloads and no blackouts. In fact, Lauckhart and Schiffman estimate we have 20 to 40 years before any risk develops.

We have more good news. A new analysis from EQL Energy shows PSE and the EIS consultants have made significant errors in their analysis of alternative technologies. There are solutions available right now that would be much more economical than transmission lines. We will have that study from EQL ready for release in about a week.

At this point, I have a question for you. Do you personally feel that you are well-qualified to judge between the opposing facts being put forward by PSE's experts and those of CENSE? If not, we would like to propose another possibility. Why not move this case to the state

I109-D-1



I109-D

COMMENT

RESPONSE

I109-D-1

agency EFSEC, the Energy Facility Site Evaluation Council? We believe it is well within your power to require an evaluation of PSE's proposal by a state agency that specializes in this kind of question. CENSE believes EFSEC is in a better position to make these technical evaluations than most city councils.

submitted by Karen Esayian, CENSE Board member  
4601 135th Ave SE, Bellevue WA 98006

From: [KEsayan@aol.com](mailto:KEsayan@aol.com)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: DEIS Comments  
 Date: Saturday, March 12, 2016 5:09:38 PM

March 7, 2016 comments to Bellevue Council members by Don Marsh

I hope you've all had a chance to look at the Lauckhart-Schiffman Load Flow Study I provided to you a couple of weeks ago. Last week, we submitted the study into the Draft EIS comment process.

Although PSE hasn't provided any specific objections to the Lauckhart-Schiffman report, the company criticizes the study for not complying with federal reliability standards. CENSE responds by citing a study of an "Extra Heavy Winter Flow" scenario performed by ColumbiaGrid in 2013. In this study, ColumbiaGrid simulated 1,500 MW of electricity flowing to Canada, and many of the local generation plants in the Puget Sound area turned off. If these assumptions sound familiar, it's because those are the same assumptions PSE made in the Eastside Needs Assessment to justify Energize Eastside.

I109-E-1

ColumbiaGrid says these extreme conditions were studied only to test the limits of the 11 transmission lines that carry electricity from central Washington to the Puget Sound. These are the same lines that Lauckhart and Schiffman also found unable to carry the load under these extreme conditions. ColumbiaGrid concludes that this scenario exceeds NERC reliability standards and therefore transmission capacity across the Cascades does not need to be increased. Logic dictates these conditions also exceed NERC standards when PSE uses them to justify Energize Eastside.

Although PSE and CENSE do not agree on which studies should determine the need for Energize Eastside, there is an objective way to resolve the dispute. Richard Lauckhart has offered to share his computer model with PSE, and he wants to see PSE's data to understand the details of the company's objections. As you may know, Mr. Lauckhart previously received CEII clearance from the federal agency FERC and has now filed a second CEII application with PSE. He has not received a response. I am now seeking this clearance for myself. I expect PSE to grant both my application and Mr. Lauckhart's without delay.

I109-E-2

At this point, questions of scale and timeline for this project have never been greater. The Draft EIS simply repeats PSE's assertion that the need has already been demonstrated by studies that do not answer the questions raised by the Lauckhart-Schiffman Study. Phase 1 of the EIS must be finalized and considered by a Hearing Examiner before phase 2 begins. It would be a waste of time and resources for all parties involved, including PSE, to spend a year studying specific solutions to a problem which is not well defined. Our next speaker will explain why it is permissible for the council to ask for finalization of Phase 1.

submitted by Karen Esayan, CENSE Board member, 4601-135th Ave SE Bellevue, WA

I109-E -1 See response for Key Theme OBJ-3.

I109-E -2 See responses for Key Themes OBJ-1 and OBJ-3.

**From:** [KEsnyan@aol.com](mailto:KEsnyan@aol.com)  
**To:** [info@energizeeastsideis.org](mailto:info@energizeeastsideis.org)  
**Subject:** DEIS Comments  
**Date:** Saturday, March 12, 2016 5:14:29 PM

November 2015 Comments to Bellevue Council by Don Marsh

My name is Don Marsh, vice president of CENSE, the Coalition of Eastside Neighborhoods for Sensible Energy. During the past two years, I've helped analyze PSE's Energize Eastside project, and I've led a search for more cost-effective and less environmentally destructive solutions to power future growth of the Eastside.

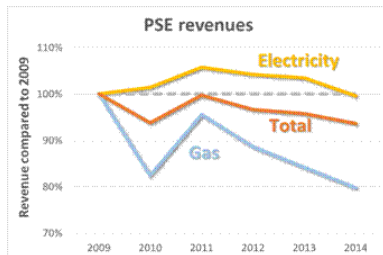
During the past 2 months, citizens have spoken to the council on a range of related topics, such as:

- The reliability of our electric grid.
- The safety hazard of locating high-voltage power lines and petroleum pipelines in close proximity.
- The Shuffleton power plant, which provided emergency power to the Eastside until PSE dismantled it and sold the property for a profit.
- How a small peaker plant could meet our future needs.
- Demand Side Management, an even better solution to peak load problems.
- And we asked the council to participate in a more realistic study of Eastside need.

Residents have told us that these presentations have helped them understand our local energy needs and opportunities. But one question still comes up. "Why would PSE propose a project like this if there are better solutions?"

There is a financial explanation.

PSE was acquired in 2009 by a private equity fund named Macquarie Infrastructure Partners, managed by an Australian investment bank and three Canadian Retirement funds. Soon after the acquisition, the company was hit with a triple whammy: 1) The recession, 2) increasing energy efficiency, and 3) falling gas prices. This graph shows the dramatic impact on the company's revenues, as reported on PSE's Form 10K. Electricity revenue is mostly flat and gas revenue has declined significantly. Last year, the company's combined revenue from energy sales, (the orange line), was 6% less than it was 5 years ago.



PSE is under pressure to increase profits for its shareholders. As a result, PSE is predisposed to build

I109-F -1 See responses for Key Themes OBJ-1 and OBJ-2.

I109-F-1

I109-F-1

large infrastructure projects rather than less profitable alternatives preferred by residents. State regulations encourage this outcome by allowing PSE to collect a 10% return on infrastructure investments.

I109-F-2

CENSE believes these state regulations must be amended to reward the implementation of 21st century energy technologies, rather than building expensive transmission systems that are much larger than the local need requires.

States such as New York and California have already demonstrated that such reforms are possible. We ask that Bellevue and other Eastside cities press the legislature to reform our regulations so that utility companies can make a decent profit from smart solutions that establish the Eastside as an energy leader, rather than erecting grossly oversized solutions from the last century.

submitted by Karen Esayan, CENSE Board member  
4601 135th Ave SE Bellevue, WA 98006

I109-F -2 See response for Key Theme ECON-4.

From: [KEsnyan@aol.com](mailto:KEsnyan@aol.com)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: DEIS Comments  
 Date: Saturday, March 12, 2016 5:17:31 PM

November 30, 2015 Comments to Bellevue Council by Don Marsh

At the last council meeting before Thanksgiving, PSE delivered a marketing presentation to the city council rather than addressing the technical questions that CENSE has raised repeatedly. Instead of telling councilmembers why it's reasonable to send large amounts of electricity to Canada during an N-1-1 power emergency on the Eastside, or why PSE would turn off most of its local generators during that emergency, PSE simply says, "This is the backbone of the Eastside and we haven't upgraded it for 55 years." This is not accurate.

By calling these lines the backbone of the Eastside, PSE conveniently ignores the fact that the company has installed a number of parallel transmission lines through Bellevue during the past 55 years. One heads northwest from the Mercer Slough, one goes along 116th Ave. NE, and a third line follows 140th Ave. NE. With these additional lines in place, PSE has the capacity to serve its customers even if the so-called "backbone lines" are out of service.

PSE's advertising about this backbone may have convinced a couple of business owners to testify in support of Energize Eastside at the last council meeting. They told the council their companies and the economic vitality of Bellevue are at risk if Energize Eastside isn't built soon.

Let's examine the facts. On page 47 of the report produced by Bellevue's independent analyst, the condition that PSE seeks to fix with Energize Eastside occurs only once every 3 to 30 years. During the next decade, Energize Eastside will prevent at most 3 outages totaling about 6 hours. During that same period, business owners in downtown Bellevue will suffer 20 outages totaling more than 40 hours. There are areas of the city outside the downtown core with even more frequent outages, none of which will be prevented by Energize Eastside.

Business owners don't want to pay higher electricity rates to finance a project that won't make a significant difference in reliability. Energize Eastside is a boondoggle that degrades our neighborhoods, harms the environment, and increases the risk of devastating pipeline fires.

The council should encourage PSE to spend our money on projects that improve our communities and make a real difference in the reliability of our electricity.

submitted by Karen Esayian, CENSE Board member

4601 135th Ave SE Bellevue, WA 98006

I109-G -1 See response for Key Theme OBJ-1.

I109-G-1

**From:** [KEsnyan@aol.com](mailto:KEsnyan@aol.com)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** DEIS Comments  
**Date:** Saturday, March 12, 2016 5:24:03 PM

Don Marsh comments to Bellevue council members 2016

Kevin Wallace asked a very critical question during discussion of the CENSE study request last Monday night: Who has the authority to question the need for Energize Eastside?

When CENSE asked the Federal Energy Regulatory Commission to help us clarify the need, FERC responded,

*Regardless of Complainants' arguments, we could not grant this requested relief because much of the "activity with respect to" the project, such as transmission siting and permitting, is not subject to the Commission's jurisdiction.*

In other words, a strictly local project must be regulated at the local level. We won't argue with that. But does the authority reside at the state or city level?

Before FERC issued its ruling, we asked the Washington Utilities and Transportation Commission to investigate the need for the project. In an email dated March 30, 2015, Commissioner Ann Rendahl responded,

*[T]he UTC does not usually engage in pre-approval or pre-review of utility plant investment and relies on the utility to bring the matter forward to the UTC, nor does it have statutory authority over transmission siting, or a formal role in the transmission planning process. ... [I]nquiries are performed when the utility requests recovery in rates for investments it has built and placed into service.*

So, no help from PSE's regulators at the state level. If the city concludes that it also has no authority to clarify the need for Energize Eastside, it would become clear that such authority does not exist at the federal, state, or city level. In such a case, it is up to citizen organizations like CENSE to defend the welfare of those who would be burdened by a project whose need has only been validated by a company which will benefit from increased revenue.

CENSE is, in fact, willing to get a study without the city's participation. However, we think we might get a different answer from the council after new councilmembers are elected. Obviously, getting conflicting answers is not our preferred outcome.

Councilmembers are justifiably concerned about the possibility of a lawsuit from PSE if the study comes to a contrary conclusion regarding the need for the project. However, the fear of a lawsuit does not justify ignoring the questions of the community. If PSE files a lawsuit, we have an idea about how the city could respond quickly and at zero cost. For obvious reasons, we would prefer to share this idea in private at this time.

We have heard a concern that another study could be controversial. If CENSE can vet the

I109-I -1 See response for Key Theme OBJ-1.

I109-I-1

I109-I

COMMENT

RESPONSE

I109-I-1

consultant beforehand (remember that we expressed strong reservations about Utility System Efficiencies), we will not criticize the outcome of the study, even if it produces results counter to our expectations. We still have plenty to say about smarter, cheaper alternatives if the study finds that a real need exists. But it is difficult to judge the viability of alternatives if we don't have a clear idea of the need, so this study will provide valuable information even if need is clearly demonstrated.

[submitted by Karen Esayan CENSE Board member; 4601 135th Ave SE Bellevue WA 98006](#)

From: [KEsnyan@aol.com](mailto:KEsnyan@aol.com)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: DEIS Comments  
 Date: Saturday, March 12, 2016 5:25:55 PM  
 Attachments: [clip\\_image002.png](#)

March 8, 2016

Don Marsh comments to Bellevue council members,

CENSE would like the opportunity to dispute some of the "facts" stated by PSE representative Keri Pravitz before the Bellevue City Council on March 7, 2016.

**1. "1,500 MW exported to Canada is a normal planning requirement for Northwest utilities."**

There are many times of year when 1,500 MW can be transmitted to Canada without a problem. However, this level of flow is **not required during peak consumption**. This is clear from the Memorandum of Agreement signed by PSE, BPA, and Seattle City Light in January 2012: *"When large amounts of energy are being delivered [from] the Puget Sound area through the Northern Intertie to Canada, transmission lines at times become congested. To relieve this congestion and avoid unplanned power interruptions to customers, BPA currently limits or curtails the amount of energy Puget Sound-area utilities and Canadian utilities can deliver across certain transmission lines."*

This quote mentions a curtailment solution that BPA has used for nearly a decade: reduced energy flow to Canada. If BPA and PSE want to avoid such curtailments, PSE's customers should not have to bear the entire cost. There are many less expensive solutions to our local needs that don't require a 230 kV line to be constructed through heavily residential areas.

Further, the Lauckhart-Schiffman study clearly shows that it would take an additional line across the Cascades to deliver 1,500 MW to Canada on a cold winter day. There are no plans to build such a line.

**2. "The 1,500 MW doesn't flow through Bellevue."**

CENSE has never said that the entire 1,500 MW flows through Bellevue. However, some portion of this flow does go through Bellevue, and it adds stress to our local infrastructure. PSE says this is just a distraction. If it isn't a central issue, then PSE should have no objection to removing this assumption from the load flow study, as USE did (and almost all of the overloads on PSE's equipment disappeared).

**3. "1,500 MW is assumed in base cases."**

I109-J -1 See response for Key Theme OBJ-3.

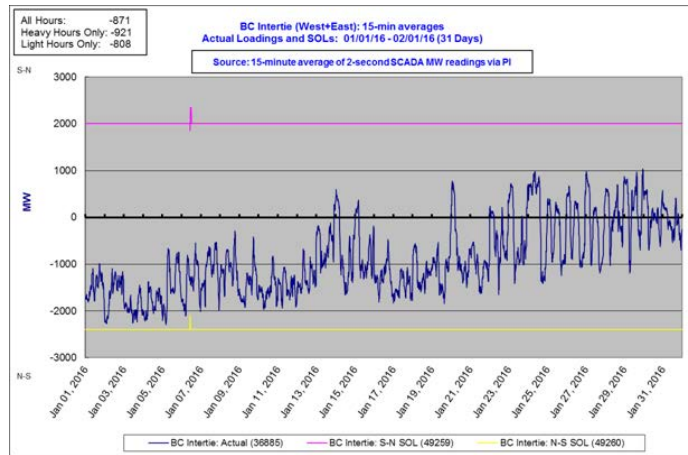
I109-J-1



Lauckhart and Schiffman started with the same WECC Heavy Winter Base Case for 2017-18 that PSE used in the Eastside Needs Assessment. The amount of electricity exported to Canada in that Base Case is 500 MW. Does PSE dispute this?

**4. Reality check**

Do large amounts of electricity actually flow to Canada when temperatures are low in the Puget Sound area? There is a BPA web site where anyone can look at electricity flow on the Northern Intertie. Let's check what happened in January 2016, when the region had very cold weather for the first half of the month:



In the above graph, the squiggly line indicates flow on the transmission lines that connect the Northwest to British Columbia. Any time the line is below the central black line, energy is flowing from Canada to the US. You can see that for most of the month, Canada was delivering electricity to our region, not vice versa.

We have looked at data for the last decade, and it is very rare for electricity to flow northwards during the cold winter scenarios that PSE uses as a basis for Energize Eastside. If the flow were reversed in any dramatic way, the 11 transmission lines that deliver electricity to the Puget Sound from central Washington would not be able to satisfy the demand.

We conclude that Energize Eastside is being justified using a fantasy scenario that cannot happen in real life.

Don Marsh, President  
CENSE.org

submitted by Karen Esayian, CENSE Board member, 4601 135th Ave SE Bellevue WA 98006

I109-J-1

From: [KEsnyan@aol.com](mailto:KEsnyan@aol.com)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: DEIS Comments  
 Date: Saturday, March 12, 2016 5:29:23 PM  
 Attachments: [clip\\_image002.png](#)

Don Marsh comments to Bellevue Council November 16, 2015

My name is Don Marsh, and I'm the vice president of CENSE, the Coalition of Eastside Neighborhoods for Sensible Energy. During the past two years, I've helped analyze PSE's Energize Eastside project, and I've led a search for more cost-effective and environmental solutions to power future growth of the Eastside.

During the past 2 months, citizens have spoken to the council on a range of related topics. Patricia Magnani spoke about reliability of our electric grid. Janis Medley explained the safety hazard of locating high-voltage power lines and petroleum pipelines in close proximity. Gary Albert related the story of the Shuffleton power plant, which provided emergency power to the Eastside until PSE dismantled it and sold the property for a profit. John Merrill explained how a small peaker plant could meet our future needs. Lindy Bruce described Demand Side Management, an even better solution to peak load problems. Edward Chung asked the council to participate in a more realistic study of Eastside need.

Residents have told us that these presentations have been helpful for them to understand our local energy needs and opportunities. But one question still comes up. "Why would PSE propose a project like this if there were better solutions?"

There is a financial explanation.

As you know, PSE was bought in 2009 by a private equity fund, Macquarie Infrastructure Partners, which is managed by an Australian investment bank. But soon after the acquisition was completed, the company was hit with a triple whammy. The recession, increasing energy efficiency, and falling gas prices have had a dramatic impact on the company's revenues. In this graph, revenue reported on PSE's Form 10K shows mostly flat electricity revenue, and revenue from gas has declined significantly. Last year, the company's combined revenue from energy sales, shown in orange in this graph, was 6% below where it was 5 years ago.

I109-K -1 See response for Key Theme OBJ-1.

I109-K-1

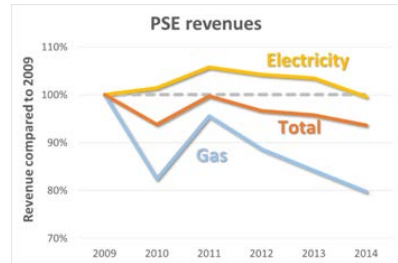


I109-K

COMMENT

RESPONSE

I109-K-1



PSE is under tremendous pressure to increase profits, and state regulators won't allow the company to hike energy prices enough to substantially raise revenue. In fact, state regulations allow only one way for PSE to boost earnings, and that's by collecting a generous 10% return on infrastructure investments. This predisposes the company to prefer expensive solutions to problems that could be solved with cheaper alternatives.

I109-K-2

CENSE has no problem with compensating PSE for projects that improve the safety and livability of our cities and advance our environmental goals. But this will only happen if outdated state regulations are amended to align PSE's financial incentives with consideration for the environment and the public good. States such as New York and California have already demonstrated that this is possible.

We would like Bellevue and other Eastside cities to take a leadership role in calling for change of these outdated state regulations.

submitted by Karen Esayian, CENSE Board member,  
4601 135th Ave SE Bellevue, WA 98006

I109-K-2 See response for Key Theme ECON-4.

From: [KEsryan@aol.com](mailto:KEsryan@aol.com)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: Comment for DEIS  
 Date: Saturday, March 12, 2016 5:41:07 PM

March 12, 2016

The SEPA Handbook, #98-114, updated in 2003, page 52, describes a useful (EIS) document as follows: ~Focuses on the most significant and vital information concerning the proposal, **alternatives**, and **impacts**; ~Provides **sufficient information about each alternative** so that impacts can be compared between alternatives; and ~Presents the lead agency's analysis and conclusions about the likely **environmental impact** of the proposal.

I109-L-1 And in DEIS Chapter 2.2.2.1: Environmentally acceptable to PSE and communities, it states: "for PSE, environmentally acceptable means a solution that, though the environmental review process, would be found to *minimize*, to the extent practicable, the **environmental impacts on the affected communities**."

With these stated goals in mind, and concluding that Alternative 1 Option A does **not** meet these goals, this comment to be entered into the DEIS will address the pros and cons of Alternative 2 as written in the DEIS document. Alternative 2 as written is totally inadequate because of its simplistic and somewhat outdated references. The information given on solution and resources to be used is *not current* which makes this option look more expensive and less feasible than it is.

I109-L-2 An *integrated or distributed energy resource Alternative* needs to be developed and reviewed by experts in this fast moving field of new technologies. An improved version of Alternative 2 could be built incrementally, as need develops, instead of using dinosaur technologies as in Alternative 1 Option A. Under this version of an alternative, the project would not have to constructed and paid for, by rate payers, in the first year; it could be scaled according to need. But the viability of an improved version of Alternative 2 depends on selecting the right mix of technologies and policies. And it depends on hiring experts in the field of 21st Century electrical grid solutions to analyze and vet any alternatives proposed.

I109-L-3 It is incumbent that Alternatives proposed and analyzed by experts in the field, not just PSE hired experts, be included in this EIS going forward.

Karen Esryan  
 CENSE Board Member  
 4601 135th Ave SE  
 Bellevue, WA 98006

I109-L -1 See response for Key Theme ALT-1.  
 I109-L -2 See responses for Key Themes ALT-1 and ALT-2.  
 I109-L -3 See response for Key Theme EIS-1.

From: [Karen.Esayian](mailto:Karen.Esayian@energizeeastsideeis.org)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: Comment for DEIS  
 Date: Sunday, March 13, 2016 1:31:55 PM

March 12, 2016

The SEPA Handbook, #98-114, updated in 2003, page 52, describes a useful (EIS) document as follows: ~Focuses on the most significant and vital information concerning the proposal, **alternatives**, and **impacts**; ~Provides **sufficient information about each alternative** so that impacts can be compared between alternatives; and ~Presents the lead agency's analysis and conclusions about the likely **environmental impact** of the proposal.

I109-M-1

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With these stated goals in mind, and concluding that Alternative 1 Option A does **not** meet these goals, this comment to be entered into the DEIS will address the pros and cons of Alternative 2 as written in the DEIS document. Alternative 2 as written is totally inadequate because of its simplistic and somewhat outdated references. The information given on solution and resources to be used is *not current* which makes this option look more expensive and less feasible than it is.

I109-M-2

An *integrated or distributed energy resource Alternative* needs to be developed and reviewed by experts in this fast moving field of new technologies. An improved version of Alternative 2 could be built incrementally, as need develops, instead of using dinosaur technologies as in Alternative 1 Option A. Under this version of an alternative, the project would not have to be constructed and paid for, by rate payers, in the first year; it could be scaled according to need. But the viability of an improved version of Alternative 2 depends on selecting the right mix of technologies and policies. And it depends on hiring experts in the field of 21st Century electrical grid solutions to analyze and vet any alternatives proposed.

I109-M-3

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Karen Esayian  
 CENSE Board Member  
 4601 135th Ave SE  
 Bellevue, WA 98006

I109-M -1 See response for Key Theme ALT-1.  
 I109-M -2 See responses for Key Themes ALT-1 and ALT-2.  
 I109-M -3 See response for Key Theme EIS-1.

**From:** [Karen Esajian](mailto:Karen.Esajian@energizeeastsideeis.org)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** DEIS Comments  
**Date:** Sunday, March 13, 2016 1:32:15 PM  
**Attachments:** [clip\\_image002.png](#)

Don Marsh comments to Bellevue Council November 16, 2015

My name is Don Marsh, and I'm the vice president of CENSE, the Coalition of Eastside Neighborhoods for Sensible Energy. During the past two years, I've helped analyze PSE's Energize Eastside project, and I've led a search for more cost-effective and environmental solutions to power future growth of the Eastside.

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There is a financial explanation.

As you know, PSE was bought in 2009 by a private equity fund, Macquarie Infrastructure Partners, which is managed by an Australian investment bank. But soon after the acquisition was completed, the company was hit with a triple whammy. The recession, increasing energy efficiency, and falling gas prices have had a dramatic impact on the company's revenues. In this graph, revenue reported on PSE's Form 10K shows mostly flat electricity revenue, and revenue from gas has declined significantly. Last year, the company's combined revenue from energy sales, shown in orange in this graph, was 6% below where it was 5 years ago.

I109-N -1 See response for Key Theme OBJ-1.

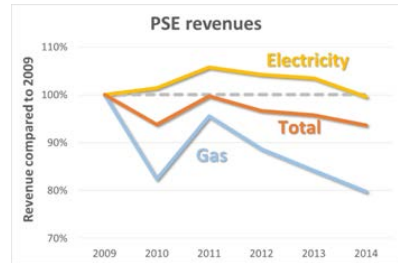
I109-N-1

I109-N

COMMENT

RESPONSE

I109-N-1



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I109-N-2

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We would like Bellevue and other Eastside cities to take a leadership role in calling for change of these outdated state regulations.

submitted by Karen Esayian, CENSE Board member,  
4601 135th Ave SE Bellevue, WA 98006

I109-N -2 See response for Key Theme ECON-4.

**From:** [Karen Esajian](mailto:Karen.Esajian@energizeeastsideeis.org)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** DEIS Comments  
**Date:** Sunday, March 13, 2016 1:32:19 PM  
**Attachments:** [clip\\_image002.png](#)

March 8, 2016

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I109-O -1 See response for Key Theme OBJ-3.

I109-O-1

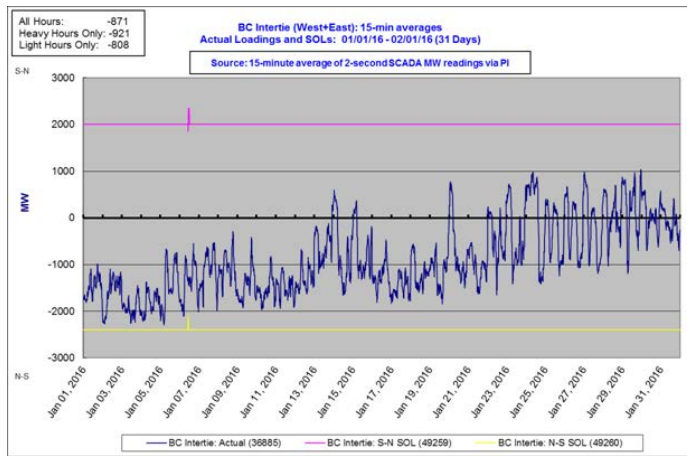


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I109-O-1

I109-O

COMMENT

RESPONSE

I109-O-1 |

happen in real life.

Don Marsh, President

[CENSE.org](http://CENSE.org)

submitted by Karen Esayan, CENSE Board member, 4601 135th Ave SE Bellevue WA 98006

**From:** [Karen Esayian](mailto:Karen_Esayian)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** DEIS Comments  
**Date:** Sunday, March 13, 2016 1:32:21 PM

Don Marsh comments to Bellevue council members 2016

Kevin Wallace asked a very critical question during discussion of the CENSE study request last Monday night: Who has the authority to question the need for Energize Eastside?

When CENSE asked the Federal Energy Regulatory Commission to help us clarify the need, FERC responded,

*Regardless of Complainants' arguments, we could not grant this requested relief because much of the "activity with respect to" the project, such as transmission siting and permitting, is not subject to the Commission's jurisdiction.*

In other words, a strictly local project must be regulated at the local level. We won't argue with that. But does the authority reside at the state or city level?

Before FERC issued its ruling, we asked the Washington Utilities and Transportation Commission to investigate the need for the project. In an email dated March 30, 2015, Commissioner Ann Rendahl responded,

*[T]he UTC does not usually engage in pre-approval or pre-review of utility plant investment and relies on the utility to bring the matter forward to the UTC, nor does it have statutory authority over transmission siting, or a formal role in the transmission planning process. ... [I]nquiries are performed when the utility requests recovery in rates for investments it has built and placed into service.*

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Councilmembers are justifiably concerned about the possibility of a lawsuit from PSE if the study comes to a contrary conclusion regarding the need for the project. However, the fear of a lawsuit does not justify ignoring the questions of the community. If PSE files a lawsuit, we have an idea about how the city could respond quickly and at zero cost. For obvious reasons, we would prefer to share this idea in private at this time.

I109-P -1 See response for Key Theme OBJ-1.

I109-P-1

I109-P

COMMENT

RESPONSE

I109-P-1

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[submitted by Karen Esayian CENSE Board member; 4601 135th Ave SE Bellevue WA 98006](#)

**From:** [Karen Esayian](mailto:Karen.Esayian@energizeeastsideeis.org)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** DEIS Comment  
**Date:** Sunday, March 13, 2016 1:32:33 PM

January 27, 2016

Don Marsh comments to Newcastle Planning Commission members,

Tonight I'd like to propose a land use code of importance to Newcastle. This code would improve the safety of the utility corridor shared by the Olympic Pipeline and PSE's high-voltage transmission lines. For all future development of this corridor, we would require a minimum distance of 50 feet between the power lines and the two pipelines. Earlier this month, CENSE requested the City of Bellevue to adopt the same code.

Our goal is to reduce the risk of devastating pipeline fires. There are three different ways these fires can occur:

1. A pipeline can be damaged during a construction project. A minor nick in one of the pipelines caused a devastating fire that claimed three lives in Bellingham in 1999.
2. Electricity flowing from a downed power line can damage the pipeline. Bellevue resident Lloyd Arnesen described such an incident during an EIS Scoping Meeting last May.[\[1\]](#)
3. Electricity can arc from wires to power poles and then into pipelines, as described in a BPA safety guide available on the web.[\[2\]](#)

Now I will describe each of these scenarios in a little more detail.

A construction accident is not hard to visualize. PSE will install poles that are at least 85 feet tall in a corridor that is, in some cases, only 100 feet wide between houses. PSE will dig foundations 15 to 50 feet deep. The excavation will require heavy equipment that will create vibration and stress on pipelines that are 40 to 50 years old. This would already be a challenging task, but there is another potential complication. The Energize Eastside website says that the existing power lines won't be removed until after the new lines are installed.[\[3\]](#) Workers will guide the new poles into position while dodging power lines above, active pipelines below, and poles and houses on either side. Deadly mishaps have happened in less complex situations, like the explosion that happened in Texas in 2010, when a subcontractor hit a pipeline while digging holes for a new transmission line.[\[4\]](#) The heat from the explosion that took his life was felt half a mile away.

Even if no significant damage occurs during construction, Newcastle and other Eastside cities will still be exposed to operational dangers. Lloyd Arnesen described what happened when electricity from a downed power line near his yard began arcing into the nearby pipeline. In this case, the flow of electricity was cut off before the pipeline casing was breached.

However, the damage was severe enough that the Olympic Pipeline Company had to shut down the pipeline and replace the damaged section of pipe. Mr. Arnesen and his neighbors

I109-Q -1 See responses for Key Themes PLS-1, PLS-2, and PLS-3.

I109-Q-1

I109-Q-1

were lucky that an explosion was avoided. But what might have happened if Energize Eastside had been built and four times the amount of power were flowing through that wire?

Our concerns on this point are validated by an October 2015 report by the respected industry risk analyst DNV-GL. According to the report, “A direct arc to a collocated or crossing pipeline is possible, which can result in coating damage, or arc damage to the pipe wall up to the point of burn-through. Even if an arc is not sustained long enough to cause burn through, a short duration elevated current can cause molten pits on the pipe surface that may lead to crack development as the pipe cools.”<sup>[5]</sup>

The DNV-GL report contains advice about ways to mitigate risk: “The separation distance between the pipeline and transmission line is a significant variable controlling the level of induced AC potential influencing the pipeline.” The report explain that “induced AC potential” increases risk of accelerated corrosion. We view this report as an excellent survey of the most recent scientific knowledge on the risks of collocated transmission lines and pipelines, and we encourage you to read it.

BPA’s safety guide explains the concern of that agency: “Proper positioning of underground utilities is required to prevent an accident in an extreme case when an unusual condition might cause electricity to arc from the high-voltage wire to the tower and then to ground. This could produce a dangerous voltage on underground piping...”

BPA recommends a minimum separation of 50 feet between power lines and pipelines to reduce risk of dangerous voltages on the pipeline. The Chevron Company, which operates a 157-mile long pipeline in Eastern Washington, recommends a separation of at least 25 feet. The Municipal Research & Services Center of Seattle has developed a model ordinance for cities.<sup>[6]</sup> The ordinance calls for a minimum setback of 50 feet from the pipeline, although electrical infrastructure is not specifically mentioned.

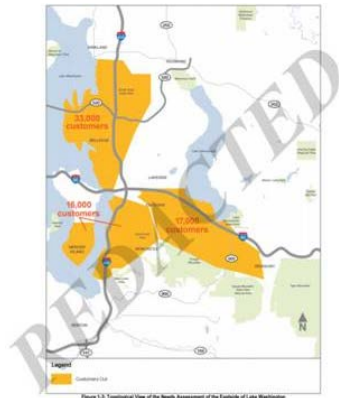
The author of the Seattle study, Jim Doherty, has six recommendations for residents. His first recommendation is, “Don’t wait for the federal government to tell you what risks are acceptable for your community – bring the issue to your planning commission and start the process for enacting reasonable land use regulations that will minimize risks to your residents.” Tonight, we are following this recommendation.

A week after CENSE requested Bellevue to incorporate the BPA-recommended separation between power poles and pipelines, PSE told the city council that there are a variety of ways to mitigate risk with careful design and engineering. CENSE is skeptical that engineering alone can reduce risk of all three scenarios we have described. Physical separation is a better way to reduce risk. Engineered solutions can be compromised through age or accidental damage. Physical separation does not degrade over time and is easily verified by anyone with a tape measure. Perhaps that is why there are no exemptions for engineered solutions in BPA’s safety guide or other ordinances we’ve seen.

I109-Q-1

It's clear that Newcastle residents will be safer with a separation requirement such as we are proposing. It's also true that it will be more difficult for PSE to build Energize Eastside with more stringent safety codes in place. How will that impact Newcastle residents?

PSE says that its Newcastle customers will experience "risk of power outages" if Energize Eastside is not built. In a map included in PSE's Eastside Needs Assessment, PSE shows parts of Newcastle located within an area of 16,000 customers that are at risk of outages.<sup>[7]</sup> But PSE has not been clear in public forums about what the true likelihood of a power outage is.



I109-Q-2

According to the Eastside Needs Assessment, Energize Eastside is needed to address peak loads that "occur just a few hours per year."<sup>[8]</sup> When do these peak hours occur? When the temperature falls below 23 degrees Fahrenheit, and only on weekdays during morning or evening peak usage hours (7-10 AM and 5-8 PM). Historically, those conditions have occurred during less than 0.2% of all service hours.

To be clear, the Eastside grid has plenty of capacity to meet customer needs even in extremely cold weather. The problem described by PSE occurs only if two of the four big transformers that serve the Eastside fail at the same time winter peak loads are occurring. There have never been two such simultaneous failures that we are aware of.

So how many Newcastle customers would lose power in this very unlikely event? Surprisingly, **no customers will lose power**. As the company describes in the Eastside Needs Assessment, Corrective Action Plans would be used to prevent overloads or outages. PSE says an outage would occur if a transmission line fails while the Corrective Action Plans are in place, but this is adding yet another unlikely scenario on top of a situation that is nearly impossible.<sup>[9]</sup>

I109-Q-3

Newcastle must balance the risk of a catastrophic pipeline fire with the need for electrical reliability in the unlikely circumstances PSE has imagined.

We don't use the term "catastrophic" lightly. This is the word used by the Bellevue Fire Department to describe the impacts of a pipeline incident in the department's Standards of Response Coverage: "Given that pipeline incidents continue to occur in this country, and many for undetermined reasons, the community is still at risk. The combination of: a highly flammable liquid, in large quantities, and in urban environment translates into a significant

I109-Q -2 See response for Key Theme OBJ-1.

I109-Q -3 See response for Key Theme PLS-3.

I109-Q-3

consequence risk that approaches the ‘catastrophic’ level.”<sup>[10]</sup>

The Fire Department goes on to state that it does not have sufficient “response and mitigation abilities” to extinguish a pipeline fire. The pipeline has the capacity to deliver approximately 5,900 gallons of fuel per minute into a burning fire. Even if the pipeline is shutdown with “near-immediate” responsiveness, “well over ten thousand gallons” of fuel may burn within the first few minutes of ignition. With houses located closer than 50 feet to the pipeline, the potential for death and destruction without warning is of great concern to us.

Since the Bellevue Fire Department serves the City of Newcastle, these cautionary statements should be heeded by Newcastle planners when considering separation of electrical infrastructure and the pipeline.

In conclusion, we have laid out substantive and specific concerns regarding the safety of locating pipelines and transmission lines in close proximity. We urge the Newcastle Planning Commission to begin the process of creating a land use code that specifies a minimum separation to protect your residents from potentially lethal pipeline fires. During this process, PSE and the Olympic Pipeline Company will be able to present their own facts, and useful public debate can occur. If a land use code is not considered, the concerns we have raised tonight will not be adequately investigated. Residents will be left to wonder if their lives and loved ones are being jeopardized to deliver phantom reliability improvements promised by PSE.

Sincerely,

Don Marsh, President

[CENSE.org](http://CENSE.org)

**submitted by Karen Esayian, CENSE Board member, 4601 135th Ave SE Bellevue WA 98006**

[1] [http://www.energizeeastsideis.org/uploads/4/7/3/1/47314045/phase\\_1\\_draft\\_eis\\_scoping\\_comment\\_record\\_report\\_rev.pdf](http://www.energizeeastsideis.org/uploads/4/7/3/1/47314045/phase_1_draft_eis_scoping_comment_record_report_rev.pdf), p. 655

[2] [http://www.bpa.gov/news/pubs/GeneralPublications/lusi-Living\\_and\\_working\\_safely\\_around\\_high\\_voltage\\_power\\_lines.pdf](http://www.bpa.gov/news/pubs/GeneralPublications/lusi-Living_and_working_safely_around_high_voltage_power_lines.pdf), p. 6

[3] <http://energizeeastside.com/construction>

[4] <http://www.wfaa.com/story/news/2014/08/09/13587360/>

[5] <http://www.ingaa.org/File.aspx?id=24732>, p. 19

[6] <http://mrcs.org/getmedia/321384AC-DB51-448E-B4FD-5A8EC4EBF7B1/ldsetbacks.aspx>, p. 21

[7] [http://energizeeastside.com/Media/Default/Library/Reports/Eastside\\_Needs\\_Assessment\\_Final\\_Draft\\_10-31-2013v2REDACTEDR1.pdf](http://energizeeastside.com/Media/Default/Library/Reports/Eastside_Needs_Assessment_Final_Draft_10-31-2013v2REDACTEDR1.pdf), p. 14

[8] *ibid.*, p.38

[9] [http://energizeeastside.com/Media/Default/Library/Reports/Eastside\\_Needs\\_Assessment\\_Final\\_Draft\\_10-31-2013v2REDACTEDR1.pdf](http://energizeeastside.com/Media/Default/Library/Reports/Eastside_Needs_Assessment_Final_Draft_10-31-2013v2REDACTEDR1.pdf), p. 13

[10] [http://www.bellevuewa.gov/pdf/Fire/Standards\\_of\\_Coverage.pdf](http://www.bellevuewa.gov/pdf/Fire/Standards_of_Coverage.pdf), p. 66



**From:** [Karen Esayian](mailto:Karen.Esayian@energizeeastsideeis.org)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** DEIS Comments  
**Date:** Sunday, March 13, 2016 1:32:38 PM

November 30, 2015 Comments to Bellevue Council by Don Marsh

At the last council meeting before Thanksgiving, PSE delivered a marketing presentation to the city council rather than addressing the technical questions that CENSE has raised repeatedly. Instead of telling councilmembers why it's reasonable to send large amounts of electricity to Canada during an N-1-1 power emergency on the Eastside, or why PSE would turn off most of its local generators during that emergency, PSE simply says, "This is the backbone of the Eastside and we haven't upgraded it for 55 years." This is not accurate.

By calling these lines the backbone of the Eastside, PSE conveniently ignores the fact that the company has installed a number of parallel transmission lines through Bellevue during the past 55 years. One heads northwest from the Mercer Slough, one goes along 116th Ave. NE, and a third line follows 140th Ave. NE. With these additional lines in place, PSE has the capacity to serve its customers even if the so-called "backbone lines" are out of service.

PSE's advertising about this backbone may have convinced a couple of business owners to testify in support of Energize Eastside at the last council meeting. They told the council their companies and the economic vitality of Bellevue are at risk if Energize Eastside isn't built soon.

Let's examine the facts. On page 47 of the report produced by Bellevue's independent analyst, the condition that PSE seeks to fix with Energize Eastside occurs only once every 3 to 30 years. During the next decade, Energize Eastside will prevent at most 3 outages totaling about 6 hours. During that same period, business owners in downtown Bellevue will suffer 20 outages totaling more than 40 hours. There are areas of the city outside the downtown core with even more frequent outages, none of which will be prevented by Energize Eastside.

Business owners don't want to pay higher electricity rates to finance a project that won't make a significant difference in reliability. Energize Eastside is a boondoggle that degrades our neighborhoods, harms the environment, and increases the risk of devastating pipeline fires.

The council should encourage PSE to spend our money on projects that improve our communities and make a real difference in the reliability of our electricity.

submitted by Karen Esayian, CENSE Board member

4601 135th Ave SE Bellevue, WA 98006

I109-R -1 See response for Key Theme OBJ-1.

I109-R-1



**From:** [Karen Esajian](mailto:Karen.Esajian)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** DEIS Comments  
**Date:** Sunday, March 13, 2016 1:32:46 PM

November 2015 Comments to Bellevue Council by Don Marsh

My name is Don Marsh, vice president of CENSE, the Coalition of Eastside Neighborhoods for Sensible Energy. During the past two years, I've helped analyze PSE's Energize Eastside project, and I've led a search for more cost-effective and less environmentally destructive solutions to power future growth of the Eastside.

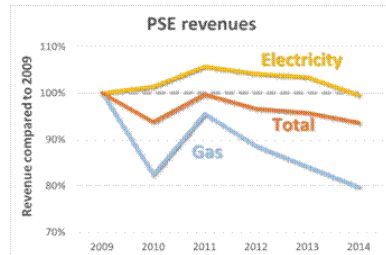
During the past 2 months, citizens have spoken to the council on a range of related topics, such as:

- The reliability of our electric grid.
- The safety hazard of locating high-voltage power lines and petroleum pipelines in close proximity.
- The Shuffleton power plant, which provided emergency power to the Eastside until PSE dismantled it and sold the property for a profit.
- How a small peaker plant could meet our future needs.
- Demand Side Management, an even better solution to peak load problems.
- And we asked the council to participate in a more realistic study of Eastside need.

Residents have told us that these presentations have helped them understand our local energy needs and opportunities. But one question still comes up. "Why would PSE propose a project like this if there are better solutions?"

There is a financial explanation.

PSE was acquired in 2009 by a private equity fund named Macquarie Infrastructure Partners, managed by an Australian investment bank and three Canadian Retirement funds. Soon after the acquisition, the company was hit with a triple whammy: 1) The recession, 2) increasing energy efficiency, and 3) falling gas prices. This graph shows the dramatic impact on the company's revenues, as reported on PSE's Form 10K. Electricity revenue is mostly flat and gas revenue has declined significantly. Last year, the company's combined revenue from energy sales, (the orange line), was 6% less than it was 5 years ago.



PSE is under pressure to increase profits for its shareholders. As a result, PSE is predisposed to build

I109-S -1 See response for Key Theme OBJ-1.

I109-S-1

I109-S-1

large infrastructure projects rather than less profitable alternatives preferred by residents. State regulations encourage this outcome by allowing PSE to collect a 10% return on infrastructure investments.

I109-S-2

CENSE believes these state regulations must be amended to reward the implementation of 21st century energy technologies, rather than building expensive transmission systems that are much larger than the local need requires.

States such as New York and California have already demonstrated that such reforms are possible. We ask that Bellevue and other Eastside cities press the legislature to reform our regulations so that utility companies can make a decent profit from smart solutions that establish the Eastside as an energy leader, rather than erecting grossly-oversized solutions from the last century.

submitted by Karen Esayan, CENSE Board member  
4601 135th Ave SE Bellevue, WA 98006

I109-S -2 See response for Key Theme ECON-4.

From: [Karen Esayan](#)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: DEIS Comments  
 Date: Sunday, March 13, 2016 1:32:55 PM

March 7, 2016 comments to Bellevue Council members by Don Marsh

I hope you've all had a chance to look at the Lauckhart-Schiffman Load Flow Study I provided to you a couple of weeks ago. Last week, we submitted the study into the Draft EIS comment process.

Although PSE hasn't provided any specific objections to the Lauckhart-Schiffman report, the company criticizes the study for not complying with federal reliability standards. CENSE responds by citing a study of an "Extra Heavy Winter Flow" scenario performed by ColumbiaGrid in 2013. In this study, ColumbiaGrid simulated 1,500 MW of electricity flowing to Canada, and many of the local generation plants in the Puget Sound area turned off. If these assumptions sound familiar, it's because those are the same assumptions PSE made in the Eastside Needs Assessment to justify Energize Eastside.

I109-T-1

ColumbiaGrid says these extreme conditions were studied only to test the limits of the 11 transmission lines that carry electricity from central Washington to the Puget Sound. These are the same lines that Lauckhart and Schiffman also found unable to carry the load under these extreme conditions. ColumbiaGrid concludes that this scenario exceeds NERC reliability standards and therefore transmission capacity across the Cascades does not need to be increased. Logic dictates these conditions also exceed NERC standards when PSE uses them to justify Energize Eastside.

Although PSE and CENSE do not agree on which studies should determine the need for Energize Eastside, there is an objective way to resolve the dispute. Richard Lauckhart has offered to share his computer model with PSE, and he wants to see PSE's data to understand the details of the company's objections. As you may know, Mr. Lauckhart previously received CEII clearance from the federal agency FERC and has now filed a second CEII application with PSE. He has not received a response. I am now seeking this clearance for myself. I expect PSE to grant both my application and Mr. Lauckhart's without delay.

I109-T-2

At this point, questions of scale and timeline for this project have never been greater. The Draft EIS simply repeats PSE's assertion that the need has already been demonstrated by studies that do not answer the questions raised by the Lauckhart-Schiffman Study. Phase 1 of the EIS must be finalized and considered by a Hearing Examiner before phase 2 begins. It would be a waste of time and resources for all parties involved, including PSE, to spend a year studying specific solutions to a problem which is not well defined. Our next speaker will explain why it is permissible for the council to ask for finalization of Phase 1.

submitted by Karen Esayan, CENSE Board member, 4601-135th Ave SE Bellevue, WA

I109-T -1 See response for Key Theme OBJ-3.

I109-T -2 See response for Key Theme OBJ-2.

**From:** [Karen Esajian](mailto:Karen.Esajian)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** DEIS Comments  
**Date:** Sunday, March 13, 2016 1:33:01 PM

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February 22, 2016 comments to Bellevue Council by Don Marsh

Tonight I'd like to present to you the results of a new load flow study of PSE's Energize Eastside project. A load flow study is a detailed simulation of how an electric grid functions in a given scenario.

The two analysts who ran this study are Richard Lauckhart, former VP of power planning for PSE, and Roger Schiffman, an industry expert who has run many load flow studies during his career.

Lauckhart and Schiffman acquired a license to use the same analysis software PSE uses, and they obtained the same base case data from the Western Electricity Coordinating Council.

However, Lauckhart and Schiffman's results differ from PSE's. When PSE's assumptions were entered into the computer model, namely three times as much energy going to Canada, and most of the local generation plants located in the Puget Sound area turned off, Lauckhart and Schiffman discovered something pretty shocking. These assumptions would boost the amount of electricity required from central Washington to exceed the capacity of the 11 transmission lines that cross the Cascades. Let me repeat that – the transmission lines

I109-U -1 See response for Key Theme OBJ-3.

I109-U-1

crossing the Cascades would become overloaded, not our transmission lines on the Eastside. PSE's proposal wouldn't make any difference at all, and PSE's scenario would put the Puget Sound area from Olympia to Bellingham at risk of blackouts.

Well, that's what the simulation says would happen. In reality, grid operators would never allow that scenario to occur. They would simply turn on local generation plants and reduce the optional flow of electricity to Canada. In that case, what would happen to us during an N-1-1 failure occurring simultaneously with heavy winter peak loads? Lauckhart and Schiffman ran another simulation to find out. And their answer is: nothing unusual would happen -- no overloads and no blackouts. In fact, Lauckhart and Schiffman estimate we have 20 to 40 years before any risk develops.

We have more good news. A new analysis from EQL Energy shows PSE and the EIS consultants have made significant errors in their analysis of alternative technologies. There are solutions available right now that would be much more economical than transmission lines. We will have that study from EQL ready for release in about a week.

At this point, I have a question for you. Do you personally feel that you are well-qualified to judge between the opposing facts being put forward by PSE's experts and those of CENSE? If not, we would like to

I109-U-1

I109-U

COMMENT

RESPONSE

I109-U-1

propose another possibility. Why not move this case to the state agency EFSEC, the Energy Facility Site Evaluation Council? We believe it is well within your power to require an evaluation of PSE's proposal by a state agency that specializes in this kind of question. CENSE believes EFSEC is in a better position to make these technical evaluations than most city councils.

submitted by Karen Esayian, CENSE Board member  
4601 135th Ave SE, Bellevue WA 98006

From: [Karen Esajian](mailto:Karen.Esajian@energizeeastsideeis.org)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: DEIS Comment  
 Date: Sunday, March 13, 2016 1:33:13 PM

February 1, 2016 comments to Council members,  
 CENSE appreciates being invited to comment on the Draft EIS for Energize Eastside.

Tonight let's look at the broad picture. The Draft EIS presents three alternatives for our energy future.

I109-V-1

The first alternative is a 230 kV transmission line through the Eastside. Four variations are studied: two different overhead lines, an underground line, and a line submerged in Lake Washington. Let us be clear. Because of the state tariff on undergrounding enforced by the Washington Utilities and Transportation Commission, only the overhead lines operated by PSE or Seattle City Light are economically feasible. Since Seattle City Light removed their line from consideration, PSE's transmission line is the only serious option under Alternative 1.

I109-V-2

Alternative 2 uses innovative technology and policy solutions to address the peak load problem PSE says we have. This is the smart way to grow our electric system.

I109-V-3

Alternative 3 would build three times as many transmission lines all over the Eastside. No one considers this to be a realistic option, and it is included just to make the first alternative look less horrific. Gamesmanship like this makes residents cynical about the EIS process.

I109-V-4

Having identified the red herrings in the EIS, let's look at the two remaining options: Alternative 1, PSE's transmission line, and Alternative 2, the smart technology solution.

I109-V-5

PSE's transmission line is a solution that is vastly bigger than we need. The line will have a capacity exceeding 1,000 megawatts when only 70 megawatts are required in the foreseeable future, according to PSE's graphs. CENSE has reason to believe even this figure has been exaggerated to justify the project. The transmission line option would put all our eggs in one basket. Ratepayers would finance a huge

I109-V-6

upfront cost of more than a quarter billion dollars to build a transmission line that has reliability and security risks. The transmission line would be vulnerable to extreme weather, fires, landslides, terrorism, solar flares, pipeline accidents, and errors of human judgment. If only one power pole falls, a big piece of our electricity supply would be out of service.

I109-V-7

Alternative 2, the smart solution, envisions a 21<sup>st</sup> century distributed energy network that is much more flexible and adaptive. It's more

- I109-V -1 See response for Key Theme ALT-1.
- I109-V -2 See response for Key Theme ALT-1.
- I109-V -3 See response for Key Theme ALT-1.
- I109-V -4 See response for Key Theme OBJ-1.
- I109-V -5 See response for Key Theme ECON-4.
- I109-V -6 See response for Key Theme PLS-2.
- I109-V -7 See response for Key Theme ALT-1.



I109-V-7

reliable, because multiple elements can fail without impacting overall reliability.

It's also more attractive financially, because it can be built incrementally. We can make smart decisions about how much additional infrastructure we need each year. For example, if the economy slows down and electricity demand plummets like it did in 2009, the level of investment could be adjusted to match the new consumption pattern. If a new kind of battery comes along that solves our problems more efficiently, it could be incorporated into the energy grid. This strategy would better support local companies like Mukilteo-based UniEnergy, which is developing batteries that will be used by utilities all over the country. By contrast, there is no local company that makes the steel monopoles used in PSE's transmission line.

Be ready for PSE's arguments against the smart solution. PSE prefers building transmission lines because it is more profitable for them. The company has disparaged Demand Response, a proven way to handle peak loads. The power plan about to be released by the Northwest Power and Conservation Council says, "Under a wide range of future conditions, energy efficiency consistently proved the least expensive and least economically risky resource. In more than 90 percent of future conditions, cost-effective efficiency met *all* electricity load growth through 2035. It's not only the single largest contributor to meeting the region's future electricity needs, it's also the single largest source of new winter peaking capacity."

Energize Eastside is all about winter peaking capacity, but PSE argues that the Eastside is an anomaly in its service area, that growth has brought us to the brink of a crisis, and a larger transmission line is our only solution.

I109-V-8

Citizens do not want a solution that despoils our neighborhoods, cuts down our trees, and increases risk of devastating pipeline fires. Instead we want an energy solution that is forward-looking, reliable, safe, cost-effective, and environmentally sound. The only alternative in this EIS that fills these criteria is Alternative 2.

Thank you. Don Marsh  
 submitted by Karen Esayian, 4601 135th Ave SE Bellevue, WA  
 98006 Cense Board member

I109-V -8 Comment noted.

I109-W

COMMENT

RESPONSE

I109-W-1

March 9, 2016

The attached map titled Environmental property map illustrates steep slopes of 40 % plus in one section of the Somerset neighborhood. (colored in brown)

The blue squiggly line drawn down the PSE easement between 135th Ave SE and Somerset Drive SE identifies a **rain creek**. The neighbors on 135th Avenue SE have all taken care to control the rain run-off - either by digging a trench filled with rocks or bordered with railroad ties or by diverting it by other means. In extreme rain storms catching ponds retain the water - one above ground and one below. This creek starts up hill at Somerset Place and continues down to Somerset Drive. This creek has not been mentioned in the DEIS.



Karen Esayian

CENSE Board Member

4601 135th Ave SE  
Bellevue, WA 98006

KEsayian@aol.com

RECEIVED  
MAR 14 REC'D  
Development Services

Attachment: Environmental map of property (City of Bellevue, nwmaps.net)

I109-W -1 See response for Key Theme WTR-1.

March 9, 2016

I109-X-1

The following comments will address **Residential and Environmental Impacts** that are associated with the proposed PSE Alternative 1 Option A in Energize Eastside as outlined in the DEIS. Chapter 10.1 Key Findings states that "of the action alternatives, Alternative 1, Option A has the greatest potential to create significant adverse land use and housing impacts." This is a definite understatement! Chapter 6.6.3.1.1 states that with PSE preferred plan of new

I109-X-2

overhead transmission lines, the new corridor for a 230 kV line would be approximately 120-150 feet wide, wider than a 115kV line at 30-40 feet. Trees would be removed in this corridor, along with trees posing a threat to transmission lines outside the corridor. There could be up to 327 acres of vegetation and up to 131 acres of tree canopy cover removed under this option.

I109-X-3

In addition to this, Chapter 11.6.3.5.1 states that under Alternative 1 Option A, a "**permanent clear zone** would be required." "Because the clear zone would create views of the transmission line, placing a new transmission line in a residential area.....would have a significant impact on the visual character of the area adjacent to it." In this description the greater Eastside would have an 18 mile, 150 foot wide clear zone marring and destroying the natural environment which in turn would ruin the livability of our neighborhoods.

I109-X-4

The concern for endangered species, nesting birds, fish habitat, is noted in Chapter 6, Plants and Animals. Section 6.4.1.5 describes the forested riparian corridor and diverse fish and wildlife habitat provided by the Coal Creek Park Natural area. Cutting a **clear zone** through this Coal Creek Basin which is already **overburdened** with the Olympic Pipeline and existing overhead 115kV transmission lines would eliminate any previous positive environmental goal.

I109-X-5

Chapter 6.6.4.2 states that with a *distributed generation component*, construction could result in only short term impacts on plants and animals. It could be added that the impact on humans (i.e. residents of neighborhoods) would also be short term using Alternative 2.

Chapter 10.7.3.1.2 acknowledges that using an existing corridor may require widening to accommodate the new utility -" up to 50 feet of additional clear zone would be needed through the corridor. This would require removal of some structures, including housing, and would reduce the availability of vacant land for additional housing..." Further stated: "*High Consequence Land Use* is a use which, if located in the vicinity of a hazardous liquid pipeline, would present an unusually high risk in the event of pipeline failure due to its function, including utilities providing regional service." The Alternative 1 A routes proposed run through residential neighborhoods and would co-locate with the Olympic Pipeline - a high pressure pipeline described in detail in Chapter 16. WHY would any governing body allow the **high consequence of pipeline failure** in addition to removal of residential homes in well maintained neighborhoods and risk the disenfranchisement of its citizens.

I109-X-6

Chapter 11.1 - Key Findings: "Alternate 1 and 3 could cause significant impacts on views and visual resources due to vegetation removal and obstruction of scenic views. Overhead wires have the greatest potential to affect residential views. The addition of 230kV lines would have the greatest impact." Because of the hilly terrain on the Eastside and the hilly proposed PSE

- I109-X -1 See response for Key Theme LU-5.
- I109-X -2 See response for Key Theme P&A-2.
- I109-X -3 See response for Key Theme VR-3.
- I109-X -4 See response for Key Theme P&A-1.
- I109-X -5 See response for Key Theme LU-2.
- I109-X -6 See responses for Key Theme VR-3, Key Theme ECON-1, Key Theme LU-4, and Key Theme VR-4.

I109-X-6

routes for Energize Eastside, the potential 130 foot high power poles will be seen for miles and miles - impacting more than individual neighborhoods, impacting the downtowns (Bellevue) also. The DEIS minimizes the impact on property values; there are no reports from those involved with residential real estate. It must be remembered that the reason most of us live on the Eastside, in Bellevue in particular, is because of the "livability" - the ambiance of neighborhood character. Power poles, **130 feet in height** and potentially 3 to 6 feet in diameter at the base, belong in an industrial setting - NOT in *anyone's* neighborhood. The City of the future should be looking for 21st Century solutions for any potential electric power deficiency.

Our home for the past 40 years is in Somerset - along the easement for the PSE 115kV transmission line. The Olympic Pipeline runs down the middle of the street a half block away. We have landscaped our property to hide the view of the power poles as much as possible; this will not be possible with industrial sized poles needed for 230kV overhead transmission lines. The potential use of a route through Somerset would devastate the livability of the Somerset community. This is a community of intensely supportive and involved residents. There are other communities along the proposed PSE preferred route that could be described in the same way. It is incumbent for those making the decisions on this proposal to keep in mind the citizens they represent.

Chapter 2.3.2.2.2 describes the Alternate 1 monopoles to likely be steel or wood with a width at the base between 2-4 feet in diameter while "typical *corner and termination poles* may need to be **4-6 feet in diameter at the base.**" In the Somerset neighborhood where the current 115kV transmission lines make a turn, these PSE proposed 230kV line, 6 foot in diameter poles would be on both sides of Somerset Blvd. One or two would straddle the tennis courts on the Somerset Recreation property. This property also sits on a steep slope. It should be obvious that this potential siting rank high in residential and environmental impact.

I109-X-7

It has been mentioned that the old 115kV transmission lines would be removed if the proposed 230kV monopole transmission lines were built, but there is **no** specific construction analysis regarding this in the DEIS.

I109-X-8

Chapter 8.6.1.3 describes natural phenomena and acknowledges "*lightening strikes* directly to electrical infrastructure could occur" and that "transmission lines located near gas pipelines (such as in the existing corridor where PSE's 115kV transmission line co-exists with **OPLC's petroleum lines**) could pose a particular safety concern." The paragraph continues: "energized transmission lines on the ground after an *earthquake*, lightning strike....could send electric current to anything else metal in the vicinity, such as utilities (including pipelines)." (One such incident occurred early this year in the Bridle Trails area.) This scenario would definitely have a major environmental and residential impact.

The continued concern about pipeline safety is documented by Dr. Frank Cheng: *Criteria for Pipelines Co-Existing with Electric Power Lines.* (Dr. Cheng's report was submitted by Don Marsh, president of CENSE, at the March 1, 2016 DEIS Comment session in Bellevue, WA.)

I109-X -7 See the Phase 2 Draft EIS for project-level construction impacts.

I109-X -8 See responses for Key Themes PLS-2 and PLS-3, and Key Theme EARTH-1.

Chapter 16.3.7 discusses pipeline corrosion stating that "a consequence of high-voltage power lines and buried **petroleum pipelines** sharing a corridor is that *electromagnetic interference* can be introduced on the pipelines, which can cause corrosion on the pipeline over time."  
 "Corrosion accounts for about 23 percent of the significant failures in both hazardous liquid and gas pipelines (Baker, 2008)."

Chapter 8.5.1.3 titled Public Safety Risks, natural phenomena, only talks about an earthquake happening during construction - **not** about risks associated with 230kV power lines permanently situated in the same corridor as the Olympic Pipeline.

Chapter 8.6.1.2 titled Public Safety Risks, activities near pipelines states: "ongoing maintenance activities during operation could theoretically damage or break the **OPLC pipelines** or other pipelines in the area, leading to a chemical release or explosion...." It continues: "if transmission lines were improperly designed or located relative to pipelines, or if pipelines themselves were not properly designed with cathodic protection, pipelines could be damaged by stray electric current, leading to risk of chemical release or explosion."

Chapter 16.6.3.1.1 states that with Alternative 1 Option A (PSE's suggested plan) and if located along the existing PSE 115kV easement, construction of a 230 kV line has the potential to disrupt existing natural **gas lines or the Olympic Pipeline**. On **March 9, 2016 a PSE natural gas pipeline exploded in Seattle**. Jet fuel, which the Olympic Pipeline carries, is much more volatile than natural gas - it needs less oxygen and a lower temperature to ignite. The potential to disrupt is **not** an imagined consequence.

Compared with Alternative 1 A - Chapter 16.6.4.3 in describing *Distributed Generation Components*, states "there may be *minor* impacts to existing buried or overhead utilities if present."

Chapter 8.5.4.2.2 referring to **Alternative 2 Distributed Generation Component** states: "the risks during construction of distributed generation facilities would be lower than with Alternative 1 because there would be greater flexibility in location the facilities away from pipelines."

I109-X-9

The Olympic Pipeline is mentioned throughout the DEIS, but its significance as a potential source of disaster is minimized - the conclusion being that current regulations and best practices and coordination will take care of any safety concerns. One small error will have a **major impact** on the environment and residential areas along the Eastside.

I109-X-10

If there is no immediate pending disaster need for redundancy in the electrical system supplying Bellevue and eastside cities, as supported by the *Lauckhart-Schiffmann Load Flow Study* - then why are we as a City not supporting 21st Century resolutions for our electrical system. (The *Lauckhart-Schiffman Load Flow Study* was submitted by Don Marsh on March 1, 2016 at the DEIS Comment session in Bellevue, WA.) The **Alternative 2** options would give greater flexibility with proven technologies that can be added incrementally to meet any increased demand for electricity. These **alternatives need to be studied further**, by consultants with a proven track record in smart grid solutions.

I109-X -9 See response for Key Theme PLS-4.

I109-X -10 See responses for Key Themes OBJ-2 and OBJ-3.

COMMENT

RESPONSE

  
Karen Esayian  
CENSE Board Member  
  
4601 135th Ave SE  
Bellevue, WA 98006  
KEsayian@aol.com

Attachments: **Figure 12b** Landslide and Seismic Hazard Areas (City of Bellevue); **Figure 16-1** Existing Electric Transmission and Natural Gas/Petroleum Pipelines (DEIS); **Property Environmental Map** - nwmaps.net (City of Bellevue); **Coal Creek Natural Area** park map.



|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | March 9, 2016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I109-Y-1 | These comments for the DEIS concern the <b>Coal Creek Basin</b> . The Coal Creek Natural Area is an integral part of Bellevue's Parks and Recreation system; the Lake Washington Watershed (WRIA 8) totals 3,990 total acres (11% of the City). The dense forest protects water quality and erosion. The drainage jurisdiction(s): 2,181.7 acres in Bellevue; 1,275.7 acres in King County and 532.1 acres in Newcastle. Coal Creek: State Stream #08-0268.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| I109-Y-2 | This basin supports habitat for Chinook, Rainbow and Cutthroat trout, Coho, Sockeye and Steelhead. (Chinook and Coho are listed as species of Local Importance: <i>Bellevue Land Use Code 20.25H.150A</i> ) (Chinook is listed as a Federal Endangered Species).<br><br>The tree canopy in the Coal Creek basin varies between 58%-85%. Chapter 6.4.1.5 describes Coal Creek Park Natural area as providing a forested riparian corridor adjacent to Coal Creek - a diverse fish and wildlife habitat. (reference: MyParksandRecreation.com)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| I109-Y-3 | <b>Figure 16-1</b> , illustrates Existing Electrical Transmission and natural gas/petroleum pipelines. This map shows the convergence of the Olympic Pipeline with the overhead existing PSE 115kV line. If the proposed 230kV PSE Energize Eastside overhead lines, as suggested in Alternative 1 - Option A, were approved - they would also intersect in the Coal Creek Basin. This natural area is already <b>overburdened</b> with transmission lines and pipelines. Good judgment would dictate avoiding any additional burden on this Basin.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| I109-Y-4 | <b>Figure 3-1</b> , illustrates Landslide and Erosion Hazard Areas. Note the high hazard zone around the Coal Creek Basin.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| I109-Y-5 | Chapter 5.5.3.1.4 acknowledges the potential impact on water resources from heavy machinery and excavation for the installation of 100 foot power poles. Please think again of what this could do to an area like the Coal Creek basin.<br><br>Chapter 5.5.3.1.6 regarding Potential Pipeline Damage: "The Olympic Pipeline, which parallels one of PSE's 115kV transmission lines, <u>could be damaged during construction under Alternative 1, Option A.</u> " It continues: "a rupture could have significant adverse effects on groundwater quality and other surrounding water resources depending on the location, size and length of time of the rupture."<br><br>There is continued concern about pipeline safety as documented by Dr. Frank Cheng: <i>Criteria for Pipelines Co-Existing with Electric Power Lines</i> . (Dr. Cheng's report was submitted by Don Marsh, President of CENSE, on March 1, during the DEIS comment meeting in Bellevue.)<br><br>Chapter 5.5.4 referring to <i>Alternative 2</i> states that an integrated resource approach has a lower potential for impact to water resources than Alternative 1 A, because construction would be smaller in scale. |
| I109-Y-6 | Chapter 6.6.3.1.1 states that Alternative 1 Option A - the "construction of new overhead transmission lines would result in permanent impacts on plants and animals and their habitats." A new corridor for a 230kV line would be approximately 120-150 feet wide, wider than a 115kV line at 30-40 feet. Trees would be removed in this corridor, along with trees posing a threat to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|           |                                                        |
|-----------|--------------------------------------------------------|
| I109-Y -1 | See response for Key Theme WTR-1.                      |
| I109-Y -2 | See response for Key Theme P&A-1.                      |
| I109-Y -3 | See response for Key Theme P&A-1.                      |
| I109-Y -4 | See response for Key Theme EARTH-3.                    |
| I109-Y -5 | See responses for Key Theme WTR-4 and Key Theme PLS-3. |
| I109-Y -6 | See response for Key Theme P&A-2.                      |

I109-Y-6

transmission lines outside the corridor. There could be up to 327 acres of vegetation and up to 131 acres of tree canopy cover removed with this option. These facts are clearly acknowledged in the DEIS. Bellevue, the *City in a Park*, deserves better than this.

Key findings in Chapter 6: Alternative 1 and 3 have the most potential to cause significant impacts on plants and animals.

I109-Y-7

Chapter 11.6.3.6.1 states that under Alternative 1 Option A **permanent clear zones would be required**. The clear zones would be between 120 and 150 feet wide requiring clearance of up to 327 acres of vegetation. Surely a *City in a Park* deserves better than this!

Chapter 6.6.4.2 states that with a distributed generation component (Alternative 2) construction could result in only short term impacts on plants and animals.

I109-Y-8

In addition to this - it was just in late 2014 that the *Coal Creek Parkway Culvert and Bridge* replacement was finished. This was built to provide a pedestrian walkway connected to the trail but the stream was also restored to improve salmon passage. (from the City of Bellevue website)

Over and over again the DEIS states that a new overhead line will create significant and unavoidable adverse impacts to our environment, plants and animals. No amount of mitigation can counter the impact of the PSE's preferred Alternative 1 A proposal. There cannot be enough small areas or parks that could counter the damage through 18 miles of neighborhoods.

I109-Y-9

On top of this, if there indeed is no immediate pending disaster need, as supported by the *Lauckhart-Schiffman Load Flow Study* - why are we as a City not supporting 21st Century resolutions for our electrical system. (The *Lauckhart-Schiffman Load Flow Study* was submitted by Don Marsh, President of CENSE, on March 1 during the DEIS comment session in Bellevue.)

As a Board Member of CENSE, I support the documents submitted by Don Marsh, President CENSE, at the March 1, 2016 Comment Meeting in Bellevue, WA.



Karen Esayian  
CENSE Board Member

4601-135th Ave. SE  
Bellevue, WA 98006

KEsayian@aol.com

Attachments: **Figure 16-1** Existing Electric Transmission and Natural Gas/Petroleum Pipelines (DEIS); **Figure 12b** Landslide and Seismic Hazard Areas (City of Bellevue); **Coal Creek Basin map** (City of Bellevue)

- I109-Y -7 See response for Key Theme VR-3.
- I109-Y -8 See response for Key Theme P&A-1.
- I109-Y -9 See response for Key Theme OBJ-3.



Page 1 of 1

Subj: **DEIS Comments**  
 Date: 3/12/2016  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)

Don Marsh comments to Bellevue council members 2016

Kevin Wallace asked a very critical question during discussion of the CENSE study request last Monday night: Who has the authority to question the need for Energize Eastside?

When CENSE asked the Federal Energy Regulatory Commission to help us clarify the need, FERC responded,

*Regardless of Complainants' arguments, we could not grant this requested relief because much of the "activity with respect to" the project, such as transmission siting and permitting, is not subject to the Commission's jurisdiction.*

In other words, a strictly local project must be regulated at the local level. We won't argue with that. But does the authority reside at the state or city level?

Before FERC issued its ruling, we asked the Washington Utilities and Transportation Commission to investigate the need for the project. In an email dated March 30, 2015, Commissioner Ann Rendahl responded,

*[T]he UTC does not usually engage in pre-approval or pre-review of utility plant investment and relies on the utility to bring the matter forward to the UTC, nor does it have statutory authority over transmission siting, or a formal role in the transmission planning process. ... [I]nquiries are performed when the utility requests recovery in rates for investments it has built and placed into service.*

So, no help from PSE's regulators at the state level. If the city concludes that it also has no authority to clarify the need for Energize Eastside, it would become clear that such authority does not exist at the federal, state, or city level. In such a case, it is up to citizen organizations like CENSE to defend the welfare of those who would be burdened by a project whose need has only been validated by a company which will benefit from increased revenue.

CENSE is, in fact, willing to get a study without the city's participation. However, we think we might get a different answer from the council after new councilmembers are elected. Obviously, getting conflicting answers is not our preferred outcome.

Councilmembers are justifiably concerned about the possibility of a lawsuit from PSE if the study comes to a contrary conclusion regarding the need for the project. However, the fear of a lawsuit does not justify ignoring the questions of the community. If PSE files a lawsuit, we have an idea about how the city could respond quickly and at zero cost. For obvious reasons, we would prefer to share this idea in private at this time.

We have heard a concern that another study could be controversial. If CENSE can vet the consultant beforehand (remember that we expressed strong reservations about Utility System Efficiencies), we will not criticize the outcome of the study, even if it produces results counter to our expectations. We still have plenty to say about smarter, cheaper alternatives if the study finds that a real need exists. But it is difficult to judge the viability of alternatives if we don't have a clear idea of the need, so this study will provide valuable information even if need is clearly demonstrated.

submitted by Karen Esayan CENSE Board member; 4601 135th Ave SE Bellevue WA 98006

Monday, March 14, 2016 AOL: KEsayan

I109-AA -1 See response for Key Theme OBJ-1.

I109-AA-1

Page 1 of 4

Subj: DEIS Comment  
 Date: 3/12/2016  
 To: info@energizeeastsideeis.org

January 27, 2016

Don Marsh comments to Newcastle Planning Commission members,

I109-BB-1

Tonight I'd like to propose a land use code of importance to Newcastle. This code would improve the safety of the utility corridor shared by the Olympic Pipeline and PSE's high-voltage transmission lines. For all future development of this corridor, we would require a minimum distance of 50 feet between the power lines and the two pipelines. Earlier this month, CENSE requested the City of Bellevue to adopt the same code.

I109-BB-2

Our goal is to reduce the risk of devastating pipeline fires. There are three different ways these fires can occur:

1. A pipeline can be damaged during a construction project. A minor nick in one of the pipelines caused a devastating fire that claimed three lives in Bellingham in 1999.
2. Electricity flowing from a downed power line can damage the pipeline. Bellevue resident Lloyd Arnesen described such an incident during an EIS Scoping Meeting last May.<sup>[1]</sup>
3. Electricity can arc from wires to power poles and then into pipelines, as described in a BPA safety guide available on the web.<sup>[2]</sup>

Now I will describe each of these scenarios in a little more detail.

A construction accident is not hard to visualize. PSE will install poles that are at least 85 feet tall in a corridor that is, in some cases, only 100 feet wide between houses. PSE will dig foundations 15 to 50 feet deep. The excavation will require heavy equipment that will create vibration and stress on pipelines that are 40 to 50 years old. This would already be a challenging task, but there is another potential complication. The Energize Eastside website says that the existing power lines won't be removed until after the new lines are installed.<sup>[3]</sup> Workers will guide the new poles into position while dodging power lines above, active pipelines below, and poles and houses on either side. Deadly mishaps have happened in less complex situations, like the explosion that happened in Texas in 2010, when a subcontractor hit a pipeline while digging holes for a new transmission line.<sup>[4]</sup> The heat from the explosion that took his life was felt half a mile away.

Even if no significant damage occurs during construction, Newcastle and other Eastside cities will still be exposed to operational dangers. Lloyd Arnesen described what happened when electricity from a downed power line near his yard began arcing into the nearby pipeline. In this case, the flow of electricity was cut off before the pipeline casing was breached. However, the damage was severe enough that the Olympic Pipeline Company had to shut down the pipeline and replace the damaged section of pipe. Mr. Arnesen and his neighbors were lucky that an explosion was avoided. But what might have happened if Energize Eastside had been built and four times the amount of power were flowing through that wire?

Our concerns on this point are validated by an October 2015 report by the respected industry risk analyst DNV-GL. According to the report, "A direct arc to a collocated or crossing pipeline is possible, which can result in coating damage, or arc damage to the pipe wall up to the point of burn-through. Even if an arc is not sustained long enough to cause burn through, a short duration elevated current

Monday, March 14, 2016 AOL: KEsavian

- I109-BB -1 Comment noted.
- I109-BB -2 See response for Key Theme PLS-2.

Page 2 of 4

can cause molten pits on the pipe surface that may lead to crack development as the pipe cools.”<sup>[5]</sup>

The DNV-GL report contains advice about ways to mitigate risk: “The separation distance between the pipeline and transmission line is a significant variable controlling the level of induced AC potential influencing the pipeline.” The report explain that “induced AC potential” increases risk of accelerated corrosion. We view this report as an excellent survey of the most recent scientific knowledge on the risks of collocated transmission lines and pipelines, and we encourage you to read it.

BPA’s safety guide explains the concern of that agency: “Proper positioning of underground utilities is required to prevent an accident in an extreme case when an unusual condition might cause electricity to arc from the high-voltage wire to the tower and then to ground. This could produce a dangerous voltage on underground piping...”

BPA recommends a minimum separation of 50 feet between power lines and pipelines to reduce risk of dangerous voltages on the pipeline. The Chevron Company, which operates a 157-mile long pipeline in Eastern Washington, recommends a separation of at least 25 feet. The Municipal Research & Services Center of Seattle has developed a model ordinance for cities.<sup>[6]</sup> The ordinance calls for a minimum setback of 50 feet from the pipeline, although electrical infrastructure is not specifically mentioned.

The author of the Seattle study, Jim Doherty, has six recommendations for residents. His first recommendation is, “Don’t wait for the federal government to tell you what risks are acceptable for your community – bring the issue to your planning commission and start the process for enacting reasonable land use regulations that will minimize risks to your residents.” Tonight, we are following this recommendation.

I109-BB-3

A week after CENSE requested Bellevue to incorporate the BPA-recommended separation between power poles and pipelines, PSE told the city council that there are a variety of ways to mitigate risk with careful design and engineering. CENSE is skeptical that engineering alone can reduce risk of all three scenarios we have described. Physical separation is a better way to reduce risk. Engineered solutions can be compromised through age or accidental damage. Physical separation does not degrade over time and is easily verified by anyone with a tape measure. Perhaps that is why there are no exemptions for engineered solutions in BPA’s safety guide or other ordinances we’ve seen.

It’s clear that Newcastle residents will be safer with a separation requirement such as we are proposing. It’s also true that it will be more difficult for PSE to build Energize Eastside with more stringent safety codes in place. How will that impact Newcastle residents?

I109-BB-4

PSE says that its Newcastle customers will experience “risk of power outages” if Energize Eastside is not built. In a map included in PSE’s Eastside Needs Assessment, PSE shows parts of Newcastle located within an area of 16,000 customers that are at risk of outages.<sup>[7]</sup> But PSE has not been clear in public forums about what the true likelihood of a power outage is.



According to the Eastside Needs Assessment, Energize Eastside is needed to address peak loads that “occur just a few hours per year.”<sup>[8]</sup> When do these peak hours occur? When the temperature falls

I109-BB -3 See responses for Key Theme PLS-1 through PLS-3.

I109-BB -4 See response for Key Theme OBJ-2.

Monday, March 14, 2016 AOL: KEsayian

I109-BB-4

below 23 degrees Fahrenheit, and only on weekdays during morning or evening peak usage hours (7-10 AM and 5-8 PM). Historically, those conditions have occurred during less than 0.2% of all service hours.

To be clear, the Eastside grid has plenty of capacity to meet customer needs even in extremely cold weather. The problem described by PSE occurs only if two of the four big transformers that serve the Eastside fail at the same time winter peak loads are occurring. There have never been two such simultaneous failures that we are aware of.

So how many Newcastle customers would lose power in this very unlikely event? Surprisingly, **no customers will lose power**. As the company describes in the Eastside Needs Assessment, Corrective Action Plans would be used to prevent overloads or outages. PSE says an outage would occur if a transmission line fails while the Corrective Action Plans are in place, but this is adding yet another unlikely scenario on top of a situation that is nearly impossible.<sup>[9]</sup>

Newcastle must balance the risk of a catastrophic pipeline fire with the need for electrical reliability in the unlikely circumstances PSE has imagined.

I109-BB-5

We don't use the term "catastrophic" lightly. This is the word used by the Bellevue Fire Department to describe the impacts of a pipeline incident in the department's Standards of Response Coverage: "Given that pipeline incidents continue to occur in this country, and many for undetermined reasons, the community is still at risk. The combination of: a highly flammable liquid, in large quantities, and in urban environment translates into a significant consequence risk that approaches the 'catastrophic' level."<sup>[10]</sup>

The Fire Department goes on to state that it does not have sufficient "response and mitigation abilities" to extinguish a pipeline fire. The pipeline has the capacity to deliver approximately 5,900 gallons of fuel per minute into a burning fire. Even if the pipeline is shutdown with "near-immediate" responsiveness, "well over ten thousand gallons" of fuel may burn within the first few minutes of ignition. With houses located closer than 50 feet to the pipeline, the potential for death and destruction without warning is of great concern to us.

Since the Bellevue Fire Department serves the City of Newcastle, these cautionary statements should be heeded by Newcastle planners when considering separation of electrical infrastructure and the pipeline.

I109-BB-6

In conclusion, we have laid out substantive and specific concerns regarding the safety of locating pipelines and transmission lines in close proximity. We urge the Newcastle Planning Commission to begin the process of creating a land use code that specifies a minimum separation to protect your residents from potentially lethal pipeline fires. During this process, PSE and the Olympic Pipeline Company will be able to present their own facts, and useful public debate can occur. If a land use code is not considered, the concerns we have raised tonight will not be adequately investigated. Residents will be left to wonder if their lives and loved ones are being jeopardized to deliver phantom reliability improvements promised by PSE.

Sincerely,

Don Marsh, President  
CENSE.org

submitted by Karen Esayian, CENSE Board member, 4601 135th Ave SE Bellevue WA 98006

Monday, March 14, 2016 AOL: KEsayian

I109-BB -5 See response for Key Theme SVC-1.

I109-BB -6 See response for Key Theme PLS-3.

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- [1] [http://www.energizeeastsideeis.org/uploads/4/7/3/1/47314045/phase\\_1\\_draft\\_eis\\_scoping\\_comment\\_record\\_report\\_rev.pdf](http://www.energizeeastsideeis.org/uploads/4/7/3/1/47314045/phase_1_draft_eis_scoping_comment_record_report_rev.pdf), p. 655
- [2] <http://www.bpa.gov/news/pubs/GeneralPublications/lusi-Living-and-working-safely-around-high-voltage-power-lines.pdf>, p. 6
- [3] <http://energizeeastside.com/construction>
- [4] <http://www.wfaa.com/story/news/2014/08/09/13587360/>
- [5] <http://www.ingaa.org/file.aspx?id=24732>, p. 19
- [6] <http://nrsc.org/getmedia/321384AC-DB51-448E-B4FD-5A8EC4EBF7B1/jdsetbacks.aspx>, p. 21
- [7] [http://energizeeastside.com/Media/Default/Library/Reports/Eastside\\_Needs\\_Assessment\\_Final\\_Draft\\_10-31-2013v2REDACTEDR1.pdf](http://energizeeastside.com/Media/Default/Library/Reports/Eastside_Needs_Assessment_Final_Draft_10-31-2013v2REDACTEDR1.pdf), p. 14
- [8] *Ibid.*, p. 38
- [9] [http://energizeeastside.com/Media/Default/Library/Reports/Eastside\\_Needs\\_Assessment\\_Final\\_Draft\\_10-31-2013v2REDACTEDR1.pdf](http://energizeeastside.com/Media/Default/Library/Reports/Eastside_Needs_Assessment_Final_Draft_10-31-2013v2REDACTEDR1.pdf), p. 13
- [10] [http://www.bellevuewa.gov/pdf/tire/Standards\\_of\\_Coverage.pdf](http://www.bellevuewa.gov/pdf/tire/Standards_of_Coverage.pdf), p. 66

Monday, March 14, 2016 AOL: KEsayan





Subj: DEIS Comments  
Date: 3/12/2016  
To: info@energizeeastsideeis.org

November 30, 2015 Comments to Bellevue Council by Don Marsh

At the last council meeting before Thanksgiving, PSE delivered a marketing presentation to the city council rather than addressing the technical questions that CENSE has raised repeatedly. Instead of telling councilmembers why it's reasonable to send large amounts of electricity to Canada during an N-1-1 power emergency on the Eastside, or why PSE would turn off most of its local generators during that emergency, PSE simply says, "This is the backbone of the Eastside and we haven't upgraded it for 55 years." This is not accurate.

By calling these lines the backbone of the Eastside, PSE conveniently ignores the fact that the company has installed a number of parallel transmission lines through Bellevue during the past 55 years. One heads northwest from the Mercer Slough, one goes along 116th Ave. NE, and a third line follows 140th Ave. NE. With these additional lines in place, PSE has the capacity to serve its customers even if the so-called "backbone lines" are out of service.

PSE's advertising about this backbone may have convinced a couple of business owners to testify in support of Energize Eastside at the last council meeting. They told the council their companies and the economic vitality of Bellevue are at risk if Energize Eastside isn't built soon.

Let's examine the facts. On page 47 of the report produced by Bellevue's independent analyst, the condition that PSE seeks to fix with Energize Eastside occurs only once every 3 to 30 years. During the next decade, Energize Eastside will prevent at most 3 outages totaling about 6 hours. During that same period, business owners in downtown Bellevue will suffer 20 outages totaling more than 40 hours. There are areas of the city outside the downtown core with even more frequent outages, none of which will be prevented by Energize Eastside.

Business owners don't want to pay higher electricity rates to finance a project that won't make a significant difference in reliability. Energize Eastside is a boondoggle that degrades our neighborhoods, harms the environment, and increases the risk of devastating pipeline fires.

The council should encourage PSE to spend our money on projects that improve our communities and make a real difference in the reliability of our electricity.

submitted by Karen Esayian, CENSE Board member

4601 135th Ave SE Bellevue, WA 98006

Monday, March 14, 2016 AOL: KEsayian

I109-CC -1 See responses for Key Themes OBJ-1 and OBJ-2.

I109-CC-1



Subj: **DEIS Comments**  
 Date: 3/12/2016  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)

**November 2015 Comments to Bellevue Council by Don Marsh**

My name is Don Marsh, vice president of CENSE, the Coalition of Eastside Neighborhoods for Sensible Energy. During the past two years, I've helped analyze PSE's Energize Eastside project, and I've led a search for more cost-effective and less environmentally destructive solutions to power future growth of the Eastside.

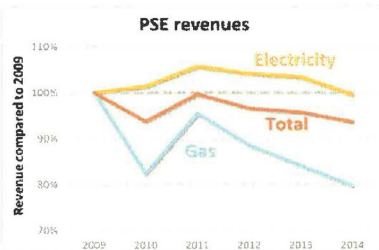
During the past 2 months, citizens have spoken to the council on a range of related topics, such as:

- The reliability of our electric grid.
- The safety hazard of locating high-voltage power lines and petroleum pipelines in close proximity.
- The Shuffleton power plant, which provided emergency power to the Eastside until PSE dismantled it and sold the property for a profit.
- How a small peaker plant could meet our future needs.
- Demand Side Management, an even better solution to peak load problems.
- And we asked the council to participate in a more realistic study of Eastside need.

Residents have told us that these presentations have helped them understand our local energy needs and opportunities. But one question still comes up. "Why would PSE propose a project like this if there are better solutions?"

There is a financial explanation.

PSE was acquired in 2009 by a private equity fund named Macquarie Infrastructure Partners, managed by an Australian investment bank and three Canadian Retirement funds. Soon after the acquisition, the company was hit with a triple whammy: 1) The recession, 2) increasing energy efficiency, and 3) falling gas prices. This graph shows the dramatic impact on the company's revenues, as reported on PSE's Form 10K. Electricity revenue is mostly flat and gas revenue has declined significantly. Last year, the company's combined revenue from energy sales, (the orange line), was 6% less than it was 5 years ago.



PSE is under pressure to increase profits for its shareholders. As a result, PSE is predisposed to build large infrastructure projects rather than less profitable alternatives preferred by residents. State regulations encourage this outcome by allowing PSE to collect a 10% return on infrastructure investments.

CENSE believes these state regulations must be amended to reward the implementation of 21st century energy technologies, rather than building expensive transmission systems that are much larger than

Monday, March 14, 2016 AOL: KEsayan

I109-DD -1 See response for Key Theme OBJ-1.

I109-DD-1

I109-DD

COMMENT

RESPONSE

Page 2 of 2

I109-DD-1

the local need requires.

States such as New York and California have already demonstrated that such reforms are possible. We ask that Bellevue and other Eastside cities press the legislature to reform our regulations so that utility companies can make a decent profit from smart solutions that establish the Eastside as an energy leader, rather than erecting grossly-over sized solutions from the last century.

submitted by Karen Esayian, CENSE Board member  
4601 135th Ave SE Bellevue, WA 98006

Monday, March 14, 2016 AOL: KEsayian





Page 1 of 1

Subj: DEIS Comments  
Date: 3/12/2016  
To: info@energizeeastsideeis.org

March 7, 2016 comments to Bellevue Council members by Don Marsh

I hope you've all had a chance to look at the Lauckhart-Schiffman Load Flow Study I provided to you a couple of weeks ago. Last week, we submitted the study into the Draft EIS comment process.

Although PSE hasn't provided any specific objections to the Lauckhart-Schiffman report, the company criticizes the study for not complying with federal reliability standards. CENSE responds by citing a study of an "Extra Heavy Winter Flow" scenario performed by ColumbiaGrid in 2013. In this study, ColumbiaGrid simulated 1,500 MW of electricity flowing to Canada, and many of the local generation plants in the Puget Sound area turned off. If these assumptions sound familiar, it's because those are the same assumptions PSE made in the Eastside Needs Assessment to justify Energize Eastside.

I109-EE-1

ColumbiaGrid says these extreme conditions were studied only to test the limits of the 11 transmission lines that carry electricity from central Washington to the Puget Sound. These are the same lines that Lauckhart and Schiffman also found unable to carry the load under these extreme conditions. ColumbiaGrid concludes that this scenario exceeds NERC reliability standards and therefore transmission capacity across the Cascades does not need to be increased. Logic dictates these conditions also exceed NERC standards when PSE uses them to justify Energize Eastside.

Although PSE and CENSE do not agree on which studies should determine the need for Energize Eastside, there is an objective way to resolve the dispute. Richard Lauckhart has offered to share his computer model with PSE, and he wants to see PSE's data to understand the details of the company's objections. As you may know, Mr. Lauckhart previously received CEII clearance from the federal agency FERC and has now filed a second CEII application with PSE. He has not received a response. I am now seeking this clearance for myself. I expect PSE to grant both my application and Mr. Lauckhart's without delay.

I109-EE-2

At this point, questions of scale and timeline for this project have never been greater. The Draft EIS simply repeats PSE's assertion that the need has already been demonstrated by studies that do not answer the questions raised by the Lauckhart-Schiffman Study. Phase 1 of the EIS must be finalized and considered by a Hearing Examiner before phase 2 begins. It would be a waste of time and resources for all parties involved, including PSE, to spend a year studying specific solutions to a problem which is not well defined. Our next speaker will explain why it is permissible for the council to ask for finalization of Phase 1.

submitted by Karen Esayian, CENSE Board member, 4601-135th Ave SE Bellevue, WA

Monday, March 14, 2016 AOL: KEsayan

I109-EE -1 See responses for Key Themes OBJ-3 and OBJ-4.

I109-EE -2 See response for Key Theme EIS-2.



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Subj: DEIS Comments  
 Date: 3/12/2016  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)

February 22, 2016 comments to Bellevue Council by Don Marsh

Tonight I'd like to present to you the results of a new load flow study of PSE's Energize Eastside project. A load flow study is a detailed simulation of how an electric grid functions in a given scenario.

The two analysts who ran this study are Richard Lauckhart, former VP of power planning for PSE, and Roger Schiffman, an industry expert who has run many load flow studies during his career.

Lauckhart and Schiffman acquired a license to use the same analysis software PSE uses, and they obtained the same base case data from the Western Electricity Coordinating Council.

However, Lauckhart and Schiffman's results differ from PSE's. When PSE's assumptions were entered into the computer model, namely three times as much energy going to Canada, and most of the local generation plants located in the Puget Sound area turned off, Lauckhart and Schiffman discovered something pretty shocking. These assumptions would boost the amount of electricity required from central Washington to exceed the capacity of the 11 transmission lines that cross the Cascades. Let me repeat that – the transmission lines crossing the Cascades would become overloaded, not our transmission lines on the Eastside. PSE's proposal wouldn't make any

Monday, March 14, 2016 AOL: KEsayian

I109-FF -1 See response for Key Theme OBJ-3.

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difference at all, and PSE's scenario would put the Puget Sound area from Olympia to Bellingham at risk of blackouts.

Well, that's what the simulation says would happen. In reality, grid operators would never allow that scenario to occur. They would simply turn on local generation plants and reduce the optional flow of electricity to Canada. In that case, what would happen to us during an N-1-1 failure occurring simultaneously with heavy winter peak loads? Lauckhart and Schiffman ran another simulation to find out. And their answer is: nothing unusual would happen -- no overloads and no blackouts. In fact, Lauckhart and Schiffman estimate we have 20 to 40 years before any risk develops.

I109-FF-2

We have more good news. A new analysis from EQL Energy shows PSE and the EIS consultants have made significant errors in their analysis of alternative technologies. There are solutions available right now that would be much more economical than transmission lines. We will have that study from EQL ready for release in about a week.

I109-FF-3

At this point, I have a question for you. Do you personally feel that you are well-qualified to judge between the opposing facts being put forward by PSE's experts and those of CENSE? If not, we would like to propose another possibility. Why not move this case to the state agency EFSEC, the Energy Facility Site Evaluation Council? We believe it is well within your power to require an evaluation of PSE's proposal by a state agency that specializes in this

Monday, March 14, 2016 AOL: KEsayian

I109-FF -2 See response for Key Theme ALT-1.  
I109-FF -3 See response for Key Theme OBJ-1.



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kind of question. CENSE believes EFSEC is in a better position to make these technical evaluations than most city councils.

submitted by Karen Esayian, CENSE Board member  
4601 135th Ave SE, Bellevue WA 98006

Monday, March 14, 2016 AOL: KEsayian



FINAL EIS  
APPENDIX J PHASE 1 DRAFT EIS COMMENTS & RESPONSES

PAGE J2-615  
MARCH 2018

DSD 006885

Subj: DEIS Comment  
 Date: 3/12/2016  
 To: info@energizeeastsideeis.org

February 1, 2016 comments to Council members,

CENSE appreciates being invited to comment on the Draft EIS for Energize Eastside.

Tonight let's look at the broad picture. The Draft EIS presents three alternatives for our energy future.

I109-GG-1

The first alternative is a 230 kV transmission line through the Eastside. Four variations are studied: two different overhead lines, an underground line, and a line submerged in Lake Washington. Let us be clear. Because of the state tariff on undergrounding enforced by the Washington Utilities and Transportation Commission, only the overhead lines operated by PSE or Seattle City Light are economically feasible. Since Seattle City Light removed their line from consideration, PSE's transmission line is the only serious option under Alternative 1.

I109-GG-2

Alternative 2 uses innovative technology and policy solutions to address the peak load problem PSE says we have. This is the smart way to grow our electric system.

I109-GG-3

Alternative 3 would build three times as many transmission lines all over the Eastside. No one considers this to be a realistic option, and it is included just to make the first alternative look less horrific. Gamesmanship like this makes residents cynical about the EIS process.

I109-GG-4

Having identified the red herrings in the EIS, let's look at the two remaining options: Alternative 1, PSE's transmission line, and Alternative 2, the smart technology solution.

I109-GG-5

PSE's transmission line is a solution that is vastly bigger than we need. The line will have a capacity exceeding 1,000 megawatts when only 70 megawatts are required in the foreseeable future, according to PSE's graphs. CENSE has reason to believe even this figure has been exaggerated to justify the project. The transmission line option would put all our eggs in one basket. Ratepayers would finance a huge upfront cost of more than a quarter billion dollars to build a transmission line that has reliability and security risks. The transmission line would be vulnerable to extreme weather, fires, landslides, terrorism, solar flares, pipeline accidents, and errors of human judgment. If only one power pole falls, a big piece of our electricity supply would be out of service.

I109-GG-6

Alternative 2, the smart solution, envisions a 21<sup>st</sup> century distributed energy network that is much more flexible and adaptive. It's more reliable, because multiple elements can fail without impacting overall reliability.

Monday, March 14, 2016 AOL: KEsayan

- I109-GG -1 See response for Key Theme ALT-1.
- I109-GG -2 Comment noted.
- I109-GG -3 See response for Key Theme ALT-1.
- I109-GG -4 See response for Key Theme OBJ-1.
- I109-GG -5 See responses for Topic ALT and Key Theme ECON-4.
- I109-GG -6 See response for Key Theme ALT-1.



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It's also more attractive financially, because it can be built incrementally. We can make smart decisions about how much additional infrastructure we need each year. For example, if the economy slows down and electricity demand plummets like it did in 2009, the level of investment could be adjusted to match the new consumption pattern. If a new kind of battery comes along that solves our problems more efficiently, it could be incorporated into the energy grid. This strategy would better support local companies like Mukilteo-based UniEnergy, which is developing batteries that will be used by utilities all over the country. By contrast, there is no local company that makes the steel monopoles used in PSE's transmission line.

I109-GG-6

Be ready for PSE's arguments against the smart solution. PSE prefers building transmission lines because it is more profitable for them. The company has disparaged Demand Response, a proven way to handle peak loads. The power plan about to be released by the Northwest Power and Conservation Council says, "Under a wide range of future conditions, energy efficiency consistently proved the least expensive and least economically risky resource. In more than 90 percent of future conditions, cost-effective efficiency met *all* electricity load growth through 2035. It's not only the single largest contributor to meeting the region's future electricity needs, it's also the single largest source of new winter peaking capacity."

Energize Eastside is all about winter peaking capacity, but PSE argues that the Eastside is an anomaly in its service area, that growth has brought us to the brink of a crisis, and a larger transmission line is our only solution.

Citizens do not want a solution that despoils our neighborhoods, cuts down our trees, and increases risk of devastating pipeline fires. Instead we want an energy solution that is forward-looking, reliable, safe, cost-effective, and environmentally sound. The only alternative in this EIS that fills these criteria is Alternative 2.

Thank you. Don Marsh

submitted by Karen Esayian, 4601 135th Ave SE Bellevue, WA 98006  
Cense Board member

Monday, March 14, 2016 AOL: KEsayian





Subj: DEIS Comments  
Date: 3/12/2016  
To: info@energizeeastsideeis.org

Don Marsh comments to Bellevue Council November 16, 2015

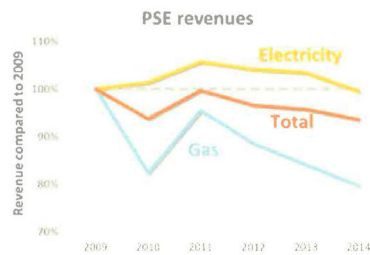
My name is Don Marsh, and I'm the vice president of CENSE, the Coalition of Eastside Neighborhoods for Sensible Energy. During the past two years, I've helped analyze PSE's Energize Eastside project, and I've led a search for more cost-effective and environmental solutions to power future growth of the Eastside.

During the past 2 months, citizens have spoken to the council on a range of related topics. Patricia Magnani spoke about reliability of our electric grid. Janis Medley explained the safety hazard of locating high-voltage power lines and petroleum pipelines in close proximity. Gary Albert related the story of the Shuffleton power plant, which provided emergency power to the Eastside until PSE dismantled it and sold the property for a profit. John Merrill explained how a small peaker plant could meet our future needs. Lindy Bruce described Demand Side Management, an even better solution to peak load problems. Edward Chung asked the council to participate in a more realistic study of Eastside need.

Residents have told us that these presentations have been helpful for them to understand our local energy needs and opportunities. But one question still comes up. "Why would PSE propose a project like this if there were better solutions?"

There is a financial explanation.

As you know, PSE was bought in 2009 by a private equity fund, Macquarie Infrastructure Partners, which is managed by an Australian investment bank. But soon after the acquisition was completed, the company was hit with a triple whammy. The recession, increasing energy efficiency, and falling gas prices have had a dramatic impact on the company's revenues. In this graph, revenue reported on PSE's Form 10K shows mostly flat electricity revenue, and revenue from gas has declined significantly. Last year, the company's combined revenue from energy sales, shown in orange in this graph, was 6% below where it was 5 years ago.



PSE is under tremendous pressure to increase profits, and state regulators won't allow the company to hike energy prices enough to substantially raise revenue. In fact, state regulations allow only one way for PSE to boost earnings, and that's by collecting a generous 10% return on infrastructure

Monday, March 14, 2016 AOL: KEsayan

I109-HH -1 See response for Key Theme OBJ-1.

I109-HH-1

I109-HH

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I109-HH-1

investments. This predisposes the company to prefer expensive solutions to problems that could be solved with cheaper alternatives.

CENSE has no problem with compensating PSE for projects that improve the safety and livability of our cities and advance our environmental goals. But this will only happen if outdated state regulations are amended to align PSE's financial incentives with consideration for the environment and the public good. States such as New York and California have already demonstrated that this is possible.

We would like Bellevue and other Eastside cities to take a leadership role in calling for change of these outdated state regulations.

submitted by Karen Esayian, CENSE Board member,  
4601 135th Ave SE Bellevue, WA 98006

Monday, March 14, 2016 AOL: KEsayian





**From:** [Jan Arnesen](mailto:Jan.Arnesen@energizeeastside.org)  
**To:** [info@energizeeastside.org](mailto:info@energizeeastside.org); [info@energizeeastside.org](mailto:info@energizeeastside.org)  
**Subject:** Safety First!  
**Date:** Wednesday, March 09, 2016 6:09:00 AM

To Energize Eastside,

**DANGEROUS**

Energize Eastside seems to be propelling an unsafe plan forward. I attended one of their meetings and left feeling that if Energize Eastside were really listening to comments made, they would have taken a more serious look at the alternatives due to the unsafe parameters of their proposal.

Here are concerns that exist:

- I110-A-1 | • The proposed power lines parallel two pipelines which firefighters would not be able to handle if there were an explosion. Power lines, I believe by law, should be at least 100' from pipelines and buildings. It would make sense that this would be **laterally** as well as vertically. (The power lines in our backyard are directly above the pipeline and 60' from our deck.)
- I110-A-2 | • The lines would also cross an earthquake fault line.
- I110-A-3 | • Many trees would be destroyed and the lines would be unsightly.
- I110-A-4 | • The "extra high voltage" 230-kilovolt lines create electric and magnetic fields (EMF) around them. This could produce possible risks to health of those living so close.
- Any accidental grounding of the wires would create many unsafe conditions for people.

**My experience:**

Five or six years ago there was an incident in the backyard of my next-door neighbor. Our backyards contain both the pipeline and, directly above, the existing 115 kilovolt lines.

It was a drizzly day. I looked out my kitchen window and saw a tree between our yard and our neighbor's yard erupt in flame with a sizzling noise. The cause was a broken power strut on a pole a little further North from the neighbor's home. The broken strut allowed the line to swing slowly and sometimes hit the tree between our yards. Because it was rainy, the rain would douse the flames. Then the line would swing and again, the tree would burst into flames. It happened several times.

Another tree in my neighbor's yard also came in contact with the power line. It caused a much bigger fire. Of course, firefighters were called. They restricted the area with hazard do not cross plastic tapes. They DID NOT try to put out the fire. I asked the fireman why they weren't trying to put the fire out. He said that it was too dangerous and went on to tell me about firefighters away from cities who had seen the effects on the ground of downed high voltage power lines. He said that the voltage can travel down a tree and spread around the trunk making the ground electrically charged. The high voltage causes extremely high heat. This makes the ground become molten. After it cools, the molten area becomes like "petrified wood", solidifying into a glassy rock. I was stunned by the potential for harm.

I110-A-5 | In the case of my neighbor's backyard, **some of the power traveled through the ground, and, guess what, hit the pipeline.** The current had sought a route down through the tree, through the ground to the pipeline. Olympic pipeline inspectors found damage to one of the pipes the size of a quarter, weakening one of the pipes. Workers came in and dug the pipe up so that section of the pipe could be replaced. It took several weeks and was very disruptive to my neighbor. One can only imagine what would have happened if the voltage had been twice as much.

Despite our best efforts to apply safety precautions to affected neighborhoods, the best course of action is, obviously, to **avoid putting the proposed 230 kilovolt lines through residential areas and over existing pipelines.**

Jan Arnesen  
 6515 128<sup>th</sup> Ave. SE  
 Bellevue, WA 98006

- I110-A -1 | See response for Key Theme PLS-1.
- I110-A -2 | See response for Key Theme EARTH-1.
- I110-A -3 | See response for Key Theme VR-4.
- I110-A -4 | See responses for Key Theme EMF-1 and Key Theme PLS-3.
  
- I110-A -5 | See response for Key Theme PLS-3.

Comments on Energize Eastside Phase 1 Draft EIS 3/9/2016

Comments by James Adcock, Electrical Engineer, graduate of MIT  
 5005 155<sup>th</sup> PL SE  
 Bellevue WA 98006

I have read in comparison to PSE and City's claims, the Lauckhard-Schiffman Analysis, which I find credible. I do not find PSE and City's claims to be credible.

I111-A-1

What I see, in agreement with Lauckhard-Schiffman, is a consistent pattern of PSE overclaiming needs to build additional transmission and generation. Currently PSE simultaneously in front of the UTC is claiming that they need an additional natural gas peaker plant – that they cannot meet winter peak needs without additional generation – that all generation plants need to run simultaneously, and then some. While at the same time, in front of City, to meet the same winter peak needs, PSE is claiming they need additional transmission capacity so that they can run – at the same moment in time – with only about half their generation running. These two claims cannot be true simultaneously. Either you need more peak generation, or more transmission, but not both. Or in reality, I suggest you need neither, you are simply trying to overbuild in order to overcharge your ratepaying customers, in order to “apply lipstick to a pig” – to apply “window dressing” to the company before your owners, Australia’s dirtiest company, Macquarie, “flips” the company to new buyers, ala Bain Capital.

Part of the problem is that PSE refuses to acknowledge the reality of climate change, which has rapidly increased the temperature of our region on the coldest winter days. Our coldest winter days – those exact days which PSE says they need to design for, have already warmed about 15 degrees since the 1950’s, reducing peak heating load about 25% compared to what PSE is designing for.

Ignoring this reduction in peak load requirements, PSE instead projects forward – and they always overproject future needs – they project 2.4% a year future load growth. They propose addressing this by replacing a 115kV line with a 230kV line which has 500% to 600% greater load carrying capacity. This represents more than 200 years of load growth. Except growth cannot continue for 200 years, there is not that much space for new office buildings, and PSE will have burnt the planet to a crisp long before then.

I111-A-2

Now in the DEIS the other shoe begins to drop. PSE admits that a 230kV line doesn’t fit into the existing routes they propose. Houses will have to be torn down in Newcastle. I believe more homes will have to be torn down in Somerset. According to the DEIS reference documents, Homeowners will be restricted from using their own property, their own back yards. You cannot sit in your own

- I111-A -1 See responses for Key Themes OBJ-1 and OBJ-3.
- I111-A -2 See response for Key Themes LU-1 and LU-2 regarding property condemnation and easement width.  
 See response for EMF-4 for the potential increase in magnetic fields.

I111-A-2

backyard, drinking a cool drink, sitting in a lawn chair. Some home owners will not be allowed to park cars on their own property. And getting into their cars others will experience "nuisance shocks." There is no such thing as a "nuisance shock." Any shock can kill. The higher the imposed voltages the more like the shock is to kill. PSE should have told these things to the citizen route-choosing committees so that they could have made informed decisions. Instead PSE hid this information from them. The Tetra Tech Linear routing study was fatally flawed – the transmission line doesn't even fit within the corridor which they artificially opened up to the detriment of homeowners, and only homeowners. Tetra Tech study, Page 32, figure 3-11.

I111-A-3

Further, the DEIS finds extreme damage to Somerset in the DEIS impacts map, figure 11-13, but the DEIS body language fails to even acknowledge this extreme and disparate impact on one community. In general document-wide the DEIS "ratings" of environmental damages have no plausible correlation to reality.

I111-A-4

If City and PSE insist on building something, again I call for a more modest rebuild of the existing lines staying at 115kV, doubling each line capacity. This won't fix all of Seattle's and BPA's overload conditions, but PSE has acknowledged under oath in front of FERC that isn't necessary, that this is "only" a local transmission line. In which case PSE only needs to meet their own load growth, not help relieve Seattle and BPA overloads. PSE and City keep playing games instead of seriously considering this 115kV rebuild alternative. They say "Oh, we looked at bigger transmissions lines, and then we looked at bigger transformers." This is hogwash. This is playing dumb. When you rebuild bigger you need BOTH bigger lines and bigger transformers. PSE and City know this. It is standard Electrical Engineering "Freshman 101" – the PSE 230kV proposal for example contains BOTH new transmission lines AND new transformers. PSE makes the excuse that they don't want to put two transformers where one was before. OK take the old transformer out, and put a new larger one in. This is obvious. Stop Playing Dumb! Take a REAL LOOK at the alternatives we are asking you to consider. And make the new transmission line a high temperature line while you are at it.

I111-A-5

The original Tetra Tech Linear Routing Study "Eastside 230 KV Project Constraints and Opportunities Study for Linear Site Selection" page 33 December 2013 shows they use a 160 foot safety buffer around (say) used car lots, 100 foot safety buffer around children sleeping in bedrooms, HOWEVER if the children sleeping in bedrooms are closer than 100 foot from the proposed 230,000 volt transmission line, then PSE will ignore the fact that children are sleeping in bedrooms within 100 foot of the transmission lines. IE PSE ignores industry standard safety buffers around sleeping children in this proposed design. The argument behind the original Tetra Tech Linear Routing study appears to be that PSE does not need to meet normal safety standards if the proposed 230,000 volt transmission line is within existing 115kV corridors. However, in this DEIS "the other shoe drops" and PSE and City now acknowledge that PSE cannot even successfully route the proposed 230,000 volt transmission line within the existing 115kV corridors – PSE will have to tear down houses, and will also place constraints on adjacent homeowners use of their properties, including no car

I111-A -3 See response for Key Theme VR-1.  
 I111-A -4 See response for Key Theme OBJ-1.  
 I111-A -5 See response for Key Theme LU-1.

I111-A-5

parking, no lawn chairs in back yards, no trees, etc. Since PSE cannot successfully contain the effects of the 230,000 volt transmission line to the existing corridor, it seems to me that the original Tetra Tech “relaxation” of constraints, ignoring traditional 160 foot safety buffers – or even 100 foot safety buffers – is inappropriate. Rather the same safety buffer width should have been used for ALL of the Tetra Tech Linear Routing study. Why children sleeping in their bedrooms should matter less to PSE and City than used cars sitting in a used car lot is simply beyond me!? Why should the 160 foot buffer be relaxed on the use of the existing 115kV corridor – if PSE can’t even keep the proposed 230,000 volt line and its negative effects within that existing 115kV corridor? Again, PSE tries to “slip by” the original Tetra Tech Routing Study false assumptions by only revealing at this late date that they cannot even successfully build the 230kV within the existing 115kV corridor!

I111-A-6

Again, I believe “Evidence” that City and PSE use in support of their EIS and Project positions needs to be “public” – in traditional EIS parlance “an EIS represents a public teaching.” You cannot make a “public teaching” based on “secret documents!” City’s consultants claim that that the PSE and ColumbiaGrid documents that they reference are available to the public. But when I ask ColumbiaGrid and PSE for a copy of these documents, even willing to follow CEII procedures, PSE blocks my access to these documents, stating to the contrary that these documents are not available to the public, period. When these documents are made available to City’s consultants, and not to this electrical engineer, then City will claim “superior knowledge” of what PSE’s plans really are, and on what basis PSE is claiming to need this massive 230,000 volt “overbuild” – while discounting this electrical engineer’s input, and the inputs of other public commentators. City giving itself access to these documents via consultants, using these documents in evidence, but preventing the DEIS and EIS public reviewers, such as this electrical engineer, equal access to that supposed evidence, is unfair, inappropriate, and unequal. In doing so, City demonstrates bias in favor of PSE, and against the homeowners unfairly and unreasonably impacted by this massive project routed through their backyards, in their bedroom communities – transmission lines which are not even appropriately routed through industrial areas as City’s own planning standards require.

I111-A-7

PSE could simply rebuild more powerful 115kV transmission lines with the existing corridors, and at existing tower heights; PSE and City do not meaningfully explore other reasonable options to PSE’s favorite 230,000 volt gigantic project. Upscaling from 115kv to 230,000 volts represents about a 500% increase in power capacity (by normal electrical engineering design standards). PSE’s already inflated growth estimates are 2.4% a year. Thus, by PSE’s own estimates their preferred 230,000 volt line would have the capacity to support growth for over 200 years. By any reasonable engineering standard this is simply WAY TOO BIG! [see my engineering analysis at the end of this document] [For comparison consider that current average load is a little more than 300 Megawatts – ONE end of ONE existing 115kV line [and [there are existing four ends on the two existing 115kV lines]] can pretty much meet this load.]

I111-A -6 See responses for Key Theme OBJ-1 and Key Theme EIS-2.

I111-A -7 See response for Key Theme OBJ-1.

I111-A-8

What with the catastrophic effects of climate change, we do not even know if the human race will continue to exist in 100 years. Normal utility planning periods is to look 20 years in the future – NOT 200 YEARS – because we simply do not know what society is going to look like in 200 years. We do not even know if the projected Wilberton buildout growth spurt is going to last 20 years. Let us consider a smaller, much more modest project: Rebuild one 115kV line in place, doubling the capacity of that line and its associated transformers. Then, if necessary rebuild the second 115kV line in place, doubling capacity. PSE says that they only want to have one transformer at the end of each line, so that will mean replacing the existing transformers with larger ones. It doesn't mean you can't build a double-power 115kV line, or two. It just means you have to replace BOTH the existing lines AND the existing transformers with units of twice the capacity. [PSE and City say "Oh we examined making the lines bigger, and we examined making the transformers bigger" – but this is just "playing dumb" – you have to make BOTH the lines bigger AND the transformers bigger – this is "Electrical Engineering 101." Existing lines would need to be replaced with lines of about 40% larger diameter. Or you run "twinned" sets of wires. At the same time PSE should move to new generation "high temperature" wires. Existing transformers would need to be replaced with larger transformers of approx. double the current volume, mean each linear dimension of the transformers would need to increase by about 25%. You have to replace existing wood towers, or at least the crossbars and insulators, with stronger units that can carry the doubled weight. PSE has made some excuses about road sizes and transformers, but large transformers are often designed to be shipped in three parts, each of standard road width. And/or parts of large transformers can be assembled on-site. Doubling capacity meets a 2.4% growth rate for more than 40 years – a much longer time period already than is reasonable and necessary for utility planning. We do not know how fast Wilberton will be built out – if at all. The local or national economy may tank. Tech companies may choose to build out elsewhere, etc. We just don't know. That is why we do not build 200 years in advance of need! Traditional utility planning looks 20 years into the future – NOT 200 years into the future!

This is a Local Transmission Line ONLY: Is this project a Local Transmission Line Project – one that only needs to meet the load requirements of Bellevue, or is this a Regional Transmission Line Project – one intended to be build "oversized" in order to also relieve load on other utilities and transmission line providers in the region – Seattle City Light, BPA, Snoopud, etc.? In their presentation to King County [Eastside Transmission Solutions Report. King County Area [REDACTED VERSION] October 2013, Updated February 2014 Puget Sound Energy] PSE claims that the project is a Regional Resource. It is for this reason that PSE is proposing such a huge 230,000 volt project. But in this DEIS City says that the only need is for a LOCAL transmission line project, that PSE DOES NOT with this project need to overbuild to meet regional needs. And, in a citizen lawsuit [CENSE] in front of FERC, PSE swore that this is ONLY a "Local Transmission Project" not a "Regional Resource" – in which case the project does not need to be a 500% larger capacity 230,000 volt "overbuild" but rather can be a much more modest 115kV rebuild simply doubling existing capacity, retaining the existing pole heights and transmission line footprints – entirely within the existing transmission line corridor. [COALITION OF EASTSIDE NEIGHBORHOODS FOR SENSIBLE ENERGY (CENSE), a nonprofit Washington corporation;

I111-A -8 See response for Key Theme OBJ-1.

CITIZENS FOR SANE EASTSIDE ENERGY (CSEE), a nonprofit Washington corporation; LARRY G. JOHNSON and GLENNA F. WHITE, husband and wife; and STEVEN D. O'DONNELL, individually; Complainants, v. PUGET SOUND ENERGY, a for-profit Washington corporation; SEATTLE CITY LIGHT, a public utility and department of the City of Seattle; BONNEVILLE POWER ADMINISTRATION, a federal agency and marketing agent for federally owned Northwest power facilities; and COLUMBIAGRID, a nonprofit Washington corporation, Respondents. J Given that PSE has sworn oath in front of FERC that this is ONLY a Local Transmission Line, City and PSE should explore build options that ONLY meet local need – which do not include huge oversizing “Overbuild” to meet Regional Desires, desires so that Seattle, BPA, Snopud, etc, do not in turn have to meet their own requirements to meet their own growth needs – growth needs which they can clearly meet on their own, in fact would prefer to meet on their own, as discussed in the ColumbiaGrid planning documents – PSE’s suggested huge overbuild of the 230,000 kV line was not even a REMOTELY “preferred” option for solving the regional ColumbiaGrid partner’s overload conditions. They can solve their own problems, they do not depend on this PSE huge Overbuild. Let these other utilities and transmission providers meet their own needs – DO NOT allow PSE to Overbuild to meet these others’ needs – at the expense of innocent homeowners, their children, and their families.

I111-A-9

PSE assumptions of “Right of Way.” It is not clear to me that PSE assumption of its “Right of Way” are correct. The existing 115kV corridor is recognized on plat maps as being a 115kV corridor. Nothing was said about ever making this a 230kV corridor. In addition, my understanding of the existing 115kV “Right of Way” was assumed to exist because of the hypothetical existence of a public road along the corridor. But no road was ever built along most of this corridor. This means that already the adjacent property owners were already burdened with the imposition of 115kV lines, without even a partial offsetting benefit of road access. Again, it is not clear to me that PSE even has a right of way.

I111-A-10

Environmental Impact of destruction of views in Somerset: DEIS gives “short shift” of the environmental impact of the destruction of views in Somerset. City makes false claim that somehow the value of views in some sort of nebulous thing which we cannot put a value on. This is simply false. Homeowners pay a high, and well-known premium for the environmental advantages of views, just like owners of waterfront property pay a huge premium for the environmental advantage of waterfront access. If City were to “drydock” waterfront property owners by filling in the lake and building an industrial complex in front of these waterfront properties, would City then claim little or no damage has been done to the waterfront property owners??? This is crazy. The valuation of aspects of the Environment is well-known and well-studied. This field is called “Environmental Economics.” The traditional “Environmental Economics” valuation of an aspect of the environment is as follows: that aspect is worth AT LEAST as much as people are willing to pay for it. Some people may not want a view, some people may not want to take a hike at Mt Rainier Paradise, for example. That doesn’t mean Mt Rainier National Park has no value, or that we can’t as a human society put a value on the national park! If strawberries cost \$6 a lb. February and you don’t think that they are worth \$6 a lb. – you do not want to buy them – but I do think they

I111-A -9 See response for Key Theme LU-2.  
 I111-A -10 See response for Key Theme ECON-1.

I111-A-10

are worth \$6 a lb. and I do buy them, then the strawberries are worth \$6 a lb. – regardless of the fact that YOU didn't want them! A willing seller has met a willing buyer. That is how we set prices in a free and democratic society. Examining real estate prices in Somerset, for example, I find a house with a superior view worth \$1.5 million. A similarly positioned house with a much inferior view is worth \$750,000 dollars. A willing buyer has met a willing seller and set a market price on this view – about \$750,000 for the view portion of this property alone. I count about 500 superior view properties in Somerset where people have paid real money for their views, and where the King County assessor has taxed them with real dollars for many decades on those views – those views have real, tangible, and quantifiable values. I estimate then that between \$50 million and \$250 million dollars in environmental view damages to Somerset alone from PSE's proposed 230,000 volt line. City and PSE are trying to pretend that views don't have real environmental value, and that they aren't actually engaged in a "taking" from the homeowners' paid-for property! [whether or not that "taking" needs to be compensated, this is REAL environmental economic value.] This City and PSE position is false, and a shameful misrepresentation of this huge amount of environmental damage. Figure 11-3 correctly identifies Somerset as being a community of extremely high and disparate view impact – but then in the body text City and PSE try to pretend that this impact is doesn't exist, or is very very small! This is wrong, this is false. Somerset has from day one – since its development in the 1960's defined itself as a view community. It has the strongest possible covenants, protecting each other's views. For example, it has no tall trees to obstruct views – the very way that PSE intends to obstruct views! City and PSE intend to destroy many 10's of millions of dollars of environmental value which Somerset homeowners HAVE PAID FOR in their properties – City and PSE are pretending that these environmental PAID FOR BY HOMEOWNERS values simply do not exist!

I111-A-11

Two REAL Routing Options Please: City requires PSE to submit two real routing option for consideration. PSE has only submitted one real routing option – the routing not-quite-within the existing 115kV corridor. PSE has submitted a second "fake" routing from Tradition Lake through East Bellevue – knowing full well that there is a moratorium on additional transmission line development in East Bellevue. This is not, and never was, a "real" routing option, because of the moratorium. Further, PSE turns it into a "Scare" option – making it look deliberately bad – again, it is not being submitted as a "real" routing option – PSE turns it into a "Scare" option by showing all the things PSE might have to do over the next 100 years to strengthen the entire area. A "Scare Option" meaning saying basically "Ooh look at all these very bad things you are going to make us do if you do not rubber stamp our preferred choice!" But many of these "strengthening" efforts shown in conjunction with the Lake Tradition option are going to have to be built out eventually anyway. What does represent this option is simply the 115kV line from Tradition Lake. And again, that is not a real option because of the East Bellevue moratorium. And that PSE puts forth this SINGLE 115kV line from Tradition Lake points out that PSE's preferred option of a 230,000 volt line in the existing 115kV corridor is WAY TO BIG to be necessary – because such a 230,000 volt line has 500% of the capacity of the SINGLE 115kV line in the Tradition Lake alternative proposal.

I111-A -11 See response for Key Theme OBJ-1.

Here's my electrical engineering analysis of how much load can be carried by various capacities of 115kV and 230kV lines:

|                           |           |            |             |
|---------------------------|-----------|------------|-------------|
| Voltage                   | 138000    | 345000     | 765000      |
| Current per Conductor (A) | 770       | 1010       | 1250        |
| Conductors per Bundle     | 1         | 2          | 4           |
| Phases                    | 3         | 3          | 3           |
| Wattage                   | 318780000 | 2090700000 | 11475000000 |
| Wattage (MW)              | 318.78    | 2090.7     | 11475       |
| Voltage Ratio             |           | 2.5        | 2.217391304 |
| Power Ratio               |           | 6.55844156 | 5.488592337 |

Summary Design Rule: Double the Voltage for approx 5X (500%) capacity increase.

Number of 115kV vs. 230kV lines:

| No 115kV | No 230kV | Percent 1-line Carrying Capacity | Percent 2-line Carrying Capacity | Ratio to existing | Years of Life Left at 2% Growth Rate |
|----------|----------|----------------------------------|----------------------------------|-------------------|--------------------------------------|
| 1        | 0        | 100%                             | 50%                              | 50%               |                                      |
| 2        | 0        | 200%                             | 100%                             | 100%              | 5                                    |
| 3        | 0        | 300%                             | 150%                             | 150%              | 30                                   |
| 4        | 0        | 400%                             | 200%                             | 200%              | 55                                   |
| 1        | 1        | 600%                             | 300%                             | 300%              | 105                                  |
| 0        | 2        | 1000%                            | 500%                             | 500%              | 205                                  |

Average Load of the Entire Eastside equals 342 aMW -- a little more than the capacity of ONE end of ONE 115kv line!  
 IE existing lines already have the capacity of almost 4X average load!



I112-A

COMMENT

RESPONSE

|          | <u>Comment</u>                                                                                                                                           | <u>Timestamp</u>     | <u>First Name</u> | <u>Last Name</u> |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------|------------------|
| I112-A-1 | Please don't bring in the ultra huge utility poles, Redmond is already becoming a junk yard of new ugly condos, and the last thing we need is a terribly | 3/8/2016<br>11:14:50 | Pam               | Paris            |
| I112-A-2 | expensive "idea". We don't need it yet and as a tax payer I don't want to be paying for it.                                                              |                      |                   |                  |

I112-A -1 See response for Key Theme VR-5.  
I112-A -2 Comment noted.



From: [Ron Bromwell](mailto:Ron.Bromwell)  
 To: [Info@energizeeastside.EIS.org](mailto:Info@energizeeastside.EIS.org)  
 Subject: Energize Eastside DEIS  
 Date: Monday, March 14, 2016 7:55:23 AM

#### NO on Energize Eastside

Peak Load hours occur during a 6-hour period (6am-9am and 5pm-8pm) - Over the past 16-year period, the region's temperature dipped to 23F, or below, on 70 days - Of those 70 days, only 44 days occurred on weekday work days (non-weekend, non-holiday) - 44 days x 6 hours = 264 hours vulnerable to Peak Demand outages, worst case - During that same 16-year period, 139,992 hours are not vulnerable to Peak Demand outages Assuming Energize Eastside avoided a power outage during every peak usage hour (264 hrs),

**Energize Eastside provides a maximum reliability improvement of 0.2%.** (264hrs / 139,992 hrs). The City of Bellevue has a fiduciary duty to its citizens to analyze how to make measureable, meaningful improvements to the electricity grid.

Sincerely,

Ron Bromwell  
 13650 NE 34<sup>th</sup> Place, Bellevue, WA 98005

March 13, 2016

I113-B -1 See responses for Key Themes OBJ-1 and OBJ-2.

I113-B-1

From: [Ron Bromwell](mailto:Ron.Bromwell@energizeeastside.org)  
 To: [Info@energizeeastside.org](mailto:Info@energizeeastside.org)  
 Subject: Energize Eastside DEIS  
 Date: Monday, March 14, 2016 12:58:21 PM

#### Energize Eastside DEIS

##### Pipeline Safety

I have written several times to Council members about the obvious danger of combining high voltage electricity and gasoline pipelines within the same Right of Way; in particular the planned location along the existing easement running through the five cities included in Energize Eastside. As previously noted the combined easement is only 100 feet wide, the pipeline uses 15 feet on a Sub-lease from PSE. Does BP Olympic Pipeline care about this danger, of course they do but they have no choice other than to re-locate the pipelines.

The E E project will violate the Bonneville Power Administration specifications for nearby structures at a minimum 50 feet and the installation of the new 100-120 foot towers will cause major vibration issues which violate BP Olympic Pipeline specifications. In addition, wind, lightning and earthquake issues cause cable breakages which create extreme danger as seen during the recent (March 13, 2016) storm where broken cables are still 'live' and 'sparking' as they lay on the wet ground.

**Under the EE plan broken cables will be lying next to, or even on top of, the gasoline pipelines – Just imagine this situation in your back-yard: A terrifying thought, but many Eastside residents have this potential nightmare to think about.**

For the safety of thousands of residents on the 18 mile route of the E E project I urge the E I S review committee to say NO to this irresponsible and un-needed venture.

Sincerely,

Ron Bromwell & Family  
 13650 NE 34th Place, Bellevue, WA 98005  
 425 896 7372 March 13, 2016

<http://www.kiro7.com/news/photos-sunday-windstorm-sweeps-through-puget-sound/159753203>

I113-C-1 See response for Key Theme PLS-3, and Key Theme EARTH-1.

I113-C-1

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                         | Timestamp            | First Name | Last Name |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I114-A-1 | We need to invest in energy but not the systems from the last century. This makes no sense at a time when global warming is an ever growing concern it makes no sense to invest in more capacity this way. There are sensible alternatives. I'm especially concerned when a foreign company wants me to pay fir something when they are deliberately vague in their studies and communications. Shame on Bellevue for letting them get this far | 3/4/2016<br>18:39:08 | Michael    | Diederich |
| I114-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      |            |           |

I114-A -1 See response for Key Theme ALT-1.  
 I114-A -2 See response for Key Theme OBJ-1.

COMMENT

RESPONSE

|          | <b>Comment</b>                                                                                                                  | <b>Timestamp</b>     | <b>First Name</b> | <b>Last Name</b> |
|----------|---------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------|------------------|
| I115-A-1 | first of all why do aussies own and even have a say in our utilities?                                                           | 3/5/2016<br>13:43:26 | kitty&larry       | buchanan         |
| I115-A-2 | Alternative 1-2 or no action is the vote my husband and I have. We own two homes in belleveue and have since 1958.<br>thank you |                      |                   |                  |

I115-A -1 See response for Key Theme OBJ-1.  
I115-A -2 Comment noted.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp            | First Name | Last Name |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I116-A-1 | I am following this proposed project and would like to register my strenuous objection to yet another poorly conceived project based on studies with dubious data, and what sounds like insufficient funding. Any work done or near the Olympic Pipeline should be scrutinized very carefully, and any property owners who could be impacted should receive information on the project, directly, and not in the form of direct mail and media coverage. | 3/5/2016<br>17:53:38 | Mary       | Truscotf  |
| I116-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |            |           |

I116-A -1 Comment noted.  
 I116-A -2 See Section 3.9 of the Phase 2 Draft EIS and Section 4.9 of the Final EIS.

I117-A

COMMENT

RESPONSE

I117-A -1 Comment noted.  
I117-A -2 Comment noted.

|          | <b>Comment</b>                                                                                                                                        | <b>Timestamp</b> | <b>First Name</b> | <b>Last Name</b> |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|
| I117-A-1 | I support Alternative 4 (NO ACTION) as I do not believe new transmission lines are necessary and we should avoid costly upgrades that are not needed. | 3/5/2016         | Paul              | Davenport        |
| I117-A-2 |                                                                                                                                                       | 19:48:27         |                   |                  |

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                   | Timestamp            | First Name | Last Name |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I118-A-1 | Puget Sound energy has not thoroughly informed the public regarding their intentions with any specifics regarding the use of their proposed dinosaur electrical system. There are more progressive alternatives to meet power demand for this area now and in the future. | 3/6/2016<br>12:11:04 | Anne D.    | Watkins   |
| I118-A-2 | I say "NO" to alternative 1-A and support Alternative 4:                                                                                                                                                                                                                  |                      |            |           |
| I118-A-3 | NO ACTION.                                                                                                                                                                                                                                                                |                      |            |           |

I118-A -1 Comment noted.  
 I118-A -2 Comment noted.  
 I118-A -3 Comment noted.



COMMENT

RESPONSE

I119-A -1 See response for Key Theme OBJ-1.

I119-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp            | First Name | Last Name |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| Without driving my eyes crazy as I have serious dry eyes, I don't see anything to tell me what the projected growth might be to need all this. I would assume certain areas have hit their maximum growth already, thereby being fine the way they are. Also, I believe if there is so much growth additional facilities should happen then/after at builder's expense, not the general public and taken a piece at a time. We cherish Redmond and other parts of the Eastside for the green, not substations and power grids. Besides when this growth happens, perhaps there would be a more environmentally effecient way to achieve a better grid and then we will have just spun our wheels for nothing. Planning should be long term, but not construction for what might not even be needed. Thank you. | 3/6/2016<br>16:05:25 | Barbara    | Dickson   |

COMMENT

RESPONSE

I120-A-1

| Comment                                                                                                                                                                                                           | Timestamp           | First Name | Last Name |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|-----------|
| Please implement option #2 of integrated resource approach or #4 no action. We are voting and taxpaying home-owning citizens of Bellevue and urge you to be sensible, listen to the people and stop this project. | 3/6/2016<br>6:30:04 | Lara       | Prior     |

I120-A -1 Comment noted.

I121-A

COMMENT

RESPONSE

I121-A -1 See response for Key Theme ALT-1.

I121-A-1

| <u>Comment</u>                                                                                             | <u>Timestamp</u>     | <u>First Name</u> | <u>Last Name</u> |
|------------------------------------------------------------------------------------------------------------|----------------------|-------------------|------------------|
| no no no to alternative 1-A                                                                                | 3/6/2016<br>15:09:24 | LINDA             | IGOE             |
| Scrap the whole idea that ruins our environment and I would be willing to do my share in using less energy |                      |                   |                  |

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Timestamp            | First Name | Last Name |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I122-A-1 | I would like to state my emphatic opposition to Puget Sound Energy's Energize Eastside proposal.                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3/7/2016<br>12:14:59 | Laura      | Rivendell |
| I122-A-2 | I am writing in support of Alternative 2 - Integrated Resource Approach . This is the most cost effective, reliable and safe of the options. According to the independent Lauckhart-Schiffman study, "PSE's system can avoid overloads and outages even when two critical transformers have failed...Energize Eastside is not needed to provide reliable power in this scenario for many years."<br><br>We urgently need to be investing in renewable energy options and infrastructure, which Energize Eastside Alternative #1 does not do. |                      |            |           |
| I122-A-3 | Please do not approve Energize Eastside Alternative #1, which is clearly a project to make money for Puget Sound Energy and is very disadvantageous for PSE's customers.                                                                                                                                                                                                                                                                                                                                                                     |                      |            |           |

- I122-A -1 Comment noted.
- I122-A -2 See response for Key Theme ALT-1.
- I122-A -3 See responses for Key Theme ALT-1 and Key Theme OBJ-1.

COMMENT

RESPONSE

I123-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timestamp            | First Name | Last Name |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| Having another old-out-of-date Transmission Lines setup in the sky is really scaring, especially when passing through the whole Bellevue and many other cities. It's a not a potential threat to safety, but it also impacts the whole environments and neighborhood. Current techniques make it natural that we should reuse current lines or make it hidden. If no actual requirements, we believe no action is the best choice. Otherwise, we need to think about the reuse of the existing one, which might be more economical. | 3/7/2016<br>13:21:56 | Liping     | Ke        |

I123-A-1 Comment noted.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timestamp            | First Name | Last Name |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I124-A-1 | After making an effort to educate myself about EIS, I am appalled by the poor communication of facts and data by PSE. The maps and scant information provided to let the public know what their specific plans are poor and lacking and one can only assume PSE wants to run some heavy electrical cables somewhere through Bellevue into Redmond. The specific routing is TBD, the specific need (as stated) is overstated according to reputable studies (something PSE has either failed to do or is unwilling to share how it got the outcome it did), and the company has done an exceptionally poor job of System Engineering (e.g., it has done a poor or nonexistent job of identifying and validating its requirements, designing the architecture that would satisfy the requirements, and linking requirements to planned actions). In short and however one wants to look at the job it has done, PSE has not put forth a convincing argument for the action it wants to pursue, but then that might be what a corporation gets when it turns to a 'weather man' to be its vice president associated with a complex engineering undertaking. I found better and more believable information to be available in an independent study done, in part, by its former vice president who has some engineering qualifications and found PSE's assertions to be overstated and/or fallacious. Additionally, it appears there are alternative approaches to meet the energy needs of tomorrow and one has to wonder whether PSE's approach is more to suit its desire to supply power to Canada than it is to meet the needs of the Eastside area. Therefore, I see no way that the City of Bellevue can or should approve/countenance PSE's flawed request. When one uses lacking and/or faulty data to arrive at a decision or plan, the decision and plan are equally worthy of rejection. | 3/7/2016<br>18:25:00 | Orville    | Gunnoe    |
| I124-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |            |           |

- I124-A -1 See the Phase 2 Draft EIS and Final EIS for project-level analysis of alternatives.
- I124-A -2 See responses for Key Themes OBJ-1 and OBJ-2.

*Robert & Karen Gillespie*  
 731 97th Avenue S.E., Bellevue, Washington 98004  
 206-719-6234 Gillespie1000@msn.com

March 3, 2016

The Honorable John Stokes  
 Mayor-The City of Bellevue  
 450 110<sup>th</sup> Avenue N.E.  
 Bellevue, Washington 98004

Re: Energize Eastside

Dear Mayor Stokes,

In my lifetime, Washington's population has increased by 4.4 million residents. It will hit 10 million by 2030. We can expect another 375,000 of those residents in King County and most of these people will create new electrical demand in Puget Sound Energy's (PSE) eastside service area.

I126-A-1

The population served by the powerlines in the Energize Eastside project has increased seven-fold since the old transmission line was built in 1963 and that demand is pushing the powerlines to their limits. Relying on a 60-year-old equipment to keep our lights on is poor public policy and I want to add my voice to those supporting the PSE proposal. A handful of homeowners (only 200; please see their Facebook page) are putting in jeopardy the power needs of the approximately 300,000 customers who are served in the circuits fed by this transmission corridor.

This isn't a power supply issue as the opponents claim. This is about delivering power in sufficient quantities through the "pipeline" that carries our electricity. Your own advisory committee said that an upgrade is needed. The utility's significant research has documented the need. Even the Federal Energy Regulatory Commission has dismissed (10/5/15) the opponents' objections as "misapplied".

I126-A-2

The visual impact of the new lines will be significantly lessened for 95% of the residents living along the route; fewer poles, farther apart, with line placement above the usual sightlines.

This EIS process has shown that failing to upgrade this line creates the possibility of sub-regional, rolling, blackouts. I don't want to experience power blackouts so that someone who moved adjacent to an existing transmission line is spared some minor impact on his or her view.

With decades of experience in the area of public affairs, I realize that the majority is rarely heard; a few loud voices always seem to dominate the conversation. But, thoughtful voices should be respected as well. I hope you will arrive at a decision supporting the recommendations of Energize Eastside.

Very truly yours,



Robert L. Gillespie

✓ Cc: Heidi Bedwell, EIS Program Mgr. - City of Bellevue  
 Councilmembers of Kirkland, Renton, Redmond and Newcastle

I126-A -1 See response for Key Theme OBJ-1.

I126-A -2 Comment noted.

*X TO ALL COUNCIL INDIVIDUALLY IN MAILBOX*

**Robert & Karen Gillespie**  
 731 97th Avenue S.E., Bellevue, Washington 98004  
 206-719-6234 Gillespie1000@msn.com

**RECEIVED**

MAR 7 2016

**CITY COUNCIL**

March 3, 2016

The Honorable John Chelminiak  
Deputy Mayor-The City of Bellevue  
450 110<sup>th</sup> Avenue N.E.  
Bellevue, Washington 98004

Re: Energize Eastside

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I126-B-1

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I126-B-2

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I126-B-3

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Very truly yours,

*Robert L. Gillespie*  
Robert L. Gillespie

*THANKS JOHN.*

Cc: Heidi Bedwell, EIS Program Mgr. - City of Bellevue  
Councilmembers of Kirkland, Renton, Redmond and Newcastle

- I126-B -1 See response for Key Theme OBJ-1.
- I126-B -2 Comment noted.
- I126-B -3 Comment noted.





COMMENT

RESPONSE

March 5, 2016

To: Heidi Bedwell, Energize Eastside EIS Program and Manager  
 From: Judy Cui

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities ( Alternative 1A).

- I127-A-1 | PSE tries to justify the need for the project using an impossible scenario that could cause regional blackouts, according to the Lauckhart- Schiffman Load Flow Study, Available at CENSE.org. Also the Project may cause health problems for people living around the area.
- I127-A-2 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is NOT adequately addressed in the EIS.
- I127-A-3 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was NOT developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.
- I127-A-4 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line.
- I127-A-5 | Moreover, high voltage transmission line may damage human DNA, cause cancers , Leukemia. Neurodegenerative disease and Miscarriage problem from studies.

The Draft EIS must answer these basic questions in order to convince residents that we are getting the possible plan for our energy future.

Judy(Qi) Cui



4543 135th ave SE, Bellevue.WA 98006

- I127-A -1 | See responses for Key Theme OBJ-1 and OBJ-3.
- I127-A -2 | See response for Key Theme EMF-1 for potential health effects from electric and magnetic fields. See responses for Key Themes PLS-1, PLS-2, and PLS-3.
- I127-A -3 | See responses for Key Theme EIS-1 and Key Theme OBJ-2.
- I127-A -4 | See response for Key Theme ECON-4.
- I127-A -5 | See response for Key Theme EMF-1.

COMMENT

RESPONSE

I128-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp            | First Name | Last Name |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| Puget Sound Energy has not provided rationale or data for its outrageously unrealistic assumptions concerning our future power needs. They seem to have completely ignored technologically modern ways of meeting current and future power demands. Instead they want us to pay for an outdated system that is ugly, damaging to the environment and unsafe by crossing the dangerous Olympic Gas Line. | 3/6/2016<br>11:52:08 | Gerald     | Watkins   |

I128-A -1 See response for Key Theme OBJ-2.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp            | First Name | Last Name |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I128-B-1 | This is a revised version of my previous submission. Puget Sound Energy has not provided rationale or data for its outrageously unrealistic assumptions concerning our future power needs. They seem to have completely ignored technologically modern ways of meeting our current and future power demands. Instead they want us to pay for an outdated system that is ugly, damaging to the environment and unsafe by crossing the dangerous Olympic Gas line. I vote NO to Alternative 1-A (Energize Eastside) and recommend Alternative 4 No Action. | 3/6/2016<br>12:25:21 | Gerald     | Watkins   |
| I128-B-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |            |           |
| I128-B-3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                      |            |           |

I128-B -1 See response for Key Theme OBJ-2.  
 I128-B -2 See response for Key Theme ALT-1.  
 I128-B -3 Comment noted.

How you can make your comments most effective



Check out the Department of Ecology Citizen's Guide to SEPA Review and Commenting at [EnergizeEastsideEIS.org/sepa-review](http://EnergizeEastsideEIS.org/sepa-review).

**Be clear, concise, and organized.** Decide what you need to say before you begin. If you have a number of points, group your comments in a logical order.

**Be specific.** Give support to your comments by including factual information. For instance, compare how things *were*, to how they *are*, to how you believe they *will be* in the future—and why.

Refer to Comprehensive Plans, development regulations, information on similar projects or situations, and other environmental laws or documents. Be as accurate as possible.

**Identify possible solutions.** Suggestions on reasonable mitigation—conditions to avoid, minimize, or reduce adverse impacts—can help influence how a project is ultimately built. After identifying your concern, suggest possible solutions.

-----fold here-----

Comments on the Phase 1 Draft EIS of PSE's Energize Eastside Project

Name Ms. Cynthia Rezabek Address\* 12144 SE 14<sup>th</sup> St.  
Belleme, WA 98005

\* You must provide your physical mailing address to be considered a "party of record," eligible to appeal the adequacy of the EIS.

I129-A-1

*Energize Eastside is a "Forever Project" that would be built with technology that will soon be easily eclipsed by newer energy delivery methods. Please wait for the technology; there is time. I attended a neighborhood EE presentation. There was no mention there of alternatives. It seemed to pit neighborhoods against each other to see who would be impacted by the inevitable. Contest the treaty!*

I129-A-2

*The maps then and now are difficult to follow, especially if you know an area. Suggest more detailed maps, showing parks, neighborhoods etc.*

I129-A-3

*There was no mention of the width of needed right-of-ways, tree effects, extent of eminent domain, and ways to visualize the height of the proposed towers. I recommend a PUD, attention to the alternative study, and conservation.*

- I129-A -1 See response for Key Theme ALT-1.
- I129-A -2 See the Phase 2 Draft EIS and Final EIS for project-level analysis of alternatives.
- I129-A -3 See responses for Key Theme LU-2 and LU-1, and Key Theme P&A-2.

March 07, 2016

Dear Ms. Bedwell,

We just came from Wisconsin and were to try buy a property in the area. But when heard the Puget Sound Energy's "Energize Eastside" project we are very concerned and curious.

I130-A-1 | First, Bellevue is a beautiful area now. It is hard to image what kind place would be with those  
I130-A-2 | high-voltage transmission towers/ poles stand. It is also hard to believe that who would like to  
live in the area with human's health threatened and higher cost if the project would get through.

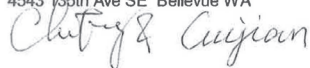
I130-A-3 | Second, we drove more than 2000 miles, through 5 states. Occasionally, we saw some  
high-voltage transmissions towers/poles and lines, but all seat in the places with NO houses  
around or wild area. We are surprised seeing those high-voltage transmission lines in Bellevue,  
which is a high-tech and beauty place. ( By the way, we saw NO high-voltage transmission lines  
in Seattle.) We understand this OLD animals were built in old time. Now we really regret to hear  
that some one wants to put more and much higher towers/poles to carry much stronger  
electricity voltage in the density population places..

I130-A-4 | Some people said the high-voltage transmission lines does NOT hurt human being, This is  
Irresponsible. If so, why other states like Wisconsin, Minnesota, North Dakota .... those much  
poor states spent more money buried the high-voltage transmission lines??! Every research  
discovered that electric and magnetic fields have negative effective on human and plants, even  
with those who said that very low magnetic fields MAY NOT have much negative effective or can  
use some methods to reduce it. But nobody can confirm that the high-voltage transmission lines  
does NOT hurt human being. Who would like to live this kind of area, or in other words, who  
would like to use his health to bet that?! More serious and important question arises here is if  
something happen in the future, who is going to take the responsibility?

I130-A-5 | The third, the permission for PSE to create the new high-voltage transmission lines was  
authorized more than 10 years ago. The science and technology was developed well in this area  
in last a few years, and some new technologies could well be applied for PSE's this project as  
we heard. Actually, nowadays it is HARD to hear or see to create new towers/poles to transmit  
high-voltage in resident places!! Why PSE does not use the newer tech but insists using the  
OLD one which would damage the beautiful area and possible human health? Not familiar with  
the new tech? money? Or?! Do PSE leaders and related people ever think this may be the last  
one or two projects in United States that use high-voltage transmission lines ? !

We just want the PSE and Bellevue Leaders consider those points and do NOT make wrong  
decision which would cause future troubles.

Fang & Zjian Cui  
4543 135th Ave SE Bellevue WA



- I130-A -1 See response for Key Theme VR-5.
- I130-A -2 See response for Key Theme EMF-1.
- I130-A -3 See responses for Key Theme LU-4 and Key Theme ALT-1.
- I130-A -4 See response for Key Theme EMF-1.
- I130-A -5 See response for Key Theme OBJ-1.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Timestamp           | First Name | Last Name |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|-----------|
| I131-A-1 | The map (heat map) on the website that has the energy use projections doesn't pass the sniff test. Why is bridal trails state park and other parks red? The parks can't be using that much electricity. There are other mature neighborhoods around the park, so their energy draw shouldn't be changing significantly. Not having any green on the chart gives the appearance the energy needs are being overstated and a more scaled back solution would be more appropriate. | 3/7/2016<br>6:26:50 | Hanski     | Elizabeth |
| I131-A-2 | Have any non advocates reviewed the projections? Have Monte Carlo simulations been run to improve the accuracy of the projections? I don't want to degrade the quality of Kirkland and Bellevue unless we can prove a problem.                                                                                                                                                                                                                                                  |                     |            |           |

- I131-A -1 This comment pertains to a graphic that is not part of the EIS. See response for Key Theme OBJ-1.
- I131-A -2 See response for Key Theme OBJ-2.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                               | Timestamp           | First Name | Last Name |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------|-----------|
| I132-A-1 | Please DO NOT build gigantic power lines over our neighborhoods. I haven't heard anything about the safety features of the proposed power lines. What happens when one falls during a storm? They are supposed to traverse our schools, possibly causing harm to children if damaged. | 3/8/2016<br>8:16:21 | Donna      | Peha      |
| I132-A-2 | There is plenty of time to bury power lines underground or come up with another solution. Don't make our neighborhoods ugly and devalued by installing these huge power poles.                                                                                                        |                     |            |           |
| I132-A-3 |                                                                                                                                                                                                                                                                                       |                     |            |           |

- I132-A -1 See responses for Key Themes PLS-2 and PLS-4.
- I132-A -2 See response for Key Theme ALT-1.
- I132-A -3 See responses for Key Theme VR-5 and Key Theme ECON-1.

COMMENT

RESPONSE

I133-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp            | First Name | Last Name |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| Living in one of the most high tech and environmentally conscious cities in the U.S., I have to believe we can come up with a better alternative that meets our growing energy needs without industrial sized power lines running through our backyards. We need to avoid the easy option here and be innovative. Other industries are doing this i.e. Tesla with cars, why doesn't PSE seriously look for new solutions for Bellevue's energy demands? | 3/8/2016<br>16:01:19 | Kellie     | Utzing    |

I133-A -1 See response for Key Theme OBJ-1.



## COMMENT

## RESPONSE

From: [Eric Zhuang](#)  
 To: [info@energizeeastsideEIS.org](mailto:info@energizeeastsideEIS.org)  
 Cc: [Eric Zhuang](#)  
 Subject: comment of safety issues on alternative 1A  
 Date: Sunday, March 13, 2016 4:14:50 PM

Name: Eric Zhuang  
 Address: 4809 Somerset DR SE, WA 98006

I am a resident in Somerset neighborhood. One of the PSE's proposed routes (alternative 1A) goes next to my backyard about 50 feet away.  
 I strongly oppose the PSE preferred alternative 1A which builds 230KV lines goes through the Somerset neighborhood as well as many of the eastside neighborhoods.

I134-A-1

There are many reasons to be concerned on PSE's 230KV lines. But I am going to focus on safety. My house is merely 50 feet next the proposed power lines. Safety of my family is the paramount concern of me. Especially, my 8 years old daughter often plays with her friends in the backyard which is almost under the proposed line.

1. Olympic pipeline. I am an electrical engineer with a master's degree in EE. Constructing a high power transmission line right on top of an aging gasoline pipeline is unheard of, especially given the notorious safety record of Olympic pipeline, known by its 1999 Bellingham explosion which kills 3 people.  
[https://en.wikipedia.org/wiki/Olympic\\_Pipeline\\_explosion](https://en.wikipedia.org/wiki/Olympic_Pipeline_explosion) Quote from Wikipedia:  
 "After a three-year investigation, investigators pointed to a series of failures, and not just a single error, most of which were the fault of Olympic Pipeline. Olympic Pipeline had failed to properly train employees, and had to contend with a faulty computer system and pressure relief valve. In 1994, five years before the accident, an IMCO construction crew, working on behalf of the City of Bellingham damaged the pipeline while constructing the city's water treatment plant and Olympic Pipeline had failed to find or repair the damage."

I134-A-2

As we can clearly see from this accident, it was caused by a construction five years ago and Olympic Pipeline failed to find and repair the damage. It is exactly what we have here in PSE's proposed new power line project. But the risk is much higher and the consequence is much worse.

(i) The pipeline is much older now, more susceptible to construction accident.

(ii) This is high power line, instead of water treatment work in Bellingham, which will produce natural ignition source by arcing and Electromagnetic Field differentials. Any gas leak, even not caused by construction, will introduce enormous risks.

(iii) Eastside is much more densely populated. The pipeline and power line are going through backyards, schools, parks. If accident happened, it would cause much more casualties and damages.

2. Landslide and earthquakes. My backyard is not only next to powerline but also has a steep slope between the power line and my house. It is defined as Critical Area by the City of Bellevue. There are many similar areas in Somerset along the proposed

I134-A -1 See response for Key Theme EMF-3.

I134-A -2 See responses for Key Themes PLS-2, PLS-3, PLS-4, and PLS-5, and Key Theme EARTH-1.

## COMMENT

## RESPONSE

I134-A-2 | route. Any major movement in the earth could trigger a catastrophic pipe burst and fire. This has happened many times throughout the world.

I134-A-3 | In conclusion, the easement PSE has over my property was created many years back. In fact, I was not even born at that time. I would imagine no one could foresee how PSE abused this easement by overburdening it disregarding the basic safety concerns. I have been to all PSE's public sessions last year. I could clearly see they had already fixed their favorite "alternative" before the public comments, simply because it was more convenient and profitable to them. They disregarded the overwhelming opposition and concerns. Their public sessions are merely a procedure for show.

I134-A-4 | However, we could still change this disastrous alternative 1A. The alternative 2 is way people friendly, environmental friendly, and forward-looking. While CENSE org's independent study has casted doubts on the vary root assumption to PSE's entire project, it is time to give this high-stake project some more time and REAL alternative thoughts before we are too late to change the worst disastrous outcome from happening.

Thank you!  
Eric Zhuang  
4809 Somerset DR SE, Bellevue, WA 98006

I134-A -3 | Comment noted.

I134-A -4 | See response for Key Theme ALT-1.

COMMENT

RESPONSE

I134-B -1 See response for Key Theme EMF-3.  
 I134-B -2 See responses for Key Themes PLS-2, PLS-3, PLS-4, and PLS-5, and Key Theme EARTH-1.

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

I134-B-1

|                                                                                                                                          |                       |      |        |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------|--------|
| I am a resident in Somerset neighborhood. One of the PSE's proposed routes (alternative 1A) goes next to my backyard about 50 feet away. | 3/13/2016<br>16:09:52 | Eric | Zhuang |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------|--------|

I strongly oppose the PSE preferred alternative 1A which builds 230KV lines goes through the Somerset neighborhood as well as many of the eastside neighborhoods.

There are many reasons to be concerned on PSE's 230KV lines. But I am going to focus on safety. My house is merely 50 feet next the proposed power lines. Safety of my family is the paramount concern of me. Especially, my 8 years old daughter often plays with her friends in the backyard which is almost under the proposed line.

I134-B-2

1. Olympic pipeline. I am an electrical engineer with a master's degree in EE. Constructing a high power transmission line right on top of an aging gasoline pipeline is unheard of, especially given the notorious safety record of Olympic pipeline, known by its 1999 Bellingham explosion which kills 3 people.

([https://en.wikipedia.org/wiki/Olympic\\_Pipeline\\_explosion](https://en.wikipedia.org/wiki/Olympic_Pipeline_explosion)) Quote from Wikipedia: "After a three-year investigation, investigators pointed to a series of failures, and not just a single error, most of which were the fault of Olympic Pipeline. Olympic Pipeline had failed to properly train employees, and had to contend with a faulty computer system and pressure relief valve. In 1994, five years before the accident, an IMCO construction crew, working on behalf of the City of Bellingham damaged the pipeline while constructing the city's water treatment plant and Olympic Pipeline had failed to find or repair the damage."

As we can clearly see from this accident, it was caused by a construction five years ago and Olympic

I134-B -3 Comment noted.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Timestamp | First Name | Last Name |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I134-B-2 | <p>Pipeline failed to find and repair the damage. It is exactly what we have here in PSE's proposed new power line project. But the risk is much higher and the consequence is much worse.</p> <p>(i) The pipeline is much older now, more susceptible to construction accident.</p> <p>(ii) This is high power line, instead of water treatment work in Bellingham, which will produce natural ignition source by arcing and Electromagnetic Field differentials. Any gas leak, even not caused by construction, will introduce enormous risks.</p> <p>(iii) Eastside is much more densely populated. The pipeline and power line are going through backyards, schools, parks. If accident happened, it would cause much more casualties and damages.</p> <p>2. Landslide and earthquakes. My backyard is not only next to powerline but also has a steep slope between the power line and my house. It is defined as Critical Area by the City of Bellevue. There are many similar areas in Somerset along the proposed route. Any major movement in the earth could trigger a catastrophic pipe burst and fire. This has happened many times throughout the world.</p> <p>In conclusion, the easement PSE has over my property was created many years back. In fact, I was not even born at that time. I would imagine no one could foresee how PSE abused this easement by overburdening it disregarding the basic safety concerns. I have been to all PSE's public sessions last year. I could clearly see they had already fixed their favorite "alternative" before the public comments, simply because it was more convenient and profitable to them. They disregarded the overwhelming opposition and concerns. Their public sessions are</p> |           |            |           |
| I134-B-3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |            |           |

I134-B-3

| <u>Comment</u> | <u>Timestamp</u> | <u>First Name</u> | <u>Last Name</u> |
|----------------|------------------|-------------------|------------------|
|----------------|------------------|-------------------|------------------|

merely a procedure for show.  
However, we could still change this disastrous alternative 1A. The alternative 2 is way people friendly, environmental friendly, and forward-looking. While CENSE org's independent study has casted doubts on the vary root assumption to PSE's entire project, it is time to give this high-stake project some more time and REAL alternative thoughts before we are too late to change the worst disastrous outcome from happening.

Thank you!  
Eric Zhuang  
4809 Somerset DR SE, Bellevue, WA 98006

I135-A-1

**From:** [Prichard, Janet](#)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** Support for Alternative 1a  
**Date:** Thursday, March 10, 2016 2:46:44 PM

Republic Services fully supports Alternative 1a for the following reasons:

- The project has been analyzed thoroughly by nearly a half dozen third-party subject-matter experts;
- There is need (current infrastructure is at the end of its useful life and PSRC data underscores the growth coming to the service area);
- We are impressed with the innovative and proven technology to supply essential power to the current and future population;
- If the project is stalled or rolling blackouts are instituted, we would be forced to use a gas-powered generator to operate our Compressed Natural Gas fueling station, which would add noise and pollution in the emerging Bel-Red corridor, thereby reducing the environmental value of our CNG fleet.

Please let me know if you have any questions.

**Janet Prichard**  
 Municipal Manager

1600 127<sup>th</sup> Avenue Northeast  
 Bellevue, Washington 98005  
 e [jprichard@republicservices.com](mailto:jprichard@republicservices.com)  
 o 425-646-2541 c 425-221-0766  
 f 425-646-2440 w [www.republicservices.com](http://www.republicservices.com)



We'll handle it from here.™

I135-A -1 Comment noted.

I137-A

COMMENT

RESPONSE

**From:** [SharedFamily iPad](#)  
**To:** [info@EnergizeEastSideEIS.org](mailto:info@EnergizeEastSideEIS.org)  
**Subject:** Deis comment  
**Date:** Thursday, March 10, 2016 9:40:31 PM

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I137-A-1

The pipeline corridor passes and connects to many green belts that connect to county state and federal lands that support wildlife. High voltage lines are perceived differently by animals than people. This causes animals to avoid high voltage lines causing their territories to become fragmented. How will this be addressed?

Sent from my iPad

I137-A -1 See response for Key Theme P&A-1.



COMMENT

RESPONSE

**From:** [Tam Tran](#)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** question 132nd Ave NE/ NE 85th through 132nd Ave NE/ NE 60th  
**Date:** Thursday, March 10, 2016 7:58:37 AM

---

I138-A-1

Hi,  
I wasn't able to make it to any of the public meetings. Just curious what kind of power line is currently running along this section of roadway.  
It looks like from the new plan, a new 115kV line is to stretch along this path.  
  
Thanks,  
Tam

I138-A -1 See discussion under Alternatives Evaluated in the Phase 1 Draft EIS (Topic ALT).



**From:** [Tom Markl](#)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** EIS Comment  
**Date:** Thursday, March 10, 2016 9:48:59 AM

---

I139-A-1

This business strongly supports 'Alternative 1 – New Transformer and Transmission' Alternative 1 (a) in the Draft EIS. It is the only alternative that should be considered in the Phase 2 of the EIS. We need adequate and reliable power for our business to exist and grow.

Thank you.

Thomas L. Markl  
CEO



16508 NE 79<sup>th</sup> Street  
Redmond, WA 98052  
Tel: (425) 881-7831  
E-Mail: [tommarkl@nelrem.com](mailto:tommarkl@nelrem.com)

I139-A -1 Comment noted.

COMMENT

RESPONSE

**From:** [Newport Manufacturing](mailto:Newport.Manufacturing)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Cc:** [rich@ci.newcastle.wa.us](mailto:rich@ci.newcastle.wa.us); [gordonh@ci.newcastle.wa.us](mailto:gordonh@ci.newcastle.wa.us); [lindap@ci.newcastle.wa.us](mailto:lindap@ci.newcastle.wa.us); [carols@ci.newcastle.wa.us](mailto:carols@ci.newcastle.wa.us); [allend@ci.newcastle.wa.us](mailto:allend@ci.newcastle.wa.us); [johnr@ci.newcastle.wa.us](mailto:johnr@ci.newcastle.wa.us); [johnb@ci.newcastle.wa.us](mailto:johnb@ci.newcastle.wa.us)  
**Subject:** Phase 1 Draft EIS for the Energize Eastside project  
**Date:** Friday, March 11, 2016 3:32:32 PM

March 11, 2016

City of Bellevue  
 Development Services Department  
 Attn: Heidi Bedwell  
 450 110<sup>th</sup> Avenue NE  
 Bellevue, WA 98004

Ms. Bedwell:

I appreciate the opportunity to comment on the Phase 1 Draft EIS for the Energize Eastside project. As a small business owner in Newcastle, I am very concerned about how the No Action Alternative in the Draft EIS may negatively affect my business. Our equipment is very sensitive to electrical fluctuations which could potentially render the machines inoperable. Our business cannot afford any delay of this project that could lead to future blackouts, mandatory shutting-off of power, or loss of power.

I140-A-1

From a personal perspective, our veterinarian and medical doctors are located within Newcastle. I am extremely concerned about the potentially detrimental effects delaying this project may have with regards to their medical equipment such as imaging machines and computers, to name a few.

I140-A-2

Residents and businesses simply cannot afford any delay of this important reliability project. Therefore, I support Alternative 1A, using poles and wires along PSE's existing corridor, to ensure that reliable power continues to be provided to Newcastle and the rest of the Eastside. Our economy and way of life depends on the delivery of dependable power by way of proven electrical infrastructure.

Sincerely,

James Denton  
 Owner, Newport Manufacturing  
 13024 Newcastle Way  
 Newcastle, WA 98059

Cc: Newcastle City Council

I140-A -1 Comment noted.  
 I140-A -2 Comment noted.





Phone: 425.641.6199  
Fax: 425.747.3925  
Email: [newport@newportmanufacturing.com](mailto:newport@newportmanufacturing.com)  
Address: 13024 Newcastle Way  
Newcastle, WA 98059

COMMENT

RESPONSE

**From:** [Jessaca Jacobson](mailto:Jessaca.Jacobson@energizeeastside.org)  
**To:** [info@energizeeastside.org](mailto:info@energizeeastside.org)  
**Subject:** Draft EIS Comments for Energize Eastside  
**Date:** Friday, March 11, 2016 1:33:35 PM

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Jessaca Jacobson residing at 12569 SE 71<sup>st</sup> Street, Newcastle, WA 98056  
 Dear Ms. Bedwell,  
 I am highly concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I141-A-1

After attending multiple community meetings and reviewing documentation provided by PSE and others, it is clear that PSE is trying to justify the need for the project by using a highly suspect (some say "impossible") scenario that could lead to regional blackouts. The Lauckhart-Schiffman Load Flow Study (available at CENSE.org) calls the PSE study into grave question. In addition to my comments below, I call upon PSE to share the specific data used to construct their scenarios in order to allow third parties to analyze the scenarios offered as justification for this project. The citizens of our communities whose lives will be forever impacted have a right to see this data in order to determine true need and to participate in formulating the best solution for PSE and our communities.

I141-A-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk could be compounded by potential seismic activity in the area. It must not be taken lightly that the proposed power lines and Olympic pipeline pass adjacent to schools and neighborhoods putting thousands at risk. These risks are not adequately addressed in the EIS.

I141-A-3

Alternative 1A also poses significant impact to neighborhood character along the entire route. Chapter 10.7.1 Key Findings: Alternative 1 Option A has the greatest

- I141-A -1 See responses for Key Themes OBJ-2 and OBJ-3.
- I141-A -2 See response for Key Theme PLS-2 and Key Theme EARTH-1.
- I141-A -3 See response for Key Theme LU-5.



## COMMENT

## RESPONSE

I141-A-3 potential to create significant adverse land and housing impacts. Homes will be devalued along the pipeline (with an impact to city taxable revenue), the natural settings (particularly for Newcastle) will be destroyed beyond measure by the elimination of trees and, potentially, of homes along the route (namely in the Olympus neighborhood in Newcastle) (see Chapter 10.7.3.1.2 Existing Corridor). The potential

I141-A-4 hum from the lines may be hugely impactful to residents residing along the lines.

I141-A-5 Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I141-A-6 The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

I141-A-7 Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I141-A-8 Thank you for this opportunity to comment. I assume that this letter delivered prior to March 14, 2016 will render me an party of record in this case.

Sincerely,  
 Jessaca Jacobson  
 12569 SE 71st Street  
 Newcastle, WA 98056

I141-A -4 See response for Key Theme NOI-1.  
 I141-A -5 See responses for Key Theme EIS-1 and Key Theme ALT-1.  
 I141-A -6 See response for Key Theme ALT-1.  
 I141-A -7 See response for Key Theme OBJ-1.  
 I141-A -8 Comment noted.

From: [Jim Long](mailto:Jim.Long)  
 To: [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
 Cc: [council@bellevuewa.gov](mailto:council@bellevuewa.gov)  
 Subject: Comments - Energize Eastside Phase 1 Draft EIS  
 Date: Friday, March 11, 2016 4:49:03 PM

Dear Ms. Bedwell,

My name is Jim Long and I am a general manager for Urban Renaissance Group, a local commercial real estate concern that invests, operates, and builds office buildings in areas throughout the Pacific Northwest including Bellevue. We presently operate 18 buildings including hi-rise offices in downtown Bellevue and office campus' along the I-90 Corridor (Eastgate area). Over 7,000 employees come to work in our properties every day. I have been privileged to grow my career with over 15 years of experience operating office buildings in the City of Bellevue.

I142-A-1 | We are firmly in support of Alternative 1A: the project utilizes an existing corridor and established right-of-way; can be built in time; and provides certainty for the power supplies to our homes and office buildings.

I142-A-2 | As commercial property owners and managers, we feel very strongly that any alternatives carried forward should be reliable, proven, and no-risk options for our buildings, the companies that work in them, and for Eastside residents. Just as buildings age and require upgrading and maintenance, our existing 50+ year old distribution must be improved in order to meet growing demand Eastside AND ensure reliable service to the existing base of energy consumers. We have a robust economy and way of life that relies so much on the delivery of power – power that needs a proven electrical infrastructure.

East King County and the city of Bellevue have and continue to attract a healthy mix of businesses – many centered on technology. We need a reliable, predictable energy infrastructure – not untested technology - to ensure our markets remain competitive within the region and state.

I142-A-3 | We feel strongly that doing nothing is not a prudent option: If no action is taken to address the need on the Eastside, rolling blackouts could affect hundreds of thousands of people and cost the local economy millions of dollars. Doing nothing is not an option. Alternative 2 seems risky. It relies upon residents and businesses voluntarily tripling their

I142-A-4 | conservation, using unproven battery technology, and attempting to place industrial generation plants in the middle of our community. We cannot fathom the impact on the Eastside's niche as a technology center/technology leader if reliable, ample electrical power is not available.

I142-A-5 | The Eastside has seen explosive growth over the past few years, and there's more to come. We must have reliable power to support this growth. Delaying this project to continue to "study" the need compromises the Eastside's future.

We urge you to move ahead with Alternative 1A.

Sincerely,

Jim

Jim Long, CPM® | General Manager  
 Urban Renaissance Group LLC  
 110 – 110<sup>th</sup> Avenue NE | Suite 450 | Bellevue, WA 98004  
 p 425.289.2051 | f 425.289.2056 | c 425.457.1837  
[www.urbanrengroup.com](http://www.urbanrengroup.com)

- I142-A -1 Comment noted.
- I142-A -2 Comment noted.
- I142-A -3 See response for Key Theme ALT-1.
- I142-A -4 See response for Key Theme ALT-1.
- I142-A -5 See response for Key Theme OBJ-1.



COMMENT

RESPONSE

**From:** [John Ellis](#)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Phase 1 comment  
**Date:** Friday, March 11, 2016 9:05:52 PM

From:  
 John Ellis  
 2230 135th PL SE  
 Bellevue, WA 98005

To whom it may concern:

I have 3 primary concerns: EMF health effects, The continued safety of the petroleum pipelines in the easement, and the audible noise emitted by the lines.

EMF health effects.

My family has lived in our home on 135th PL SE for 24 years. 10 years ago I was afflicted by Bell's Palsy. 1 year before I was afflicted, a neighbor 13605 SE 24th was also afflicted with Bell's Palsy, and 3 years after my bout with the condition, a neighbor at 2034 135th PL also suffered facial paralysis (Bell's Palsy). The overall rate of Bell's Palsy in the population is 1 in every 5,000 people, so 3 victims (that I know of) all living within 500 feet of each other, and all directly West of the power lines, indicates a MUCH higher incidence of this condition than that of the general population. The "Upgraded" lines will generate a much larger Electro Magnetic Field, and the health effects on people living near them will certainly be much worse.

I143-A-1

Petroleum Pipelines:

The magnetic field generated by the high tension lines also increases the rate of galvanic corrosion (rusting) of the petroleum pipelines buried beneath them. A higher voltage line will increase this further. The safety risk to the pipelines is unacceptable. The proven danger of damaging these lines was adequately proven by the explosion and deaths in Bellingham a few years ago. We do not want a repeat of this in Bellevue.

Noise:

Already, our neighborhood is subject to quite a bit of "city noise:" I-405 and I-90 are only a mile or so away and can be heard day or night. The crackling of the high lines can be heard on damp, quiet nights, and increasing the voltage means the lines will be heard all the time. This will add to the stress level of residents near the line and amplify the health effects of the EMF.

I143-A-2

These lines are a poor solution to a problem that doesn't exist. We do not have a current local power shortage. These lines will only hurt the citizens of Bellevue and only benefit PSE. Please do not allow them to be built.

I143-A-3

Sincerely,  
 John Ellis  
 2230 135th PL SE  
 Bellevue, WA 98005  
 425-562-0593

- I143-A -1 See response for Key Theme EMF-1. See responses for Key Themes PLS-2 and PLS-3.
- I143-A -2 See responses for Key Theme NOI-1 and Key Theme EMF-1.
- I143-A -3 See response for Key Theme OBJ-1.



**From:** [Julie Beffa](mailto:Julie.Beffa)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Cc:** [dncense@gmail.com](mailto:dncense@gmail.com); [council@bellevuewa.gov](mailto:council@bellevuewa.gov)  
**Subject:** Writing in Opposition to PSE'S Draft EIS by Energize Eastside  
**Date:** Friday, March 11, 2016 4:04:47 PM

I144-A-1 | As a resident of Bellevue for 47 years, 35 in Clyde Hill, I am appalled that the Bellevue City Council has endorsed the proposed plan to put a 230-kilovolt line 18 miles through Bellevue from Redmond to Renton. The estimated costs of between \$150 and \$300 million depending on the alternative PSE selects, is outrageous and so beyond the needs of our area. PSE claims that if plan isn't implemented we could see rolling blackouts by as early as 2017, but the Lauckhart-Schiffman load-flow study CENSE paid for, claims the number is close to 2050 before system is affected. That is a huge difference. Not surprising now that PSE is owned by an Australian investment bank Macquarie Group Limited, which it took over in 2007. Its' a corporation and reports to its' shareholders. That should sound an alert to our community's best interests.

I144-A-2 |

After PSE applied for the needed permits from Bellevue, obtained approval from the Hearing Examiner and the City Council, they then reapproached the East Bellevue Community Council (refused the first time), for the conditional use permit approval. It was refused the first time, and fortunately for our city, the EBCC had the courage to disapprove the CUP again. Where was that integrity and representation of the Bellevue City Council? PSE continues the blind path, but then the KC Superior Court upheld the EBCC decision. Another appeal this summer? Let's allow common sense to prevail and disallow this project to go forward for good.

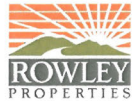
I144-A-3 | There are many alternatives to mowing down hundreds of trees and decimating our suburban environment that many of us have worked so hard to protect and encourage. Proposals such as this, with it's massive swath of destruction, make me think that none of these planners, engineers, investment bankers, ever live in the community they select to wipeout. No doubt living with 300ft steel power poles in your backyard instead of the 8,000 mature trees obliterated we all need for oxygen making, wouldn't bother anyone who lives elsewhere, but for me the trade-off is NOT worth it.

I144-A-4 |

Julie Beffa  
 9110 NE 21st Place  
 Clyde Hill, WA 98004

I144-A -1 See response for Key Theme ECON-4.  
 I144-A -2 See responses for Key Themes OBJ-1 and OBJ-3.  
 I144-A -3 See response for Key Theme LU-4.  
 I144-A -4 Comment noted.





March 11, 2016

Heidi Bedwell, Energize Eastside EIS Program Manager  
 City of Bellevue  
 Development Services Department  
 450 110th Ave NE  
 Bellevue, WA 98004

Dear Heidi:

**RE: Energize Eastside DEIS Phase I Comment and Request to be Added as Party of Record**

I145-A-1

Thank you for the opportunity to review and publicly comment on the Energize Eastside Project. Given the significance of this project's contribution to the economic vitality and health of the Eastside community, we are in full support of the Energize Eastside Project and its process (both study and construction) moving forward quickly, without delay. We understand that without this project, the consequence of power failure is simply unacceptable. We also understand given the complexity of infrastructure needs and planning associated, the general public may not understand the small trade-offs required are almost inconsequential in the scheme of our region's power supply for its residents, businesses and visitors now, and well in to the future.

I145-A-2

From our perspective, Alternative 1-Option A makes the most sense for implementation given it provides PSE with reliability and flexibility within use of an existing corridor. Efficient use of utility systems already in place will help limit impact on several fronts and the cost associated. We look forward to learning more about Alternative 1-Option A in Phase II of the DEIS.

I145-A-3

Alternative 1-Option B may potentially make sense long term with PSE working with another utility provider, Seattle City Light, to coordinate infrastructure in closing the power loop for the Greater Eastside.

I145-A-4

A safe, reliable electricity infrastructure for the long term (beyond 2024) is imperative to not only Issaquah, but our region as a whole. Solutions that are proven for a reliable infrastructure must be used, therefore we are not in favor of Alternative 2. Further, a No Action alternative would simply be unacceptable for our communities, citizens and businesses.

I145-A-5

1595 NW Gilman Blvd., Ste. 1, Issaquah WA 98027  
[www.rowleyproperties.com](http://www.rowleyproperties.com)

- I145-A -1 See response for Key Theme OBJ-1.
- I145-A -2 See response for Key Theme ALT-1.
- I145-A -3 See response for Key Theme ALT-1.
- I145-A -4 Comment noted.
- I145-A -5 Comment noted.

I145-A-5 |

We are very concerned about a pending critical failure in the system as soon as Winter 2017 without this Project (to close the loop) coming to fruition with a sense of urgency. Thank you for the hard work, diligence and study to come to discover the best and most prudent course of action. We look forward to the next phase of the DEIS for more information about the alternatives we have noted as being in support of.

Respectfully,



Kari Magill, CEO



Skip Rowley, Chairman of the Board

COMMENT

RESPONSE

**From:** [Sean Cox](#)  
**To:** [info@energize-eastsideeis.org](mailto:info@energize-eastsideeis.org)  
**Cc:** [sean.ozel.cox@gmail.com](mailto:sean.ozel.cox@gmail.com)  
**Subject:** Energize Eastside  
**Date:** Friday, March 11, 2016 12:27:43 PM

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Comment from:  
Sean Cox  
4538 Somerset Dr SE  
Bellevue, WA 98006

Section 3 Earth  
Significant Unavoidable Adverse Impacts

I146-A-1

This risk statement is not true as under Alternative 1a the taller poles pose a greater risk of having the transmission lines destroy lives and property in a seismic event. The current lines would fall within the easement boundaries while the new taller poles and vertical design would have them fall onto existing properties along the outlined routes. This risk needs to be recognized and mitigated.  
Sean Cox.

I146-A-1

I146-A -1 See response for Key Theme EARTH-2.  
I146-A -2 See response for Key Theme EARTH-2.

COMMENT

RESPONSE

**From:** [Sean Cox](#)  
**To:** [Info@EnergizeEastsideEIS.org](mailto:Info@EnergizeEastsideEIS.org)  
**Cc:** [sean.ozel.cox@gmail.com](mailto:sean.ozel.cox@gmail.com)  
**Subject:** Energize Eastside  
**Date:** Friday, March 11, 2016 12:34:52 PM

---

Comment from:  
Sean Cox  
4538 Somerset Dr SE  
Bellevue, WA 98006

I146-B-1 | Section 3 and Section 5  
I146-B-2 | There is no mention in section 3 and 5 of the natural springs which exist along the proposed routes.  
Risk mitigation plans will need to be developed as construction will cause the rerouting of these natural springs and cause flooding and other water related issues to structures. This is especially true on the hills and valleys that these lines must traverse.  
Sean Cox

I146-B -1 See response for Key Theme WTR-1.  
I146-B -2 See response for Key Theme WTR-4.

**From:** [Sean Cox](#)  
**To:** [Info@EnergizeEastsideEIS.org](mailto:Info@EnergizeEastsideEIS.org)  
**Cc:** [sean.ozel.cox@gmail.com](mailto:sean.ozel.cox@gmail.com)  
**Subject:** Energize Eastside  
**Date:** Friday, March 11, 2016 12:40:44 PM

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Comment from:  
Sean Cox  
4538 Somerset Dr SE  
Bellevue, WA 98006

Section 8 Environmental Health  
PSE has a poor record of complying with applicable regulations and safety stands as can be witnessed by fines and other actions which have been taken against them by local, regional, and national authorities. This needs to be addressed with a mitigation plan that provides adequate oversight based on their track record and the additional risks this presents to the project.  
Sean Cox

I146-C -1 See response for Key Theme PLS-5.

I146-C-1

**From:** [Sean Cox](#)  
**To:** [Info@EnergizeEastsideEIS.org](mailto:Info@EnergizeEastsideEIS.org)  
**Cc:** [sean.ozel.cox@gmail.com](mailto:sean.ozel.cox@gmail.com)  
**Subject:** Energize Eastside  
**Date:** Friday, March 11, 2016 12:48:38 PM

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Comment from:  
Sean Cox  
4538 Somerset Dr SE  
Bellevue, WA 98006

Section 10 Land Use and Housing  
It should be noted that Alternative 1a could also have significant impacts as the existing easement through residential neighborhoods will need to be larger to accommodate the taller poles and to meet NERC and other national guidelines.  
Sean Cox

I146-D -1 See response for Key Theme LU-5.

I146-D-1

**From:** [Sean Cox](#)  
**To:** [Info@EnergizeEastsideEIS.org](mailto:Info@EnergizeEastsideEIS.org)  
**Cc:** [sean.ozel.cox@gmail.com](mailto:sean.ozel.cox@gmail.com)  
**Subject:** Energize Eastside  
**Date:** Friday, March 11, 2016 1:02:25 PM

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Comment from:  
Sean Cox  
4538 Somerset Dr SE  
Bellevue, WA 98006

Section 11 Views and Visual Resources

The impact of views to residents along the proposed route as well as the views of significant numbers of residents across the region will be impacted as they have to look at these transmission lines as the cross through the 5 cities impacted by the industrial blighting of their neighborhoods. For a high tech area, this is not the legacy we want to leave for our children and future generations.  
Sean Cox

I146-E -1 See responses for Key Themes VR-1 and VR-5.

I146-E-1



Thomas A. Gilchrist  
President  
(425) 455-8140  
tomg@sterlingrealty.com

March 11, 2016

Heidi Bedwell  
Energize Eastside EIS Program Manager  
City of Bellevue  
PO Box 90012  
Bellevue, WA 98009

RE: Scoping comments – Energize Eastside Phase I Draft EIS

Dear Ms. Bedwell:

Sterling Realty Organization is a local real estate company that has operated on the Eastside for more than 60 years. We own the super block in Downtown Bellevue at the SE quadrant of NE 8<sup>th</sup> and 106<sup>th</sup> as well as three office buildings, a theatre and strip center in Factoria and 5.15 acres known as Campus Office Park on 116<sup>th</sup> in Bellevue. In total over 150 tenants employing thousands of people operate out of our Bellevue holdings.

I147-A-1

Our tenants count on reliable power. Some time back we experienced power outages in the Factoria area for periods of days. The impact on our tenants was tremendous. As the Eastside continues to grow it is essential that we provide reliable power through proven electrical infrastructure. Not addressing these needs today threatens our future ability to grow and prosper as a region. The problem has been studied thoroughly and we believe the need is real.

I147-A-2

Sterling Realty strongly supports advancing Alternative 1A to Phase 2 of the EIS. We have proven infrastructure that should be upgraded to accommodate the needs of a growing region (infrastructure that is directly adjacent to existing holdings in Factoria). Time is of the essence. Growth is occurring throughout the Eastside, not only in Bellevue but from Renton to Issaquah to Kirkland.

Help keep this region a great place to live and to do business by ensuring reliable power going forward.

Sincerely,

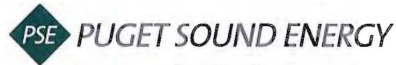
Thomas A. Gilchrist  
President  
Sterling Realty Organization Co.

600 106th Ave. N.E., Suite 200, Bellevue, WA 98004-5043 • (425) 455-8100 • Fax (425) 455-8165

I147-A -1 See response for Key Theme OBJ-1.

I147-A -2 Comment noted.





Puget Sound Energy  
P.O. Box 97034  
Bellevue, WA 98009-9734  
PSE.com

March 14, 2016

City of Bellevue  
Development Services Department  
Attn: Heidi Bedwell, Senior Land Use Planner  
450 110th Ave NE  
Bellevue, WA 98004

**RE: Puget Sound Energy's Comments on the Energize Eastside Phase 1 Draft Environmental Impact Statement**

Dear Ms. Bedwell:

Puget Sound Energy ("PSE") thanks the City of Bellevue ("City") and partner cities (collectively "Cities") for their thorough review and respectfully submits the following and attached comments on the Energize Eastside Project Phase 1 Draft Environmental Impact Statement ("DEIS").

The purpose of PSE's Energize Eastside project is to solve a transmission capacity deficiency problem that will develop by the winter of 2017-18 and summer of 2018 in the area roughly between Lake Washington and Lake Sammamish ("Eastside"). Of the alternatives analyzed in the Phase 1 DEIS, PSE selects Alternative 1, Option A, which requires the construction of a new 230 kilovolt (kV) to 115 kV transformer in the center of the Eastside and a new 230 kV transmission line between the Talbot Hills and Lake Sammamish substations.<sup>1</sup> PSE further proposes to route the new transmission line, to the extent possible, within PSE's existing Sammamish-Lakeside-Talbot Hill 115 kV transmission line corridor, as it is the shortest and least impactful route. PSE chooses Alternative 1, Option A because it best meets all of the project objectives set forth in the DEIS – it utilizes a proven technology, solves the transmission capacity deficiency problem, meets mandatory federal standards, is the most cost effective and reliable option, and has the greatest longevity.

These comments proceed in two parts. First, a table is presented containing PSE's core comments on the DEIS. Second, PSE briefly addresses a renewed effort to cast stones at the need for the Energize Eastside Project. The need for this project was conclusively established by PSE and an independent needs assessment undertaken by the City of Bellevue. PSE respectfully requests that the partner Cities not engage this distraction, as it is a diversion from important issues implicated by this project and, ultimately, wastes valuable public resources.

<sup>1</sup> This solution (and its justification) is outlined in the DEIS and the *Transmission Solution Study* and the *Supplemental Eastside Solutions Study Report* (Gentile, et al., 2014, 2015).

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I150-A -1 See response for Key Theme ALT-1.

I150-A-1

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Page 2

**I. PHASE I DEIS REVIEW COMMENTS**

PSE has reviewed the Phase 1 DEIS and commends the Cities and their consultants for thoroughly reviewing PSE’s proposed Energize Eastside project. The DEIS comprehensively identifies and provides analysis of numerous environmental elements (e.g., Greenhouse Gas Emissions, Water Resources, Aesthetics) defined under SEPA. Phase 1, accordingly, not only aided PSE in re-visiting all possible project solutions, it helped PSE to better assess potential impacts and identify ways to reduce those impacts through design changes and mitigation.

In addition to benefiting from its review of the DEIS, PSE has identified key assumptions and issues that we believe need to be clarified or corrected before finalizing this document. The table below summarizes PSE’s core comments on the alternatives assessed in the Phase 1 DEIS. These comments generally focus on significant impact determinations that are based on incorrect assumptions or impacts that are likely to be mitigated. PSE is also providing detailed annotated comments, which are attached to this letter as Attachment A.

| Environmental Element    | Impact Assessment for Alt. 1 | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Greenhouse Gas Emissions | Option A – Construction:     | The DEIS improperly concludes that implementation of Alternative 1, Option A will require significant tree/vegetation clearing and so will result in a significant loss of GHG sequestration. The DEIS assumes a worse-case tree removal scenario, which is unlikely to occur. Tree removal can be substantially avoided by using existing corridors. The DEIS incorrectly states that up to an additional 50-feet of lateral clearing would be required if the existing 115 kV corridor is used. Specifically, if the existing Sammamish-Lakeside-Talbot Hill 115 kV corridor is used, no additional corridor width would be required, thereby significantly avoiding the potential loss of GHG sequestration. In addition, the actual number of trees removed will not be determined until Phase 2 of the DEIS. During PSE’s Community Advisory Group (CAG) process, preliminary estimates of impacted trees by routes were presented. Although these numbers are not specifically used in the DEIS, PSE believes that it is important to point out that they represent only the estimated the number of trees that could be impacted along a route, which included trimming. The estimates were not meant to suggest only removal. |
|                          | Option B – Construction      | The complexity of rebuilding the Seattle City Light (SCL) line is understated in the DEIS. Since this line is not owned by PSE, the methods, extent, and sequencing of the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

I150-A -2 See responses for Topic GHG.

I150-A-2

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I150-A -3 See response for Key Theme P&A-6.

I150-A-2

I150-A-3

| Environmental Element | Impact Assessment for Alt. 1 | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                              | <p>rebuild would need to be coordinated with SCL. The assumption in the DEIS that the SCL could be taken completely out of service and rebuilt in place has not been studied electrically or agreed to by SCL. If electrical load/flow studies show that the SCL line could be taken completely out of service for an extended amount of time, then the line could be rebuilt in place. However, if the line could not be taken completely out of service, it is likely that a replacement line would have to be constructed adjacent to the existing line. This approach would potentially require clearing the entire width of SCL's corridor and possibly acquisition of additional easement, which would result in equivalent or even greater impacts than the worse-case scenario of Alternative 1, Option A. Alternatively, it may be possible to take shorter outages on the SCL line and construct the replacement line in sections over a couple of years. However, this approach would not meet the in-services dates needed for the project.</p> <p>The DEIS's discussion of Alternative 1, Option B, omits the additional 9 miles of re-conductoring that would need to occur between PSE's Sammamish substation and BPA's Bothell Substation (outside the study area). The DEIS failed to include an analysis of the GHG impacts of the additional construction work. Operationally, there would be no change along the north 9 mile section of re-conductor.</p> <p>The DEIS's discussion of Alternative 1, Option B, also omits the additional 3 miles of new double circuit 230kV transmission line corridor that would be needed to electrically interconnect the SCL line source to Sammamish substation and separately to Lakeside substation. The DEIS failed to include an analysis of the GHG impacts of both the construction work and the tree/vegetation clearing that would be required.</p> |
| Plants and Animals    | Construction and Operation   | The construction impacts of using the existing transmission line corridor for Alternative 1, Option A should be updated consistent with this comment. Use of existing corridors would reduce the amount of habitat that would be converted to a transmission line-compatible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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I150-A -4 See response for Key Theme LU-1.  
I150-A -5 See response for Key Theme VR-7.

| Environmental Element | Impact Assessment for Alt. 1 | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-3              |                              | <p>configuration. Creation of new transmission lines does not necessarily remove habitat for wildlife; however, it does change the type of habitat available to lower growing species and possibly the composition of the species that use it.</p> <p>Operation: The DEIS overstates the impact of a new transmission line on avian species (Alternative 1), and understates the impact of constructing 60 miles of 115kV transmission lines, as studied under Alternative 3. Although it may seem counterintuitive for avian species, higher voltage power lines are safer than lower voltage lines for a number of reasons. As stated by the Avian Power Line Interaction Committee, "Due to their high voltages, transmission lines are designed with large separations between energized conductors. Therefore, transmission lines typically do not pose bird electrocution risks" (<a href="http://www.aplic.org/">http://www.aplic.org/</a>). Additionally, the larger conductor types used with transmission lines are more visible to avian species and therefore, are not as likely to result in avian collisions.</p> |
| I150-A-4              | Land Use and Housing         | Option A - Operation<br><p>PSE's preference is to use existing corridors where possible in order to minimize impacts to areas that do not already have utilities. Use of existing utility and road corridors require the least amount of preparation and the least amount of impact. For example, PSE's existing Sammamish-Lakeside-Talbot Hill 115 kV corridor was established in the late 1920s. It has been operated and maintained as a utility corridor for decades with significant development occurring around it during that time. Use of this corridor would require less vegetation removal than a new corridor, land use would not need to change, and additional property would not likely be converted to utility use. These positive benefits of using the existing corridor should be reflected in the DEIS.</p>                                                                                                                                                                                                                                                                                                |
| I150-A-5              | Views and Visual Resources   | Operation<br><p>PSE's preference is to use existing corridors where possible to minimize impacts to areas that do not already have prominent utility corridors. To better address potential impacts to view and visual resources, PSE understands the importance of design flexibility so that the</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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I150-A -6 See response for Key Theme REC-1  
I150-A -7 See response for Key Theme H&C-2.  
I150-A -8 See response for Key Theme UTL-6.

| Environmental Element | Impact Assessment for Alt. 1                                  | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-5              |                                                               | community concerns can be better addressed. For instance, taller poles may be preferred, in areas that are forested. Alternatively, shorter poles may be preferred in areas on hillsides with low vegetation. Each pole type has its advantages and disadvantages depending on the setting. Taller poles allow for plant species with taller mature heights to remain under the lines, greater spacing between poles, and the ability to move the conductors up out of views. In areas where existing vegetation is low and/or views are prominent, reducing pole height or minimizing the overall change in height has benefits.                                                                                                                                              |
| I150-A-6              | Recreation<br>Construction and Operation                      | The DEIS should state that when existing transmission line corridors are used, the impacts to recreation would be temporary and limited to those resulting from construction. Additionally, contrary to conclusions in the DEIS, utility corridors are compatible with recreational uses. Trail systems often only exist because of the presence of a utility corridor. There are many examples of this in our region, including: 1) Bridle Trails State Park Equestrian Trail on the SCL corridor (the SCL corridor was established prior to the area becoming a park); Interurban Trail, south King County (situated on PSE's 230 kV/115 kV corridor; Olympic pipeline is also co-located in this corridor); and the Puget Power Trail in Redmond (along PSE's 230 kV line). |
| I150-A-7              | Historic and Cultural Resources<br>Construction and Operation | The DEIS should state that prior to construction, PSE will commission the appropriate historic and cultural resources field surveys along the proposed route. This will help ensure that the appropriate analysis is performed at identified properties. Additionally, as stated in the DEIS, an Inadvertent Discovery Plan will be prepared for the project.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| I150-A-8              | Utilities<br>Options A & B - Construction                     | The DEIS should state that, if an existing utility corridor is used, PSE will commission the appropriate engineering analysis that will evaluate soil conditions as they relate to conductivity and corrosiveness of existing underground utilities. Such a study is important in determining the appropriate grounding and cathodic protection needed to help ensure continued safe operation of co-located utilities.                                                                                                                                                                                                                                                                                                                                                        |

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I150-A-8

| Environmental Element | Impact Assessment for Alt. 1 | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                              | <p>All steel pipelines are required to have cathodic protection, regardless if there is a nearby power line. In areas where transmission lines and pipelines are co-located, PSE works with the pipeline operator to ensure appropriate engineering analysis is performed so that if any modifications to the pipeline’s cathodic protection are necessary, they can be made.</p> <p>PSE and Olympic Pipeline will evaluate the construction and operational parameters related to the replacement of the two existing 115 kV lines with both a 230 kV and a 115 kV line. This will include electrical interaction potential, cathodic protection, and proximity. This will include the applicable field work necessary to inform design parameters and construction methods.</p> |

As explained above, PSE is also submitting an annotated table containing comments on each DEIS section (Attachment A). Overall, we believe that the DEIS is a thorough document that reflects a rigorous review of alternatives potentially addressing PSE’s identified need to improve transmission and reliability on the Eastside.

**II. THE ENERGIZE EASTSIDE PROJECT IS NEEDED**

PSE’s *Eastside Needs Assessment Report, Supplemental Eastside Needs Assessment Report* (Gentile, et al., 2014, 2015), and the City of Bellevue’s *Independent Technical Analysis Energize Eastside Phase I DEIS* confirm the project need. The transmission system planning process for the electric system is governed by a strict set of mandatory requirements promulgated by the Federal Energy Regulatory Commission (“FERC”) and the North American Electric Reliability Corporation (“NERC”). Both organizations require that a utility company demonstrate that its transmission line infrastructure can handle reasonably foreseeable electricity loads under a robust range of expected conditions such as:

I150-A-9

- Equipment outages;
- Variations in weather causing differences in demand;
- Differences in generation dispatch patterns; and
- A variety of other specific things that can affect the electric system.

These requirements are subject to federal audits and, if not met, can result in significant fines to PSE. The DEIS’s discussion of the “No Action Alternative” outlines some of the consequences of failing to meet the requirements.<sup>2</sup>

<sup>2</sup> It is important to note that the FERC and NERC have different requirements for system planning and for system operations. System planning considers a range of probable alternatives,

I150-A -9 See response for Key Theme OBJ-2.



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PSE analyzed planning needs in the *Eastside Needs Assessment Report* and *Supplemental Eastside Needs Assessment Report* (Gentile, et al. 2013, 2015). In these studies, PSE looked at a wide range of reasonably foreseeable customer demand scenarios and iterated over six million scenarios of potential contingencies affecting system element outages. PSE also looked at 550 probable events that could affect system reliability. The studies (1) demonstrated that the Eastside's transmission capacity will be deficient in the near-term and will require additional infrastructure and (2) identified the system elements causing the most system vulnerability. Responsive to these conclusions, PSE's system planners evaluated a wide range of possible solutions to update the system to meet performance requirements, and ultimately favored options similar to those set forth in Alternative 1 of the DEIS.

The City of Bellevue, encouraged by public concern about the project, hired independent transmission planning experts and undertook its own needs assessment. See *Independent Technical Analysis of Energize Eastside for the City of Bellevue* (Utility System Efficiencies, Inc., 2015). These experts unequivocally confirmed a need for Energize Eastside.

**A. The Lauckhart and Schiffman Load Document is Inaccurate and Does Not Comply with Federal Planning Standards**

PSE is aware that members of the public (Lauckhart and Schiffman, 2016) prepared a document that calls into question PSE and the City of Bellevue's needs assessment by conducting their own load flow modeling for the Eastside. As the utility responsible for delivering reliable power to the Bellevue community, it is PSE's duty to point out the deficiencies and errors in this document. More importantly, PSE must emphasize the risk to the reliability of the community's electric service if this study is given merit. Simply put—the study is inaccurate and flawed for the following reasons:

- 1) The study erroneously interprets power flows to Canada;
- 2) The study does not conform to mandatory federal transmission planning standards and therefore cannot be used as a basis for system planning;
- 3) The study confuses planning standards with day-to-day system operations; and
- 4) The study reaches irrational conclusions.

PSE's detailed review of the Lauckhart and Schiffman document can be found in Attachment B of this letter.

Electrical transmission system planning is a complex and rigorous exercise, performed by industry experts with in-depth knowledge of federally-mandated system planning requirements. As explained above, the need for this project has been conclusively established several times by multiple independent experts, as well as PSE. Therefore, moving forward with the Phase 2 DEIS, this issue should not be addressed further.

including foreseeable outages of vital equipment at high load times on a forward-looking basis. In contrast, system operation requirements focus on the real time operation of the electric system, and are designed to deal with issues that are imminent or are already occurring. Planning, therefore, must look forward to meet foreseeable conditions (even if those conditions are not currently affecting the system) so that system operators have sufficient flexibility to keep the electric system intact under a wide range of circumstances.

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### III. CONCLUSION

In conclusion, PSE once again thanks the Cities for their careful review of the Energize Eastside project. In welcoming an in-depth audit of the project, which once again places PSE's decision to propose a new 230 kV transmission line in the Eastside under the public microscope, PSE invites ways to improve the project and to build trust with the public. This DEIS process has challenged PSE engineers to creatively explore all potential paths to addressing system deficiencies and we sincerely believe that our efforts identify a solution that meets the project need while minimizing and mitigating impacts. We look forward to fully engaging the public in a dialogue on the potential site-specific impacts of this complex project during the Phase 2 DEIS process.

Sincerely,

**Puget Sound Energy**



Jens Nedrud  
Energize Eastside  
Project Manager



**Attachment A**  
**Puget Sound Energy Annotated Comments**  
**Energize Eastside Phase 1 Draft Environmental Impact Statement**  
 March 14, 2016



Follows are Puget Sound Energy's comments on the Energize Eastside Phase I Draft Environmental Impact Statement. The comments are arranged by chapter and Section to facilitate review.

I150-A-10  
 I150-A-11  
 I150-A-12  
 I150-A-13  
 I150-A-14  
 I150-A-15  
 I150-A-16  
 I150-A-17

| Page                                      | Section | Paragraph       | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------|---------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chapter 1 Introduction and Summary</b> |         |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1-1                                       | 1.1     | Figure 1-1      | To clarify, the shaded area indicates which customers would potentially be affected by rotating outages.                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 1-2                                       | 1.1     | 3               | The text states, "As illustrated in Figure 1-1, there is no 230 kV line that reaches the center of the Eastside area." In actuality, Seattle City Light's (SCL) parallel 230 kV lines go through the center of the Eastside; however, it does not have the necessary capacity.                                                                                                                                                                                                                                                                                           |
| 1-6                                       | 1.3     | Final paragraph | The DEIS text states "Once equipment is in an overload condition the options are to let it fail or take it out of service." To clarify, NERC requires that utilities prevent overloads of bulk transmission elements such as lines and transformers.                                                                                                                                                                                                                                                                                                                     |
| 1-7                                       | 1.3     | Final paragraph | From the Stantec report: "...power flow to other parts of the system... have minimal effect..." In actuality, power flows through the region affect the strength of the source from the north or the south of the central Eastside area. A strong south-north flow means that Talbot Hill will provide the majority of the Eastside power. A strong north-south flow will result in Sammamish providing the majority of the Eastside power.                                                                                                                              |
| 1-17                                      | 1.9.2   | First Paragraph | The length of these options is actually 16 miles at a minimum and more than 26 miles using Alternative 1B - SCL lines.<br>To clarify, PSE has used "approximately 18 miles" as an indicator if a route selected is other than the existing Sammamish-Lakeside-Talbot Hill 115 kV corridor, which is approximately 16-miles in length. The 18-mile long corridor assumption was used as the primary basis for much of the analysis performed as part of the DEIS; therefore, if the existing corridor is used, less impacts should be realized than what was anticipated. |
| 1-18                                      | 1.9.2   | Final paragraph | "...a minimum of approximately 18 miles."<br>Same comments as above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1-18                                      | 1.9.2   | Final Paragraph | It should be noted that in some instances where existing 115 kV or 230 kV line corridors are utilized, the new 230 kV line could replace existing infrastructure and not be in addition to the existing lines. For example, if the corridor that is occupied by PSE's two existing Sammamish-Lakeside-Talbot Hill 115 kV lines is used for the new 230 kV line, then one of the existing 115 kV lines would be removed and replaced with the new 230 kV line. In other words, there would still only be two lines, not three.                                            |
| 1-18                                      | 1.9.2   | Final Paragraph | Based on the total length using Alternative 1, Option B, the SCL lines may be longer than the submerged line option and the greatest length of all options considered under this alternative.                                                                                                                                                                                                                                                                                                                                                                            |

I150-A -10 See response for Key Theme OBJ-5.  
 I150-A -11 See response for Key Theme OBJ-5.  
 I150-A -12 Comment noted. [Placeholder- confirm this clarification has been made in the Final EIS.]  
 I150-A -13 This clarification was incorporated in Section 1.3 of the Phase 2 Draft EIS and Final EIS. Also, see the response for Key Theme OBJ-3.  
 I150-A -14 See response for Key Theme ALT-3.  
 I150-A -15 See response for Key Theme ALT-3.  
 I150-A -16 See response for Key Theme ALT-3.  
 I150-A -17 See response for Key Theme ALT-3.



|           | Page | Section              | Paragraph                       | Comment                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------|------|----------------------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-18 | 1-24 |                      | No Action                       | It should be noted that system maintenance also includes replacement of poles.                                                                                                                                                                                                                                                                                                                                 |
| I150-A-19 | 1-24 |                      | Alternative 1                   | Depending on the route and design selected, Option A and B could have approximately the same level of vegetation alteration. Option B could have higher level of vegetation alteration due to the total length and number of miles of new corridor.                                                                                                                                                            |
| I150-A-20 | 1-24 |                      | Mitigation                      | Use of existing utility and road corridors would reduce tree removal.                                                                                                                                                                                                                                                                                                                                          |
| I150-A-21 | 1-28 |                      | Alternative 1                   | 4th bullet: This statement is not correct and overstates the impact of Alternative 1 to birds relative to Alternative 3. 230 kV lines have less collision and electrocution potential than do 115kV and distribution lines as the conductors are larger and spaced farther apart.                                                                                                                              |
| I150-A-22 | 1-28 |                      | Unavoidable impacts             | Use of existing corridors would reduce the potential for impacts.                                                                                                                                                                                                                                                                                                                                              |
| I150-A-23 | 1-31 | Affected Environment |                                 | There are no PSE HPPF powerlines in the study area.                                                                                                                                                                                                                                                                                                                                                            |
| I150-A-24 | 1-32 |                      | No Action                       | Wood poles are more susceptible to failure from storm events than they are from earthquakes or lightning strikes.                                                                                                                                                                                                                                                                                              |
| I150-A-25 | 1-32 |                      | Alternative 1                   | If steel poles are used, they are more robust than wood poles and therefore less susceptible to damage from storms and geologic events, such as earthquakes and landslides. This is a result of the higher level of engineering that goes into designing steel poles. Additionally, both wood and steel poles can be fitted with static and ground wires to help reduce the probability of shielding failures. |
| I150-A-26 | 1-32 |                      | Alternative 1                   | HPPF cables are not being proposed.                                                                                                                                                                                                                                                                                                                                                                            |
| I150-A-27 | 1-32 |                      | Mitigation Measures             | SF6 is used in breakers and not transformers.                                                                                                                                                                                                                                                                                                                                                                  |
| I150-A-28 | 1-32 |                      | Mitigation Measures             | No HPPF lines are being proposed.                                                                                                                                                                                                                                                                                                                                                                              |
| I150-A-29 | 1-34 |                      | Mitigation Measures             | All equipment should meet the appropriate regulatory noise thresholds. An allowance of 5 dBA for any equipment is arbitrary and not based on regulation.                                                                                                                                                                                                                                                       |
| I150-A-30 | 1-38 |                      | Alternative 1                   | Alternative 1, Option B could have equal or greater clear zones than Option A.                                                                                                                                                                                                                                                                                                                                 |
| I150-A-31 | 1-38 |                      | Significant Unavoidable Impacts | It is important to clarify that significant impacts from Alternative 1 would be minimized if the route is built in existing transmission line or road corridors.                                                                                                                                                                                                                                               |

- I150-A -18 See response for Key Theme WTR-7.
- I150-A -19 See response for Key Theme GHG-2.
- I150-A -20 See response for Key Theme GHG-2.
- I150-A -21 See response for Key Theme P&A-6.
- I150-A -22 See response for Key Theme P&A-2.
- I150-A -23 See response for Key Theme OBJ-5.
- I150-A -24 Comment noted.
- I150-A -25 Comment noted.
- I150-A -26 Comment noted.
- I150-A -27 See response for Key Theme OBJ-5.
- I150-A -28 Comment noted.
- I150-A -29 See response for Key Theme NOI-3.
- I150-A -30 See response for Key Theme VR-3.
- I150-A -31 See response for Key Theme VR-2.



|                                       | Page    | Section                         | Paragraph                       | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------|---------|---------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-32                             | 1-40    | Mitigation Measures             |                                 | Recreational trails commonly co-exist with utility corridors. It is important to note that many trail systems exist solely because of such utility corridors. New trails or improvements to existing trails systems can be incorporated into siting of utility projects so that there is a positive impact to recreation.                                                                                                                                                                        |
| I150-A-33                             | 1-40    | Significant Unavoidable Impacts |                                 | This conclusion ignores the fact that recreational activities and areas commonly co-exist with utility corridors. Please consider revising to, "Some significant impacts may be unavoidable if design or siting factors require elimination of certain recreational facilities, however, transmission lines and electrical facilities commonly co-exist."                                                                                                                                        |
| I150-A-34                             | 1-50-51 | Construction Impact Table       | Greenhouse Gas Emissions        | The conclusion on page 1-24 that "If mitigation measures are employed, there would be no significant and unavoidable adverse impacts related to GHG emissions associated with any of the project alternatives" and the conclusions that all options under Alternative 1 have "minor to significant impacts." Project impacts for all options should be minor as mitigation is likely required by permitting authorities.                                                                         |
| I150-A-35                             | 1-50-51 | Construction Impact Table       | Historic and Cultural Resources | Page 1-42 concludes that "[t]here are no known significant unavoidable adverse impacts to historic and cultural resources." However, the Construction Impact Comparison Table lists impacts as "minor to significant" for Alternative 1, but as "minor" with respect to the Energy Storage and Peak Power Generation Component. These conclusions are inconsistent as there are no known impacts, but risk of impacts should be the same for all alternatives requiring construction activities. |
| I150-A-36                             | 1-54    | Operation Impacts Comparison    | Noise                           | Noise impacts is understated as "moderate" as noise generated by the operation of peaker plants is expected to exceed local noise ordinances in many potential locations.                                                                                                                                                                                                                                                                                                                        |
| I150-A-37                             | 1-56    | Need for the Project            | 2nd paragraph                   | "The purpose of this EIS is not to determine whether the project is needed, but to confirm that the methods used to define the need are consistent with industry standards and generally accepted methods."<br>SEPA does not consider project need, so this review was optional. This statement implies that need is part of SEPA, when it is not.                                                                                                                                               |
| <b>Chapter 2 Project Alternatives</b> |         |                                 |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| I150-A-38                             | 2-14    |                                 |                                 | PSE's conservation included in the DEIS is mandated by state/federal construction requirements.                                                                                                                                                                                                                                                                                                                                                                                                  |
| I150-A-39                             | 2-15    | 2.3.1.1                         |                                 | Conductor replacement would involve more equipment than a "single-man lift". Additionally, regular pole replacement uses the same equipment as does installing a new line.                                                                                                                                                                                                                                                                                                                       |
| I150-A-40                             | 2-16    | 2.3.2                           | 2                               | "...two new 230 kV transmission lines would be constructed..."<br>To clarify, PSE proposes to build two new lines - one single 230 kV line and another 115 kV line designed to 230 kV standards.                                                                                                                                                                                                                                                                                                 |

- I150-A -32 See response for Key Theme REC-1.
- I150-A -33 See response for Key Theme REC-1.
- I150-A -34 See response for Key Theme GHG-1.
- I150-A -35 See response for Key Theme H&C-1.
- I150-A -36 See response for Key Theme NOI-4.
- I150-A -37 See response for Key Theme OBJ-1.
- I150-A -38 See response for Key Theme ALT-3.
- I150-A -39 See response for Key Theme ALT-3.
- I150-A -40 See response for Key Theme ALT-3.



I150-A-41

I150-A-42

I150-A-43

I150-A-44

I150-A-45

I150-A-46

I150-A-47

I150-A-48

I150-A-49

I150-A-50

I150-A-51

I150-A-52

I150-A-53

| Page | Section    | Paragraph  | Comment                                                                                                                                                                                                                                                                                        |
|------|------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      |            |            | "...addition of a second 230 kV circuit on the same poles..."                                                                                                                                                                                                                                  |
| 2-16 | 2.3.2      | 5          | This is not accurate. PSE is planning for a high capacity 115 kV circuit that will be designed for future operation at 230 kV. If double circuit poles are used, then one line will operate at 230 kV and the other at 115 kV.                                                                 |
| 2-18 | 2.3.2      | Figure 2-2 | To clarify, the figure shows dimensions being on poles spotted in our existing corridor at existing span lengths. Roadside construction or a different corridor with longer/shorter spans would have different heights.                                                                        |
| 2-18 | Figure 2-3 |            | Figure 2-3 shows a small distribution transformer, smaller than PSE's distribution transformers. The transformer for this project is significantly larger. Some examples can be found at: <a href="http://www.jshp.com/USA_Canada.html">http://www.jshp.com/USA_Canada.html</a>                |
| 2-22 | 2.3.2.2    | 3          | "an additional wire would be installed on top of the new poles for lightning protection." This is inaccurate. For clarification, an additional wire will be placed on top of the poles to provide protection for both lightning and ground potential rise.                                     |
| 2-22 | 2.3.2.2.2  | 2          | 4th Sentence - "Double circuit system" is misleading. For clarification, double-circuit poles would typically be 100 feet, while the single-circuit poles would typically be 85 feet.                                                                                                          |
| 2-22 | 2.3.2.2.2  | 2          | To clarify "a double circuit pole could incorporate a rebuild of an existing 115 kV line with a new 230 kV line on single poles similar..."                                                                                                                                                    |
| 2-23 | 2.3.2.2.3  | 2          | The 1st sentence in the Clear zones section is incorrect. NESC does not provide clearances for vegetation. NERC/FERC specifies vegetation clearance requirements for high voltage lines.                                                                                                       |
| 2-23 | 2.3.2.2.3  | 4          | To clarify, if PSE used its existing 115 kV corridor between the Sammamish and Talbot Hill substations, then no additional corridor width would be required, which significantly reduces the amount of vegetation management required and limits impacts to land use, housing, and aesthetics. |
| 2-23 | 2.3.2.2.3  | 6          | To clarify, poles can be set on a drilled pier foundation, which involves setting the anchor bolt cage in a poured column of concrete.                                                                                                                                                         |
| 2-23 | 2.3.2.2.3  | 6          | "(No foundations are used for wood poles)". This is incorrect. For clarification, depending on soil characteristics, PSE uses caissons for wood poles when necessary.                                                                                                                          |
| 2-23 | 2.3.2.2.3  | 6          | Last line is incorrect. PSE will need two poles at certain locations for obstacle avoidance and ease of construction. Span lengths are anticipated to be closer to 500-600 feet on average.                                                                                                    |
| 2-25 | 2.3.2.2.3  | 8          | 2nd sentence assumes PSE will need temporary construction access roads. For clarification, there may be existing adequate access, and in that case, no temporary construction roads would be needed. This will be explored more in Phase 2.                                                    |
| 2-25 | 2.3.2.2.3  | 1          | Fourth sentence is inaccurate. Wood poles typically do not have foundations; however, when necessary PSE uses caissons for wood poles depending on soil characteristics.                                                                                                                       |

Page 4

- I150-A -41 See response for Key Theme ALT-3.
- I150-A -42 See response for Key Theme ALT-3.
- I150-A -43 See response for Key Theme ALT-3.
- I150-A -44 See response for Key Theme ALT-3.
- I150-A -45 See response for Key Theme ALT-3.
- I150-A -46 See response for Key Theme ALT-3.
- I150-A -47 See response for Key Theme VR-3.
- I150-A -48 See response for Key Theme ALT-3.
- I150-A -49 See response for Key Theme ALT-3.
- I150-A -50 See response for Key Theme ALT-3.
- I150-A -51 See response for Key Theme ALT-3.
- I150-A -52 See response for Key Theme ALT-3.
- I150-A -53 See response for Key Theme ALT-3.



|           | Page | Section   | Paragraph         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------|------|-----------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-54 | 2-25 | 2.3.2.2.3 | 1                 | "Installation of transmission lines under existing roadways..."<br>The use of the word "under" in this sentence is misleading. For clarity, for overhead lines PSE will not be constructing the transmission lines under existing roadways.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| I150-A-55 | 2-23 | 2.3.2.2.3 |                   | In order to minimize pole heights, PSE has assumed that the existing pole spacing/locations would be used (approximately 500 to 700 feet). If spans were increased to around 1,000-feet, the pole heights would need to be taller.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| I150-A-56 | 2-23 | 2.3.2.2.3 | Pole Installation | During construction, if a corridor is used that has existing wooden poles and conductors, they would be removed. In order for this to occur, construction would need to take place during low load periods.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| I150-A-57 | 2-26 | 2.3.2.3   | 3                 | This paragraph is inaccurate. PSE studied a loop from one SCL 230 kV line to the Lakeside substation (approximately 1 mile), plus a loop of the other SCL 230 kV line to the Sammamish substation (approximately 1.8 miles). The loop to Lakeside should be on separate poles, not double circuit construction. If double circuit construction were used, then both feeds to Lakeside 230 kV bus could be lost for one outage event. However, the line between the SCL line and Sammamish could be a double-circuit line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| I150-A-58 | 2-26 | 2.3.2.3   | 3                 | In addition, this alternative would require the reconductor of the existing line between the Sammamish Substation and BPAs substation in Bothell (approximately 9 miles).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| I150-A-59 | 2-28 | 2.3.2.4.1 |                   | Construction in or over shallow bedrock would entail traditional trenching construction. Trenchless methods do not work in bedrock.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| I150-A-60 | 2-34 | 2.3.3     | 3                 | "According to PSE projections, it would take 74 MW of additional transmission capacity to marginally meet the demand through 2018 (Gentile et al., 2015). However, to address the capacity deficiency in 2018 with non-transmission resources would take approximately 163 MW of additional conservation, storage, and new generation within the Eastside beyond the 50 MW of conservation planned in 2013 Integrated Resource Plan (Nedrud, personal communication, 2015; PSE, 2013) (Figure 2-13)."<br>To clarify, the 74 MW sited above, represents the amount of load shedding in the summer of 2018 to manage potential overloads for certain N-1-1 and N-2 contingencies. The 2015 Supplemental Needs Assessment showed this concern in the summer 2018. The winter 2017/18 did not require load shedding. The 163 MW referenced above, in addition to the 50 MW of conservation planned, represents additional conservation, storage, and new generation within the Eastside for the 2017/18 winter period to reduce the Eastside transformer loading close to 90%. The total of 213 MW represents the needed conservation required for both the summer and winter 2017/18 and 2018. |
| I150-A-61 | 2-36 | 2.3.3.2   | 2                 | Tripling the amount of demand response in the area is very aggressive and beyond PSE's control.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| I150-A-62 | 2-36 | 2.3.3.2   |                   | To clarify, Demand Response is an opt-in technology for customers. PSE does not have the ability to force customers to adopt such technologies. PSE has run demand response pilot programs in the past with marginal success.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

- I150-A -54 See response for Key Theme ALT-3.
- I150-A -55 See response for Key Theme ALT-3.
- I150-A -56 See response for Key Theme ALT-3.
- I150-A -57 See response for Key Theme ALT-3.
- I150-A -58 See response for Key Theme ALT-3.
- I150-A -59 See response for Key Theme ALT-3.
- I150-A -60 See response for Key Theme ALT-3.
- I150-A -61 See response for Key Theme ALT-3.
- I150-A -62 See response for Key Theme ALT-3.



|                        | Page | Section   | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------|------|-----------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-63              | 2-40 | 2.3.3.4   | 1         | The first paragraph is inaccurate. To provide clarity, when using the term "storing" the text should refer to the MWh rating (225.6), rather than the power rating of 121 MW. For this section the power rating is 121 MW and storage capacity is 225.6 MWh.                                                                                                                                                         |
| I150-A-64              | 2-48 | Table 2-3 |           | Row 1: Pole replacement would be part of general maintenance under the no action alternative.                                                                                                                                                                                                                                                                                                                        |
| I150-A-65              |      |           |           | Row 3: 120-foot corridor would only be for new cross-country alignments. If existing 115 kV corridor is used, then no additional width would be required.                                                                                                                                                                                                                                                            |
| I150-A-66              | 2-54 | 2.5       | 2         | Row 4: Additional width may be required depending upon the rebuild scenario.<br>To add, these power outages could begin as early as the summer of 2018 and impact nearly 131,000 customers.                                                                                                                                                                                                                          |
| <b>Chapter 3 Earth</b> |      |           |           |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I150-A-67              | 3-5  | 3.3.3.2   | 1         | PSE will use stormwater mitigation (detention) and will address stream bank erosion due to increase in runoff from new impervious surfaces. PSE complies with local agencies requirements on flow control mitigation to protect the natural conveyance systems downstream from flooding and erosion.                                                                                                                 |
| I150-A-68              | 3-11 | 3.3.3.1   | 1         | Renton also has coal mine hazards, which is not listed in the DEIS.                                                                                                                                                                                                                                                                                                                                                  |
| I150-A-69              | 3-12 | 3.6       | 1         | It should be noted that some regulatory agencies have lower thresholds.                                                                                                                                                                                                                                                                                                                                              |
| I150-A-70              | 3-14 | 3.6.2     | 1         | Please correct this paragraph to state that construction impacts related to geologic and seismic hazards include pole replacement that is necessary as part of routine system maintenance.                                                                                                                                                                                                                           |
| I150-A-71              | 3-14 | 3.6.3     | 2         | This paragraph understates the importance of preparing areas for all substation equipment. PSE will prepare the area for foundations to support the new control house, transformer and associated electrical equipment in accordance with regulatory requirements and industry standards.                                                                                                                            |
| I150-A-72              | 3-15 | 3.6.3.2   | 1         | Impacts may be the same or greater than Alternative 1 depending on how the SCL line is rebuilt. If the existing PSE 115 kV Sammamish-Lakeside-Talbot Hill corridor is used, then both alternatives would be replacement of existing lines. The assumption that PSE's corridor would need to be widened is not correct. The 230 kV and high capacity 115 kV lines can fit within the existing 100-foot wide corridor. |
| I150-A-73              | 3-16 | 3.6.4     | 1         | Depending on where the peaker plants were located, additional natural gas pipelines would be likely as would water and sewer pipelines.                                                                                                                                                                                                                                                                              |
| I150-A-74              | 3-16 | 3.6.4     | 1         | To clarify, it is not required that earthwork activities are supervised by a geotechnical engineer. Design plans would take into account the geotechnical engineer's recommendations.                                                                                                                                                                                                                                |
| I150-A-75              | 3-16 | 3.6.5     | 2         | To clarify, it is not required that earthwork activities are supervised by a geotechnical engineer. Design plans would take into account the geotechnical engineer's recommendations.                                                                                                                                                                                                                                |

- I150-A -63 See response for Key Theme ALT-3.
- I150-A -64 See response for Key Theme ALT-3.
- I150-A -65 See response for Key Theme ALT-3.
- I150-A -66 Comment noted.
- I150-A -67 See response for Key Theme EARTH-4.
- I150-A -68 See response for Key Theme EARTH-6.
- I150-A -69 See response for Key Theme EARTH-4.
- I150-A -70 See response for Key Theme EARTH-6.
- I150-A -71 See response for Key Theme EARTH-4.
- I150-A -72 See response for Key Theme VR-3.
- I150-A -73 See response for Key Theme UTL-6.
- I150-A -74 See response for Key Theme EARTH-6.
- I150-A -75 See response for Key Theme EARTH-6.



|                                           | Page | Section   | Paragraph | Comment                                                                                                                                                                                                                                                                                     |
|-------------------------------------------|------|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-76                                 | 3-17 | 3.7.1.3   | 1         | 3rd Sentence: Geotechnical Engineers do not design substation or other electrical facilities. System designers use the information and recommendations prepared by a geotechnical engineer to ensure appropriate design considerations are made. The statement in the DEIS is not accurate. |
| I150-A-77                                 | 3-17 | 3.7.1.3   | 1         | 4th sentence, building codes are requirements not recommendations.                                                                                                                                                                                                                          |
| I150-A-78                                 | 3-18 | 3.7.1.3   | 2         | Last sentence: PSE follows the appropriate NESC design requirements. Because forces on powerlines and their poles from ice and wind loading exceed those of seismic loads, additional seismic engineering is not required; however, it could be included as mitigation (Section 3.8.1).     |
| I150-A-79                                 | 3-18 | 3.7.2     | 1         | 3rd Sentence: Vegetation is maintained along the existing corridor as it is now; therefore, stating that there would be continual loss of vegetation is not accurate.                                                                                                                       |
| I150-A-80                                 | 3-22 | 3.8.1     | 1         | Add bullet point: Use appropriate stormwater management (detention) facilities to reduce stream flow velocities and flooding.                                                                                                                                                               |
| <b>Chapter 4 Greenhouse Gas Emissions</b> |      |           |           |                                                                                                                                                                                                                                                                                             |
| I150-A-81                                 | 4-12 | 4.5.3.1.2 | 1         | The assumption for number of poles is incorrect. A more correct estimate would be closer to 200 structures. The foundation dimensions are higher than the average. Values should be 5 feet diameter and 25 feet deep.                                                                       |
| I150-A-82                                 | 4-12 | 4.5.3.1.3 | 2         | 50 feet of additional clearing come is incorrect. The transmission line can be operated within existing corridor limits. Please update this section to reflect the correct data.                                                                                                            |
| I150-A-83                                 | 4-13 | 4.5.3.1.3 | 3         | The clear zone width is inaccurate in the paragraph. PSE's existing corridor width is 100 feet and no other clear zone is anticipated. Therefore the number of acres cleared and CO <sub>2</sub> estimates (which assume a 150-ft clear zone) are significantly overestimated.              |
| I150-A-84                                 | 4-4  | 4.2       | 1         | Puget Sound Clean Air Agency is responsible for issuing permits related to air emissions, specifically those related to power generation.                                                                                                                                                   |
| I150-A-85                                 | 4-10 | 4.5.1     | 1         | This paragraph implies that all vegetation would be removed within a selected corridor. This is not a case. Only vegetation that could interfere with operations would be required along the transmission line corridor.                                                                    |
| I150-A-86                                 | 4-11 | 4.5.2     | 1         | Pole replacement would occur as necessary.                                                                                                                                                                                                                                                  |
| I150-A-87                                 | 4-12 | 4.5.3.1.2 | 1         | Poles may or may not be on foundations. A number could be directly embedded. Also, pole spacing would likely be equivalent to the existing lines, which is around 500 to 700 feet. Greater spacing requires taller poles.                                                                   |
| I150-A-88                                 | 4-18 | 4.7       | 1         | Use of existing utility and road corridors would require less tree/vegetation removal; therefore helping mitigate impacts.                                                                                                                                                                  |
| I150-A-89                                 | 4-13 | 4.5.3.1.3 | 1         | All worst case scenarios are based on 40% tree coverage and 150 feet of clearing; these assumptions seem unlikely with existing management practices or where the line is adjacent to roads.                                                                                                |

- I150-A -76 See response for Key Theme EARTH-6.
- I150-A -77 See response for Key Theme EARTH-6.
- I150-A -78 See response for Key Theme EARTH-4.
- I150-A -79 See response for Key Theme EARTH-6.
- I150-A -80 See response for Key Theme EARTH-4.
- I150-A -81 See response for Key Theme GHG-1.
- I150-A -82 See response for Key Theme GHG-2.
- I150-A -83 See response for Key Theme GHG-2.
- I150-A -84 Comment noted.
- I150-A -85 See response for Key Theme GHG-2.
- I150-A -86 See response for Key Theme WTR-7.
- I150-A -87 See response for Key Theme GHG-1.
- I150-A -88 See response for Key Theme GHG-2.
- I150-A -89 See response for Key Theme GHG-2.



|            | Page                                | Section   | Paragraph                                           | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------|-------------------------------------|-----------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            | <b>Chapter 5 Water Resources</b>    |           |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| I150-A-90  | 5-2                                 | Table 5-1 | 1                                                   | Please note the following: "Dredge and Fill Requirements (33 CFR Part 323); Section 10 Permits for Work in Navigable Waters (33 CFR Part 322). Section 10 falls under the Rivers and Harbors Act and Section 404 is a Clean Water Act permit."                                                                                                                                                                                                                                                                                                            |
| I150-A-91  | 5-13                                | 5.5.2     | 1                                                   | Construction related to general maintenance, such as regular pole replacement would occur.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I150-A-92  | 5-19                                | 5.6.2     | 1                                                   | Regular pole replacement would be necessary in addition to conductor replacement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| I150-A-93  | 5-21                                | 5.7       |                                                     | Using existing utility or road corridors would have lesser clearing requirements and therefore, a lower potential for impacts to water quality.                                                                                                                                                                                                                                                                                                                                                                                                           |
| I150-A-94  | 5-21                                | 5.9       | 1                                                   | Alternative 2 also requires construction of facilities; therefore, as proposed, minor to moderate impacts to water resources could occur. Additionally, the necessary ancillary utilities that are required for components of Alternative 2 have not been addressed. These include, natural gas, water, and sewer pipelines.                                                                                                                                                                                                                              |
| I150-A-95  | 5-2, 5-5                            | 5.2       | Table (FEMA & Local Floodplain Management Sections) | Reference to FEMA and local floodplain management regulations do not address requirements resulting from the 2008 Biological Opinion on the National Flood Insurance Program (NFIP). Not all of the referenced codes may have been amended to account for the BiOp, but each City is responsible for demonstrating compliance under the BiOp. The Regulated Activities/Program description should be revised to reflect the NFIP's requirement to conserve/protect habitat conditions for threatened and endangered salmonids and essential fish habitat. |
| I150-A-96  | 5-7                                 | 5.3.2     | 1                                                   | Lake Boren was not included in the list of small lakes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| I150-A-97  | 5-15                                | 5.5.3.2.4 | 1                                                   | The description is missing a potential impact. To clarify, trenching through wetlands has potential impact of dewatering/drainage wetland without appropriate BMPs.                                                                                                                                                                                                                                                                                                                                                                                       |
|            | <b>Chapter 6 Plants and Animals</b> |           |                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| I150-A-98  | 6-14                                | 6.6.2     | 3                                                   | This paragraph and Figure 6-6 describes PSE's Vegetation Management Program for 230 kV lines rather than the existing 115 kV lines discussed in the No Action Alternative. Under the No Action Alternative the vegetation management program would include removal of trees 25 feet in height.                                                                                                                                                                                                                                                            |
| I150-A-99  | 6-16                                | 6.6.3.1.1 | 1                                                   | To clarify, if PSE uses the existing Sammamish-Lakeside-Talbot Hill 115 kV corridor, no additional width would be required.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| I150-A-100 | 6-16                                | 6.6.3.1.1 | 1                                                   | 4th Sentence: Only non-compatible trees would be removed; not all trees. Taller poles could potentially allow for taller trees to remain.                                                                                                                                                                                                                                                                                                                                                                                                                 |

- I150-A -90 See response for Key Theme WTR-5.
- I150-A -91 See response for Key Theme WTR-7.
- I150-A -92 See response for Key Theme WTR-7.
- I150-A -93 See response for Key Theme WTR-2.
- I150-A -94 See responses for Key Themes WTR-4 and WTR-7.
- I150-A -95 See response for Key Theme WTR-5.
- I150-A -96 See response for Key Theme WTR-1.
- I150-A -97 See response for Key Theme WTR-4.
- I150-A -98 See response for Key Theme P&A-6.
- I150-A -99 See response for Key Theme P&A-2.
- I150-A -100 See response for Key Theme P&A-2.





|            | Page | Section   | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| I150-A-101 | 6-17 | 6.6.3.2.1 | 1         | 4th Sentence: This assumption may not be correct. The amount of clearing along the SCL corridor would be dependent upon the rebuild scenario. Additionally, north of the Sammamish substation, 9-miles of 230 kV line would need to be reconducted, which could include clearing associated with construction access.<br>Therefore, the impact assessment associated with this Option is not completely quantified.                                                                                                                                                                            |
| I150-A-102 | 6-23 | 6.7.3.1   | 1         | Bird collision and electrocution information is not correct. If the existing corridor is used, then the total number of conductors in the air would not change. The spacing of 230 kV conductors is greater than that of 115 kV; conductors therefore, the electrocution potential is less. The greater distance between the conductors equates to less of a chance for birds to contact two phases simultaneously, which is the cause of electrocution. Also, the larger conductor size typically used for 230 KV lines is easier to see be avian species, hence lower collision occurrences. |
| I150-A-103 | 6-25 | 6.8       | 1         | Mitigation - narrow corridor to existing addresses issues with 6.6.3.1.1. Transmission lines can be configured and routed to help minimize impacts to trees and habitat. In some instances, taller poles can allow taller vegetation to remain. The new 230 kV line could be built and operated within the existing 100-foot wide corridor; therefore the impacts associated with the 50-foot widening would not be realized.                                                                                                                                                                  |
| I150-A-104 | 6-25 | 6.8       | 3         | Eagle nest buffer zones will need to be considered and possibly avoided or monitored if construction is scheduled to occur within active nest buffers during the nesting season. The same is true for great blue heron nest buffers. Avian protection program biologists should be consulted prior to implementation of PSE's avian protection plan to determine the most effective use of avian protection measures on a site-specific basis.                                                                                                                                                 |
| I150-A-105 | 6-26 | 6.9       | 1         | Under Alternative 1, Option B would likely have the same impacts as options A and C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| I150-A-106 | 6-3  | 6.2.1     | Table     | SEPA should be included under "State".                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| I150-A-107 | 6-7  | 6.4.1     | 1         | Habitats and landscape areas can also include commercial areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I150-A-108 | 6-9  | 6.4.1.1   | 1         | Lakes and ponds also important for amphibians and some mammals.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I150-A-109 | 6-11 | 6.4.1.4   | 1         | Forests also provide habitat for amphibians and reptiles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I150-A-110 | 6-12 | 6.4.2     | 3         | The Bellevue list does not match the latest list of species of local importance in Bellevue code.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| I150-A-111 | 6-12 | 6.4.2     | 4         | This is an old Redmond code reference. The current Redmond Municipal Code encompasses all Ordinances through No. 2813, passed December 1, 2015. See RMC 21.64.020.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| I150-A-112 | 6-13 | 6.6.1.1   | 1         | 2nd sentence is incomplete. Impacts also vary by duration and timing of construction.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| I150-A-113 | 6-14 | 6.6.2     | 3         | This paragraph's description of the Vegetation Management Program is incomplete. PSE selectively uses herbicide use in accordance with best management practices and local regulations.                                                                                                                                                                                                                                                                                                                                                                                                        |
| I150-A-114 | 6-16 | 6.6.3.1.1 | 2         | 4th sentence - misleading to say species will be displaced; typically they are replaced.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

- I150-A -101 See response for Key Theme P&A-6.
- I150-A -102 See response for Key Theme P&A-4.
- I150-A -103 See response for Key Theme P&A-2.
- I150-A -104 See response for Key Theme P&A-4.
- I150-A -105 See response for Key Theme P&A-6.
- I150-A -106 See response for Key Theme P&A-6.
- I150-A -107 See response for Key Theme P&A-1.
- I150-A -108 See response for Key Theme P&A-1.
- I150-A -109 See response for Key Theme P&A-1.
- I150-A -110 See response for Key Theme P&A-3.
- I150-A -111 See response for Key Theme P&A-6.
- I150-A -112 See response for Key Theme P&A-3.
- I150-A -113 See response for Key Theme P&A-1.
- I150-A -114 See response for Key Theme P&A-1.



|                                               | Page | Section   | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------|------|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-115                                    | 6-16 | 6.6.3.1.1 | 1 & 2     | Discussion about how much wider the corridor would end up is confusing; please clarify. If using the existing 100-foot wide corridor the new monopole configuration is not expected to need additional width cleared. Assuming the 'worst case scenario', if there are trees growing into the ROW from beyond the existing ROW boundary it is possible that additional tree removal might be needed. Assuming that a contiguous additional 20 to 50 feet of clearing is pretty extreme in a urban/suburban area, even in a 'worst case scenario'. Also, in PSE's opinion, the 40% tree canopy coverage is over-estimated. An average of the tree inventory for each jurisdiction was used, but DEIS also state that 'habitat is already disturbed' along the utility easements. |
| I150-A-116                                    | 6-23 | 6.7.3     | 1         | Regarding the 3rd sentence, impacts to birds typically include temporary displacement rather than complete displacement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| I150-A-117                                    | 6-24 | 6.7.4     | 1         | This section understates the potential noise impact to wildlife resulting from the operation of peaker plants, which exceeds noise regulations in some areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Chapter 7 Energy and Natural Resources</b> |      |           |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| I150-A-118                                    | 7-10 | 7.6.4.5   | 1         | As described, installing three 20-MW peaker plants would have minimal impact on the natural gas supply in the area. However, if peaker plants are used to solve the transmission deficiency problem, then it is expected that around twenty 20-MW peaker plants would be required. This would require construction of new high pressure natural gas (around 15 miles), water and sewer pipelines.                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Chapter 8 Environmental Health</b>         |      |           |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| I150-A-119                                    | 8-9  | 8.3.1     | 2         | 3rd Sentence: The transformers PSE uses do not contain SF6 gas; however, in some instances, SF6 is used in equipment such as breakers. PSE would not use HPPF conductors for any of the alternatives.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| I150-A-120                                    | 8-9  | 8.3.1     | 3         | The oil within the SCFF lines running to Mercer Island does not contain PCBs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| I150-A-121                                    | 8-9  | 8.3.1     | 5         | All PSE transformers have been retrofitted and therefore do not contain federally regulated levels of PCBs. PSE does not use transformers with SF6 gas; however, substation breakers typically contain SF6 gas. All new equipment used by PSE that contains oil is filled with <1 ppm PCB mineral oil.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| I150-A-122                                    | 8-9  | Sidebar   |           | SF6: is <u>not</u> a highly toxic gas - it actually has a low order of toxicity. See the MSDS at: <a href="http://www.concordegas.com/Images-(1)/pdf/SF6-MSDS-English.aspx">http://www.concordegas.com/Images-(1)/pdf/SF6-MSDS-English.aspx</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| I150-A-123                                    | 8-11 | 8.3.1     | 7         | PSE does not use SF6 in transformers, only breakers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| I150-A-124                                    | 8-11 | 8.3.1     | 7         | There is no discussion of battery disposal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| I150-A-125                                    | 8-23 | 8.5.1     | 2         | 2nd sentence: Note that pre-existing contamination would be by other parties and unrelated to PSE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| I150-A-126                                    | 8-25 | 8.5.2     | 1         | 2nd Sentence: It is more likely that poles/structures would be replaced due to age rather than conductors.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| I150-A-127                                    | 8-26 | 8.5.3.1.1 | 1         | Construction would not be <b>continuous</b> for 18 months at each location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

- I150-A -115 See response for Key Theme P&A-2.
- I150-A -116 See response for Key Theme P&A-4.
- I150-A -117 See response for Key Theme P&A-6.
- I150-A -118 See response for Key Theme EGY-1.
- I150-A -119 Comment noted.
- I150-A -120 Comment noted.
- I150-A -121 Comment noted.
- I150-A -122 See response for Key Theme GHG-5.
- I150-A -123 See response for Key Theme OBJ-5.
- I150-A -124 It is presumed that battery disposal would be regulated and would not result in significant adverse effects.
- I150-A -125 Comment noted.
- I150-A -126 Comment noted.
- I150-A -127 Comment noted.



I150-A-128  
 I150-A-129  
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 I150-A-132  
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 I150-A-138  
 I150-A-139  
 I150-A-140

| Page | Section   | Paragraph      | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| 8-26 | 8.5.3.1.1 | 2              | PSE would not use HPFF type cables.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8-26 | 8.5.3.1.1 | 2              | Special equipment is used when charging equipment with SF6 gas to prevent release to the atmosphere. SF6 is used in breakers and not transformers.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 8-26 | 8.5.3.1.1 | 3              | 1st sentence: PSE's Emergency Spill Response Program will also ensure that accidentally released substances are properly responded to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 8-29 | 8.5.3.2.1 | 1              | PSE would not use HPFF type cables.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8-29 | 8.5.3.3.1 | 1              | PSE would not use HPFF type cables.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8-30 | 8.5.3.3.2 | 1              | To clarify, an underground route may not utilize the existing corridor and requires further analysis. Therefore, the potential risks to other utilities are unknown.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 8-32 | 8.5.4.4.2 | 1              | Note, if peak generation facilities were natural gas fired or water cooled, then construction of additional pipelines would be required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 8-35 | 8.6.1.3   | Definition Box | Steel poles do not have a grounding conductor. Pole itself is used as a ground to connect shieldwire to grounding system.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 8-35 | 8.6.1.3   | 1              | NESC does not direct how to shield lines with lightning protection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8-35 | 8.6.1.3   | 1              | "Direct strikes to poles or lines could damage the pole, causing it to topple or..." We are not aware of any direct strike to a steel pole that has damaged it to the point of toppling. Pole toppling or breaking, is almost always caused by broken conductors, which is common result of trees falling on the lines. This induces longitudinal tension loads on the structures causing them to fail.                                                                                                                                                                                                          |
| 8-35 | 8.6.1.3   | 2              | "Energized transmission lines on the ground after an earthquake, lightning strike (or accidents) could send electric current to anything else metal in the vicinity, such as utilities (including pipelines). In addition to electrocution or shock potential, this type of electrical contact could create holes in pipelines, leading to a risk of explosion if regulations were not followed by the pipeline (or other utility) owner or if facilities had not been designed properly."<br>To provide further information, PSE is designing for steady state and fault scenarios to address these conditions. |
| 8-38 | 8.6.2.2   | 1              | Maintenance and operational activities would be higher with the existing 115 kV lines as they are on wood structures that need to be replaced at regular intervals. A new steel structure line would have lower maintenance requirements as they are designed to modern standards.                                                                                                                                                                                                                                                                                                                               |
| 8-38 | 8.6.2.3   | 1              | Last sentence references, "...downed lines resulting from lightning strikes to poles..."<br>As noted in our earlier comment related to page 8-35, we are not aware of any direct strike to a steel pole that has damaged it to the point of toppling.                                                                                                                                                                                                                                                                                                                                                            |

I150-A -128 Comment noted.  
 I150-A -129 See response for Key Theme OBJ-5.  
 I150-A -130 Comment noted.  
 I150-A -131 Comment noted.  
 I150-A -132 Comment noted.  
 I150-A -133 Comment noted.  
 I150-A -134 Comment noted.  
 I150-A -135 Comment noted.  
 I150-A -136 See response for Key Theme PLS-2.  
 I150-A -137 Comment noted.  
 I150-A -138 See response for Key Theme PLS-2.  
 I150-A -139 Comment noted.  
 I150-A -140 Comment noted.



I150-A-141  
I150-A-142  
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I150-A-154

| Page                   | Section   | Paragraph | Comment                                                                                                                                                                                                                                                                                             |
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| 8-39                   | 8.6.2.3   | 3         | 1st Sentence: To clarify, for 230 kV substations lightning protection is provided via a static mast with shield wires that are connected to the substation ground grid. Furthermore, all substation transformers are protected with surge arresters to limit damage done during a lightning strike. |
| 8-40                   | 8.6.3.1.3 | 1         | "State public utility commission seismic standards" - This statement is misleading. The codes PSE designs to include IBC, ASCE, and ACI. The public utility commission is not involved in establishing code requirements.                                                                           |
| 8-40                   | 8.6.3.1.3 | 3         | 3rd Sentence: Based on the probable location of the substation on the Westminster site, the nearest residential structure would be more than 200 feet away.                                                                                                                                         |
| 8-40                   | 8.6.3.1.3 | 3         | 4th Sentence: The new substation at the Lakeside Substation (Richards Creek substation) would be approximately 500 feet from the nearest residence.                                                                                                                                                 |
| 8-41                   | 8.6.3.1.2 | 1         | The Olympic Pipeline (OPL) is collocated with SCL in Renton south of the PSE Eastside corridor. A re-build of the SCL lines would require equal attention given to the pipeline.                                                                                                                    |
| 8-41                   | 8.6.3.3.2 | 1         | PSE has natural gas lines that run to Mercer Island so potential impacts are present.                                                                                                                                                                                                               |
| 8-43                   | 8.6.4.4.1 | 1         | Few, if any, of the existing substations would have space to accommodate a peaker plant. Peaker plants would be constructed adjacent to existing substation, within a stand-alone yard or and expanded substation. This may require acquisition of additional land.                                 |
| 8-46                   | 8.7.2.1   | 1         | Mitigation for field locating utilities - excavation could be done using hydro-vac techniques rather than typical excavation equipment. Hydro-vac is much less damaging around existing underground utilities.                                                                                      |
| <b>Chapter 9 Noise</b> |           |           |                                                                                                                                                                                                                                                                                                     |
| 9-8                    | 9.3.2     | 2         | Electrical Substations are subject to the noise state noise limits between the hours of 10:00 PM and 7:00 AM; however, they are not subject to the 10 dBA reduction (WAC 197-60-040(2)(b)).                                                                                                         |
| 9-10                   | 9.5.3.1   | 1         | 3rd Sentence: A new substation yard would be required for all Alternative 1 options.                                                                                                                                                                                                                |
| 9-10                   | 9.5.3.1   | 2         | 2nd Sentence: It is expected that most spacing between structures would be between 500 and 700 feet (use of existing structure locations); although that could increase or decrease as necessary to avoid sensitive areas and better accommodate community preferences.                             |
| 9-13                   | 9.5.4.4   | 1         | In addition to the noise generated during construction of the facility, construction noise would be generated by the installation of appurtenant utilities, such as, natural gas, water, and sewer pipelines, as well as transmission lines (if necessary).                                         |
| 9-14                   | 9.6.2     | 1         | 2nd Sentence: These are typically referred to as "utility yards" as opposed to "maintenance yards".                                                                                                                                                                                                 |
| 9-15                   | 9.6.3.1.2 | 2         | Electrical Substation are subject to the noise state noise limits between the hours of 10:00 PM and 7:00 AM; however, they are not subject to the 10 dBA reduction (WAC 197-60-040(2)(b)).                                                                                                          |

I150-A -141 See response for Key Theme PLS-2.  
I150-A -142 See response for Key Theme EARTH-6.  
I150-A -143 Comment noted.  
I150-A -144 Comment noted.  
I150-A -145 Comment noted.  
I150-A -146 Comment noted. This alternative was not carried forward in the Phase 2 Draft EIS.  
I150-A -147 Comment noted.  
I150-A -148 Comment noted.  
I150-A -149 See response for Key Theme NOI-4.  
I150-A -150 See response for Key Theme NOI-4.  
I150-A -151 See response for Key Theme NOI-4.  
I150-A -152 See response for Key Theme NOI-2.  
I150-A -153 See response for Key Theme NOI-4.  
I150-A -154 See response for Key Theme NOI-2.

I150-A -155 See response for Key Theme NOI-2.  
 I150-A -156 See response for Key Theme NOI-2.  
 I150-A -157 See response for Key Theme NOI-3.  
 I150-A -158 See response for Key Theme NOI-3.  
 I150-A -159 See response for Key Theme NOI-4.  
 I150-A -160 See response for Key Theme LU-5.  
 I150-A -161 See response for Key Theme LU-3.  
 I150-A -162 See response for Key Theme LU-5.



I150-A-155  
 I150-A-156  
 I150-A-157  
 I150-A-158  
 I150-A-159

| Page                                   | Section | Paragraph | Comment                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------|---------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9-17                                   | 9.6.5.2 | 1         | Electrical substation are subject to the noise state noise limits between the hours of 10:00 PM and 7:00 AM; however, they are not subject to the 10 dBA reduction (WAC 197-60-040(2)(b)).               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 9-17                                   | 9.7.2   | 1         | 1st Sentence: Electrical substation are subject to the noise state noise limits between the hours of 10:00 PM and 7:00 AM; however, they are not subject to the 10 dBA reduction (WAC 197-60-040(2)(b)). |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 9-17                                   | 9.7.2   | 1         | 3rd Sentence: This is speculative and does not reflect code requirements. New substations will meet the appropriate noise requirements.                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 9-17                                   | 9.7.3   | 1         | 3rd Sentence: Applicable noise regulations will be met as appropriate.                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 9-18                                   | 9.9     | 1         | 1st Sentence: Use of engineered noise attenuation measures could be used in addition to prudent siting.                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Chapter 10 Land Use and Housing</b> |         |           |                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| I150-A-160                             | 10-6    | 10.2.1    | 7                                                                                                                                                                                                        | <p>"Each comprehensive plan is required to establish a process for identifying and siting essential public facilities (EPFs). State, regional, county, and local agencies are also required to coordinate in determining the location of these facilities. EPFs are facilities that are typically difficult to site, such as airports, state education facilities, and state or regional transportation facilities (RCW 36.70A.200). A determination of whether the Energize Eastside Project qualifies as an EPF would be made by the permitting agency at the time of permit preparation or submittal."</p> <p>WAC 365-196-550(1)(a): <i>Consistent with county-wide planning policies, counties and cities should create their own lists of "essential public facilities," to include a minimum those set forth in RCW 36.70A.200.</i></p> <p>The WAC EPF list does not include electrical transmission lines or substation facilities.</p> <p>The study area jurisdictions of Bellevue, Redmond, Kirkland, Renton, Newcastle, King County, Sammamish, and Hunts Point all include land use regulations and development review processes that permit 230 kV transmission facilities and substations as permitted uses, conditional uses, or special uses and do not define these facilities as EPFs. The City of Issaquah includes major utility facilities in the land use charts under the heading of EPFs, but also includes specific review criteria for permitting public utility facilities through the normal review processes. The smaller communities of Medina, Clyde Hill, Beaux Arts, and Yarrow Point do not address transmission lines and transmission substations in their land use codes.</p> |
| I150-A-161                             | 10-18   | 10.5      | 2                                                                                                                                                                                                        | Permitting of this project will follow normal permitting procedures outlined in applicable jurisdictions codes and not the EPF siting process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| I150-A-162                             | 10-20   | 10.7.1.2  | 2                                                                                                                                                                                                        | <p>Last sentence: "PSE confirms that due to safety regulations, transmission lines would never be placed directly over homes (Strauch - telephone conversation)."</p> <p>To clarify, as a rule, PSE avoids placing transmission lines over homes. Although, the National Electric Safety Code (NESC) would allow PSE to build transmission lines over homes and buildings, that is a practice that PSE does not employ. It should be noted that there are occupied structures that have been constructed under the existing 115 kV transmission lines.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



I150-A-163  
 I150-A-164  
 I150-A-165  
 I150-A-166  
 I150-A-167  
 I150-A-168  
 I150-A-169  
 I150-A-170  
 I150-A-171  
 I150-A-172

| Page  | Section    | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10-24 | 10.7.3     | 3         | The statement that "If Lakeside site were chosen, PSE would need to purchase and develop land adjacent to the existing substation." is incorrect. PSE already owns the property located south of the existing Lakeside substation. It is anticipated that this property would be adequate to develop the new 230-115 kV substation, which would be known as Richards Creek.                                                                                                                                       |
| 10-24 | 10.7.3.1.1 | 2         | Although allowed under the NESC, PSE prefers to not allow occupied structures under 230 kV lines.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 10-24 | Table 10-1 |           | Use across from Lakeside substation is the existing transmission corridor (not "vacant")                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 10-25 | 10.7.3.1.2 | 1         | If PSE uses the existing Sammamish-Lakeside-Talbot Hill 115 kV corridor, it is not anticipated that additional clear zone would be required. The replacement 230 kV and 115 kV lines can be operated within the existing easement area.                                                                                                                                                                                                                                                                           |
| 10-25 | 10.7.3.1.2 | 2         | Regarding co-location with OPC's pipeline, the corridor currently has two 115 kV transmission lines.                                                                                                                                                                                                                                                                                                                                                                                                              |
| 10-26 | Table 10-2 |           | Substations are defined as utility facilities, not utility yards under Newcastle Zoning Code. Utility facilities are permitted in all zones.                                                                                                                                                                                                                                                                                                                                                                      |
| 10-26 | 10.7.3.2   | 1         | The assumption that the existing SCL corridor would not need to be expanded if a adjacent parallel line were constructed may not be correct. It is likely that additional clearing would be required and in some instances, new land acquired.                                                                                                                                                                                                                                                                    |
| 10-27 | 10.7.3.2   | 3         | PSE already owns the potential future 230 kV substation site (Richards Creek) that is currently used as a pole yard, therefore the acquisition of additional land would be unlikely.                                                                                                                                                                                                                                                                                                                              |
| 10-27 | 10.7.3.2   | 4         | "This option would have some of the same zoning consistency issues as Option A (Table 10-2) including potential for co-location with a high consequence land use, since it also crosses the OPL Company (OPLC) pipeline in places and is parallel to it in other locations."<br>King County, Redmond, Kirkland codes prohibit <u>new</u> high consequence land uses within proximity to the existing corridor. Transmission lines are an <u>existing</u> use within the corridor and are and are not <u>new</u> . |
| 10-27 | 10.7.3.3   | 3         | "An underground transmission line would have the same potential constraints as Option A's overhead line regarding co-location with OPLC's pipeline."<br>Same comment as above.                                                                                                                                                                                                                                                                                                                                    |

I150-A -163 See response for Key Theme LU-1.  
 I150-A -164 See response for Key Theme LU-1.  
 I150-A -165 See response for Key Theme LU-5.  
 I150-A -166 See response for Key Theme LU-2.  
 I150-A -167 See response for Key Theme LU-2.  
 I150-A -168 See response for Key Theme LU-5.  
 I150-A -169 See response for Key Theme LU-5.  
 I150-A -170 See response for Key Theme LU-1.  
 I150-A -171 See response for Key Theme LU-5.  
 I150-A -172 See response for Key Theme LU-5.

I150-A -173 See response for Key Theme LU-5.  
 I150-A -174 See response for Key Theme LU-1.  
 I150-A -175 See response for Key Theme LU-1.  
 I150-A -176 See response for Key Theme VR-7.  
 I150-A -177 See response for Key Theme ECON-1.  
 I150-A -178 See response for Key Theme ECON-1.  
 I150-A -179 Comment noted.  
 I150-A -180 See response for Key Theme VR-1.



I150-A-173

I150-A-174

I150-A-175

I150-A-176

I150-A-177

I150-A-178

I150-A-179

I150-A-180

| Page                                         | Section  | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------|----------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10-29                                        | 10.7.4.4 | 1         | "Three peak generation plants could be placed on sites of approximately 1 acre, and each would be adjacent to or within existing PSE substations on the Eastside."<br>Approximately 19 to 20 peak generation plants (20 MW each) would be required to be in operation by 2017-2019 in order to fully meet the project objectives. More than half of the energy realized under Alternative 2 is not within the control of the utility. Generation facilities are either not addressed or not allowed under most of the EIS jurisdiction's codes. In jurisdictions where there are existing substations that may be able to be expanded to accommodate a peak generation plant, generation is either not addressed (resulting in not being permitted) or not allowed outright. Bellevue may allow such facilities under interpretation by the Planning Director. |
| 10-30                                        | 10.7.5.1 | 1         | It is not a certainty that PSE would need to acquire additional property for the expansion of the substations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 10-31                                        | 10.8     |           | Last bullet point. To clarify, residential and business would be provided the appropriate level of assistance/compensation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Genera<br>I                                  |          |           | As referenced in section 2.3.2 there will be an additional wire placed on top of the poles to provide lightning protection as well as a system fiber optic communication line. To help minimize visual impacts, PSE will investigate the use of a combined static/communication line to reduce the total number of wires in the air.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Chapter 11 Views and Visual Resources</b> |          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 11-2                                         | 11.1.2   | 1         | Property values are not an environmental element and therefore, should not be elaborated upon under SEPA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 11-2                                         | 11.1.2   | 1         | While it is reasonable to consider assessor identified view parcels in the programmatic-level visual analysis to determine potential special viewshed areas for analysis or to focus studies occurring in Phase II of the EIS process, any attempt to correlate a decrease in property values with the presence of a transmission line is not supported by empirical studies on the subject, and does not follow industry-accepted methods of visual impact assessment.                                                                                                                                                                                                                                                                                                                                                                                        |
| 11-9                                         | 11.3.1   | 4         | It is important to note that transmission line corridors, such as the PSE Sammamish-Lakeside-Talbot Hill transmission lines, were originally established in the late 1920 and early 1930s prior to much of the development in the study area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 11-6                                         | 11.2.1   | 2         | The extent to which the establishment or expansion of trails would be integrated into new or expanded transmission line corridors, increasing access to visual resources and providing "beneficial impacts" in the combined study area, should be considered in the analysis of Alternatives 1 and 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |



|            | Page         | Section | Paragraph                       | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------|--------------|---------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-181 | 11-9 & 11-13 | 11.3.2  | Figures 11-2, 11-4 through 11-9 | The photos are presented as typical representations of the combined study area that "contribute to the overall visual character and quality of and area." Additional photography should be provided in Phase 2 that shows the range of visual resources and visual character on which impacts appear to be based, including those areas where existing utility infrastructure substantially contribute to the visual character. These photos should provide a reasonable range of settings, character, and scenery to comprehensively evaluate potential visual impacts. |
| I150-A-182 | 11-16        | 11.3.2  | Figure 11-10                    | It is unclear the extent to which "Roadways" appearing on the map have been integrated into the visual study, including Mountains to Sound Greenway National Scenic Byway.                                                                                                                                                                                                                                                                                                                                                                                               |
| I150-A-183 | 11-17        | 11.3.4  | 1                               | While it is reasonable to consider assessor identified view parcels in the programmatic-level visual analysis to determine potential special viewshed areas for analysis or to focus studies occurring in Phase II of the EIS process, any attempt to correlate a decrease in property values with the presence of a transmission line is not supported by empirical studies on the subject, and does not follow industry-accepted methods of visual impact assessment.                                                                                                  |
| I150-A-184 | 11-20        | 11.3.6  | 2                               | 60-foot tall distribution poles are very rare. The vast majority of distribution poles are 34 to 40 feet tall.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| I150-A-185 | 11-20        | 11.3.6  | 3                               | A more accurate range for our transmission poles are 60 to 80 feet above ground. It is important to note, that the configuration of the conductors on the poles is a principle factor in determining the required height.                                                                                                                                                                                                                                                                                                                                                |
| I150-A-186 | 11-21        | 11.3.6  | 4                               | As previously stated, pole height is a function of the conductor configuration and number of circuits. If the conductors are placed flat in a single-circuit configuration, parallel to the ground, then 230 kV structures can be reduced to heights less than 70 feet.                                                                                                                                                                                                                                                                                                  |
| I150-A-187 | 11-21        | 11.3.6  | 4                               | To clarify, the Westminster substation does not exist. It was just an option for a future new substation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I150-A-188 | 11-23        | 11.4    | 2                               | "Visual quality", a key component of the FHWA system, which is integrated into the study when visual quality impacts (or decrease in visual quality as measured by resulting vividness, intactness and unity) are missing from this discussion. In addition, the degree of "beneficial" impacts associated with any of the alternatives is not discussed. These should be clearly explained in the Phase 2 Draft EIS.                                                                                                                                                    |
| I150-A-189 | 11-23        | 11.4    | Callout to right                | The callout box is not clear. Is sensitivity directly correlated with land use type, or can one land use type have different levels of sensitivity among viewpoints? What are the sensitivities of each of the viewpoints? Does the number of viewers affect visual sensitivity? It is unclear as to what factors go into visual sensitivity. This should be clearly explained in the Phase 2 Draft EIS.                                                                                                                                                                 |
| I150-A-190 | 11-24        | 11-4    | Table 11-3                      | This table suggests that viewers with a High sensitivity would experience Moderate to Significant impacts, regardless of contrast, number of viewers, or duration of impact. For example, what would be the expected impacts for a High sensitivity viewer, exposed to long-term duration impacts, experienced by a low number of viewers, seeing a Medium degree of contrast, be? Again, does distance influence the assessment of initial impacts according to this table? As the alternatives move into Phase 2 these questions should be addressed.                  |

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- I150-A -181 See response for Key Theme VR-2.
- I150-A -182 See response for Key Theme VR-1.
- I150-A -183 See response for Key Theme ECON-1.
- I150-A -184 See response for Key Theme VR-8.
- I150-A -185 See response for Key Theme VR-8.
- I150-A -186 See response for Key Theme VR-8.
- I150-A -187 See response for Key Theme VR-8.
- I150-A -188 See response for Key Theme VR-2.
- I150-A -189 See response for Key Theme VR-2.
- I150-A -190 See response for Key Theme VR-2.





I150-A-191  
I150-A-192  
I150-A-193  
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I150-A-199  
I150-A-200  
I150-A-201  
I150-A-202

| Page                         | Section    | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------|------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11-25                        | 11.5.1     | 1         | It is unclear whether distance zones are factored into the analysis. If not, this should be considered in Phase 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 11-27                        | 11.5.3.3   |           | The analysis of Option A in Section 11.5.3.1 states that "The longer duration and likelihood of stockpiled construction debris in or near residential areas and parks, where more sensitive viewers reside, could have a moderate impact on viewers." The justification for moderate impacts for Option A are unclear when you compare it to the analysis of construction impacts resulting from undergrounding would be minor due to duration. Would construction impacts for undergrounding be greater if they were located adjacent to a residential area or park? This should be considered as alternatives move forward to Phase 2. |
| 11-27                        | 11.5.4     | 2         | The battery facility will require a new substation built at the facility. Another option could be to expand an existing substation, but there are currently no substations in the Bellevue area with enough room for expansion.                                                                                                                                                                                                                                                                                                                                                                                                          |
| 11-31                        | 11.6.3.1   | 1         | NESC does not specify vegetation clearances.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 11-32                        | 11.6.3.2   | 2         | To provide further information, 230kV substation will have several deadend towers that have a height of 65 feet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 11-33                        | 11.6.3.5.1 | 2         | The new 230 kV line could be built and operated within the existing Sammamish-Lakeside-Talbot Hill 115 kV 100-foot wide corridor; therefore the impacts associated with the 50-foot widening would not be realized.                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 11-34                        | 11.6.3.5.3 | 1         | Our maximum pole height range has been stated as 130 feet tall.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 11-37                        | 11.6.3.5.4 | 1         | Typically galvanized steel poles are more reflective, especially when new. The reflectance typically diminishes with time. It should be noted that there are different types of finishes that are not reflective in nature.                                                                                                                                                                                                                                                                                                                                                                                                              |
| 11-37                        | 11.6.3.6.1 | 1         | The SCL corridor already contains two 230 kV transmission lines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 11-42                        | 11.6.5.3   | 2         | To clarify, if the new 115 kV line were sited with an existing 115 kV line, the circuits could be on both sides of the pole or on taller poles with the circuits on the same side of the pole.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 11-44                        | 11.9       | 1         | Under Alternative 1, it may be possible to use a variety of pole configurations that can reduce visual impacts. This approach would be used in conjunction with careful siting.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Chapter 12 Recreation</b> |            |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 12-6                         | 12.4       | 1         | Often new or enhanced utility corridors create opportunities for new recreational trails. This is dependent upon property rights and location, but is common in the region. For example the Interurban Trail (Tukwila) and the Puget Power (PSE) Trail (Redmond) exists because PSE allows the use of its rights-of-way for public recreation. Please consistently reflect this fact throughout the conclusions in this section.                                                                                                                                                                                                         |

I150-A -191 See response for Key Theme VR-2.  
I150-A -192 See response for Key Theme ALT-2.  
I150-A -193 See responses for Key Theme ALT-1 and Key Theme UTL-6.  
I150-A -194 See response for Key Theme VR-3.  
I150-A -195 See response for Key Theme UTL-6.  
I150-A -196 See response for Key Theme VR-3.  
I150-A -197 See response for Key Theme VR-8.  
I150-A -198 See response for Key Theme VR-6.  
I150-A -199 See response for Key Theme VR-8.  
I150-A -200 See response for Key Theme UTL-6.  
I150-A -201 See response for Key Theme VR-7.  
I150-A -202 See response for Key Theme REC-1.



|            | Page  | Section    | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------|-------|------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-203 | 12-7  | 12.5.1     | 1         | It should be noted, that utility corridors are often used for recreational purposes. In those instances, such as places along the existing Sammamish-Lakeside-Talbot Hill 115 kV corridor, the recreational use of the utility corridor is secondary and avoidance would not be possible.                                                                                                                                               |
| I150-A-204 | 12-8  | 12.5.2     | 1         | Within the existing corridor, maintenance and repair occur by both PSE and Olympic Pipeline. Some sections of the existing corridor serve as trails, which would likely be closed during maintenance activities of the existing utilities. PSE expects impacts would not change (or be minor).                                                                                                                                          |
| I150-A-205 | 12-8  | 12.5.3.1   | 1         | If the existing Sammamish-Lakeside-Talbot Hill corridor is used, then PSE would use the existing corridor width - it would not be widened.                                                                                                                                                                                                                                                                                              |
| I150-A-206 | 12-9  | 12.5.3.1   | 1         | Ninth sentence in paragraph: To clarify, if new corridors are used, clearing would take longer.                                                                                                                                                                                                                                                                                                                                         |
| I150-A-207 | 12-11 | 12.5.4.5   | 1         | Depending on the type of peaker plant used, new natural gas, water, and sewer pipelines may be required. These are typical construction within public rights-of-way; therefore impacts to informal recreation opportunities would be likely due to lane and/or road closures.                                                                                                                                                           |
| I150-A-208 | 12-11 | 12.5.5     | 1         | Impacts to informal recreational resources would be much higher than Alternative 1 as there would be numerous land and road closures during construction.                                                                                                                                                                                                                                                                               |
| I150-A-209 | 12-13 | 12.6.3     | 2         | Transformer noise at Westminster may not be a measurable because the ambient noise in the area, primarily contributed to SR520, is high.                                                                                                                                                                                                                                                                                                |
| I150-A-210 | 12-13 | 12.6.3.1.1 | 1         | 2nd Sentence: Permanent impacts are not a certainty.<br>If PSE's existing Sammamish-Lakeside-Talbot Hill corridor is used, no additional easement would be required.<br>Additionally, if the existing corridor is used, then operationally, once constructed, there would be little difference from what is there now -- an existing utility corridor.                                                                                  |
| I150-A-211 | 12-13 | 12.6.3.1.1 | 2         | New corridors could provide new recreational opportunities.                                                                                                                                                                                                                                                                                                                                                                             |
| I150-A-212 | 12-13 | 12.6.3.1.3 | 1         | Depending on the structure type selected, paths could be widened as well. For example, the existing 115 kV corridor is occupied with two H-frame structures (4 poles). If a single double circuit monopole is used, then there would only be one pole.                                                                                                                                                                                  |
| I150-A-213 | 12-14 | 12.6.3.2   | 1         | Additional clearing would be likely, especially areas like Bridle Trails State Park where the line traverses the middle of the park. In that area, the corridor is narrow and may need to be widened to accommodate construction and future operation. New 230 kV corridors connecting the SCL corridor with the Sammamish substation and Lakeside substation may also impact recreational resources depending upon the selected route. |
| I150-A-214 | 12-15 | 12.6.3.4   | 1         | If the line were placed in Lake Washington, vaults and access roads would be required at the entrance and exit points to the lake, not every 1,500 to 2,500 feet.                                                                                                                                                                                                                                                                       |

I150-A -203 See response for Key Theme REC-1.  
 I150-A -204 See response for Key Theme REC-1.  
 I150-A -205 See response for Key Theme REC-1.  
 I150-A -206 See response for Key Theme REC-5.  
 I150-A -207 See response for Key Theme REC-5.  
 I150-A -208 See responses for Key Theme REC-1 and Key Theme ALT-2.  
 I150-A -209 See response for Key Theme NOI-2.  
 I150-A -210 See response for Key Theme REC-1.  
 I150-A -211 See response for Key Theme REC-1.  
 I150-A -212 See response for Key Theme REC-1.  
 I150-A -213 See response for Key Theme REC-3.  
 I150-A -214 See response for Key Theme REC-5.



I150-A-215  
I150-A-216  
I150-A-217  
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| Page                                              | Section    | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------|------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12-16                                             | 12.7.2     | 1         | Under Alternatives 1 and 3, new recreational opportunities or improvements could be realized depending on project configuration and location.                                                                                                                                                                                                                                                                                                                                                |
| <b>Chapter 13 Historic and Cultural Resources</b> |            |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 13-1                                              |            | 3         | Property can also include object.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 13-4                                              | Table 13-2 |           | For clarification, Smithsonian includes resources other than archaeological sites.                                                                                                                                                                                                                                                                                                                                                                                                           |
| 13-6                                              | 13.3.3     | 3         | Multicomponent sites are not identified in Section 13.3.3. This should be identified for alternatives moving forward into Phase 2.                                                                                                                                                                                                                                                                                                                                                           |
| 13-10                                             | 13.4       | 5 & 6     | In our experience, construction within or adjacent to properly identified, evaluated, logged, and documented resources, has not been categorized as being significant within the context of SEPA.                                                                                                                                                                                                                                                                                            |
| 13-11                                             | 13.5.2     | 2         | Ground disturbance would occur under the No Action as part of routine pole replacement activities. Over time, all of the poles along the existing Sammamish to Talbot Hill 115 kV corridor would be replaced again.                                                                                                                                                                                                                                                                          |
| 13-14                                             | 13.5.3.4   | 3         | Last sentence: On multiple past projects, if a site is properly cataloged and removed, it is not necessarily considered significant.                                                                                                                                                                                                                                                                                                                                                         |
| 13-18                                             | 13.6.5     | 1         | Transmission lines at the 115 kV level do not produce noise above background levels.                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Chapter 14 Transportation</b>                  |            |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 14-13                                             | 14.5.3.2.9 | 1         | This section is incorrect. Trucks would not likely be available in sufficient quantity to replace the entire throughput of the OPLC's pipeline system. Refiners in Washington State may not have enough capacity to load as many trucks as would be required. Barges would have to be used to deliver refined petroleum to terminals.<br>Trucking the entire throughput of the pipeline is infeasible due to constraints at refinery truck racks that are not built to manage this capacity. |
| 14-14                                             | 14.5.3.3   | 1         | If PSE uses the existing Sammamish to Talbot Hill 115 kV corridor, then the difference between the SCL corridor (Option B) and Option A would be negligible. Both scenarios would essentially be the rebuilding an existing transmission line.                                                                                                                                                                                                                                               |
| 14-15                                             | 14.5.4.5   | 1         | It should be noted that additional natural gas, water, and sewer pipelines may be required for the peaker plants.                                                                                                                                                                                                                                                                                                                                                                            |
| 14-17                                             | 14.6.3.1.2 | 1         | To clarify, large equipment such as 230/115 kV transformers and breakers can remain operational for decades.                                                                                                                                                                                                                                                                                                                                                                                 |
| 14-19                                             | 14.7       |           | Additional mitigation that can be used includes temporary relocation of residential customers to hotels. This is not a common practice, but can sometimes be required to meet safety requirements.                                                                                                                                                                                                                                                                                           |

I150-A -215 See response for Key Theme REC-1.  
I150-A -216 See response for Key Theme H&C-4.  
I150-A -217 See response for Key Theme H&C-4.  
I150-A -218 See response for Key Theme H&C-4.  
I150-A -219 See response for Key Theme H&C-1.  
I150-A -220 See response for Key Theme H&C-1.  
I150-A -221 See response for Key Theme H&C-1.  
I150-A -222 See response for Key Theme H&C-1.  
I150-A -223 See response for Key Theme TRAN-2.  
I150-A -224 Comment noted.  
I150-A -225 See response for Key Theme UTL-6.  
I150-A -226 See response for Key Theme TRAN-3.  
I150-A -227 See response for Key Theme TRAN-4.



|                                   | Page  | Section    | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------|-------|------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I150-A-228                        | 14-20 | 14.8       |           | SR 520 Improvement Project has been completed on the Eastside from Medina to I-405. The floating bridge portion opens April 2016.<br>SR 520 is completed on the Eastside and should not be considered as cumulative impacts.                                                                                                                                                                                                             |
| <b>Chapter 15 Public Services</b> |       |            |           |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| I150-A-229                        | 15-6  | 15.3.1.3   | 1         | Since, OPLC conducts aerial reconnaissance of the corridor weekly, unauthorized work near the pipeline and transmission lines is monitored on a regular basis.                                                                                                                                                                                                                                                                           |
| I150-A-230                        | 15-9  | 15.5.2     | 1         | Maintenance would not be limited to conductor replacement, but would include regular pole replacement.                                                                                                                                                                                                                                                                                                                                   |
| I150-A-231                        | 15-10 | 15.5.3.1.1 | 2         | In addition to fuel and natural gas pipelines, water and sewer pipelines are located throughout the study area.                                                                                                                                                                                                                                                                                                                          |
| I150-A-232                        | 15-13 | 15.5.4.4   | 1         | Water and sewer pipelines may also need to be extended to the peaking facilities.                                                                                                                                                                                                                                                                                                                                                        |
| I150-A-233                        | 15-16 | 15.6.3     | 2         | Pole replacement is more common than conductor replacement.                                                                                                                                                                                                                                                                                                                                                                              |
| I150-A-234                        | 15-18 | 15.6.4.1.1 | 11        | 230 kV systems are typically constructed using steel poles rather than wood; therefore, operationally, pole replacement frequency would be reduced as compared with the existing 115 kV system. Also, steel poles are stronger and less susceptible to weather impacts.                                                                                                                                                                  |
| I150-A-235                        | 15-19 | 15.6.4.1.2 | 2         | To clarify, fences, gates and structures, within PSE's easement corridors, can be permitted through the use of a Consent Agreement between PSE and property owners. The consent process makes it possible to operate gates in coordination with property owners to insure that there is a shared lock system on the gate and that gate widths are adequate for PSE service and maintenance vehicles to obtain access to PSE's corridors. |
| I150-A-236                        | 15-20 | 15.6.4.5   | 3         | It should be made clear that the rough estimate of \$10 million dollars is hypothetical.                                                                                                                                                                                                                                                                                                                                                 |
| <b>Chapter 16 Utilities</b>       |       |            |           |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| I150-A-237                        | 16-9  | 16.3.1.3   | 1         | BPA Maple Valley substation is located next to PSE Talbot Hill substation with two connections to Talbot Hill                                                                                                                                                                                                                                                                                                                            |
| I150-A-238                        | 16-12 | 16.3.3     |           | OPLC has a franchise agreement with the City of Bellevue, which was passed in early 2016.                                                                                                                                                                                                                                                                                                                                                |
| I150-A-239                        | 16-16 | 16.4.1     | 3         | "PSE is monitoring preliminary "point load" needs where two new substations may be needed in the combined study area to help serve new load, where adjacent existing substations are inadequate, or to serve specific facilities."<br><br>This statement is incorrect. PSE needs two new transformers, not two new substations, to serve the new load.                                                                                   |

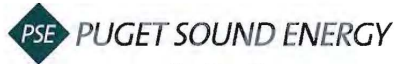
I150-A -228 See response for Key Theme UTL-6.  
 I150-A -229 See response for Key Theme SVC-3.  
 I150-A -230 See response for Key Theme WTR-7.  
 I150-A -231 Comment noted.  
 I150-A -232 See response for Key Theme WTR-7.  
 I150-A -233 Comment noted.  
 I150-A -234 See response for Key Theme SVC-5.  
 I150-A -235 See response for Key Theme SVC-5.  
 I150-A -236 Comment noted.  
 I150-A -237 See response for Key Theme UTL-6.  
 I150-A -238 See response for Key Theme UTL-6.  
 I150-A -239 See response for Key Theme UTL-6.



I150-A-240  
I150-A-241  
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I150-A-251

| Page         | Section                   | Paragraph | Comment                                                                                                                                                                                                                                                                                                                                               |
|--------------|---------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16-16        | 16.4.1                    | 2         | To clarify, Energize Eastside is replacing two 115 kV lines; one with a 230 kV line and the other with a high capacity 115 kV line.                                                                                                                                                                                                                   |
| 16-16        | 16.4.1                    | 4         | TO clarify, the reference to the Bothell-SnoKing double circuit 230 kV line line should have been the Maple Valley-SnoKing double circuit 230 kV line                                                                                                                                                                                                 |
| 16-20        | 16.6.3.1.1                | 1         | 1st Sentence: PSE is considering expanding the Lakeside and Westminster substation sites, not the Vernell substation.                                                                                                                                                                                                                                 |
| 16-20        | 16.6.3.1.1                | 1         | The transformer is just one of many foundations. The deadend towers and control house will have deeper foundations in comparison.                                                                                                                                                                                                                     |
| 16-21        | 16.6.3.1.1                | 8         | "...less potential for construction to encounter existing utilities..." - This statement is misleading. Often times, road rights-of-way have more co-located utilities in them, thereby leading to a higher risk of disruption.                                                                                                                       |
| 16-22        | 16.6.3.1.2                | 1         | 1st Sentence: To clarify, Vernell is not an existing substation; therefore, it could not be expanded.                                                                                                                                                                                                                                                 |
| 16-28        | 16.7.1.1                  | 1         | "Three study area communities - King County, Redmond, and Kirkland - have policies or regulations that specifically prohibit transmission lines ('high consequence land uses') with hazardous material pipelines." The regulations prohibit new uses within proximity to the existing corridor, not transmission lines in the corridor.               |
| 16-30        | 16.7.3.1.1                | 1         | Last sentence: There are no policies that discourage co-location. Kirkland and Redmond have policies regarding new uses, which are designed to minimize risk.                                                                                                                                                                                         |
| 16-32        | 16.7.3.2.3                | 1         | PSE is not locating an additional 230 kV line in the SCL corridor. The Alternative would entail completely removing the old lines and rebuilding the existing SCL 230 kV lines.                                                                                                                                                                       |
| 16-32        | 16.7.3.3.1                | 1         | Last sentence: There are no policies that discourage co-location. Kirkland and Redmond have policies regarding expansions designed to minimize risk.                                                                                                                                                                                                  |
| 16-36        | 16.7.4.5                  | 1         | "While upgrades or extensions of gas and water distribution lines could be needed, this new demand is not expected to adversely affect the natural gas supply over the long term." This statement is true for Alternative 2 as described in the DEIS. However, if additional peaker plants were necessary, then gas supply studies would be required. |
| Appendix B-1 | Removal of Existing Poles | 2         | Table B-1 is missing a key piece of equipment for Alternative 1 (Options A and B) and Alternative 3 when it comes to removal of existing wooden poles. PSE will also consider using a crane to remove the existing poles.                                                                                                                             |

I150-A -240 See response for Key Theme UTL-6.  
I150-A -241 See response for Key Theme UTL-6.  
I150-A -242 See response for Key Theme UTL-6.  
I150-A -243 See response for Key Theme UTL-6.  
I150-A -244 See response for Key Theme UTL-6.  
I150-A -245 See response for Key Theme UTL-6.  
I150-A -246 See response for Key Theme UTL-6.  
I150-A -247 See response for Key Theme UTL-6.  
I150-A -248 See response for Key Theme UTL-6.  
I150-A -249 See response for Key Theme UTL-6.  
I150-A -250 Comment noted.  
I150-A -251 See response for Key Theme OBJ-5.



Puget Sound Energy  
P.O. Box 97034  
Bellevue, WA 98009-9734  
PSE.com

March 14, 2016

City of Bellevue  
Development Services Department  
Attn: Heidi Bedwell, Senior Land Use Planner  
450 110th Ave NE  
Bellevue, WA 98004

**RE: Puget Sound Energy, Inc.'s Proposed Route Alternatives for the Energize Eastside Project Phase 2 Draft Environmental Impact Statement**

Dear Ms. Bedwell:

Puget Sound Energy, Inc. ("PSE") commends the cities of Bellevue, Kirkland, Newcastle, Redmond and Renton ("Cities") for their completion of the Energize Eastside Project Phase 1 Draft Environmental Impact Statement ("Phase 1 DEIS"). The Cities' analysis in Phase 1 helped PSE to clarify and confirm the project solutions that we propose the City and its partner jurisdictions study in detail in the Phase 2 DEIS.

I150-B-1 | Specifically, of the three Alternatives analyzed in the Phase 1 DEIS, PSE's preferred alternative is Alternative 1, Option A as it best meets DEIS project objectives. This alternative requires the construction and installation of a new 230 kilovolt ( kV) to 115 kV transformer in the center of the Eastside and a new 230 kV transmission line between the Talbot Hill and Sammamish substations.<sup>1</sup>

I150-B-2 | PSE further proposes to route the new transmission line, to the extent possible, within PSE's existing Sammamish-Lakeside-Talbot Hill 115 kV transmission line corridor. This is the shortest, least impactful route studied in the Phase 1 DEIS and is the only one that will succeed in utilizing a proven technology, solve the transmission capacity deficiency problem, meet mandatory federal standards, be the most cost effective and reliable option, and have the greatest longevity (i.e., provides the longest-enduring solution to the current Eastside transmission need).

I150-B-3 | In response to information gathered during PSE's comprehensive internal review, the Cities' DEIS process, and public comment, PSE has further refined route alternatives. As set forth in detail below, PSE now proposes analysis of four route options (referred to as Oak 1 and 2 and Willow 1 and 2). After extensive study and review, PSE believes these best meet the

<sup>1</sup> This solution (and its justification) is outlined in the DEIS and the *Transmission Solution Study* and the *Supplemental Eastside Solutions Study Report* (Gentile, et al., 2014, 2015).

I150-B -1 Comment noted.  
I150-B -2 See response for Key Theme ALT-1.  
I150-B -3 Comment noted.

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I150-B-3

project objectives while minimizing environmental impacts. PSE looks forward to more detailed study of each route during the Phase 2 DEIS review process.

PSE also proposes removing DEIS Alternatives 2 and 3 from further review as they are, respectively, infeasible or more impactful. Below we discuss in detail why we propose an analysis of four routes and removing Alternatives 2 and 3 from consideration.

**I. ALTERNATIVE 1, OPTION A BEST MEETS PHASE 1 DEIS PROJECT OBJECTIVES**

I150-B-4

PSE is charged by state statute to provide safe, reliable, low-cost power to its customers. PSE must also plan and operate its electrical infrastructure in compliance with mandatory state and federal standards. Installing a new 230 kV to 115 kV transformer in the center of the Eastside area and constructing a new 230 kV transmission line is the most cost-effective and proven means of providing reliable power while complying with state and federal standards. Alternative 1, Option A not only addresses the system deficiencies identified by PSE and the City of Bellevue's independent experts in the *Independent Technical Analysis of Energize Eastside for the City of Bellevue* (Utility System Efficiencies, Inc., 2015), it meets all of the project objectives described in Chapter 2.2 of the Phase 1 DEIS. Alternative 1, Option A is PSE's preferred solution.

**II. PSE PROPOSES FOUR PHASE 2 ALTERNATIVES**

I150-B-5

There are many ways to route, design and implement Alternative 1, Option A. PSE has reviewed the Phase 1 DEIS and used information provided by the public during PSE's outreach efforts to further analyze route options under Alternative 1, Option A. To address key concerns identified in the DEIS process, PSE performed additional engineering work to identify ways to further minimize impacts. One key conclusion resulting from this review is that environmental impacts are minimized by locating the new transmission line, to the extent possible, within the existing PSE Sammamish-Lakeside-Talbot Hill double 115 kV corridor, which was established in the late 1920s.

Additionally, PSE proposes exercising context-specific design flexibility. For example, in some areas it may be advantageous to use taller poles, whereas in other areas, shorter poles will be preferred. In other locations, a double-circuit single pole may be preferred rather than two poles. Specifically, in areas dominated with taller vegetation, replacing the two existing 115 kV H-frame structures with a single, taller double circuit pole can provide environmental benefits. If the existing H-frames are replaced with a single double-circuit pole, not only is the number of poles reduced (from four to one), but the wire zone narrows, thereby allowing more vegetation to remain in the corridor. Moreover, if the poles are taller, there is additional flexibility in system operation and more vegetation can remain under the lines.

PSE has invested significant resources in assessing context-specific design needs. In 2015, PSE conducted route-specific fieldwork along the two routes, Oak and Willow, recommended by the Community Advisory Group ("CAG") in December 2014.<sup>2</sup> In addition to

<sup>2</sup> By way of background, the CAG was convened by PSE prior to the scoping of the Phase I DEIS to gather and organize community input on transmission line routes between the Talbot Hills and Lake Sammamish substations. The CAG published their findings and

I150-B -4 See response for Key Theme OBJ-1.

I150-B -5 Comment noted.



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working with the CAG, PSE has engaged in an in-depth, multi-year public discussion to gather community feedback about the project (e.g., open house, mailers, small group meetings, etc.). Through these processes, PSE has learned that pole height and aesthetics (*i.e.*, view impacts) are of particular concern to residents in the corridor. To address community concern regarding potential visual impacts (particularly potential impacts to the Factoria-Somerset area), PSE's engineers have developed two new alignments that are variations of the Oak and Willow routes. The alternative alignments meet all federal regulations for transmission line design, operation and constructability.

The two new options utilize existing above-ground utility corridors, including a combination of the existing Sammamish-Lakeside-Talbot Hill transmission line corridor and existing transmission and distribution line routes along public rights-of-way. In total, PSE officially submits four routes (Oak 1, Willow 1, Oak 2, and Willow 2) to be reviewed and evaluated as part of the forthcoming Phase 2 DEIS. These alignments are described below by the segment nomenclature used during the CAG process (and reflected in the CAG Report) and are shown in Attachments B-E. Certain segments referred to in the CAG Report (A, C, E, M, and N) are common to all routes; therefore, they are not mentioned further in the description of the following alignments.

**a. Oak 1 Route**

Oak 1 is one of the original two routes recommended by the CAG in 2014. Oak 1 includes Segments G2 (SE 30th St.), I (Factoria Blvd. SE), and K2 (Coal Creek Parkway), connecting with segment E to the north and M to the south. These are depicted on the attached Oak 1 graphic (*see* Attachment B). A specific description of this route is as follows:

- Heading west from the new Richards Creek (Lakeside) substation along SE 30th St. (Segment G), the existing 115kV line would be rebuilt to a double-circuit 230 kV/high capacity 115 kV line, with the high capacity 115 kV line built to 230 kV standards. The pole types currently under consideration for Oak 1 are steel monopoles (*see* attached graphic inset), which are expected to range between 80 feet and 100 feet tall. The poles necessary to cross I-90 would need to be taller to meet travel clearance minimums (around 130 feet).
- From SE 30th St. south along Factoria Blvd. SE (Segment I), the same double circuit configuration would be used. The existing 115 kV single circuit line along Factoria Blvd. would be removed.
- The two existing 115 kV lines on Segment J would remain.
- Oak 1 entails maintaining the existing corridor along Segment J (through Somerset) and replacing the single existing 115 kV transmission line circuit situated on the referenced segments with a double circuit design (*see* insert on map for an illustration of a double circuit design).

conclusions in the Energize Eastside, Community Advisory Group Final Report, January 2015, which is attached to this comment letter as Attachment A.

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**b. Willow 1 Route**

Willow 1 is also one of the original two routes recommended by the CAG in 2014. The route utilizes the existing Sammamish-Lakeside-Talbot Hills 115 kV corridor (Segment J) (*see Attachment C*). The pole types currently under consideration for this route are steel poles, ranging from 85 feet to 100 feet tall, depending on topography and location. A specific description of this route is as follows:

- A distinctive feature of the route occurs midway through Segment J, where the route is modified from one double-circuit transmission line (one pole) to two single-circuit transmission lines (two poles).
- This design consideration minimizes structure height as well as takes into consideration proximity to other existing utilities in the corridor such as the Olympic pipeline.

**c. Oak 2 Route**

Oak 2 is a slight modification of Oak 1 and uses segments G2, J, I, K2, and O (124th Ave. SE) (*see Attachment D*). The Oak 2 route option allows PSE to address some of the identified impacts that are related to the unique topography of the area. These impacts are primarily related to visual and vegetation elements. This alignment is more complex, but key elements are as follows:

- Oak 2 entails taking the existing 115 kV line that is situated along Segment I (Factoria Blvd. SE) and moving it to 124th Ave. SE (Segment O) on approximately 70 feet tall wood poles. It should be noted that the SCL 230 kV corridor is currently situated along the west side of 124th Ave. SE.
- A replacement single circuit high capacity 115 kV line built to 230 kV standards would be built along Factoria Blvd. SE using steel poles approximately 80 feet tall.
- The two existing 115 kV transmission lines on Segment J would be converted to one single-circuit 230 kV line built on approximately 65-foot tall steel H-frames. This would result in only two poles remaining on most of Segment J rather than the existing four. There would be a nominal increase in pole height along Segment J (approximately 5 feet to 15 feet depending on topography and based on preliminary design). This would also narrow the transmission line footprint along Segment J potentially impacting fewer vegetation elements.
- The existing 115 kV line located along Coal Creek Parkway SE between 124th Ave. SE and Factoria Blvd. SE would be removed.
- The existing 115 kV line between Coal Creek Parkway SE and the junction of Segment M and J would be rebuilt as a high capacity 115 kV line built to 230kV standards, which would look essentially the same as the existing line except that the wood poles would be replaced with steel poles.

**d. Willow 2 Route – the Preferred Route**

The Willow 2 alignment is a modification of the Willow 1 route option using segments I, J, K2, and a new segment along SE Newport Way (Segment P) (*see Attachment E*). The Willow 2 route allows PSE to address some of the identified impacts that are related to the unique

I150-B-5

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topography of the area. These impacts are primarily related to visual and vegetation elements. Willow 2 is PSE's preferred route option as we believe it provides the best balance of minimizing impacts, meeting system requirements, and managing costs. Willow 2 would include the following:

- Along Segment J, from the new Richards Creek (Lakeside) 230 kV substation south to SE Newport Way, the existing two 115 kV lines would be removed and the replaced with a double circuit 230 kV/115 kV constructed on a single steel pole (approximately 100 feet tall).
- Continuing south along Segment J, after SE Newport Way, the two existing 115 kV lines would be removed and replaced with a single 230 kV line. The 230 kV line would be constructed on steel poles and would only be between 5 and 15 feet taller than the existing structures being removed (based on preliminary design). This portion of the route would see a change from four to two poles. The narrower configuration could allow for more vegetation to remain along the edge of the corridor.
- From Segment J west along SE Newport Way, the existing double circuit distribution and communication lines could be relocated underground because PSE would build a new high capacity 115 kV line that would be built to 230 kV standards. The new 115 kV line would be built on steel poles that would be approximately 80 feet tall.<sup>3</sup> This high capacity 115 kV line would continue to Factoria Blvd. SE where it would join the existing 115 kV line along Factoria Blvd. SE. The section between SE Newport Way and Coal Creek Parkway SE would be rebuilt to a double circuit line on steel poles that would be approximately 80 feet tall.
- The existing 115 kV line between Coal Creek Parkway SE and the junction of Segment M and J would be rebuilt as a high capacity 115 kV line built to 230kV standards, which would look essentially the same as the existing line except that the wood poles would be replaced with steel poles.

Of these alignments, PSE prefers Willow 2 as it addresses many of the concerns identified in the Phase 1 DEIS, meets the project objectives, and is the most cost effective. Nevertheless, PSE anticipates a rigorous review of all proposed routes.

### III. PHASE 1 DEIS ALTERNATIVE 2 SHOULD NOT UNDERGO FURTHER CONSIDERATION

In addition to clarifying PSE's proposals for project implementation, the Phase 1 DEIS review process confirmed that certain alternatives considered are undesirable and/or infeasible. In contrast to Alternative 1, PSE does not support additional review of Alternative 2 as described in the Phase 1 DEIS. Alternative 2 is an integrated resource approach comprised of the following five components:

- Energy storage
- Demand response services
- Distributed generation
- Peak generation production
- Energy efficiency improvements

<sup>3</sup>Undergrounding in this case would be required for technical reasons as a distribution line cannot be installed under a 230 kV line.

I150-B -6 Comment noted.

I150-B-5

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I150-B-7

PSE only has control over two of the five components: energy storage and peak generation production. Without direct control over the other three components, Alternative 2 does not adequately enable PSE to meet transmission planning standards. Therefore, as proposed, Alternative 2 does not meet the project objectives listed in Phase 1 DEIS, Section 2.2 and so should not be carried forward into Phase 2.

The following three subsections explore additional issues implicated by Alternative 2, all of which weigh in favor of suspending review of this alternative.

**a. Land Use Regulations Limit Feasibility of Alternative 2**

Implementation of Alternative 2 (*i.e.* proceeding without the construction of additional 230 kV transmission lines) would require the construction of 19 to 20 gas-turbine peak generation plants distributed across the Eastside. Each facility would need to provide approximately 20 MW of generation and be located adjacent to one of PSE's existing substations.

Existing land use regulations make Alternative 2 infeasible. Thirty-one (31) of PSE's existing substations are located on the Eastside. Eleven of them are within cities or towns that do not allow for the construction of generation facilities under their municipal codes (*e.g.*, Redmond, Kirkland, and Newcastle). Accordingly, the build-out of Alternative 2 using only peak generation plants is not permitted under existing laws and would require code changes for 11 of the potential sites. The remaining twenty substations would be distributed as follows (as organized by jurisdiction).

*i. City of Bellevue*

Fifteen (15) existing substations are located within the City of Bellevue. Therefore, a majority of the potential peak generator sites would be located in Bellevue. Generation facilities are not specifically mentioned in the Bellevue Land Use Code. The City's Planning Director has the authority to make the final determination as to the inclusion or exclusion of a particular proposed use in a particular use category (LUC 20.10.420).

The possibility of these facilities being considered an essential public facility ("EPF") under Bellevue's code has been discussed. EPFs are facilities that are typically difficult to site and must meet extensive siting criteria as required under state law. Anticipated review timelines for EPF permit applications exceed the in-service date as established in the DEIS project objectives, which limits the feasibility of this alternative.

*ii. City of Mercer Island*

Three (3) substations are located within the City of Mercer Island. Peak generation facilities could be allowed as a Transportation/Utility use defined as "the generation, transmission, distribution of energy," MICC 19.16, which are allowed under a conditional use permit within Residential zones where two of the substations are located. The other substation is located in Town Center where a utility is an allowed use.

*iii. City of Issaquah*

Two (2) substations are located within the City of Issaquah. Issaquah defines major utility facilities as "facilities which potentially have a significant impact on the adjacent properties,

I150-B -7 See response for Key Theme ALT-1.

I150-B -8 See responses for Key Themes LU-3 and LU-5.

I150-B-8

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such as administrative offices and operation centers; electric generation facilities; overhead transmission lines, sewage treatment plants and lagoons; or sanitary landfills." IMC 18.02.230. Major utilities are categorized as EPTs.

The substations are located in residential and commercial zoning districts. The code outlines review processes for each district, with the permit decision being made by the planning director/manager and Development Commission respectively. The code contains specific criteria for siting of major utilities.

**b. Additional Constraints Limit Feasibility of Constructing Peak Generation Facilities**

In addition to zoning restrictions, the following constraints further limit the feasibility of Alternative 2:

- **Land Size:** Each generation facility requires about an acre of land. Most of the existing substations do not have adequate space to facilitate installation of a peak generation plant. Additionally land would likely need to be acquired. Research would need to be done on adjacent parcels on the feasibility of purchasing them.
- **Critical Areas:** Proposed sites would also need to be evaluated for critical environmental functions such as wetlands and steep slopes. Special protection is placed on environmentally critical areas and their buffers, which could limit the development potential of these properties because the footprint of a peaker plant is larger than that of transmission poles.
- **Infrastructure Requirements:** An assessment would need to be conducted to ensure that the necessary ancillary utilities would be available. This includes water, sewer, and fuel (natural gas). In order to meet the pressure and supply demands of 19-20 gas-turbine generators, it is estimated that a total of more than 15 miles of high pressure natural gas pipeline would need to be installed.
- **Noise Requirements:** Maximum permissible noise levels depend on the zoning district in which the property is located. For example, most Residential zones have a noise limitation of 55 dBA during the day and 45 dBAs at night. WAC 173-60-040. Noise limitations may vary by jurisdiction.

Seventeen of the possible sites are located in or near Residential zones and would have to meet these limitations. North Bellevue, Center, and Goodes Corner substations are located in commercial zones and would have a noise limitation of 60 dBA during the day and 50 dBA at night. Peak generation facilities are mechanical devices that produce high levels of noise. To make a facility compliant in any zone, extensive noise reducing features would need to be installed. Even with extensive noise attenuation technology, meeting existing noise requirements would still be difficult.

If a fleet of peak generators were installed, they would run significantly more often than just in response to a transmission deficiency event. For generators to replace transmission infrastructure, they must run in advance of a transmission event. That means they would need to be dispatched whenever a probable event was foreseeable or imminent, which is likely to be the case during a large part of both peak winter and peak summer periods.

I150-B -9 See response for Key Theme WTR-7.

I150-B -10 See response for Key Theme NOI-2.

I150-B-8

I150-B-9

I150-B-10

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Page 8

I150-B -11 See response for Key Theme ALT-1.

I150-B -12 See response for Key Theme ALT-1.

I150-B-10

Generators also need to be tested regularly and, once installed, they become part of PSE's generation system. This means that generators would run whenever their economics are better than in other sources. In other words, generators would not just run during peak times.

**c. Construction of an Energy Storage Facility on the Eastside is Untested and Infeasible**

Alternative 2 also contemplates an energy storage component consisting of a 121 MW lithium ion storage battery system. This option was discussed in detail in the *Eastside System Energy Storage Alternatives Screening Study* completed by Strategen in 2015 ("Strategen Report"). While 121MW/225MWh was the smallest size studied in the report, this would still be the largest chemical battery storage system ever constructed in the United States.

There are two relevant facts regarding technological readiness and suitability included in the Strategen report:

I150-B-11

- The largest currently deployed and commissioned chemical storage project (by power rating) in the United States is SCE's Tehachapi Wind Energy Storage Energy Storage System, an 8MW/23MWh lithium ion battery (Strategen, 2015).
- The only system of comparable size to what PSE requires is a 100 MW/400 MWh lithium-ion Energy Storage System recently procured by Southern California Edison. This system is not expected to be operational until 2021.

The energy storage component proposed in Alternative 2 is ten times larger (per power rating) than any commissioned energy storage system in the United States. Alternative 2 is, accordingly, not considered a proven technology, and therefore does not meet the project objectives. It also cannot be reasonably procured in time to meet the project objective of being constructible by 2017-18.

In conclusion, an energy storage component of the size proposed in Alternative 2 does not fully meet the project objectives outlined in the DEIS Chapter 2 and should be removed from further consideration in Phase 2.

**IV. ALTERNATIVE 3 SHOULD BE ELIMINATED FROM FURTHER REVIEW AS IT IS MORE IMPACTFUL**

I150-B-12

Alternative 3 proposes the installation of approximately 60 miles of new transmission lines and 3 new transformers. Construction impacts (e.g., aesthetics, land use, plants and animals impacts) resulting from 60 miles of new 115 kV transmission lines verses 18 miles of 230 kV transmission lines would be significantly greater than impacts identified for Alternative 1. Additionally, Alternative 3 does not meet the longevity requirement stated in the project objectives and *Supplemental Eastside Solutions study Report* (Gentile et al., 2015). Therefore, PSE does not support Alternative 3 being carried forward for additional study in the Phase 2 DEIS.

**V. CONCLUSION**

PSE looks forward to the next phase of public dialogue on the Energize Eastside project and hopes that the four routes proposed herein help to address concerns identified during the Phase 1 DEIS review. PSE strongly encourages elimination of Alternatives 2 and 3 from the

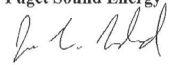


March 14, 2016  
Page 9

Phase 2 review as the DEIS confirms that they are alternatively unproven, infeasible or more impactful to the environment.

Sincerely,

**Puget Sound Energy**



Jens Nedrud  
Energize Eastside  
Project Manager

Attachments

COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
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|---------|-----------|------------|-----------|

|                                                                                                                                                                                                                                    |                       |     |        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----|--------|
| I write in strong opposition to Option A of Alternative 1 from the Draft EIS for Energize Eastside, which proposes a new 230kV transmission line as well as a new transformer. My reasons for opposing that option are as follows: | 3/14/2016<br>12:33:10 | Ron | Wilson |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----|--------|

I151-A-1

- The new high-voltage line is not needed. While PSE argues, and the Chapter 1.3 of the Draft EIS states, that a new high-voltage power line is necessary to meet short term energy needs on the Eastside, the Lauckhart-Schiffman Load Flow Study (from 2/18/2016) shows that this is not the case. To quote that study, "PSE's system can avoid overloads and outages even when two critical transformers have failed during winter peak usage."

I151-A-2

- A new high-voltage power line that follows, and towers above, the aging Olympic gas pipeline is a catastrophe waiting to happen.
  - o Chapter 16.3.7 of the Draft EIS mentions pipeline corrosion. Electromagnetic interference leads to pipeline corrosion, meaning a potential leak and devastating fire at any time during or after construction. Dr. Y. Frank Cheng of the University of Calgary and an expert on pipeline safety, has submitted, via CENSE, information confirming the dangers of locating high voltage power lines in close proximity to gas pipelines.

I151-A -1 See response for Key Theme OBJ-3.  
 I151-A -2 See responses for Key Themes PLS-1, PLS-2, and PLS-3.

I151-A -3 See response for Key Theme SVC-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Timestamp | First Name | Last Name |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I151-A-2 | <ul style="list-style-type: none"> <li>o The installation of the poles for the power lines, as well as any maintenance activities further down the line, would be a dangerous enterprise. Though downplaying those dangers, the Draft EIS does note (Chapter 8.5.3.1.2) that "significant adverse impact to public safety could occur if a leak or an explosion... resulted from the project" and (Chapter 8.6.1.2) that "ongoing maintenance activities during operation could theoretically damage or break the OPLC pipelines or other pipelines in the area, leading to a chemical release or explosion."</li> <li>o The location of the gas pipelines underground can shift over the years due to soil erosion,[1] potentially bringing the (aged) pipelines into closer proximity to the power lines and leading to further dangers during maintenance activities. Keep in mind that the pipeline is already many decades old and has already had one major explosion (Bellingham, WA in 1999) resulting in loss of life.</li> <li>o BP, the operator of the Olympic Pipeline, noted that "the location of the pipelines may be found anywhere within the easement from the center of the right-of-way to either side" and as a result recommended against route segments Oak and Willow.[2] Yet Oak and Willow are the only two routes still being considered.</li> </ul> |           |            |           |
| I151-A-3 | <ul style="list-style-type: none"> <li>o As noted by CENSE, the Bellevue Fire Department writes in their Standards of Response Coverage, "Given that pipeline incidents continue to occur in this</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |            |           |



COMMENT

RESPONSE

I151-A -4 See responses for Key Themes PLS-2 and PLS-4, Key Theme EMF-3 and Key Theme EARTH-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timestamp | First Name | Last Name |
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| I151-A-3 | country, and many for undetermined reasons, the community is still at risk. The combination of a highly flammable liquid, in large quantities, and in [an] urban environment translates into a significant consequence risk that approaches the 'catastrophic' level."[3] Thus, local emergency responders feel this is a dangerous proposition.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |            |           |
| I151-A-4 | o Most importantly, this entire proposed power line lies upon a major fault line. As recent media attention has shown, and as has been confirmed by national government agencies, the Pacific Northwest is long overdue for a major earthquake. A high voltage power line on top of an aging gas pipeline that runs through almost exclusively residential neighborhoods will cause a catastrophic and easily predictable loss of life. In the Somerset and Eastgate neighborhoods alone, where I live, aside from running through many residents' back yards, the pipeline/powerline combination runs underneath and above the neighborhood swim and tennis pool, where multi-generational families spend their summer days and evenings. The combination runs over and below the public Tyee Middle School, where hundreds of local children spend 8-9 hours a day, 5 days a week studying. The combination runs right alongside a Bright Horizons daycare facility, where our community's youngest, most vulnerable (and least likely to be successfully evacuated) members spend their days year-round. Somerset/Eastgate is but one of the many potentially-impacted neighborhoods. Further south in Newport Hills, these lines will come dangerously close to yet another public school, Jing |           |            |           |

COMMENT

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|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Timestamp | First Name | Last Name |
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| I151-A-4 | Mei Elementary. Other neighborhoods will be similarly impacted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |            |           |
| I151-A-5 | In sum, choosing Alternative 1 Option A is a negligent, if not clearly reckless, choice on the part of our local governments and government agencies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |            |           |
| I151-A-6 | Alternative 2 from the Draft EIS for Energize Eastside is the only safe option. The EQL Energy study, submitted by CENSE, shows that Alternative 2, if properly implemented, would be much more energy efficient for our wider community and have lower long-term costs. It will have a much lower impact on the local community than Alternative 1 Option A (see Chapter 10.7.1 and Chapter 11.6.3.5.1 of the Draft EIS), which, in addition to all of the concerns listed above, requires the widening of the existing utility corridor and thus the destruction of many homes and other community resources – indeed, it's hard to fathom how places like the Somerset Community Pool could continue to exist if Alternative 1 is put into place since it is well within the 120-150 foot “clear zones” that Alternative 1 requires (Chapter 11.6.3.5.1). |           |            |           |
| I151-A-7 | Alternative 2 options were not adequately analyzed during the Draft EIS process and should be given greater attention going forward. Our community leaders should not allow a foreign-owned, private, and profit-driven company (PSE) to determine the course of our energy future.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |            |           |
| I151-A-8 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |            |           |

- I151-A -5 Comment noted.
- I151-A -6 See response for Key Theme ALT-1.
- I151-A -7 See responses for Key Theme REC-3, and Key Themes VR-3 and VR-5.
- I151-A -8 See response for Key Theme EIS-1.



| <u>Comment</u> | <u>Timestamp</u> | <u>First Name</u> | <u>Last Name</u> |
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[1] Frank Cheng. 2013. Stress Corrosion Cracking of Pipelines. Section 8.7.1.

[2] For a copy of the letter from the Olympic Pipeline Company, follow the link at the following web address:  
<http://sane-eastside-energy.org/2014/04/02/olympic-pipeline-company-opposes-transmission-lines-over-its-pipelines-for-several-reasons-including-safety/>

[3]  
[http://www.bellevuewa.gov/pdf/Fire/Standards\\_of\\_Coverage.pdf](http://www.bellevuewa.gov/pdf/Fire/Standards_of_Coverage.pdf), p. 66

**How you can make your comments most effective**



Check out the Department of Ecology Citizen's Guide to SEPA Review and Commenting at [EnergizeEastsideEIS.org/sepa-review](http://EnergizeEastsideEIS.org/sepa-review).

Refer to Comprehensive Plans, development regulations, information on similar projects or situations, and other environmental laws or documents. Be as accurate as possible.

**Be clear, concise, and organized.** Decide what you need to say before you begin. If you have a number of points, group your comments in a logical order.

**Identify possible solutions.** Suggestions on reasonable mitigation—conditions to avoid, minimize, or reduce adverse impacts—can help influence how a project is ultimately built. After identifying your concern, suggest possible solutions.

**Be specific.** Give support to your comments by including factual information. For instance, compare how things *were*, to how they *are*, to how you believe they *will be* in the future—and why.

—fold here—

**Comments on the Phase 1 Draft EIS of PSE's Energize Eastside Project**

Name ALMA-LOUISE ELWORTH Address\* 5411 119<sup>th</sup> Av. SE  
BELLEVUE, WA. 98006

\* You must provide your physical mailing address to be considered a "party of record," eligible to appeal the adequacy of the EIS.

I152-A-1

WHY DOES THIS HEINOUS PROJECT HAVE TO BE "YOUR WAY" OR "YOUR WAY?"

I152-A-2

WHY CAN'T YOU LOOK AT ALTERNATIVES? WHY IS IT NECESSARY (YOU THINK) TO CUT HUGE SWATHS OF LAND, DEMOLISH HOMES, DAMAGE ~~THE~~ ALREADY STRESSED ENVIRONMENT JUST TO FILL YOUR

I152-A-3

POCKETS WITH OUR MONEY - FOR A PROJECT THAT IS TOTALLY UNNECESSARY!!! WE CAN PLAN FOR FUTURE POWER NEEDS BUT WE NEED TO PURSUE PRACTICAL, HELPFUL WAYS FOR ALL OF US!

- I152-A -1 See response for Key Theme ALT-1.
- I152-A -2 See response for Key Theme OBJ-1.
- I152-A -3 Comment noted.

COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
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|                       |                       |        |           |
|-----------------------|-----------------------|--------|-----------|
| To Energize Eastside: | 3/13/2016<br>14:00:55 | Thomas | Neighbors |
|-----------------------|-----------------------|--------|-----------|

I write in strong opposition to Option A of Alternative 1 from the Draft EIS for Energize Eastside, which proposes a new 230kV transmission line as well as a new transformer. My reasons for opposing that option are as follows:

I153-B-1

- The new high-voltage line is not needed. While PSE argues, and the Chapter 1.3 of the Draft EIS states, that a new high-voltage power line is necessary to meet short term energy needs on the Eastside, the Lauckhart-Schiffman Load Flow Study (from 2/18/2016) shows that this is not the case. To quote that study, "PSE's system can avoid overloads and outages even when two critical transformers have failed during winter peak usage."

I153-B-2

- A new high-voltage power line that follows, and towers above, the aging Olympic gas pipeline is a catastrophe waiting to happen.
- Chapter 16.3.7 of the Draft EIS mentions pipeline corrosion. Electromagnetic interference leads to pipeline corrosion, meaning a potential leak and devastating fire at any time during or after construction. Dr. Y. Frank Cheng of the University of Calgary and an expert on pipeline safety, has submitted, via CENSE, information confirming the dangers of locating high voltage power lines in close proximity to gas pipelines.
- The installation of the poles for the power lines, as well as any maintenance activities further down the line, would be a dangerous enterprise. Though downplaying those dangers, the Draft EIS does note

I153-B -1 See response for Key Theme OBJ-1.

I153-B -2 See responses for Key Themes PLS-1, PLS-2, and PLS-3.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Timestamp | First Name | Last Name |
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| I153-B-2 | <p>(Chapter 8.5.3.1.2) that "significant adverse impact to public safety could occur if a leak or an explosion... resulted from the project" and (Chapter 8.6.1.2) that "ongoing maintenance activities during operation could theoretically damage or break the OPLC pipelines or other pipelines in the area, leading to a chemical release or explosion."</p> <ul style="list-style-type: none"> <li>• The location of the gas pipelines underground can shift over the years due to soil erosion,[1] potentially bringing the (aged) pipelines into closer proximity to the power lines and leading to further dangers during maintenance activities. Keep in mind that the pipeline is already many decades old and has already had one major explosion (Bellingham, WA in 1999) resulting in loss of life.</li> </ul> |           |            |           |
| I153-B-3 | <ul style="list-style-type: none"> <li>• BP, the operator of the Olympic Pipeline, noted that "the location of the pipelines may be found anywhere within the easement from the center of the right-of-way to either side" and as a result recommended against route segments Oak and Willow.[2] Yet Oak and Willow are the only two routes still being considered.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |            |           |
| I153-B-4 | <ul style="list-style-type: none"> <li>• As noted by CENSE, the Bellevue Fire Department writes in their Standards of Response Coverage, "Given that pipeline incidents continue to occur in this country, and many for undetermined reasons, the community is still at risk. The combination of a highly flammable liquid, in large quantities, and in [an] urban environment translates into a significant consequence risk that approaches the 'catastrophic' level." [3] Thus, local emergency responders feel this is a dangerous proposition.</li> <li>• Most important, this entire proposed power line lies upon a major fault line. As recent media attention has shown, and as has been confirmed by national</li> </ul>                                                                                          |           |            |           |

- I153-B -3 See response for Key Theme SVC-1.
- I153-B -4 See responses for Key Themes PLS-2 and PLS-4, Key Theme EMF-3, and Key Theme EARTH-1.

COMMENT

RESPONSE

I153-B -5 Comment noted.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp | First Name | Last Name |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I153-B-4 | <p>government agencies, the Pacific Northwest is long overdue for a major earthquake. A high voltage power line on top of an aging gas pipeline that runs through almost exclusively residential neighborhoods could cause a catastrophic and easily predictable loss of life. In the Somerset and Eastgate neighborhoods alone, where my daughter lives, aside from running through many residents' back yards, the pipeline/powerline combination runs underneath and above the neighborhood swim and tennis pool, where multi-generational families spend their summer days and evenings. The combination runs over and below the public Tye Middle School, where hundreds of local children spend 8-9 hours a day, 5 days a week studying. The combination runs right alongside a Bright Horizons daycare facility, where our community's youngest, most vulnerable (and least likely to be successfully evacuated) members spend their days year-round. Somerset/Eastgate is but one of the many potentially-impacted neighborhoods. Further south in Newport Hills, these lines will come dangerously close to yet another public school, Jing Mei Elementary. Other neighborhoods will be similarly impacted.</p> |           |            |           |
| I153-B-5 | <p>In sum, choosing Alternative 1 Option A is a negligent, if not clearly reckless, choice on the part of our local governments and government agencies. If this alternative is selected based on flawed data and a catastrophic occurs, all associated proposing and approving parties are legally culpable with limitless liability.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |            |           |

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp | First Name | Last Name |  |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|--|
| I153-B-6 | <p>Based on the data presented, Alternative 2 from the Draft EIS for Energize Eastside is the only safe option. The EQL Energy study, submitted by CENSE, shows that Alternative 2, if properly implemented, would be much more energy efficient for our wider community and have lower long-term costs. It will have a much lower impact on the local community than Alternative 1 Option A (see Chapter 10.7.1 and Chapter 11.6.3.5.1 of the Draft EIS), which, in addition to all of the concerns listed above, requires the widening of the existing utility corridor and thus the destruction of many homes and other community resources – indeed, it’s hard to fathom how places like the Somerset Community Pool could continue to exist if Alternative 1 is put into place since it is well within the 120-150 foot “clear zones” that Alternative 1 requires (Chapter 11.6.3.5.1). Alternative 2 options were not adequately analyzed during the Draft EIS process and should be given greater attention going forward. Our community leaders should not allow a foreign-owned, private, and profit-driven company (PSE) to determine the course of our energy future.</p> <p>REFERENCES</p> <p>[1] Frank Cheng. 2013. Stress Corrosion Cracking of Pipelines. Section 8.7.1.</p> <p>[2] For a copy of the letter from the Olympic Pipeline Company, follow the link at the following web address: <a href="http://sane-eastside-energy.org/2014/04/02/olympic-pipeline-company-opposes-transmission-lines-over-its-pipelines-for-several-reasons-including-safety/">http://sane-eastside-energy.org/2014/04/02/olympic-pipeline-company-opposes-transmission-lines-over-its-pipelines-for-several-reasons-including-safety/</a></p> <p>[3] <a href="http://www.bellevuewa.gov/pdf/Fire/Standards_of_Coverage.pdf">http://www.bellevuewa.gov/pdf/Fire/Standards_of_Coverage.pdf</a>, p. 66</p> |           |            |           |  |
| I153-B-7 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |            |           |  |
| I153-B-8 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |            |           |  |

I153-B -6 See responses for Key Theme ALT-1 and Key Theme LU-1.  
 I153-B -7 See responses for Key Theme REC-3 and Key Theme VR-3.  
 I153-B -8 See response for Key Theme EIS-1.





COMMENT

RESPONSE

I154-A -1 See response for Key Theme OBJ-3.  
 I154-A -2 See response for Key Theme PLS-3.

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |       |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|--------|
| <p>The Lauckhart - Schiffman report titled Load Flow Modeling for Energize Eastside of February 18, 2016, uses the accepted techniques for modeling electrical load such as that proposed by PSE as justification for building this project. The report includes its assumptions that can be duplicated by anyone with the appropriate software and clearance. The PSE supplied load flow study does not disclose all of its assumptions and using the assumptions that are disclosed, the result is a low voltage condition which could cause blackouts rather than prevent them. Either PSE has chosen to hide its true assumptions or their load flow forecasters are incompetent. The Lauckhart - Schiffman study reveals that with commonly used assumptions about transformer performance and realistic energy demand growth, that this project is not needed for 20 years or more.</p> | 3/14/2016<br>18:40:54 | David | Herbig |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|--------|

I154-A-1

There are many environmental impacts already outlined in the EIS. If the Lauckhart-Schiffman study is correct, all of these environmental impacts can be avoided! There are alternative approaches that could reduce demand or increase generation and there are many years before a decision and expenditures can be made.

The EIS seems to assume that the PSE study is adequate justification for proceeding while very experienced engineers using the same load flow modeling approach compute it to be otherwise. No decision to proceed should be allowed until the PSE assumptions are made public and reviewed by others.

I154-A-2

This project will have serious impacts on the safety of

COMMENT

RESPONSE

I154-A -3 See responses for Key Theme ECON-4 and Key Theme OBJ-1.  
 I154-A -4 See response for Key Theme ECON-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp | First Name | Last Name |
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| I154-A-2 | the pipelines running under the proposed routes, and has significant economic consequences to the people in Bellevue. The project will cost over \$1 Billion dollars over 10 years. The only beneficiary of this expenditure appears to be PSE as it will allow them to increase rates to provide an adequate return on their investment in the project. This is how they plan to increase revenues in anticipation of selling PSE by 2020 as stated by the hedge fund which used a leveraged buyout to purchase PSE.                                                                                                                                                                                          |           |            |           |
| I154-A-3 | The EIS includes several alternative scenarios which PSE brushes aside as being too expensive or not technologically proven without disclosing how they arrived at their conclusions. Until a unbiased look at the cost and impact of the alternatives is undertaken, we are taking the word of a company owned in Australia that seeks to benefit from building a system that is unneeded at best and tragically costly to the residents of Bellevue.                                                                                                                                                                                                                                                         |           |            |           |
| I154-A-4 | For example, the cost of the reduction is the value of homes is not computed because it "does not support a conclusion that property value shifts would occur that lead to negative impacts on land uses." While this may be true it misses the point that people are part of the environment and what affects them financially is important . Other studies have shown that the impact on property value of a powerline running close to residential property can be in the range of a 3-6.3% reduction in property value. The EIS states: "Higher-end properties are more likely to experience a reduction in price than lower end properties." Most of the properties in Bellevue are "higher end" compared |           |            |           |



COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Timestamp | First Name | Last Name |
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| I154-A-4 | to the national averages. The average value of a home in the view areas that would be affected is in the neighborhood of \$1,000,000. There are hundreds of homes that will be affected by the sight of the new larger towers. At \$63,000 per home, the cost to the county tax roles will be millions of dollars and the cost to homeowners when they need to sell will be \$10s of millions more. The EIS concludes that an EPRI study which admits that "no quantitative generalizations about findings from the studies can be made with any reliability". This does not mean that a study of the impact on Eastside house values by the project proposed by PSE cannot be done. A study to determine a reasonable estimated range of the impact needs to be done and the time necessary to do so should be taken. |           |            |           |
| I154-A-5 | In conclusion, this project is all about economics and safety. PSE wants to increase their revenues by getting about a 9.8% return on invested capital, even if the investment is not actually needed. The overall cost of the project including maintenance and interest will be over \$1 Billion dollars, paid for by homeowners IN ADDITION to the reduction in the value of their homes and to the other homeowners in the country who will have to make up the difference in the tax receipts of the county. Added to this is the increased risk of a pipeline accident while machinery works near the lines of a 16 mile stretch AND results in an increase in the corrosion rate of the pipeline pipes from the increased voltage in close proximity to those pipes.                                            |           |            |           |
| I154-A-6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |            |           |
| I154-A-7 | Engerize Eastside should be delayed until the need for                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |            |           |

- I154-A -5 See response for Key Theme ECON-4.
- I154-A -6 See responses for Key Themes PLS-1 and PLS-3.
- I154-A -7 Comment noted.



COMMENT

RESPONSE

I154-A -8 See response for Key Theme OBJ-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                     | Timestamp | First Name | Last Name |
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| I154-A-7 | the electricity is proven to the public and the alternatives have been more fairly evaluated rather than dismissed out of hand.                                                                                                                                                                                                                                             |           |            |           |
| I154-A-8 | PSE has tried to convince the general public that the project is in their interest by waging a publicity campaign discussed as "gathering public input". They have ignored the public input they have received. Proceeding with this project will not turn out well for PSE or the citizens of Bellevue unless it is properly evaluated by unbiased and experienced people. |           |            |           |

How you can make your comments most effective



Check out the Department of Ecology Citizen's Guide to SEPA Review and Commenting at **EnergizeEastsideEIS.org/sepa-review**.

**Be clear, concise, and organized.** Decide what you need to say before you begin. If you have a number of points, group your comments in a logical order.

**Be specific.** Give support to your comments by including factual information. For instance, compare how things *were*, to how they *are*, to how you believe they *will be* in the future—and why.

Refer to Comprehensive Plans, development regulations, information on similar projects or situations, and other environmental laws or documents. Be as accurate as possible.

**Identify possible solutions.** Suggestions on reasonable mitigation—conditions to avoid, minimize, or reduce adverse impacts—can help influence how a project is ultimately built. After identifying your concern, suggest possible solutions.

-----fold here-----

Comments on the Phase 1 Draft EIS of PSE's Energize Eastside Project

Name Bill + Margie Stewart Address\* 2240 135<sup>th</sup> PL SE  
Belleme, WA 98005

\* You must provide your physical mailing address to be considered a "party of record," eligible to appeal the adequacy of the EIS.

I155-A-1

We are  
I am 100% against this project - I still feel  
it is a health danger, real & perceived. Plus,  
because of this it will de-value our property. Plus,  
it is a larger eyesore, plus all the construction.

I155-A-2

I don't believe we need this and by the time  
we would, if ever, a whole new technology for  
energy could be in place.

I155-A-3

My largest concern is still health & safety.  
You claim an alternating current would erase the dangerous  
output but WHAT IF THAT FAILS, ~~or~~ or is  
just a smoke screen that really doesn't work.

- I155-A -1 See response for Key Theme ALT-3.
- I155-A -2 Comment noted.
- I155-A -3 See response for Key Theme PLS-1.

COMMENT

RESPONSE

I156-A -1 See responses for Key Themes OBJ-2 and OBJ-3.

| Comment | Timestamp | First Name | Last Name |
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|                                                       |                       |       |        |
|-------------------------------------------------------|-----------------------|-------|--------|
| I would urge you to adopt Alternative 4, "No Action." | 3/14/2016<br>14:52:47 | James | Loring |
|-------------------------------------------------------|-----------------------|-------|--------|

There is enough documentation submitted in this EIS process to cast doubt on the assumptions Puget Sound Energy has made in its rationale for this 8 mile, 230,000-volt transmission line and has failed to identify all adverse environmental impacts resulting from this proposal.

It has been asserted by local community groups and private experts that PSE has been less forthcoming in providing the rationale or data for its assumptions. Indeed, nationally recognized power and transmission planners have been unable to duplicate PSE's modeling under the assumptions the PSE has made in justification of this project.

I156-A-1

The Lauckhart and Schiffman report submitted for your consideration indicates decades will pass before demand exceeds supply capacity for the area under study. PSE appears to be using a summer rating capacity for its transformers during a winter peak scenario. The winter rating is up to 31 percent higher, significantly increasing the capacity available for winter peak demand. PSE Further, the project proponent assumes little or no generation in the Puget Sound area while continuing transmission to Canada in the event of major disruption or winter peak scenario.

Puget Sound Energy's faulty assumptions permeate this proposal. Its justifications for the necessity of new power lines unfounded. While building major regional electrical transmission infrastructure through residential neighborhoods destroying some 8,000

COMMENT

RESPONSE

|          | <u>Comment</u>                                                                                                                                                                                                                                                                                    | <u>Timestamp</u> | <u>First Name</u> | <u>Last Name</u> |
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| I156-A-1 | tress, promoting blight across public parks, wetlands, and recreational facilities, it does nothing to bring the Puget Sound region's power grid to any semblance of the "Smart Grid" of the future. It is simply ignored in the assumption stringing more wire is the future. We deserve better. |                  |                   |                  |
| I156-A-2 | The "No Action" Alternative 4 is the best course at this juncture. It's time Puget Sound Energy went back to the drawing board, seeking a more collaborative approach with the local jurisdictions and community groups such as CENSE.                                                            |                  |                   |                  |
| I156-A-3 |                                                                                                                                                                                                                                                                                                   |                  |                   |                  |

I156-A -2    Comment noted.  
 I156-A -3    Comment noted.

COMMENT

RESPONSE

I157-A -1 See response for Key Theme EMF-1.

I157-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Timestamp            | First Name | Last Name |
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| <p>I have questions about this for-profit utility's [PSE] evaluations of need and cost of this project because it is owned and associated with the Australian business MacQuarie. Three reasons are that :</p> <ol style="list-style-type: none"> <li>1. MacQuarie's other questionable projects</li> <li>2. A 2014 inquiry by the Australian Senate called for the Australian Securities and Investments Commission "to put Macquarie Group's financial planning unit under "intensive surveillance," according to the Sydney Morning Herald. The inquiry was sparked by reports of "misconduct by financial planners at the Commonwealth Bank," but concerns about financial practices spread beyond Commonwealth. The Senate report stated, "The committee is concerned with the efficacy of the enforceable undertaking entered into as a result of serious compliance deficiencies within Macquarie Private Wealth." [11] About the inquiry, the Australian Financial Review reported that "Macquarie Group's private wealth unit [was] accused of not cooperating with the Senate committee that delved into unethical financial planning practices at the Commonwealth Bank of Australia." [12]</li> <li>3. Is this construction project part of a plan to pay off debts acquired with the purchase of PSE and not a benefit for consumers?</li> </ol> <p>"In 2008, Macquarie and a group of Canadian pension funds purchased Puget Sound Energy (PSE), the largest energy company in Washington, which provides electricity and natural gas to Seattle and the surrounding area. The Macquarie-led consortium purchased PSE from its shareholders for \$7.4 billion, which was financed in large part by borrowing \$4.2 billion. Commentators worried from the beginning of the transaction that Macquarie's heavy borrowing</p> | 3/9/2016<br>16:25:32 | kathleen   | sherman   |



I157-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Timestamp | First Name | Last Name |
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| <p>would "saddle Puget Energy with debt, sapping its financial standing and creating pressure in the future to raise rates."[56] The Washington Utilities and Transportation Commission staff and the Public Counsel Section of the Washington state Attorney General's Office also opposed the transaction during its initial stages due to the large amount of debt financing. Public Counsel Section Chief Simon Fitch warned "at the same time, customers have no assurance that capital for infrastructure will be any more available or affordable than without the merger. Consumers appear to get little or nothing in return for the increased financial risk."[57]<br/> <a href="http://www.sourcewatch.org/index.php/Macquarie">http://www.sourcewatch.org/index.php/Macquarie</a><br/>                     3/9/2016 12:11 pm</p> |           |            |           |

COMMENT

RESPONSE

I157-C-1

| Comment                                                                                                                                                                        | Timestamp            | First Name | Last Name |
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| All authors and contributors of the DEIS need to disclose any financial or other relationships with PSE and its related entities in the past, present or planned in the future | 3/9/2016<br>20:29:40 | Kathleen   | Sherman   |
| I<br>Am<br>A<br>Member of cense and spoke at the Bellevue meeting and have submitted other comments                                                                            |                      |            |           |

I157-C -1 See response for Key Theme OBJ-1.

COMMENT

RESPONSE

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|                                                                        |                       |          |         |
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| Comments on the DEIS Chapter 8<br>Environmental health is not defined. | 3/10/2016<br>19:28:22 | kathleen | sherman |
|------------------------------------------------------------------------|-----------------------|----------|---------|

I157-E-1

In this DEIS report There are many instances of stating that there are laws covering this issues but very few statements of how PSE will met these requirements.

8.1

Item number 2 Lists safety risks of activities near pipelines as an item of environmental concern. Where is the list of safety risks near a high voltage transmission line which is being studied?

Item number 3 does not include corrosion as a natural phenomenon

There is no mention of above ground structures or other underground structures like natural gas mains, waterlines and sewers. . PSE was Fined \$1.25 Million for Falsifying Gas Pipeline Safety Inspection Reports For 4 Years Running. Who is going to supervise PSE in the management of construction near its own structures like natural gas pipelines?

I157-E-2

8.2.1

This section does not follow the concept of transparency. It is probably a partial listing of codes laws and regulation. It does not include how the regulations will be met or who will enforce. There is no transparency for public notice of failures, shortcomings, or fines. This is particularly important because of PSE past serious safety violations. PSE was Fined \$1.25 Million for Falsifying Gas Pipeline Safety Inspection Reports For 4 Years Running. Who is going to pay for the kind of supervision PSE

I157-E -1 See responses for Topic PLS.

I157-E -2 See response for Key Theme PLS-5.

COMMENT

RESPONSE

I157-E -3 See response for Key Theme WTR-2.  
 I157-E -4 See response for Key Theme PLS-5.  
 I157-E -5 See response for Key Theme OBJ-3.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp | First Name | Last Name |
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| I157-E-2 | NEEDS?<br>Likely hazardous wastes are not listed including jet fuel spills. Again who is going to provide the kind of supervision for profit PSE needs to follow expensive safety regulations                                                                                                                                                                                                                                           |           |            |           |
| I157-E-3 | Storm water management will be necessary both during and after construction. There are no maps or plans provided for storm water management. There is no plan for managing mosquitos in standing water.<br>Storm water has to go somewhere and its management is important in hilly areas. Underground lakes and reseivours amybe be formed leading to erosion and damage to buildings, pipelines and transmission lines.               |           |            |           |
| I157-E-4 | No MSDS information is included for building materials that will be used and no MSDS information is provided for substances that are possibly found or created at the building site or operation site<br>There is no plan for storing materials for construction or materials found or created on or near the site before, after or during construction and operation. PSE has a history of being fined for flouting safety regulations |           |            |           |
| I157-E-5 | The city of Bellevue does not have the technical expertise to regulate or evaluate pipeline and high voltage transmission lines. The study they commissioned to independently evaluate Energize Eastside did not evaluate the data input by PSE as did the Lauckhart study.<br>cense memeber                                                                                                                                            |           |            |           |

COMMENT

RESPONSE

I157-F -1 See response for Key Theme PLS-5.  
 I157-F -2 See responses for Key Themes SVC-1 and SCV-3.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp             | First Name | Last Name |
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| I157-F-1 | <p>8.2.2.1 This section does not address PSE responsibilities in constructing, Operating or maintaining anything in the pipeline corridor. It addresses the pipeline company's responsibilities only instead of PSE responsibilities and penalties .This section lists civil penalties for pipeline operators but not penalties for pipeline non- operators who are building or maintaining or using something in the pipeline corridor</p> <p>8.2.2.2</p> <p>There is no list of high density on-site populations centers.</p> <p>There is no plan for increasing the availability of emergency services and traffic police during construction or afterward. There are no city personnel or financial plan for any increased risk incurred by the city for the increased services incurred during the construction and operation of the high voltage transmission lines. Will the city insurance for emergency personnel and other things increase with this high voltage transmission line construction and operation afterward? Will police and emergency personnel need to be reassigned because of increased risk caused by these transmission lines? Are city emergency personnel at an increased risk? How will their risk be analyzed and minimized? How much will the involved cities' insurance increase?</p> | 3/10/2016<br>19:31:00 | kathleen   | sherman   |
| I157-F-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |           |

I157-G -1 See response for Key Theme EMF-1.

I157-G-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Timestamp                     | First Name | Last Name |
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| <p>8.2.3</p> <p>The international agency for research on cancer (IARC) in 2002 classified the extremely low frequency magnetic field generated by electrical devices as possibly carcinogenic to humans [1]. In 2011, the radio frequencies of electromagnetic fields were qualified by IARC and WHO as possibly increasing the risk of malignant brain tumor development [2]. Please address this fact.</p> <p>The effect of power lines on defibrulators, EKG misinterpretation needs to be addressed particularly because the high voltage line will pass near schools and other places where people gather. Please address this study in terms of people living or working near power lines</p> <p>Onco Targets Ther. 2016 Feb 12;9:745-54. doi: 10.2147/OTT.S94374. eCollection 2016.</p> <p>Effects of electromagnetic radiation exposure on bone mineral density, thyroid, and oxidative stress index in electrical workers.</p> <p>Kunt H1, Şentürk İ2, Gönül Y3, Korkmaz M4, Ahsen A5, Hazman Ö6, Bal A7, Genç A8, Songur A3.</p> <p>Author information</p> <p>Abstract</p> <p>BACKGROUND:</p> <p>In the literature, some articles report that the incidence of numerous diseases increases among the individuals who live around high-voltage electric transmission lines (HVETL) or are exposed vocationally. However, it was not investigated whether HVETL affect bone metabolism, oxidative stress, and the prevalence of thyroid nodule.</p> <p>METHODS:</p> | <p>3/10/2016<br/>19:31:49</p> | kathleen   | sherman   |

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Dual-energy X-ray absorptiometry (DEXA) bone density measurements, serum free triiodothyronine (FT3), free thyroxine (FT4), RANK, RANKL, osteoprotegerin (OPG), alkaline phosphatase (ALP), phosphor, total antioxidant status (TAS), total oxidant status (TOS), and oxidative stress index (OSI) levels were analyzed to investigate this effect.

RESULTS:

Bone mineral density levels of L1-L4 vertebrae and femur were observed significantly lower in the electrical workers. ALP, phosphor, RANK, RANKL, TOS, OSI, and anteroposterior diameter of the left thyroid lobe levels were significantly higher, and OPG, TAS, and FT4 levels were detected significantly lower in the study group when compared with the control group.

CONCLUSION:

Consequently, it was observed that the balance between construction and destruction in the bone metabolism of the electrical workers who were employed in HVETL replaced toward destruction and led to a decrease in OPG levels and an increase in RANK and RANKL levels. In line with the previous studies, long-term exposure to an electromagnetic field causes disorders in many organs and systems. Thus, it is considered that long-term exposure to an electromagnetic field affects bone and thyroid metabolism and also increases OSI by increasing the TOS and decreasing the antioxidant status.

I157-G-2 See response for Key Theme EMF-1.

I157-G-2 | This recent peer review article shows a link between

I157-G-2

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp | First Name | Last Name |
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| <p>birth weight and proximity to high voltage lines Does 60hz exposure also affect birth weight? Please address this.</p> <p>Environ Int t2014 Aug;69:51-7. doi: 10.1016/j.envint.2014.04.012. Epub 2014 May 7.</p> <p>Residential proximity to electromagnetic field sources and birth weight: Minimizing residual confounding using multiple imputation and propensity score matching.</p> <p>de Vocht F1, Lee B2.</p> <p>Abstract</p> <p>Studies have suggested that residential exposure to extremely low frequency (50 Hz) electromagnetic fields (ELF-EMF) from high voltage cables, overhead power lines, electricity substations or towers are associated with reduced birth weight and may be associated with adverse birth outcomes or even miscarriages. We previously conducted a study of 140,356 singleton live births between 2004 and 2008 in Northwest England, which suggested that close residential proximity (<math>\leq 50</math> m) to ELF-EMF sources was associated with reduced average birth weight of 212 g (95%CI: -395 to -29 g) but not with statistically significant increased risks for other adverse perinatal outcomes. However, the cohort was limited by missing data for most potentially confounding variables including maternal smoking during pregnancy, which was only available for a small subgroup, while also residual confounding could not be excluded. This study, using the same cohort, was conducted to minimize the effects of these problems using multiple imputation to address missing data and propensity score matching to minimize residual confounding. Missing data were imputed using multiple imputation using chained equations to generate five</p> |           |            |           |



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datasets. For each dataset 115 exposed women (residing  $\leq$  50 m from a residential ELF-EMF source) were propensity score matched to 1150 unexposed women. After doubly robust confounder adjustment, close proximity to a residential ELF-EMF source remained associated with a reduction in birth weight of -116 g (95% confidence interval: -224:-7 g). No effect was found for proximity  $\leq$  100 m compared to women living further away. These results indicate that although the effect size was about half of the effect previously reported, close maternal residential proximity to sources of ELF-EMF remained associated with suboptimal fetal growth.

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COMMENT

RESPONSE

I157-H -1 See response for Key Theme EMF-3.

I157-H-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp             | First Name | Last Name |
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| <p>Please address these recent peer reviewed articles in regards to childhood cancer. The abstracts are included</p> <p>Asian Pac J Cancer Prev. 2015;16(6):2347-50.<br/>Increased risk of childhood acute lymphoblastic leukemia (ALL) by prenatal and postnatal exposure to high voltage power lines: a case control study in Isfahan, Iran.<br/>Tabrizi MM1, Bidgoli SA.<br/>Abstract</p> <p>Childhood acute lymphoblastic leukemia (ALL) is one of the most common hematologic malignancies, accounting for one fourth of all childhood cancer cases. Exposure to environmental factors around the time of conception or pregnancy can increase the risk of ALL in the offspring. This study aimed to evaluate the role of prenatal and postnatal exposure to high voltage power lines on the incidence of childhood ALL. This cross-sectional case control study was carried out on 22 cases and 100 controls who were born and lived in low socioeconomic families in Isfahan and hospitalized for therapeutic purposes in different hospitals from 2013-2014. With regard to the underlying risk factors, familial history and parental factors were noted but in this age, socioeconomic and zonal matched case control study, prenatal and childhood exposure to high voltage power lines was considered as the most important environmental risk factors of ALL (p=0.006, OR=3.651, CI 95%, 1.692-7.878). As the population was of low socioeconomic background, use of mobiles, computers and microwave was negligible. Moreover prenatal and postnatal exposure to indoor electrically charged</p> | 3/10/2016<br>19:33:26 | kathleen   | sherman   |



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objects was not determined to be a significant environmental factor. Thus, pre and post-natal exposure to high voltage power lines and living in pollutant regions as well as familial influence could be described as risk factors of ALL for the first time in a low socioeconomic status Iranian population.

PMID:

25824762

[PubMed - indexed for MEDLINE]

Abstract

Asian Pac J Cancer Prev. 2015;16(17):7613-8

Childhood acute lymphoblastic leukemia (ALL) is one of the most common hematologic malignancies which accounts for one fourth of all childhood cancer cases. Exposure to environmental factors around the time of conception or pregnancy can increase the risk of ALL in the offspring. This study aimed to evaluate the influence of prenatal and postnatal exposure to high voltage power lines on the incidence of childhood ALL. It also examines the role of various factors such as environmental factors and alpha-amylase as a marker in the development of leukemia. This cross-sectional case control study was carried out on 22 cases and 100 controls who born and lived in low socioeconomic families in Tehran and were hospitalized for therapeutic purposes in different hospitals from 2013-2014. With regard to the underlying risk factors; familial history and parental factors were detected as risk factors of ALL but in this age, socioeconomic and zonal matched case control study, prenatal and childhood exposure to high voltage power lines was considered as the most important environmental risk factor (p=0.006, OR=3.651, CI 95% 1.692-7.878). As

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the population study was from low socioeconomic state, use of mobiles, computers and microwaves was negligible. Moreover prenatal and postnatal exposure to all indoor electrically charged objects were not detected as significant environmental factors in the present study. This work defined the risk of environmental especially continuous pre and postnatal exposure to high voltage power lines and living in pollutant regions through the parents or children as well as the previously described risk factors of ALL for the first time in low socioeconomic status Iranian population.

PMID:  
26625771

I157-I -1 See response for Key Theme EMF-1.

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                           |                 |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------|----------------|
| <p>Please address the health effects of high voltage power lines in the following recent peer reviewed article The article discusses sleep disturbances and circadian rhythms Sleep disturbances are an issue in safety such as driving safety and health. Biomed Res Int. 2014; 2014: 169459. Published online 2014 Jul 22. doi: 10.1155/2014/169459 PMID: PMC4130204 Influence of Electric, Magnetic, and Electromagnetic Fields on the Circadian System: Current Stage of Knowledge Bogdan Lewczuk, 1 ,* Grzegorz Redlarski, 2 , 3 Arkadiusz Zak, 2 Natalia Ziolkowska, 1 Barbara Przybylska-Gornowicz, 1 and Marek Krawczuk 2</p> | <p>3/10/2016 19:41:41</p> | <p>kathleen</p> | <p>sherman</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------|----------------|

This article has been cited by other articles in PMC.

Abstract

One of the side effects of each electrical device work is the electromagnetic field generated near its workplace. All organisms, including humans, are exposed daily to the influence of different types of this field, characterized by various physical parameters. Therefore, it is important to accurately determine the effects of an electromagnetic field on the physiological and pathological processes occurring in cells, tissues, and organs. Numerous epidemiological and experimental data suggest that the extremely low frequency magnetic field generated by electrical transmission lines and electrically powered devices and the high frequencies electromagnetic radiation emitted by electronic devices have a potentially negative impact on the circadian system. On the other

I157-I-1

I157-I

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RESPONSE

I157-I-1

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hand, several studies have found no influence of these fields on Chrono biological parameters. According to the current state of knowledge, some previously proposed hypotheses, including one concerning the key role of melatonin secretion disruption in pathogenesis of electromagnetic field induced diseases, need to be revised. This paper reviews the data on the effect of electric, magnetic, and electromagnetic fields on melatonin and cortisol rhythms—two major markers of the circadian system as well as on sleep. It also provides the basic information about the nature, classification, parameters, and sources of these fields.

I157-J-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp          | First Name | Last Name |
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| <p>The amount exposure to power line effects should take into account cumulative exposures that occur at home, school and other places children spend time. Bio electromagnetics. 2008 Oct;29(7):564-70. doi: 10.1002/bem.20431</p> <p>Analysis of individual- and school-level clustering of power frequency magnetic fields.</p> <p>Lin IF1, Li CY, Wang JD.</p> <p>1Institute of Occupational Medicine and Industrial Hygiene, College of Public Health, National Taiwan University, Taipei, Taiwan.</p> <p>Abstract</p> <p>This study reports the continuous 8-h monitoring of data on extremely low-frequency magnetic fields (ELF-MF) relating to 14 children and 35 teachers in 11 elementary schools in Northern Taiwan. It was anticipated that the subjects in two of these campuses would have elevated exposure to ELF-MF as a result of their close proximity to high-voltage (161 kilo-Volt, kV) power lines. The results of our analysis reveal that in those schools with high-voltage power lines running through the campuses, the mean ELF-MF exposure level (0.38 +/- 0.51 micro-Tesla (microT), or 0.15, 0.25 and 0.44 microT at the respective 25th, 50th and 75th percentiles) was higher than the mean ELF-MF exposure level for campuses situated far away from such high-voltage power lines (0.14 +/- 0.27 microT, or 0.04, 0.06 and 0.10 microT at the respective 25th, 50th and 75th percentiles). The multi-level analytical technique, which takes individual measurements as the analytical unit, and which also takes into consideration the inter-correlation between measurements from the same individual and/or campus, was also applied to the analysis of the data.</p> | 3/10/2016 19:44:26 | kathleen   | sherman   |

I157-J -1 See response for Key Theme P&A-3.

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We conclude that individual-level and school-level clustering of the measurements, both of which were discernible in this study, should be taken into consideration in any future analysis of data obtained from the continuous monitoring of exposure to ELF-MF.  
this comment box will not let me put the entire article.



**From:** [Kathleen Sherman](#)  
**To:** [info@EnergizeEastSideEIS.org](mailto:info@EnergizeEastSideEIS.org)  
**Subject:** DEIS comment  
**Date:** Sunday, March 13, 2016 11:21:41 PM

Kathleen Sherman  
 4741 132<sup>nd</sup> ave se  
 Bellevue wa 98006

The document needs to address PSE role in pipeline safety as it constructs high voltage transmission lines. I am questioning PSE ability to meet industry standards, regulatory requirements, and construction and operational procedures that address high voltage transmission lines, upkeep of existing structures let alone pipeline safety

PSE has been fined for falsifying safety records so how can it argue that laws and regulations will protect people.

8.3.5.1.3 This section describes what epidemiology is but not how it is used in this DEIS or who used it for the DEIS. There is no definition of statistically valid provided.

The study of childhood leukemia founded by the Electric Power Research Institute is suspect because the Electric Power Research Institute is funded by electric utilities. There is a problem with tobacco companied funding tobacco smoking research so this research by the Electric Power Research Institute should be looked at critically.

8.3.5.1.4 There is no discussion of interference with defibrillators or EKG readings. This is important because this high voltage line will pass over schools.

I157-L -1 See responses for Key Themes PLS-1 and PLS-5, and Key Theme EMF-1.

I157-L-1

**From:** [Kathleen Sherman](mailto:Kathleen.Sherman@energizeeastside.org)  
**To:** [info@energizeeastside.org](mailto:info@energizeeastside.org)  
**Subject:** FW: deis 8  
**Date:** Monday, March 14, 2016 9:08:27 PM

**From:** Kathleen Sherman [mailto:kathleen.sherman@comcast.net]  
**Sent:** Wednesday, March 02, 2016 6:49 PM  
**To:** Kathleen Sherman (kathleen.sherman@comcast.net)  
**Subject:** deis 8

DEIS review

Chapter 8

Environmental health is not defined.

Chapter8

8.1

Item number 2 Lists safety risks of activities near pipelines as an item of environmental concern. Where is the list of safety risks near a high voltage transmission line which is being studied? Item number 3 does not include corrosion as a natural phenomenon There is no mention of other underground structures ns like natural gas mains, waterlines and sewers.

8.2.1

This section does not follow the concept of transparency. It is probably a partial listing of codes laws and regulation. It does not include how the regulations will be met or who will enforce. There is no transparency for public notice of failures, shortcomings, or fines. This is particularly important because of PSE past serious safety violations. PSE was Fined \$1.25 Million for Falsifying Gas Pipeline Safety Inspection Reports For 4 Years Running. Who is going to pay for the kind of supervision PSE NEEDS?

Likely hazardous wasted are not listed including jet fuel spills. Again who is going to provide the kind of supervision for profit PSE needs to follow expensive safety regulations

Storm water management will be necessary both during and after construction. There are no maps or plans provided for storm water management. Storm water has to go somewhere and its management is important in hilly areas. Underground lakes and resevoirs amybe be formed leading to erosion and damage to buildings, pipelins and transmission lines.

Kathleen Sherman  
 4741 132<sup>nd</sup> ave se  
 Bellevue wa

I157-N -1 See responses for Key Themes PLS-2 and PLS-3.

I157-N -2 See response for Key Theme WTR-2.

I157-N-1

I157-N-2

COMMENT

RESPONSE

**From:** [Kathleen Sherman](#)  
**To:** [info@energizeEastsideEIS.org](mailto:info@energizeEastsideEIS.org)  
**Subject:** DEIS comments  
**Date:** Monday, March 14, 2016 10:22:58 PM

Kathleen Sherman  
 4741 132<sup>nd</sup> ave se  
 Bellevue WA

I157-O-1

Who is going to be responsible for the upgrade of sacrifice metals for pipeline corrosion due to increased corrosion caused by the high voltage power line electrical fields?

I157-O-2

What will be done about galloping power lines and how will safety of nearby people and their homes and school be ensured?

I157-O-3

The possible noise of working high voltage power lines will disturb nearby households

See this link: <https://www.youtube.com/watch?v=Als2tLHzdY4>

I157-O-4

Property owners with a loss of property value need to be compensated by PSE. Appraisals are affected by high voltage transmission lines and some real estate agents do not like to show houses near transmission lines. This will lead to a decrease in collected money from property taxes which will lead to a general increase in property tax rates.

I157-O-5

Wild fires will increase with this power line. This has been shown in California. There are too many homes and schools nearby for such a fire corridor to be built.

In October 2007, Southern California was hit by multiple simultaneous catastrophic fires driven by "Santa Ana" Foehn winds. Half of these fires – the largest and most destructive – have been attributed to power lines. Comparing scaling relations for historical fire sizes demonstrates that power line fires tend to be larger than wildland fires from other sources. This occurs because the number of line faults rise rapidly as a function of wind speed while fire suppression efficiency drops from its usual 99% to around 80% under high-wind conditions. Three physical effects causing power line fires – tree contact, line slap, and metal fatigue – are shown to lead to a number of ignitions that increase at least as wind speed squared, and probably as a much stronger function of wind speed. Current regulations are shown to be inadequate to protect against extreme wind events, making the reoccurrence of power line conflagrations equaling or worse than that of October 2007 inevitable barring significant additional preventative measures to be taken by utilities and regulators. From Power Lines and Catastrophic Wildland Fire in Southern California  
 Joseph W. Mitchell

- I157-O -1 See response for Key Theme PLS-3.
- I157-O-2 See response for Key Theme PLS-2.
- I157-O -3 See response for Key Theme NOI-2.
- I157-O -4 See responses for Key Themes ECON-1 and ECON-2.
- I157-O -5 See responses for Key Themes PLS-2 and PLS-3.

COMMENT

RESPONSE

I157-O-5 | The risk of pipeline problems caused by high voltage transmission lines is too great to risk. Also PSE and Olympic pipeline company will blame each other for any problems and nothing will be settled or any responsibility taken for years.

I157-O-6 | The soil analysis and other site factors cannot be properly evaluated without a detailed map or building plan. The placement of each structure erected needs to be evaluated. The soil changes even in my quarter acre lot. An impact study of the general area is not adequate. It's like building in the pipeline corridor without checking to see exactly where the pipeline is.

I157-O-7 | Because of PSE safety violation record and recent gas line explosion an independent entity will need to evaluate the ELF levels nears homes and schools.

I157-O-8 | AT the meeting in Bellevue a PSE representative said the energize eastside project would cost nothing because the money is coming from the capital fund. The capital fund is also used for repairs. Energize eastside use 75% of the capital fund. What will not get repaired, maintained or inspected if this much of the capitol fund is used for one project?

I157-O -6 See response for Key Theme EARTH-5.

I157-O -7 See responses for Key Theme PLS-1 and Key Theme EMF-3.

I157-O -8 See responses for Key Themes ECON-3 and ECON-4.

**From:** [SharedFamily iPad](#)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Cc:** [eis@cense.org](mailto:eis@cense.org)  
**Subject:** Fwd: Deis comment  
**Date:** Monday, March 14, 2016 10:29:51 PM

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Kathleen sherman  
 4741 132nd ave se 98006  
 Cense member

Sent from my iPad

Begin forwarded message:

**From:** SharedFamily iPad <[SharedFamilyIpad@comcast.net](mailto:SharedFamilyIpad@comcast.net)>  
**Date:** March 10, 2016 at 9:40:15 PM PST  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Deis comment

The pipeline corridor passes and connects to many green belts that connect to county state and federal lands that support wildlife. High voltage lines are perceived differently by animals than people. This causes animals to avoid high voltage lines causing their territories to become fragmented. How will this be addressed?

Sent from my iPad

I157-P -1 See response for Key Theme P&A-1.

I157-P-1

I157-Q -1 See response for Key Theme EMF-1.

I157-Q-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Timestamp          | First Name | Last Name |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------|-----------|
| <p>Mental health is part of environmental health These two articles show effects of power lines on mental health. Please address these concerns.</p> <p>Am J Epidemiol. 1997 Dec 15;146(12):1037-45<br/>                     Magnetic fields of transmission lines and depression. Verkasalo PK1, Kaprio J, Varjonen J, Romanov K, Heikkilä K, Koskenvuo M.</p> <p>Abstract<br/>                     Electromagnetic fields have been suggested to contribute to the risk of depression by causing pineal dysfunction. Some epidemiologic studies have supported this possibility but have generally reported crude methods of exposure assessment and nonsystematic evaluation of depression. Using two available nationwide data sets, the authors identified from the Finnish Twin Cohort Study 12,063 persons who had answered the 21-item Beck Depression Inventory of self-rated depressive symptoms in 1990. The personal 20-year histories of exposure (i.e., distance and calculated annual average magnetic fields) before 1990 to overhead 110- to 400-kv power lines were obtained from the Finnish Transmission Line Cohort Study. The adjusted mean Beck Depression Inventory scores did not differ by exposure, providing some assurance that proximity to high-voltage transmission lines is not associated with changes within the common range of depressive symptoms. However, the risk of severe depression was increased 4.7-fold (95% confidence interval 1.70-13.3) among subjects living within 100 m of a high-voltage power line. This finding was based on small numbers. The authors recommend that attempts be made to strive for a better understanding of the exposure characteristics in relation to the onset and</p> | 3/10/2016 19:52:09 | kathleen.  | sherman   |

I157-Q-1

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

course of depression.  
 PMID:  
 9420528  
 [PubMed - indexed for MEDLINE]

- 
- Relation between suicide and the electromagnetic field of overhead power lines.  
 Reichmanis M, Perry FS, Marino AA, Becker RO.  
 Abstract  
 Laboratory studies have shown that electromagnetic fields similar to those from high-voltage transmission lines can produce biological effects. Surveys of the actual effects of such lines on exposed individuals usually have been hampered by complicating factors tending to blur the data. By means of a new approach, however, correlation has been established between the presence of transmission-line fields and the occurrence of suicides in part of the Midlands of England.  
 PMID:  
 542502  
 [PubMed - indexed for MEDLINE]

The mental health, psychological and emotional impact of condemning homes and altering neighborhoods is not addressed. Nor is impact and cost of construction.  
 8.3.1

COMMENT

RESPONSE

I157-S-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp             | First Name | Last Name |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| was the species <i>Bombus occidentalis</i> specifically investigated?<br>There are many hedgerows along the pipeline corridor and hedgerows are ecologically important how is this address?<br>There have been multiple reports of bobcats in the area. Some pictures or on NextDoor. Although bobcats are mor common in suburban ares these pictures do not show the spotted bobcat coat pattern The may be young canadian lynx. This need to be investigated | 3/10/2016<br>20:01:49 | kathleen   | sherman   |

I157-S -1 See response for Key Theme EIS-1.



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**From:** [Kathleen Sherman](#)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** FW: DEIS comments  
**Date:** Monday, March 14, 2016 9:06:44 PM  
**Attachments:** [DEIS review chapter 8.docx](#)

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**From:** Kathleen Sherman [mailto:kathleen.sherman@comcast.net]  
**Sent:** Sunday, March 13, 2016 10:40 PM  
**To:** 'info@EnergizeEastsideEIS.org'  
**Subject:** DEIS comments

Kathleen Sherman  
4741 132<sup>nd</sup> ave sebellvue wa 98006

See attachemnet

COMMENT

RESPONSE

Comments on the DEIS  
Chapter 8

I157-T-1 | Environmental health is not defined.

I157-T-2 | In this DEIS report There are many instances of stating that there are laws covering this issues but very few statements of how PSE will met these requirements.

8.1

Item number 2 Lists safety risks of activities near pipelines as an item of environmental concern. Where is the list of safety risks near a high voltage transmission line which is being studied?

Item number 3 does not include corrosion as a natural phenomenon

There is no mention of above ground structures or other underground structures like natural gas mains, waterlines and sewers. . PSE was Fined \$1.25 Million for Falsifying Gas Pipeline Safety Inspection Reports For 4 Years Running. Who is going to supervise PSE in the management of construction near its own structures like natural gas pipelines?

I157-T-3 | 8.2.1

This section does not follow the concept of transparency. It is probably a partial listing of codes laws and regulation. It does not include how the regulations will be met or who will enforce. There is no transparency for public notice of failures, shortcomings, or fines. This is particularly important because of PSE past serious safety violations. PSE was Fined \$1.25 Million for Falsifying Gas Pipeline Safety Inspection Reports For 4 Years Running. Who is going to pay for the kind of supervision PSE NEEDS?

Likely hazardous wasted are not listed including jet fuel spills. Again who is going to provide the kind of supervision for profit PSE needs to follow expensive safety regulations

Storm water management will be necessary both during and after construction. There are no maps or plans provided for storm water management. There is no plan for managing mosquitos in standing water. Storm water has to go somewhere and its management is important in hilly areas. Underground lakes and resevoirs amybe be formed leading to erosion and damage to buildings, pipelines and transmission lines.

I157-T-4 | No MSDS information is included for building materials that will be used and no MSDS information is provided for substances that are possibly found or created at the building site or operation site

There is no plan for storing materials for construction or materials found or created on or near the site before, after or during construction and operation.

I157-T -1 | The specific environmental health issues of concern are described in detail in the EIS. For a definition of the topic refer to the SEPA regulations in WAC 197-11.

I157-T -2 | Comment noted. Additional detail is provided in the Phase 2 Draft EIS and Final EIS.

I157-T -3 | See responses for Key Themes PLS-3 and PLS-5.

I157-T -4 | See Sections 8.2.1, 8.3.1, 8.5, 8.6, and 8.7.1 of the Phase 1 Draft EIS.

I157-T-5 PSE has a history of being fined for flouting safety regulations  
 The city of Bellevue does not have the technical expertise to regulate or evaluate pipeline and high voltage transmission lines. The study they commissioned to independently evaluate Energize Eastside did not evaluate the data input by PSE as did the Lauckhart study.

I157-T-6 8.2.2.1 This section does not address PSE responsibilities in constructing, operating or maintaining anything in the pipeline corridor. It addresses the pipeline company's responsibilities only instead of PSE responsibilities and penalties. This section lists civil penalties for pipeline operators but not penalties for pipeline non- operators who are building or maintaining or using something in the pipeline corridor

I157-T-7 8.2.2.2  
 There is no list of high density on-site populations centers.  
 There is no plan for increasing the availability of emergency services and traffic police during construction or afterward. There are no city personnel or financial plan for any increased risk incurred by the city for the increased services incurred during the construction and operation of the high voltage transmission lines. Will the city insurance for emergency personnel and other things increase with this high voltage transmission line construction and operation afterward? Will police and emergency personnel need to be reassigned because of increased risk caused by these transmission lines? Are city emergency personnel at an increased risk? How will their risk be analyzed and minimized? How much will the involved cities' insurance increase?

I157-T-8 8.2.3  
 The international agency for research on cancer (IARC) in 2002 classified the extremely low frequency magnetic field generated by electrical devices as possibly carcinogenic to humans [1]. In 2011, the radio frequencies of electromagnetic fields were qualified by IARC and WHO as possibly increasing the risk of malignant brain tumor development [2]. Please address this fact.

**The effect of power lines on defibrillators, EKG misinterpretation needs to be addresses particularly because the high voltage line will pass near schools and other places where people gather.**

**Please address this study in terms of people living or working near power lines**

**Onco Targets Ther. 2016 Feb 12;9:745-54. doi: 10.2147/OTT.S94374. eCollection 2016.**

**Effects of electromagnetic radiation exposure on bone mineral density, thyroid, and oxidative stress index in electrical workers.**

Kunt H1, Şentürk İ2, Gönül Y3, Korkmaz M4, Ahsen A5, Hazman Ö6, Bal A7, Genç A8, Songur A3.

Author information

I157-T -5 See response for Key Theme PLS-5.  
 I157-T -6 See response for Key Theme PLS-5.  
 I157-T -7 See responses for Key Themes SVC-1 and SCV-3.  
 I157-T -8 See response for Key Theme EMF-1.

**Abstract****BACKGROUND:**

In the literature, some articles report that the incidence of numerous diseases increases among the individuals who live around high-voltage electric transmission lines (HVETL) or are exposed vocationally. However, it was not investigated whether HVETL affect bone metabolism, oxidative stress, and the prevalence of thyroid nodule.

**METHODS:**

Dual-energy X-ray absorptiometry (DEXA) bone density measurements, serum free triiodothyronine (FT3), free thyroxine (FT4), RANK, RANKL, osteoprotegerin (OPG), alkaline phosphatase (ALP), phosphor, total antioxidant status (TAS), total oxidant status (TOS), and oxidative stress index (OSI) levels were analyzed to investigate this effect.

**RESULTS:**

Bone mineral density levels of L1-L4 vertebrae and femur were observed significantly lower in the electrical workers. ALP, phosphor, RANK, RANKL, TOS, OSI, and anteroposterior diameter of the left thyroid lobe levels were significantly higher, and OPG, TAS, and FT4 levels were detected significantly lower in the study group when compared with the control group.

**CONCLUSION:**

Consequently, it was observed that the balance between construction and destruction in the bone metabolism of the electrical workers who were employed in HVETL replaced toward destruction and led to a decrease in OPG levels and an increase in RANK and RANKL levels. In line with the previous studies, long-term exposure to an electromagnetic field causes disorders in many organs and systems. Thus, it is considered that long-term exposure to an electromagnetic field affects bone and thyroid metabolism and also increases OSI by increasing the TOS and decreasing the antioxidant status.

I157-T -9 See response for Key Theme EMF-1.

I157-T-9

This recent peer review article shows a link between birth weight and proximity to high voltage lines Does 60hz exposure also affect birth weight? Please address this.

Environ Int t2014 Aug;69:51-7. doi: 10.1016/j.envint.2014.04.012. Epub 2014 May 7.

**Residential proximity to electromagnetic field sources and birth weight: Minimizing residual confounding using multiple imputation and propensity score matching.**

de Vocht F1, Lee B2.

**Abstract**

Studies have suggested that residential exposure to extremely low frequency (50 Hz) electromagnetic fields (ELF-EMF) from high voltage cables, overhead power lines, electricity substations or towers are associated with reduced birth weight and may be associated with adverse birth outcomes or even miscarriages. We previously conducted a study of 140,356 singleton live births between 2004 and 2008 in Northwest England, which suggested that close residential proximity ( $\leq 50$  m) to ELF-EMF sources was associated with reduced average birth weight of 212 g (95%CI: -395 to -29 g) but not with statistically significant increased risks for other adverse perinatal outcomes. However, the cohort was limited by missing data for most potentially confounding variables including maternal smoking during pregnancy, which was only available for a small subgroup, while also residual confounding could not be excluded. This study, using the same cohort, was conducted to minimize the effects of these problems using multiple imputation to address missing data and propensity score matching to minimize residual confounding. Missing data were imputed using multiple imputation using chained equations to generate five datasets. For each dataset 115 exposed women (residing  $\leq 50$  m from a residential ELF-EMF source) were propensity score matched to 1150 unexposed women. After doubly robust confounder adjustment, close proximity to a residential ELF-EMF source remained associated with a reduction in birth weight of -116 g (95% confidence interval: -224:-7 g). No effect was found for proximity  $\leq 100$  m compared to women living further away. These results indicate that although the effect size was about half of the effect previously reported, close maternal residential proximity to sources of ELF-EMF remained associated with suboptimal fetal growth.

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I157-T -10 See response for Key Theme EMF-1.

I157-T-10

**Please address these recent peer reviewed articles in regards to childhood cancer. The abstracts are included**

**Asian Pac J Cancer Prev. 2015;16(6):2347-50.**

Increased risk of childhood acute lymphoblastic leukemia (ALL) by prenatal and postnatal exposure to high voltage power lines: a case control study in Isfahan, Iran.

Tabrizi MM1, Bidgoli SA.

**Abstract**

Childhood acute lymphoblastic leukemia (ALL) is one of the most common hematologic malignancies, accounting for one fourth of all childhood cancer cases. Exposure to environmental factors around the time of conception or pregnancy can increase the risk of ALL in the offspring. This study aimed to evaluate the role of prenatal and postnatal exposure to high voltage power lines on the incidence of childhood ALL. This cross-sectional case control study was carried out on 22 cases and 100 controls who were born and lived in low socioeconomic families in Isfahan and hospitalized for therapeutic purposes in different hospitals from 2013-2014. With regard to the underlying risk factors, familial history and parental factors were noted but in this age, socioeconomic and zonal matched case control study, prenatal and childhood exposure to high voltage power lines was considered as the most important environmental risk factors of ALL ( $p=0.006$ ,  $OR=3.651$ ,  $CI$  95%, 1.692-7.878). As the population was of low socioeconomic background, use of mobiles, computers and microwave was negligible. Moreover prenatal and postnatal exposure to indoor electrically charged objects was not determined to be a significant environmental factor. Thus, pre and post-natal exposure to high voltage power lines and living in pollutant regions as well as familial influence could be described as risk factors of ALL for the first time in a low socioeconomic status Iranian population.

PMID:

25824762

[PubMed - indexed for MEDLINE]

Abstract

**Asian Pac J Cancer Prev. 2015;16(17):7613-8**

Childhood acute lymphoblastic leukemia (ALL) is one of the most common hematologic malignancies which accounts for one fourth of all childhood cancer cases. Exposure to environmental factors around the time of conception or pregnancy can increase the risk of ALL in the offspring. This study aimed to evaluate the influence of prenatal and postnatal exposure to high voltage power lines on the incidence of childhood ALL. It also examines the role of various factors such as environmental factors and alpha-amylase as a marker in the development of leukemia. This cross-sectional case control study was carried out on 22 cases and 100 controls who born and lived in low socioeconomic families in Tehran and were hospitalized for therapeutic purposes in different hospitals from 2013-2014. With regard to the underlying risk factors; familial history and parental factors were detected as risk factors of ALL but in this age, socioeconomic and zonal matched case control study, prenatal and childhood exposure to high voltage power lines was considered as the most important environmental risk factor ( $p=0.006$ ,  $OR=3.651$ ,  $CI$  95% 1.692-7.878). As the population study was from low socioeconomic state, use of mobiles, computers and microwaves was negligible. Moreover prenatal and postnatal exposure to all indoor electrically charged objects were not detected as significant environmental factors in the present

study. This work defined the risk of environmental especially continuous pre and postnatal exposure to high voltage power lines and living in pollutant regions through the parents or children as well as the previously described risk factors of ALL for the first time in low socioeconomic status Iranian population.

PMID:

26625771

I157-T-11

**Please address the health effects of high voltage power lines in the following recent peer reviewed article. The article discusses sleep disturbances and circadian rhythms. Sleep disturbances are an issue in safety such as driving safety and health.**

**Biomed Res Int. 2014; 2014: 169459.**

**Published online 2014 Jul 22. doi: 10.1155/2014/169459**

**PMCID: PMC4130204**

**Influence of Electric, Magnetic, and Electromagnetic Fields on the Circadian System: Current Stage of Knowledge**

Bogdan Lewczuk, 1,\* Grzegorz Redlarski, 2, 3 Arkadiusz Żak, 2 Natalia Ziółkowska, 1 Barbara Przybylska-Gornowicz, 1 and Marek Krawczuk 2

[Author information](#) ► [Article notes](#) ► [Copyright and License information](#) ►

This article has been cited by other articles in PMC.

Go to:

Abstract

One of the side effects of each electrical device work is the electromagnetic field generated near its workplace. All organisms, including humans, are exposed daily to the influence of different types of this field, characterized by various physical parameters. Therefore, it is important to accurately determine the effects of an electromagnetic field on the physiological and pathological processes occurring in cells, tissues, and organs. Numerous epidemiological and experimental data suggest that the extremely low frequency magnetic field generated by electrical transmission lines and electrically powered devices and the high frequencies electromagnetic radiation emitted by electronic devices have a potentially negative impact on the circadian system. On the other hand, several studies have found no influence of these fields on Chrono biological parameters. According to the current state of knowledge, some previously proposed hypotheses, including one concerning the key role of melatonin secretion disruption in pathogenesis of electromagnetic field induced diseases, need to be revised. This paper reviews the data

I157-T -11 See response for Key Theme EMF-1.

on the effect of electric, magnetic, and electromagnetic fields on melatonin and cortisol rhythms—two major markers of the circadian system as well as on sleep. It also provides the basic information about the nature, classification, parameters, and sources of these fields.

Go to:

1. Introduction

One of the side effects of each electrical device work is the electromagnetic field generated near its workplace. All organisms, including humans, are exposed daily to the influence of different types of this field, characterized by distinct physical parameters. Therefore, it is important to accurately determine the effects of electromagnetic field on organisms. All electrically powered devices and transmission lines generate the low frequency (usually 50 or 60 Hz) field, which has a quasi-stationary character and its two components—the electric and magnetic field—can be analyzed separately. This field is considered as having a potentially negative impact on organisms, although the mechanism of its biological action remains unknown. On the other hand, electronic devices, such as mobile phones, television sets or radio transmitters, emit electromagnetic radiation with high frequencies (from 300 MHz to 300 GHz). High energy radiation of this type causes a thermal effect that may increase the temperature of tissues and organs and also cause serious damage to cells. The international agency for research on cancer (IARC) in 2002 classified the extremely low frequency magnetic field generated by electrical devices as possibly carcinogenic to humans [1]. In 2011, the radio frequencies of electromagnetic fields were qualified by IARC and WHO as possibly increasing the risk of malignant brain tumor development [2].

The visible part of electromagnetic radiation, with a relatively narrow frequency band from 389 to 789 THz, plays a key role in the regulation of the diurnal rhythms by having influence on the activity of the suprachiasmatic nucleus via melanopsin-positive ganglion cells of the retina [3]. However, several reports have provided evidence that electric and magnetic fields also influence the circadian system. It has been suggested that a deficiency in melatonin secretion may be responsible for the oncogenic action of the electromagnetic field [4].

The aim of the paper was to review the data on the effects of electric, magnetic, and electromagnetic fields on melatonin and cortisol rhythms, two major markers of the circadian system as well as on sleep. We also included information on the nature, physical parameters, classification, and sources of fields, which may be useful for biologists and medical doctors.

Go to:

2. Nature of Electric, Magnetic, and Electromagnetic Forces



In physical sciences, the electromagnetic field is the state of space characterized by electrodynamic nature of forces acting on electrically charged objects. In that context, the electromagnetic field can be thought of as consisting of two independent components [5]:

electric—represented by a state of space, known as an electric field, in which Coulomb forces act on stationary electrically charged objects,

magnetic—represented by a state of space, known as a magnetic field, in which Lorenz forces act on nonstationary (moving) electrically charged objects (representing electric currents).

It may be interesting to note that according to the special theory of relativity, electric and magnetic fields are two aspects of the same phenomenon depending on a chosen reference frame of observation—an electrical field in one reference frame may be perceived as a magnetic field in a different reference frame.

Within the range of their influence, the electromagnetic fields may affect physical objects, including living organisms. The effects of this influence depend on many factors. Among these, the most important are [5]

field intensity—in the case of the electric field, its intensity  $E$  is expressed in volts per meter (V/m), while in the case of the magnetic field (MF) its intensity  $H$  is expressed in amperes per meter (A/m),

distance  $R$  from an object expressed in meters (m),

frequency  $f$  of radiated energy—in the case of time dependent fields it is expressed in hertz (Hz), while for time independent fields their frequency  $f$  equals 0,

surface power density  $P$  (specific power) representing the intensity of radiated energy (power) with the area throughout this energy being radiated, expressed in watts per square meter (W/m<sup>2</sup>).

It is worth mentioning at this point that the intensity of a magnetic field  $H$  is expressed in amperes per meter (A/m) according to the SI standards. However, in the literature and scientific practice, very often, the induction of a magnetic field  $B$  is used instead, which is expressed in tesla (T). These quantities— $H$  and  $B$ —are interrelated through the medium magnetic permeability  $\mu$ .

Go to:

3. Electromagnetic Fields in the Habitat of Living Organisms

Electromagnetic radiation and fields have been accompanying living organisms since the dawn of life on Earth. However, their current intensity and omnipresence should be attributed, first of all, to human activity—technological advances in modern engineering related to the development and practical use of electrical power transmission systems, electrical equipment, and telecommunications.

The sources of electromagnetic radiation and fields can be divided into natural and non-natural ones. The natural sources include celestial bodies such as stars and magnetars, Earth and biological processes involving the flow of electrical impulses in living organisms (Figure 1). The electromagnetic radiation that reaches the Earth's surface from space as microwave background radiation is a consequence of the big bang and the evolution of the universe in the very first seconds of its existence. This type of radiation is characterised by its thermal energy distribution as the most perfect black body in nature and has a nearly ideal Planck spectrum at a temperature around 2.7 K, while the maximum of its surface power density corresponds to the wavelength of 272 GHz [6]. The solar radiation that reaches the Earth's surface has relatively small surface power density around  $3 \mu\text{W}/\text{m}^2$  [6] and comprised of distinctive frequency bands, so-called atmospheric windows, representing those frequency bands that are not absorbed by the Earth atmosphere. They can be listed as

radio window—represented by electromagnetic wavelengths starting from 15 MHz up to 300 GHz,

optical window—represented by electromagnetic wavelengths starting from 150 THz up to 1000 THz,

microwave window—represented by electromagnetic wavelengths starting from 23.1 THz up to 37.5 THz.

The magnetic field of Earth is another natural field originating from the planet core that extends to a vast space surrounding Earth, known as the magnetosphere. An important source of strong electromagnetic fields is atmospheric discharges, known as lightning. Rapid radiation releases, which accompany these natural phenomena, are characterised by high power densities and high frequencies. In living organisms, electromagnetic fields originate from the transmission of signals in the nervous system and from structures autonomously generating electrical impulses (like the heart).

Figure 1

Figure 1

Natural radiation sources present on Earth (based on [6]).

The history of nonnatural sources of electromagnetic radiation and fields is relatively short and covers only the last hundred years. Nonnatural sources of electromagnetic radiation or fields are attributed to two groups. The first group includes ionising radiation, characterised by a relatively high energy that may result in the ionisation of matter particles. The presence of this kind of radiation has primarily natural reasons (the statistical annual exposure dose is around 2.4 mSv). However, nonnatural sources of ionising radiation, such as technical devices, in which various radioactive isotopes are used, are currently considered to be the most important problems in public health protection. The second group comprises nonionising radiation of energy, which is too low to ionise matter particles. The common sources of this kind of radiation are all means used for electrical power production, transmission, and utilisation (high-voltage power lines, substations, motors, generators, industrial and domestic appliances, home wiring, etc.). Very important sources of electromagnetic radiation include telecommunication systems (radio, television, internet, and Wi-Fi) as well as medical devices used for diagnosis or therapy.

According to the European Commission, nonionizing radiation can be divided into several levels [7]:

static fields,

extremely low frequency fields (ELF fields),

intermediate frequency fields (IF fields),

radio frequency fields (RF fields).

In order to illustrate the authors' considerations, typical sources of electromagnetic fields/radiation influencing living organisms and mentioned above are listed and described in Table 1.

Table 1

Table 1

A list of various sources of electromagnetic fields/radiation influencing living organisms [7].

Go to:

4. Effects of Electric, Magnetic, and Electromagnetic Fields on the Diurnal Rhythm of Melatonin Secretion

Melatonin is the main hormone of the circadian timing system in all vertebrates including the human [8]. The diurnal rhythm of its secretion in the mammalian pineal gland is driven by the suprachiasmatic nucleus—the central endogenous oscillator, directly connected with the retina [8–10]. Under physiological condition, the regulatory mechanisms ensure that this rhythm is properly entrained to the light-dark cycle and, therefore, the elevated night-time melatonin secretion can serve for all cells of the body as a clock and a calendar [8, 11, 12]. Melatonin plays a key role in the control of many physiological processes occurring in daily or seasonal rhythms, like sleep, metabolism, and reproduction [13]. Moreover, melatonin is also involved in the regulation of immune system [14], cardiovascular system [15], and cancer development [13, 16, 17]. It is also a very potent free radical scavenger [18].

It is worth to note that the level of melatonin secretion differs markedly between individuals, in both humans [19, 20] and animals [21, 22]. Based on urinary melatonin measurements, the human population could be divided into low and high melatonin excretors [19, 20]. The study on the sheep demonstrated that interindividual variability in a plasma melatonin level is under strong genetic control and it is related to the pineal gland weight and melatonin secretion, but not to the hormone catabolism [21]. The individual diurnal profiles of plasma melatonin are highly repeatable on consecutive days, weeks, and months, in both humans and animals [20, 22]. The level of nocturnal melatonin secretion decreases with age [23].

Several factors, like light pollution during night or moving across time zones, may lead to the disruption of the melatonin secretion rhythm and circadian disorganization, which undoubtedly has a negative impact on various aspects of health [13, 14, 16, 24, 25].

The melatonin secretion by the pineal gland is generally regarded as particularly sensitive to electric, magnetic, and electromagnetic field influences. The effects of these fields on pineal activity have been analyzed in epidemiological studies [26–41] and experimental investigations carried out using different in vivo [42–94] and in vitro models [95–100].

#### 4.1. Epidemiological Studies

The epidemiological studies provided interesting and very important data on the influence of electromagnetic fields on melatonin and its metabolite—6-sulfatoxymelatonin—in humans. Many of these investigations concerned the effects of an extremely low frequency magnetic field (ELF-MF), which is generated by outdoor high- and medium-voltage electricity power lines, indoor electrical power supply, and electrical appliances [25].

The relations between exposure to the magnetic fields with a frequency of 16.7 Hz and human health have been intensively studied in railway workers [26, 101, 102]. Pfluger and Minder [26] compared, using a repeated measures design, the urinary excretion of 6-sulfatoxymelatonin in 108 male Swiss railway workers between leisure periods and days following the start of service on electrically powered engines or doing other tasks. The study demonstrated that the urinary excretion of 6-sulfatoxymelatonin was lower on work days than leisure days among engine drivers exposed to a 16.7 Hz magnetic field with an average strength of 20  $\mu$ T, but not among other workers. It should be noted that epidemiological studies of Swiss railway workers demonstrated significantly increased (0.9% per  $\mu$ T-year of cumulative exposure) leukemia mortality [101]. The statistical data also suggest a link between occupational exposition to a magnetic field with a frequency of 16.7 Hz and the risk of Alzheimer's disease [102].

Humans are widely exposed to magnetic fields with a frequency of 50 Hz (in Europe) or 60 Hz (in North America) generated by the electrical power supply and electrical devices, commonly used in homes and workplaces. The decreased excretion of 6-sulfatoxymelatonin in urine was observed in electrical utility workers, who were exposed to magnetic fields with a frequency of 60 Hz [27–29]. Significant changes were noted after the second day of the working week and the effect of the magnetic field exposition was the most prominent in subjects with low workplace light exposures [28]. Further, it was demonstrated that a decrease in excretion of 6-sulfatoxymelatonin occurred in workers exposed for more than two hours and in a 3-phase environment [29]. No change was found in people working in a 1-phase environment. A weak effect of occupational exposure to low-intensity magnetic field on 6-sulfatoxymelatonin excretion was also observed in female workers [30].

Davis et al. [31] suggested that domestic exposure to a 60 Hz magnetic field decreased pineal activity in women, primarily those using medications. The level of 6-sulfatoxymelatonin excretion was lower in infants kept in incubators and rose when they were moved to a place free from electrical devices [103]. The analysis performed by Juutilainen and Kumlin [32] suggests that exposure to a magnetic field with a frequency of 50 Hz may enhance the effects of night-time light exposure on melatonin production; however, the study was performed on a relatively small group of subjects.

It should be underlined that a moderate number of epidemiological studies showed no effect of the exposure to ELF-MF on melatonin secretion [33–37]. Gobba et al. [33] noted similar levels of 6-sulfatoxymelatonin excretion in two groups to fields  $\leq 0.2$   $\mu$ T and  $>0.2$   $\mu$ T. No association between residential exposure to a 60 Hz magnetic field and 6-sulfatoxymelatonin excretion was observed in adults aged 50–81 years [34]. Touitou et al. [35] showed that the long-term exposure to ELF-MF did not change the level and diurnal secretion of melatonin. These data suggest that magnetic fields do not have cumulative effects on melatonin secretion in humans.

In contrast to ELF-MF, much less attention has been paid in epidemiological studies to the effects of intermediate frequency range (300 Hz to <10 MHz) and radio frequency range (10 MHz to 300 GHz) electromagnetic fields. No changes in urinary 6-sulfatoxymelatonin excretion were found in women residing near radio and television broadcasting transmitters [38]. The use of a mobile phone for more than 25 minutes a day decreased the level of melatonin secretion [39]. Broadcast transmitters with short-wave electromagnetic fields (6–22 MHz) reduced melatonin secretion by 10% [40]. A study carried out on 50 electronic equipment service technicians, exposed to different kinds of fields, found significantly decreased levels of serum melatonin compared to the control group [41].

#### 4.2. Experimental Studies on Volunteers

In contrast to the epidemiological studies, the majority of investigations performed on volunteers found no effect of ELF-MF on melatonin or/and 6-sulfatoxymelatonin levels [42–51]. In a study by Warman et al. [42], 2-hour-long exposure to a 50 Hz field at an intensity of 200–300  $\mu$ T did not induce significant changes in the nocturnal melatonin rise. Similarly, the exposure of volunteers for one night to 50 Hz field at an intensity of 20  $\mu$ T had no effect on plasma melatonin level [43]. Selmaoui et al. [44] demonstrated that nocturnal acute exposure to either continuous or intermittent 50 Hz linearly polarized magnetic fields of 10  $\mu$ T does not affect melatonin secretion in humans. In a series of experiments performed by Graham et al. [45–49], the nocturnal secretion and metabolism of melatonin were not altered in humans by the exposure to ELF-MF at intensities within the occupational-exposure range for one or more nights. No changes in salivary melatonin were found after exposing volunteers to a 16.7 Hz electromagnetic field [50, 51]. In contrast to the data presented above, Davis et al. [52] demonstrated that the exposure to a magnetic field of 0.5 to 1  $\mu$ T greater than the ambient levels for 5 consecutive nights reduced the excretion of 6-sulfatoxymelatonin in women.

#### 4.3. Experimental Studies on Animals

The majority of in vivo experiments concerning the influence of magnetic field exposure on pineal activity have been conducted on laboratory rodents [53–85].

Highly variable results were obtained in the studies on the effects of ELF-MF. The continuous exposition of Sprague-Dawley rats to a 10  $\mu$ T 50 Hz magnetic field for 91 days decreased the blood melatonin level [53]. However, another study from the same group failed to demonstrate a consistent effect of a 100  $\mu$ T 50 Hz magnetic field exposure on melatonin levels in rats, as a decline or no changes were observed [54]. A decrease in the pineal activity in response to ELF-MF was also noted in several other experiments performed on laboratory rats [55–63] and Djungarian hamsters [64, 65]. On the other hand, an increased excretion of 6-sulfatoxymelatonin was observed in Sprague-Dawley rats exposed to a

magnetic field with a frequency of 50 Hz and an intensity of 100  $\mu$ T for 24 hours [66]. Similarly, Dyche et al. [67] demonstrated that male rats, exposed to the 100  $\mu$ T magnetic field for 1 month, have a slightly elevated excretion of 6-sulfatoxymelatonin. Increased melatonin secretion after exposure to a weak magnetic field was also reported in the Djungarian hamster by Niehaus et al. [68]. In other studies performed on rats and hamsters, no changes in melatonin secretion were observed in response to a magnetic field with a frequency of 50/60 Hz [69–77]. The lack of influence of ELF-MF on pineal activity was also reported for mice [78].

Studies on rodents have provided interesting data concerning the effect of radio frequency range of electromagnetic field on pineal activity. The exposure of rats to an electromagnetic field of 900 MHz frequency and a specific adsorption of 0.9 W·kg<sup>-1</sup> (mobile phone) lasting 2 hours a day and repeated for 45 days resulted in a statistically significant decrease in pineal melatonin content [81]. Moreover, a field of 1800 MHz frequency and a power of 200 W·cm<sup>-2</sup> (2 hours per day for 32 days; 0.5762 W·kg<sup>-1</sup>) disturbed the rhythm of melatonin secretion in rats [82]. However, in another experiment, the animals were subjected to a similar field for 30 minutes a day, 5 days a week for 4 weeks and no changes in the level of melatonin in rat serum were noted [83]. Similarly, the exposure of Djungarian hamsters to an electromagnetic field with frequencies of 383, 900, and 1800 MHz (80 m W·kg<sup>-1</sup>) for 60 days (24 hours a day) did not result in alternations of the melatonin secretion [84].

Studies on the effects of electric and magnetic fields on nonrodent species have been conducted only occasionally [86–94]. The exposure of dairy cattle to a vertical electric field of 10 kV/m and a uniform horizontal magnetic field of 30  $\mu$ T for 28 days did not change the nocturnal blood melatonin level [86]. Similarly, no changes in melatonin secretion were observed in other experiments performed on dairy cows [87, 88] and on lambs [89, 90]. The studies of American kestrels revealed that a long-term exposure to electromagnetic fields (60 Hz, 30  $\mu$ T, 10 kV·m<sup>-1</sup>) caused changes in melatonin secretion [91]. The magnetic field increased the level of melatonin in the pineal gland and blood serum of trout during the night [92].

#### 4.4. In Vitro Studies

In vitro studies concerning the effect of electromagnetic fields on melatonin secretion were conducted on the pineal glands of Djungarian hamsters [95, 100] and rats [96–99]. The results of experiments with hamster pineals in the superfusion organ culture demonstrated that ELF-MF with an intensity of 86  $\mu$ T and a frequency of 16.67 or 50 Hz caused a decrease in melatonin secretion, activated by isoproterenol [95]. A reduction in isoproterenol-stimulated melatonin secretion and activity of arylalkylamine N-acetyltransferase has also been found in studies of rat pinealocytes after exposure to ELF-MF [96, 97]. On the contrary, Lewy et al. [98] noted increased activity of melatonin-synthesizing enzymes, while Tripp et al. [99] found no changes in melatonin secretion in rat pinealocytes in response to ELF-MF.

The effect of exposure to an electromagnetic field with a frequency of 1800 MHz on melatonin secretion from the Djungarian hamster pineal gland was investigated [100] in the same experimental setup which had been used in experiments with ELF-MF [95]. This study demonstrated that both continuous and pulse signals at a specific adsorption level of 800 mW·kg<sup>-1</sup>, lasting seven hours, increased the level of isoproterenol-stimulated melatonin secretion [100].

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#### 5. Effects of Electric, Magnetic, and Electromagnetic Fields on the Diurnal Rhythm of Cortisol Secretion

Cortisol is an essential steroid hormone produced by the adrenal gland. Like melatonin, it exhibits a constant and reproducible diurnal rhythm under physiological conditions [104–107]. Debono et al. [105] in a study of 33 healthy individuals with 20-minute-interval cortisol profiling over 24 hours showed that the cortisol concentration reached the lowest levels at around midnight. It then started to rise at 02:00–03:00 and the peak occurred at around 08:30. Next, the cortisol level slowly decreased back to the nadir. The peak cortisol level in the human blood was approximately 399 nmol/L, while the nadir cortisol level was <50 nmol/L. Like many other physiological processes in the body occurring in daily cycles, the rhythm of cortisol secretion is regulated by the suprachiasmatic nucleus, located in the hypothalamus.

Cortisol governs hunger and appetite, stress, inflammatory response, and many other functions [108–110]. The importance of cortisol is especially evident when it becomes deficient in a state known as adrenal insufficiency [111]. It has been suggested that cortisol acts as a secondary messenger between central and peripheral clocks and may be an important factor in the synchronization of body circadian rhythms [111]. Alterations in the rhythmic production and level of the cortisol lead to significant adverse effects [108, 112]. Children with autism frequently show a large variation in day-time patterns of cortisol and significant elevations in salivary cortisol in response to a nonsocial stressor [113].

Both people and animals live in environments with electromagnetic fields of different origins. They are exposed to electromagnetic field of natural origin, like the magnetic force of Earth and artificial origins, which results from human activities. Variations in the Earth's magnetic field are consequential to all living beings of the planet. In addition, electric and magnetic fields, which exist wherever electricity is generated or transmitted, seem to be very important to exposed organisms.

#### 5.1. Experimental Studies on Animals



The results of studies on the effects of electromagnetic field on the secretion of cortisol in animals are very diverse. In Guinea pigs, ELF-MF caused changes in cortisol levels, which depended on the field frequency and intensity [114]. Exposure of animals for 2 h and 4 h per day, over a period of 5 days, to a field of 50 Hz and 0.207  $\mu$ T showed a significant decrease in cortisol levels [114]. However, in the groups subjected to a field of 5 Hz and 0.013  $\mu$ T, no significant changes in cortisol were observed after 2 h or 4 h of exposure [114]. In Swiss mice continuously exposed to a low frequency (50 Hz) field for 350 days, a decrease in cortisol value was observed on day 190 of the experiment [115]. No significant differences were noted on days 90 and 350 of the exposure [115]. An increase in the cortisol level was observed in rats exposed to uniform magnetic fields of 10–3 T and 10–2 T, 1 hour each day for a period of ten days [116]. The exposure of female hamsters to mobile phones working at 950 MHz for short (10 days, 3 h daily) and long (60 days, 3 h daily) periods caused a significant increase in cortisol in comparison with the control group [117].

A lack of electromagnetic field effect on cortisol concentration was also reported. Burchard et al. [118] showed no variation in cortisol concentration, which could be attributed to the exposure of dairy cows to electric and magnetic fields (vertical electric field 10 kV and horizontal magnetic field of 30 mT). In ewe lambs, no effect of the exposition to a 60 Hz magnetic field for 43 weeks on serum cortisol was also reported [119]. A lack of electromagnetic field effect on corticosterone concentration, irrespective of the exposure characteristics and period, was also found in experiments on rats [120, 121].

#### 5.2. Studies in Humans

The studies concerning the influence of the Earth's magnetic force on the human body demonstrated that the serum cortisol values were dependent on the direction of the head during sleep in relation to the North and South Magnetic Poles [122]. The biological effect of exposure to man-made electromagnetic fields on humans was the subject of several studies [123–127]. Dentistry is one of the job categories with high exposure to elevated levels of ELF-MF. Exposure of dentists to the fields emitted by cavitrons caused a decrease in the serum cortisol level in comparison with a control group [123]. Low frequency magnetic fields are applied in physiotherapy (magnetotherapy and magnetostimulation). Studies of the long-term application of these procedures suggest a regulating influence of magnetic fields on cortisol concentration [124]. However, it should be stressed that numerous studies found no effect of the magnetic fields 50/60 Hz (1–20  $\mu$ T) and the radio frequency electromagnetic fields on a level of cortisol, irrespective of the experiment time, age, or sex of individuals or sampling time [125–127].

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6. Effects of Electric, Magnetic, and Electromagnetic Fields on Sleep

The diurnal rhythms are generated by an internal biological clock system that is synchronized to a 24-hour day by environmental factors, primarily the light-dark cycle. Many rhythms are overt and easy to recognize, such as the sleep-wake cycle, locomotor activity, and feeding behavior.

The sleep-wake cycle is likely the primary output rhythm of the circadian clock, because the regulation of many behavior and physiological activities depends on whether the organism is asleep or awake. Sleep disorders—frequently occurring clinical symptoms—have been hypothesized to be partially related to electromagnetic field exposure. In recent years, there has been an increasing amount of experimental and epidemiological data on the influence of nonionizing electromagnetic fields on brain physiology and sleep [40, 128–144].

Sleep is an endogenous, self-sustained cerebral process. It is possible to measure defined and distinguishable phases of sleep. The low frequency activity (<10 Hz) and the sleep spindle frequency activity (approximately 12–15 Hz) are two silent features of nonrapid eye movement (NREM) sleep that can be quantified and used as markers of sleep regulating processes [145]. Several experiments have shown that electroencephalographic (EEG) spectral power in the alpha (8–12 Hz) and spindle (12–14 Hz) frequencies is enhanced both during and following pulsed-modulated radio frequency field exposure [128–133]. Recently, an increase in delta power (<4.5 Hz) has also been observed [129]. Mann and Röschke [134] reported a reduction of rapid eye movement (REM) sleep and changes in spectral power of EEG during REM sleep in response to a high frequency electromagnetic field emitted by digital mobile radio telephones. Regel et al. [130] performed a study on the influence of radio frequency electromagnetic field exposure by varying the signal intensity in three experimental sessions. The analysis of the sleep EEG revealed a dose-dependent increase of power in the spindle frequency range in NREM sleep. This provided the first indications of a dose-dependent relation between the field intensity and its effect on brain physiology. Huber et al. [137] also demonstrated a power increase in the fast spindle frequency range of EEG during pulse-modulating radio frequency field exposure but not in a dose-dependent manner. It should be also stressed that many studies [135, 139–141] failed to show any effects of the radio frequency field exposure on sleep or sleep EEG.

Despite several reports showing an influence of pulsed-modulated radio frequency electromagnetic field on sleep EEG, the mechanism behind these exposure-induced changes is still unclear. Additionally, there is no supporting evidence that this effect is related to health consequences such as alterations in sleep quality [128–130, 136].

To date, there have been few controlled laboratory studies on sleep EEG under low frequency electric and magnetic fields. Åkerstedt et al. [143] carried out a double-blind, placebo-controlled study on 18

healthy subjects to examine the effects of a 50 Hz magnetic field on sleep. The results showed that sleep efficiency, slow wave sleep, and slow activity as well as subjective depth of sleep were significantly reduced under ELF-MF exposure. Although these results suggest an interference of the low frequency field, the authors emphasize that these alterations are still within a normal range. In a double-blind laboratory study, Graham et al. [144] investigated the effect of a 60 Hz magnetic field on sleep during continuous, intermittent, or sham exposures. They demonstrated that intermittent exposure resulted in clear distortion of sleep and altered sleep architecture compared to sham conditions and continuous exposure. It should be emphasized that field strengths in both cited studies [143, 144] were below those used for medical diagnostic purposes such as magnetic resonance imaging.

The analysis of epidemiological data concerning the sleep quality and melatonin cycle, collected during ten years in the area surrounding a short-wave (6–22 MHz) broadcasting station, provided the evidence that electromagnetic field exposure only affects poor sleepers and that might be a group of people who are sensitive to such exposure [40]. This phenomenon has been described as electromagnetic hypersensitivity, EHS. It was also observed in several other reports [146, 147].

Although a biological explanation for an association between exposure to radio frequency electromagnetic field and impaired sleep quality has not been identified, it is hypothesized that the suppression of night-time melatonin secretion may be involved in this process [148]. Two relatively recent studies suggest an association between the decreased secretion of melatonin during the night and increasing use of mobile phones emitting a radio frequency field [39, 149]. However, four cross-over trials [127, 141, 150, 151] have found no correlation between the exposure to mobile phone handset and the melatonin secretion. The hypothesis of an association between melatonin cycle and electromagnetic field exposure requires further investigation [152].

Go to:

#### 7. Conclusions

The results of studies on the effects of electric, magnetic, and electromagnetic fields on melatonin and cortisol secretion as well as on sleep are largely contradictory. The adverse data related to the influence of these physical factors on secretion of both "circadian" hormones were obtained in all groups of investigations including the epidemiological studies, the studies on volunteers, and the studies on animals. Moreover, in vitro investigations on rodent pineals have also brought inconsistent results. The sources of discrepancies remain unknown; however such factors as an inappropriate estimation of exposure level, interferences with other factors like light and medication, differences in a phase of the circadian rhythm during exposure, and interindividual variability in the sensitivity to electromagnetic fields seem to be particularly worth of attention. The idea that some individuals are more sensitive to

the electromagnetic field than others, due to genetic background or/and current health status, appears very attractive and should be a subject of further studies. It is worth to note that inconsistent results have been also obtained in the studies dealing with other effects of electrical, magnetic, and electromagnetic fields on organism, including their tumor-promoting action [153–157].

Despite divergences in the reported results, ELF-MF and radio frequency electromagnetic field have to be considered as factors possibly influencing the circadian system function, because a substantial number of studies demonstrated the changes in melatonin and cortisol secretion as well as in sleep after exposition to these fields. Due to widespread exposure of humans and animals to ELF-MF and radio frequency electromagnetic field, the studies on their biological effects should be continued. An important and still unsolved issue is relationships between physical characteristics and biological effects of the fields as well as the mechanisms of field action on the circadian system.

In light of the existing literature, the hypothesis pointing to the disruption of melatonin secretion, as one of the main factors responsible for cancerogenic effects of electrical, magnetic, or electromagnetic fields [158, 159], is not supported by the epidemiological and experimental data. Therefore, it should be currently considered as negatively verified.

Go to:

Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

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I157-T-12

**The amount exposure to power line effects should take into account cumulative exposures that occur at home, school and other places children spend time.**

**Bio electromagnetics. 2008 Oct;29(7):564-70. doi: 10.1002/bem.20431**

Analysis of individual- and school-level clustering of power frequency magnetic fields.

Lin IF1, Li CY, Wang JD.

<sup>1</sup>Institute of Occupational Medicine and Industrial Hygiene, College of Public Health, National Taiwan University, Taipei, Taiwan.

Abstract

This study reports the continuous 8-h monitoring of data on extremely low-frequency magnetic fields (ELF-MF) relating to 14 children and 35 teachers in 11 elementary schools in Northern Taiwan. It was anticipated that the subjects in two of these campuses would have elevated exposure to ELF-MF as a result of their close proximity to high-voltage (161 kilo-Volt, kV) power lines. The results of our analysis reveal that in those schools with high-voltage power lines running through the campuses, the mean ELF-MF exposure level (0.38 +/- 0.51 micro-Tesla (microT), or 0.15, 0.25 and 0.44 microT at the respective 25th, 50th and 75th percentiles) was higher than the mean ELF-MF exposure level for campuses situated far away from such high-voltage power lines (0.14 +/- 0.27 microT, or 0.04, 0.06 and 0.10 microT at the respective 25th, 50th and 75th percentiles). The multi-level analytical technique, which takes individual measurements as the analytical unit, and which also takes into consideration the inter-correlation between measurements from the same individual and/or campus, was also applied to the analysis of the data. We conclude that individual-level and school-level clustering of the measurements, both of which were discernible in this study, should be taken into consideration in any future analysis of data obtained from the continuous monitoring of exposure to ELF-MF.

PMID: 18543290

I157-T-13

**Mental health is part of environmental health These two articles show effects of power lines on mental health. Please address these concerns.**

**Am J Epidemiol. 1997 Dec 15;146(12):1037-45**

**Magnetic fields of transmission lines and depression.**

[Verkasalo PK](#)<sup>1</sup>, [Kaprio J](#), [Varjonen J](#), [Romanov K](#), [Heikkilä K](#), [Koskenvuo M](#).

Abstract

I157-T -12 See response for Key Theme EMF-3.

I157-T -13 See response for Key Theme EMF-1.

Electromagnetic fields have been suggested to contribute to the risk of depression by causing pineal dysfunction. Some epidemiologic studies have supported this possibility but have generally reported crude methods of exposure assessment and nonsystematic evaluation of depression. Using two available nationwide data sets, the authors identified from the Finnish Twin Cohort Study 12,063 persons who had answered the 21-item Beck Depression Inventory of self-rated depressive symptoms in 1990. The personal 20-year histories of exposure (i.e., distance and calculated annual average magnetic fields) before 1990 to overhead 110- to 400-kv power lines were obtained from the Finnish Transmission Line Cohort Study. The adjusted mean Beck Depression Inventory scores did not differ by exposure, providing some assurance that proximity to high-voltage transmission lines is not associated with changes within the common range of depressive symptoms. However, the risk of severe depression was increased 4.7-fold (95% confidence interval 1.70-13.3) among subjects living within 100 m of a high-voltage power line. This finding was based on small numbers. The authors recommend that attempts be made to strive for a better understanding of the exposure characteristics in relation to the onset and course of depression.

PMID:

9420528

[PubMed - indexed for MEDLINE]

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• **Relation between suicide and the electromagnetic field of overhead power lines.**

[Reichmanis M, Perry FS, Marino AA, Becker RO.](#)

Abstract

Laboratory studies have shown that electromagnetic fields similar to those from high-voltage transmission lines can produce biological effects. Surveys of the actual effects of such lines on exposed individuals usually have been hampered by complicating factors tending to blur the data. By means of a new approach, however, correlation has been established between the presence of transmission-line fields and the occurrence of suicides in part of the Midlands of England.

PMID:

542502

[PubMed - indexed for MEDLINE]

The mental health, psychological and emotional impact of condemning homes and altering neighborhoods is not addressed. Nor is impact and cost of construction.

8.3.1

I157-T-14

If PSE is concerned that locations it may use are already contaminated than PSE should conduct studies that show contamination before PSE starts construction. If they do not show areas of contamination before they start work then PSE should take responsibility for any contamination

There is no mention of sewer and other pipelines

Table 8.5 lists possible contents of fuel pipelines and potential hazards but does not discuss any method of monitoring leaks

I157-T-15

8.3.2 Public safety is not defined. There is no mention of increased public safety risks due to the fact that people use the pipeline corridor for walking trails, access to parks and live and go to school in close proximity and construction of a high voltage line will increase the risks. there is no description of how PSE is going to mitigate any risk it causes by working or using the pipeline corridor. Nor does it discuss how PSE will mitigate risk near other underground structures. This section does not discuss the cost or other impacts of the potential risk this section does not compare the risks of not building in the pipeline corridor to the risks of building a high voltage transmission line over the aging Olympic pipeline. There is no risk comparison

8.3.3

This section does not discuss t the risk of a co-located petrochemical pipeline and high voltage transmission tower. The sentence “New infrastructure constructed for the energize eastside project would be at the same risk.” Does not mean that the same risk exists whether a transmission line is built over the pipeline or no new transmission line is built. It means that structures built in the same location have the same risk from natural phenomena. high voltage transmission lines will increase the risk from natural phenomena like corrosion and fire.

I157-T-16

8.3.5.1.1

Are harmonics taken into account in calculating the total exposure to magnetic fields?

I157-T -14 See response for Key Theme EIS-1.

I157-T-15 See responses for Topic PLS.

I157-T-16 See response for Key Theme EMF-4.

COMMENT

RESPONSE

I158-A -1 See response for Key Theme EIS-1.

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Timestamp          | First Name | Last Name |
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| <p>John Merrill DEIS Comments re Puget Sound Energy Proposed Eastside Transmission Lines<br/>March 14, 2016</p> <p>Thank you for this opportunity to comment on an issue that is very high stakes for the future of the Eastside. I am a member of the Coalition of Eastside Neighborhoods for Sensible Energy (CENSE.org) and live at 4800 134th Place SE in Bellevue. My comments extend to all members of CENSE.</p> <p>CENSE's Vision</p> <p>CENSE envisions an Eastside energy future that embraces our community's values rather than clinging to an outdated alternative of the past which is not aligned with our values. The Eastside can and should be a leader in implementing modern energy solutions that reflect our high-tech community, reinforce the livability of our neighborhoods, are safe and reliable and enhance our environment. These values make the Eastside a wonderful place to live and work and provide our business community with a competitive advantage to recruit and retain the best employees. The Eastside gets so many growth issues right; we can also have a bright energy future aligned with our values.</p> <p>High Level Comparison of Alternatives 2 and 1A<br/>Alternative/Choice Criteria Alternative 2: Integrated Resources * Alternative 1A – Proposed Overhead Lines</p> <p>Desirability as place to work/live Enhances community attractiveness Degrades the attractiveness of our community</p> <p>Technology Uses modern technologies aligned with our high-tech community values Uses outdated "dinosaur technology"</p> | 3/14/2016 19:00:49 | John       | Merrill   |

I158-A-1



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Reliability Proven in communities across the U.S.  
 Exceeds Federal industry standard requirements  
 Safety Safe Increases risk of catastrophic fire for 18 miles  
 Environmental Impact Benign \* Significant negative impacts  
 Appropriate size Incremental capacity increases over time Grossly oversized  
 Alignment Aligned with community values Unaligned  
 \*- With modifications (explained below)

General Comments on the DEIS:

- We now have new information provided by Lauckhart and Schffman, two unassailably qualified experts in determining the timing for and quantity of need for new electrical infrastructure, which shows the Eastside has ample time to plan for and incrementally implement forward-thinking solutions to the Eastside’s energy future rather than rushing into an inferior solution which has much greater impacts.
- The DEIS asserts that the need for Alternative 1A is justified because PSE used the industry standard methodology for determining need. This is false. Alternative 1A greatly exceeds the industry standard. It goes far beyond Federal minimum requirements which are the industry standard. It greatly exceeds the industry standard test of reliability by imposing not only the industry standard Federal N-1-1 outage criteria but further burdens the system with additional equipment outages, lower than standard component capacities and a significantly increased flow of power to non-Eastside customers, among other stressors.
- The Lauckhart Schiffman study shows unequivocally that the timing for and amount of need is not

I158-A -2 See responses for Key Themes OBJ-2 and OBJ-3.

I158-A-2



I158-A -3 See response for Key Theme OBJ-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Timestamp | First Name | Last Name |
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| I158-A-2 | <p>established. The EIS process must be corrected for this fundamental deficiency. Until such time as the timing for and amount of need is established through a transparent, fair and accurate process, the basis for the DEIS as written is invalid and any conclusions of the EIS process are, unfortunately, invalid.</p> <ul style="list-style-type: none"> <li>• Puget Sound Energy's (PSE) 19 criteria listed in Chapter 2 are un-vetted by any unbiased and expert authority on the provision of a reliable supply of electricity to power the growth of the Eastside. PSE's assertion, for instance, that any selected alternative must be implementable by a 2018 timeframe is simply untrue and unnecessary. (Although Alternative 2 could do so.) PSE's project criteria, along with the way that Alternatives 2 and 3 are characterized, appear purposely designed to preclude serious consideration of more aligned solutions to the Eastside's actual needs. The argument that the Lead Agency or EIS Consultant has no responsibility to question the proponent's specifications of need and the project criteria of acceptable alternatives is highly questionable. If for instance, PSE proposed to build an above ground 500kV transmission line through downtown Bellevue which required a 200 foot wide right of way through the Downtown Park and the demolition of 20 high-rise buildings, the City of Bellevue as lead agency would certainly both seriously question the need as well as acceptable criteria for alternatives. The bias toward the proponent's preferred alternative shown by the Lead Agency's blind acceptance of PSE's definition of need and 19 project criteria, tragically, makes a mockery of the entire EIS process and further invalidates its conclusions.</li> <li>• The lead agency has put the EIS team in a very</li> </ul> |           |            |           |
| I158-A-3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |            |           |

I158-A -4 See response for Key Theme ALT-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp | First Name | Last Name |
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| I158-A-3 | <p>difficult position by instructing the EIS team to proceed as if the timing for and quantity of need were credibly established. The City of Bellevue as lead agency must change the EIS process to credibly establish both the timing for and quantity of need before any EIS analysis can be considered valid. Unfortunately, at least some of the large amount of work that the EIS consultant team has obviously put into the Phase 1 DEIS will likely need to be redone when the timing of and quantity of need is accurately established.</p> <ul style="list-style-type: none"> <li>• The definition, characterization and analysis of Alternative 2 is inaccurate, outdated and biased. For instance, to insist that 3 small peaking plants are a necessary component rather than one larger one or none at all and the inclusion of such a large battery storage facility both show either ignorance about these types facilities or willful bias against Alternative 2. Alternative 2, or a new Alternative, must be corrected by an expert in the field of 21st Century grid solutions to reflect both expertise in this relatively new field and up to date information. Alternative 2, or a new Alternative, should be changed to reflect recommendations of a consultant like EQL Energy which has relevant expertise and experience with 21st Century grid solutions that is not yet represented on the EIS team.</li> <li>• A modified Alternative 2, or a new alternative, which reflects best practices in the implementation of 21st Century grid solutions, would both satisfy the need, even that which is used as the basis for the Phase 1 DEIS, and have the lowest environmental impacts of any alternative (perhaps other than no action). The Lauckhart Schiffman study shows unequivocally that the Eastside has time to incrementally implement</li> </ul> |           |            |           |
| I158-A-4 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |            |           |



I158-A -5 See responses for Key Theme EIS-2 and Key Theme OBJ-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Timestamp | First Name | Last Name |
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| I158-A-4 | <p>forward-thinking solutions to the Eastside’s energy future rather than implementing an oversized, outdated technology which has far greater impacts.</p> <ul style="list-style-type: none"> <li>• The lack of a permit application with a specific design of Alternative 1A by the project proponent renders meaningful Phase 1 evaluation impossible. For instance, the absence of the locations of the proposed poles relative to the existing fuel pipelines makes evaluation of safety subject to so much uncertainty as to be meaningless. We also do not know with certainty whether or not PSE would remove the existing 115kV system under Alternative 1A and the high likelihood that the old lines will remain indefinitely are not assessed in the DEIS. The ultimate width of the right of way under Alternative 1A and the potentially huge number of homes that will have to be destroyed are likewise unknown and thus the devastating impacts of widening the right of way cannot be adequately analyzed. Thus the DEIS is premature and its conclusions further compromised. The lack of detailed analysis of these major impacts in a glaring deficiency that can only be remedied after the proponent provides detailed design specifications.</li> <li>• The DEIS does not adequately assess the safety of co-locating Alternative 1A with hazardous liquid transport pipelines. Numerous experts warn against the proximity of these two conflicting right of way uses and the risks have not been identified properly let alone analyzed in detail. The DEIS says that current regulations regarding pipeline safety are adequate to protect adjacent homeowners and their families. This is inadequate given that pipeline explosions and fires happen regularly in the presence of pipeline safety rules and the existing rules are not well enforced. For</li> </ul> |           |            |           |
| I158-A-5 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |            |           |

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instance, in 2010 Texas had rules designed to prevent catastrophic conflicts between fuels pipelines and electrical infrastructure which did not prevent the death of 3 workmen installing transmission line poles. The first responders could not get within ½ mile of the victims for over an hour because the heat from the flames was so intense. If this accident had occurred in a neighborhood like those on the Eastside adjacent to the route of Alternative 1A, hundreds of deaths would have resulted and the fire and police departments would have been helpless to prevent them.

- The DEIS all but ignores the fact that Alternative 1 would encourage the use of more electricity leading to more environmental impact both locally and elsewhere whereas a modified Alternative 2 would decrease the use of electricity and reduce environmental impacts. Not evaluating the impacts of other pollutants from electricity production including acid gases, heavy metals and particulates is a glaring omission.

Other Alternatives: There are other and better alternatives which must be added to the Phase 1 analysis, including but not limited to:

- A modified Alternative 3 without miles of new wires. Relatively simple transformers additions and associated upgrades at Talbot Hill and/or Sammamish substations and possibly replacing existing conductors as needed would increase peak capacity by approximately 200MW. This would satisfy even PSE's exaggerated statement of need. It is also standard industry practice to run 230kV circuits on poles approximately the same height as the existing 115kV poles to replace one of the two existing circuits. In fact, PSE has such dual voltage circuits running side by



I158-A -6 See responses for Key Themes OBJ-2 and OBJ-3.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp | First Name | Last Name |
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| I158-A-5 | <p>side just north of Sammamish.</p> <ul style="list-style-type: none"> <li>• A combination of pieces of a modified Alternative 3, as described above, and portions of Alternative 2 would best serve the Eastside's needs with the least impacts.</li> <li>• PSE's 2015 Integrated Resource Plan shows that PSE plans to build several hundred MW of new gas-fired generation in Western Washington beginning in 2021. As stated above, the Lauckhart Schiffman report shows we have plenty of capacity until then. The addition of just 200 MW of additional capacity at 115kV would satisfy even PSE's exaggerated statement of local need.</li> <li>• Flexible AC transmission system (FACTS) control devices – as described in the EQL paper attached would keep our existing 115kV system from overloading eliminating the need to supplement it for many years while still providing reliable service.</li> </ul> |           |            |           |
| I158-A-6 | <p>Comments on specific parts of the DEIS:<br/>Chapter 1 Introduction and Summary<br/>1.1 Alternative 1A is grossly oversized to serve even PSE's exaggerated estimate of need over the next several decades. PSE asserts that the need in the next 10 years is 133 MW (Section 1.3) and the longer term need is roughly 200 MW. (note this is an exaggeration of need given this estimate of need greatly exceeds industry standard criteria.) Yet the installation of a single new transformer, utilizing only 1 of 2 new circuits on Alternative 1A, would increase capacity by roughly 350 MW. Alternative 1A could easily double increased capacity to 700 MW by energizing the second circuit at 230kV and adding a 6th transformer to the system. That would increase</p>                                                                                                                                         |           |            |           |

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peak capacity by 100%. The conductors PSE has specified for the 2 new circuits on Alternative 1A would actually support the addition of a total of 8 new like-sized transformers before the conductor capacity was exceeded. Thus Alternative 1A would actually increase peak capacity by approximately 400% if fully utilized. This is grossly out of scale with even PSE's exaggerated estimate of local need but greatly increases PSE's contribution to the capacity of the regional grid to serve non-local customers including Canada. Again, this is grossly out of scale with local need.

Table 1-2 Construction Impacts Comparison shows that the DEIS concludes that Alternative 1A (Alt 1A) has negligible or minor impacts on Earth, Green House Gas Emissions, Plants and Animals, Energy and Natural Resources, Environmental Health, Land Use and Housing, and Views and Visual Resources. This is a gross understatement of the actual impacts. All these categories should show Significant Impacts for Alt 1A. To say that the impacts of Alt 1A is equal to the impacts of No Action or Alt 2 does not pass the common sense test. For instance, it is makes no sense to equate the Earth impact of 18 miles of heavy construction to the impact of Alt 2 if Alt 2 is correctly characterized without peaker plants.

1.3 The Stantec memorandum, which purportedly supports PSE's assertion of need, is not included in the DEIS as advertised. This memo is apparently an important basis of the DEIS determination of need. Without the opportunity to review and verify this memo, it is impossible for reviewers of the DEIS to concur. In the absence of this memo, the need cannot be determined to be established. By not including this

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memo, the DEIS reinforces the impression that the review team is biased toward the proponents preferred alternative.

The electrical load growth rate of 2.4% per year used by PSE in its determination of need appears highly exaggerated. PSE and the DEIS state that it is based upon 3 factors: a population increase of 1.2 % per year, an employment increase of 2.1 percent per year and the addition of "block loads" from proposed construction projects. The population increase rate is based on a credible, independent forecast from the Puget Sound Regional Council, however, the job growth rate forecast was done by PSE and lacks transparency and thus credibility. Moreover, including "block loads" double counts both the effects of population and employment growth depending on whether the block loads are residential or office buildings. To be credible, the methodology must be transparent and independently verified by experts.

The largest fallacy in the load growth rate projection, however, is the completely unsupported assertion that lower growth rates in both population and job growth could somehow increase electricity use at a greater rate than either of them. This flies in the face of common sense when one understands that peak per capita electricity use, both at home and at work is falling - largely because energy conservation, such as switching to LED bulbs, greater use of energy efficient home appliances and increasing use of lower power computers and office equipment. More and more homeowners and businesses are also switching from electric space heat furnaces and electric hot water heaters as the price of natural gas continues at historic lows. PSE's assertion that peak electricity use is

I158-A -7 See responses for Key Themes OBJ-1 and OBJ-2.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timestamp | First Name | Last Name |
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| I158-A-6 | growing twice as fast as population and faster than employment growth has no rational basis and must be independently vetted before it can be used to justify the need for any alternative in the EIS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |            |           |
| I158-A-7 | <p>1.6 Paragraph 3 is totally disingenuous in that it implies that only Alternative 1 meets PSE's 19 project criteria as Alternatives 2 and 3 only "address the objectives sufficiently enough to be reasonable for consideration" in Phase 1 of the DEIS, but by inference not in Phase 2. This reinforces the conclusion that the DEIS is designed to support only PSE's proposal and eliminate all other alternatives. This does not serve the intent or purpose of an EIS when there in fact are other viable alternatives.</p> <p>1.12.1 PSE's need evaluation process has NOT been conducted according to industry standards. The evaluation criteria used by PSE and its consultants greatly exceed the standards required by NERC and WECC and are not standard in the industry. The load flow simulations run by PSE and subsequently by its consultants and Utility Systems Efficiencies go well beyond federal and regional reliability requirements which are the industry norm. For instance, PSE's and its consultants load flow studies simulate not just the required N-1-1 situation, which is the industry standard wherein two critical pieces of equipment fail sequentially during a rare peak demand event as required by NERC and WECC. The PSE studies go far beyond the requirement by taking another approximately 8 pieces of critical equipment (Western Washington gas-fired generators, some of which are "peaking plants" designed and built specifically to run during peak demand hours) offline IN ADDITION TO</p> |           |            |           |

I158-A -8 See responses for Topic GHG.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timestamp | First Name | Last Name |
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| I158-A-7 | <p>the required and industry standard N-1-1 equipment outages. In addition to this non-industry-standard simulation of a highly unrealistic "N-1-1-8" event, PSE and its consultants further stress an already highly compromised system by subjecting it to a huge flow of power to Canada. (There is no firm contract to deliver power to Canada during a peak demand event on the Eastside and PSE has not produced any evidence that there is such an obligation.) The simulation of an N-1-1-8 event, with or without the added stress of enormous power flows to Canada, is not "in accordance with industry standards for utility planning" as asserted in the DEIS. In its load flow modelling, PSE apparently also incorrectly used summer ratings for the remaining operating transformers during the winter peak event simulation. This yet further stresses the system reducing its ability to adequately handle load. Thus the need for any alternative, other than no action, is not yet established. The need must be transparently established in accordance with industry standard practices (i.e., based on NERC and WECC minimum requirements of an N-1-1 event during peak demand hours alone) without additional, non-standard stresses modeled on the system before the Phase II DEIS scoping can proceed.</p> |           |            |           |
| I158-A-8 | <p>Chapter 4 Greenhouse Gas Emissions<br/>                     Alternatives 1 A, C and D would have a very significant impact on GHG emissions (GHGs). With regard to construction, the metal extraction from the earth, transportation of ore, manufacture of metal, fabrication of metal, and shipping of the rebar, conductors and towers would emit significant quantities of Scope 1, 2 and 3 emissions as well as the installation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |            |           |

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With regard to operation, the DEIS ignores the relationship between the production of electricity using carbon-intensive fuels and the construction of Alt 1. Alt 1 encourages the use of both local and distant carbon-intensive generation plants like Colstrip whereas Alt 2 would actually decrease the amount of electricity used from all sources. Alt 1A is an enabler of PSE's plans, as documented in its 2015 Integrated Resource Plan, to build hundreds of megawatts of new gas-fired, carbon intensive generators beginning in 2021 and prolong the life of Colstrip. For instance, without the construction of an Alt 1, which would be treated as a sunk cost in an economic analysis of new gas-fired generators, new gas-fired generators would not be built because they would not be a least cost source of power. Colstrip might even be shut down sooner if Alt 1 is not implemented. Simply put, if these fossil fuel-fired plants were burdened with the cost of transmission, they would not be built or their life extended. Thus the impacts of any of the Alt 1 options must account for the increase in electricity use they enable. The amount of new or existing carbon intensive generation capacity they enable is at least 1000 MW. 1000MW capacity is the difference between the 1500 MW of Canadian flow in the PSE load flow studies used to justify the need for Alt 1 and the 500 MW of Canadian flow in the PSE base case and Lauckhart Schiffman studies.

4.5.3.1.2 The implicit assertion that only the production of concrete and not the production of steel, aluminum and other metals does not produce GHGs in significant quantities is simply wrong. The extraction and production of metals is extremely energy intensive and produces huge quantities of GHGs. To include the



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impacts of production of battery storage components under 4.5.4.4.2 but not the impacts of production of components of Alt 1 shows bias for Alt 1 and must be corrected.

Ignoring the significant production of GHGs from these activities directly caused by Alt 1A biases the analysis against Alternative 2, which absent peaker plant which are not needed in an effective Integrated Resource solution, produce little to no GHGs.

4.5.3.1.3 In general, the use of the State quantitative criteria for determining GHG impacts is inadequate and misleading given the negligible impacts from a corrected Alt 2 which does not require peaker plants and only small storage amounts. Alt 2 can and should rely primarily on energy efficiency, conservation, demand side management and non-impactful distributed energy resources. The DEIS analysis and results imply that the impacts of Alt 2 are somehow in the same ballpark as the other alternatives, especially Alt 1A, which is entirely biased and misleading.

The statement that 44 acres of forested land "under a worst case scenario" would be deforested is not adequately supported. First it is less than half of the roughly 110 acres that would have to be added to the 100 foot right of way for expansion by 50 feet. Second, the assertion that the expansion would have to be only 50 feet is not adequately supported elsewhere in the EIS. The actual expansion required may be 100 feet or more in order to provide adequate separation of Alt 1A and the two high-pressure fuel lines as well as the 115kV lines in the existing right of way. The described impacts are not worst case.

4.6.4.4 No peaking capacity is needed for Alt 2 to satisfy the need, even though PSE's quantification of

I158-A -9 See responses for Key Themes EGY-1 and EGY-2.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timestamp | First Name | Last Name |
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| I158-A-8 | <p>need is overstated. It is misleading to included peaking plants in Alt 2 in the first place, let alone to include a moderate impact "warranting mitigation" to color people's impression of Alt 2.</p> <p>4.9 The conclusion that none of the alternatives would significantly impact GHG emissions, as stated above, ignores the cause-effect relationship between Alt 1 and the generation of more carbon fuel-generated electricity as well as the construction of up to 1000 MW of new carbon intensive generation capacity. This is a glaring defect in the analysis and must be corrected by experts who understand these relationships and their consequences for GHGs and other impacts.</p>                                                                                                                                                                                                                                                                                                       |           |            |           |
| I158-A-9 | <p>Chapter 7 Energy and Natural Resources</p> <p>The assertion in the side bar in 7.1 that Alt 2 would lead to Eastside generation of non-renewable power rests on the faulty characterization of Alt 2. Alt 2 does not require new Eastside peaking capacity to be an effective solution to even PSE's exaggerated quantification of need. Moreover, if Alt 1 is built, fossil fuels will be burned and water consumed and contaminated somewhere else to satisfy the increased demand for electricity it enables and it is wrong to ignore distant impacts. The impacts of PSE's Colstrip plant for instance are ignored. The fact remains that Alt 2 would reduce demand for energy and Alt 1 would significantly increase both capacity of and demand for electrical energy.</p> <p>7.6.3 and 7.6.4 Again, the assertion that Alt 1A would not lead to additional need for new power generation or additional use of resources is not supported and ignores the cause-effect relationship between the</p> |           |            |           |

|           | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timestamp | First Name | Last Name |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I158-A-9  | <p>construction of transmission and the construction of new and increased use of existing resource-intensive generators. This relationship must be adequately analyzed by experts who understand these relationships and their consequences. Alt 1 would enable the construction of up to 1000MW of new generation and the attendant energy resource use impacts.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |            |           |
| I158-A-10 | <p>Chapter 10<br/>                     10.7.3.1.2 Alt 1A does not comply with King County, Redmond and Kirkland policies or regulations that specifically prohibit co-locating new or expanded transmission lines with hazardous material pipelines. The reasons for this prohibition should be analyzed and an in-depth assessment of risk to neighboring communities included in the DEIS. The feasibility of Alt 1A is questionable given these regulations.</p> <p>10.7.3.1.1 The DEIS states that Alternative 1A could require up to 327 acres of housing, businesses and other land uses to be condemned and demolished for use as a utility corridor. It also states that at a minimum an additional 50 feet width of adjacent property would have to be added to the existing right of way. This would be an additional approximately 109 acres of housing and businesses that would have to be cleared of structures and trees. This analysis likely underestimates the amount of land required because it does not contain an analysis of how far away from the hazardous material pipelines the new lines must be built. If either of the two pipelines in the existing right of way are near the edge of the existing right of way, the proposed transmission lines in Alt 1A would, to be safe, have to be located at least 50 feet away. And to</p> |           |            |           |

I158-A -10 See responses for Key Themes LU-2 and LU-5.

I158-A-10

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that 50 feet another 50 or so feet would have to be cleared of houses and other structures in order to maintain sufficient clearance from the new power lines. The current analysis is also inadequate because it does not include a discussion of the number of homes, businesses, other structures and trees which would have to be torn or cut down. For instance, if the average housing lot size along the right of way is 1/3 of an acre, the addition of 109 acres of additional right of way could require the condemnation and removal of up to 327 homes which is equivalent to every home located on one side or the other of the existing right of way. To obscure this impact in the fine print of such a long document and to label the impact of this amount of dislocation and trauma to the communities along the right of way anything less than beyond significant is untruthful and disingenuous at best.

10.7.1.4 The cost discussion and analysis provided is totally inadequate because it relies entirely on only one out-of-date study which may or may not be relevant to property values in this particular location. The analysis contains no evidence that the study is applicable to the Eastside. Real estate values are widely known to depend on location, location, location yet the analysis makes no attempt to enlist the knowledge and expertise of local real estate experts. This must be done, otherwise the analysis is inadequate.

Documents Incorporated By Reference

1. Lauckhart Schiffman Load Flow Study
2. The Best Alternative document by EQL Energy
3. Alternatives To Energize Eastside by EQL Energy
4. Grow Eastside Smart Transmission Project Local Economic Study Request Oct 31, 2015 (Flexible AC transmission system (FACTS) control devices) by EQL Energy



John Merrill DEIS Comments re Puget Sound Energy Proposed Eastside Transmission Lines  
 March 14, 2016

Thank you for this opportunity to comment on an issue that is very high stakes for the future of the Eastside. I am a member of the Coalition of Eastside Neighborhoods for Sensible Energy (CENSE.org) and live at 4800 134<sup>th</sup> Place SE in Bellevue. My comments extend to all members of CENSE.

**CENSE's Vision**

CENSE envisions an Eastside energy future that embraces our community's values rather than clinging to an outdated alternative of the past which is not aligned with our values. The Eastside can and should be a leader in implementing modern energy solutions that reflect our high-tech community, reinforce the livability of our neighborhoods, are safe and reliable and enhance our environment. These values make the Eastside a wonderful place to live and work and provide our business community with a competitive advantage to recruit and retain the best employees. The Eastside gets so many growth issues right; we can also have a bright energy future aligned with our values.

I158-D-1

**High Level Comparison of Alternatives 2 and 1A**

| Alternative/Choice Criteria        | Alternative 2: Integrated Resources *                                | Alternative 1A – Proposed Overhead Lines         |
|------------------------------------|----------------------------------------------------------------------|--------------------------------------------------|
| Desirability as place to work/live | Enhances community attractiveness                                    | Degrades the attractiveness of our community     |
| Technology                         | Uses modern technologies aligned with our high-tech community values | Uses outdated "dinosaur technology"              |
| Reliability                        | Proven in communities across the U.S.                                | Exceeds Federal industry standard requirements   |
| Safety                             | Safe                                                                 | Increases risk of catastrophic fire for 18 miles |
| Environmental Impact               | Benign *                                                             | Significant negative impacts                     |
| Appropriate size                   | Incremental capacity increases over time                             | Grossly oversized                                |
| Alignment                          | Aligned with community values                                        | Unaligned                                        |
|                                    | *- With modifications (explained below)                              |                                                  |

**General Comments on the DEIS:**

- We now have new information provided by Lauckhart and Schffman, two unassailably qualified experts in determining the timing for and quantity of need for new electrical infrastructure, which shows the Eastside has ample time to plan for and incrementally implement forward-thinking solutions to the Eastside's energy future rather than rushing into an inferior solution which has much greater impacts.
- The DEIS asserts that the need for Alternative 1A is justified because PSE used the industry standard methodology for determining need. This is false. Alternative 1A greatly exceeds the industry standard. It goes far beyond Federal minimum requirements which are the industry

I158-D-3

- I158-D -1 See response for Key Theme EIS-1.
- I158-D -2 See response for Key Theme ALT-2.
- I158-D -3 See responses for Key Themes OBJ-2 and OBJ-3.

- I158-D-3
- standard. It greatly exceeds the industry standard test of reliability by imposing not only the industry standard Federal N-1-1 outage criteria but further burdens the system with additional equipment outages, lower than standard component capacities and a significantly increased flow of power to non-Eastside customers, among other stressors.
- The Lauckhart Schiffman study shows unequivocally that the timing for and amount of need is not established. The EIS process must be corrected for this fundamental deficiency. Until such time as the timing for and amount of need is established through a transparent, fair and accurate process, the basis for the DEIS as written is invalid and any conclusions of the EIS process are, unfortunately, invalid.
  - Puget Sound Energy's (PSE) 19 criteria listed in Chapter 2 are un-vetted by any unbiased and expert authority on the provision of a reliable supply of electricity to power the growth of the Eastside. PSE's assertion, for instance, that any selected alternative must be implementable by a 2018 timeframe is simply untrue and unnecessary. (Although Alternative 2 could do so.) PSE's project criteria, along with the way that Alternatives 2 and 3 are characterized, appear purposely designed to preclude serious consideration of more aligned solutions to the Eastside's actual needs. The argument that the Lead Agency or EIS Consultant has no responsibility to question the proponent's specifications of need and the project criteria of acceptable alternatives is highly questionable. If for instance, PSE proposed to build an above ground 500kV transmission line through downtown Bellevue which required a 200 foot wide right of way through the Downtown Park and the demolition of 20 high-rise buildings, the City of Bellevue as lead agency would certainly both seriously question the need as well as acceptable criteria for alternatives. The bias toward the proponent's preferred alternative shown by the Lead Agency's blind acceptance of PSE's definition of need and 19 project criteria, tragically, makes a mockery of the entire EIS process and further invalidates its conclusions.
- I158-D-4
- I158-D-5
- The lead agency has put the EIS team in a very difficult position by instructing the EIS team to proceed as if the timing for and quantity of need were credibly established. The City of Bellevue as lead agency must change the EIS process to credibly establish both the timing for and quantity of need before any EIS analysis can be considered valid. Unfortunately, at least some of the large amount of work that the EIS consultant team has obviously put into the Phase 1 DEIS will likely need to be redone when the timing of and quantity of need is accurately established.
  - The definition, characterization and analysis of Alternative 2 is inaccurate, outdated and biased. For instance, to insist that 3 small peaking plants are a necessary component rather than one larger one or none at all and the inclusion of such a large battery storage facility both show either ignorance about these types facilities or willful bias against Alternative 2. Alternative 2, or a new Alternative, must be corrected by an expert in the field of 21<sup>st</sup> Century grid solutions to reflect both expertise in this relatively new field and up to date information. Alternative 2, or a new Alternative, should be changed to reflect recommendations of a consultant like EQL Energy which has relevant expertise and experience with 21<sup>st</sup> Century grid solutions that is not yet represented on the EIS team.
- I158-D-6
- A modified Alternative 2, or a new alternative, which reflects best practices in the implementation of 21<sup>st</sup> Century grid solutions, would both satisfy the need, even that which is used as the basis for the Phase 1 DEIS, and have the lowest environmental impacts of any alternative (perhaps other than no action). The Lauckhart Schiffman study shows unequivocally that the Eastside has time to incrementally implement forward-thinking solutions to the

- I158-D -4 See response for Key Theme EIS-2.
- I158-D -5 See response for Key Theme EIS-1.
- I158-D -6 See responses for Key Themes ALT-1 and ALT-2, and Key Theme EIS-2.

I158-D-6 Eastside’s energy future rather than implementing an oversized, outdated technology which has far greater impacts.

- The lack of a permit application with a specific design of Alternative 1A by the project proponent renders meaningful Phase 1 evaluation impossible. For instance, the absence of the locations of the proposed poles relative to the existing fuel pipelines makes evaluation of safety subject to so much uncertainty as to be meaningless. We also do not know with certainty whether or not PSE would remove the existing 115kV system under Alternative 1A and the high likelihood that the old lines will remain indefinitely are not assessed in the DEIS. The ultimate width of the right of way under Alternative 1A and the potentially huge number of homes that will have to be destroyed are likewise unknown and thus the devastating impacts of widening the right of way cannot be adequately analyzed. Thus the DEIS is premature and its conclusions further compromised. The lack of detailed analysis of these major impacts in a glaring deficiency that can only be remedied after the proponent provides detailed design specifications.
- The DEIS does not adequately assess the safety of co-locating Alternative 1A with hazardous liquid transport pipelines. Numerous experts warn against the proximity of these two conflicting right of way uses and the risks have not been identified properly let alone analyzed in detail. The DEIS says that current regulations regarding pipeline safety are adequate to protect adjacent homeowners and their families. This is inadequate given that pipeline explosions and fires happen regularly in the presence of pipeline safety rules and the existing rules are not well enforced. For instance, in 2010 Texas had rules designed to prevent catastrophic conflicts between fuels pipelines and electrical infrastructure which did not prevent the death of 3 workmen installing transmission line poles. The first responders could not get within ½ mile of the victims for over an hour because the heat from the flames was so intense. If this accident had occurred in a neighborhood like those on the Eastside adjacent to the route of Alternative 1A, hundreds of deaths would have resulted and the fire and police departments would have been helpless to prevent them.
- The DEIS all but ignores the fact that Alternative 1 would encourage the use of more electricity leading to more environmental impact both locally and elsewhere whereas a modified Alternative 2 would decrease the use of electricity and reduce environmental impacts. Not evaluating the impacts of other pollutants from electricity production including acid gases, heavy metals and particulates is a glaring omission.

I158-D-7

I158-D-8

I158-D-9

I158-D-10

**Other Alternatives:** There are other and better alternatives which must be added to the Phase 1 analysis, including but not limited to:

- A modified Alternative 3 without miles of new wires. Relatively simple transformers additions and associated upgrades at Talbot Hill and/or Sammamish substations and possibly replacing existing conductors as needed would increase peak capacity by approximately 200MW. This would satisfy even PSE’s exaggerated statement of need. It is also standard industry practice to run 230kV circuits on poles approximately the same height as the existing 115kV poles to replace one of the two existing circuits. In fact, PSE has such dual voltage circuits running side by side just north of Sammamish.
- A combination of pieces of a modified Alternative 3, as described above, and portions of Alternative 2 would best serve the Eastside’s needs with the least impacts.

I158-D -7 See response for Key Theme EIS-2.  
 I158-D -8 See responses for Key Themes PLS-1 and PLS-4.  
 I158-D -9 See response for Key Theme EIS-1.  
 I158-D -10 See responses for Key Theme EIS-3 and Key Theme OBJ-2.

I158-D-10

- PSE’s 2015 Integrated Resource Plan shows that PSE plans to build several hundred MW of new gas-fired generation in Western Washington beginning in 2021. As stated above, the Lauckhart Schiffman report shows we have plenty of capacity until then. The addition of just 200 MW of additional capacity at 115kV would satisfy even PSE’s exaggerated statement of local need.
- Flexible AC transmission system (FACTS) control devices – as described in the EQL paper attached would keep our existing 115kV system from overloading eliminating the need to supplement it for many years while still providing reliable service.

**Comments on specific parts of the DEIS:**

Chapter 1 Introduction and Summary

I158-D-11

1.1 Alternative 1A is grossly oversized to serve even PSE’s exaggerated estimate of need over the next several decades. PSE asserts that the need in the next 10 years is 133 MW (Section 1.3) and the longer term need is roughly 200 MW. (note this is an exaggeration of need given this estimate of need greatly exceeds industry standard criteria.) Yet the installation of a single new transformer, utilizing only 1 of 2 new circuits on Alternative 1A, would increase capacity by roughly 350 MW. Alternative 1A could easily double increased capacity to 700 MW by energizing the second circuit at 230kV and adding a 6<sup>th</sup> transformer to the system. That would increase peak capacity by 100%. The conductors PSE has specified for the 2 new circuits on Alternative 1A would actually support the addition of a total of 8 new like-sized transformers before the conductor capacity was exceeded. Thus Alternative 1A would actually increase peak capacity by approximately 400% if fully utilized. This is grossly out of scale with even PSE’s exaggerated estimate of local need but greatly increases PSE’s contribution to the capacity of the regional grid to serve non-local customers including Canada. Again, this is grossly out of scale with local need.

I158-D-12

Table 1-2 Construction Impacts Comparison shows that the DEIS concludes that Alternative 1A (Alt 1A) has negligible or minor impacts on Earth, Green House Gas Emissions, Plants and Animals, Energy and Natural Resources, Environmental Health, Land Use and Housing, and Views and Visual Resources. This is a gross understatement of the actual impacts. All these categories should show Significant Impacts for Alt 1A. To say that the impacts of Alt 1A is equal to the impacts of No Action or Alt 2 does not pass the common sense test. For instance, it makes no sense to equate the Earth impact of 18 miles of heavy construction to the impact of Alt 2 if Alt 2 is correctly characterized without peaker plants.

I158-D-13

1.3 The Stantec memorandum, which purportedly supports PSE’s assertion of need, is not included in the DEIS as advertised. This memo is apparently an important basis of the DEIS determination of need. Without the opportunity to review and verify this memo, it is impossible for reviewers of the DEIS to concur. In the absence of this memo, the need cannot be determined to be established. By not including this memo, the DEIS reinforces the impression that the review team is biased toward the proponents preferred alternative.

The electrical load growth rate of 2.4% per year used by PSE in its determination of need appears highly exaggerated. PSE and the DEIS state that it is based upon 3 factors: a population increase of 1.2 % per year, an employment increase of 2.1 percent per year and the addition of “block loads” from proposed construction projects. The population increase rate is based on a credible, independent forecast from the Puget Sound Regional Council, however, the job growth rate forecast was done by PSE and lacks

- I158-D -11 See response for Key Theme ALT-1.
- I158-D -12 See response for Key Theme ALT-1.
- I158-D -13 See response for Key Theme OBJ-2.



I158-D -14 See response for Key Theme OBJ-2.

I158-D-13

transparency and thus credibility. Moreover, including "block loads" double counts both the effects of population and employment growth depending on whether the block loads are residential or office buildings. To be credible, the methodology must be transparent and independently verified by experts.

The largest fallacy in the load growth rate projection, however, is the completely unsupported assertion that lower growth rates in both population and job growth could somehow increase electricity use at a greater rate than either of them. This flies in the face of common sense when one understands that peak per capita electricity use, both at home and at work is falling - largely because energy conservation, such as switching to LED bulbs, greater use of energy efficient home appliances and increasing use of lower power computers and office equipment. More and more homeowners and businesses are also switching from electric space heat furnaces and electric hot water heaters as the price of natural gas continues at historic lows. PSE's assertion that peak electricity use is growing twice as fast as population and faster than employment growth has no rational basis and must be independently vetted before it can be used to justify the need for any alternative in the EIS.

I158-D-14

1.6 Paragraph 3 is totally disingenuous in that it implies that only Alternative 1 meets PSE's 19 project criteria as Alternatives 2 and 3 only "address the objectives sufficiently enough to be reasonable for consideration" in Phase 1 of the DEIS, but by inference not in Phase 2. This reinforces the conclusion that the DEIS is designed to support only PSE's proposal and eliminate all other alternatives. This does not serve the intent or purpose of an EIS when there in fact are other viable alternatives.

1.12.1 PSE's need evaluation process has NOT been conducted according to industry standards. The evaluation criteria used by PSE and its consultants greatly exceed the standards required by NERC and WECC and are not standard in the industry. The load flow simulations run by PSE and subsequently by its consultants and Utility Systems Efficiencies go well beyond federal and regional reliability requirements which are the industry norm. For instance, PSE's and its consultants load flow studies simulate not just the required N-1-1 situation, which is the industry standard wherein two critical pieces of equipment fail sequentially during a rare peak demand event as required by NERC and WECC. The PSE studies go far beyond the requirement by taking another approximately 8 pieces of critical equipment (Western Washington gas-fired generators, some of which are "peaking plants" designed and built specifically to run during peak demand hours) offline IN ADDITION TO the required and industry standard N-1-1 equipment outages. In addition to this non-industry-standard simulation of a highly unrealistic "N-1-1-8" event, PSE and its consultants further stress an already highly compromised system by subjecting it to a huge flow of power to Canada. (There is no firm contract to deliver power to Canada during a peak demand event on the Eastside and PSE has not produced any evidence that there is such an obligation.) The simulation of an N-1-1-8 event, with or without the added stress of enormous power flows to Canada, is not "in accordance with industry standards for utility planning" as asserted in the DEIS. In its load flow modelling, PSE apparently also incorrectly used summer ratings for the remaining operating transformers during the winter peak event simulation. This yet further stresses the system reducing its ability to adequately handle load. Thus the need for any alternative, other than no action, is not yet established. The need must be transparently established in accordance with industry standard practices (i.e., based on NERC and WECC minimum requirements of an N-1-1 event during peak demand hours alone) without additional, non-standard stresses modeled on the system before the Phase II DEIS scoping can proceed.

## Chapter 4 Greenhouse Gas Emissions

Alternatives 1 A, C and D would have a very significant impact on GHG emissions (GHGs). With regard to construction, the metal extraction from the earth, transportation of ore, manufacture of metal, fabrication of metal, and shipping of the rebar, conductors and towers would emit significant quantities of Scope 1, 2 and 3 emissions as well as the installation.

With regard to operation, the DEIS ignores the relationship between the production of electricity using carbon-intensive fuels and the construction of Alt 1. Alt 1 encourages the use of both local and distant carbon-intensive generation plants like Colstrip whereas Alt 2 would actually decrease the amount of electricity used from all sources. Alt 1A is an enabler of PSE's plans, as documented in its 2015 Integrated Resource Plan, to build hundreds of megawatts of new gas-fired, carbon intensive generators beginning in 2021 and prolong the life of Colstrip. For instance, without the construction of an Alt 1, which would be treated as a sunk cost in an economic analysis of new gas-fired generators, new gas-fired generators would not be built because they would not be a least cost source of power. Colstrip might even be shut down sooner if Alt 1 is not implemented. Simply put, if these fossil fuel-fired plants were burdened with the cost of transmission, they would not be built or their life extended. Thus the impacts of any of the Alt 1 options must account for the increase in electricity use they enable. The amount of new or existing carbon intensive generation capacity they enable is at least 1000 MW. 1000MW capacity is the difference between the 1500 MW of Canadian flow in the PSE load flow studies used to justify the need for Alt 1 and the 500 MW of Canadian flow in the PSE base case and Lauckhart Schiffman studies.

4.5.3.1.2 The implicit assertion that only the production of concrete and not the production of steel, aluminum and other metals does not produce GHGs in significant quantities is simply wrong. The extraction and production of metals is extremely energy intensive and produces huge quantities of GHGs. To include the impacts of production of battery storage components under 4.5.4.4.2 but not the impacts of production of components of Alt 1 shows bias for Alt 1 and must be corrected.

Ignoring the significant production of GHGs from these activities directly caused by Alt 1A biases the analysis against Alternative 2, which absent peaker plant which are not needed in an effective Integrated Resource solution, produce little to no GHGs.

4.5.3.1.3 In general, the use of the State quantitative criteria for determining GHG impacts is inadequate and misleading given the negligible impacts from a corrected Alt 2 which does not require peaker plants and only small storage amounts. Alt 2 can and should rely primarily on energy efficiency, conservation, demand side management and non-impactful distributed energy resources. The DEIS analysis and results imply that the impacts of Alt 2 are somehow in the same ballpark as the other alternatives, especially Alt 1A, which is entirely biased and misleading.

The statement that 44 acres of forested land "under a worst case scenario" would be deforested is not adequately supported. First it is less than half of the roughly 110 acres that would have to be added to the 100 foot right of way for expansion by 50 feet. Second, the assertion that the expansion would have to be only 50 feet is not adequately supported elsewhere in the EIS. The actual expansion required may

I158-D -15 See responses for Topic GHG.

I158-D-15

I158-D-15

be 100 feet or more in order to provide adequate separation of Alt 1A and the two high-pressure fuel lines as well as the 115kV lines in the existing right of way. The described impacts are not worst case.

4.6.4.4 No peaking capacity is needed for Alt 2 to satisfy the need, even though PSE’s quantification of need is overstated. It is misleading to included peaking plants in Alt 2 in the first place, let alone to include a moderate impact “warranting mitigation” to color people’s impression of Alt 2.

4.9 The conclusion that none of the alternatives would significantly impact GHG emissions, as stated above, ignores the cause-effect relationship between Alt 1 and the generation of more carbon fuel-generated electricity as well as the construction of up to 1000 MW of new carbon intensive generation capacity. This is a glaring defect in the analysis and must be corrected by experts who understand these relationships and their consequences for GHGs and other impacts.

I158-D-16

Chapter 7 Energy and Natural Resources

The assertion in the side bar in 7.1 that Alt 2 would lead to Eastside generation of non-renewable power rests on the faulty characterization of Alt 2. Alt 2 does not require new Eastside peaking capacity to be an effective solution to even PSE’s exaggerated quantification of need. Moreover, if Alt 1 is built, fossil fuels will be burned and water consumed and contaminated somewhere else to satisfy the increased demand for electricity it enables and it is wrong to ignore distant impacts. The impacts of PSE’s Colstrip plant for instance are ignored. The fact remains that Alt 2 would reduce demand for energy and Alt 1 would significantly increase both capacity of and demand for electrical energy.

7.6.3 and 7.6.4 Again, the assertion that Alt 1A would not lead to additional need for new power generation or additional use of resources is not supported and ignores the cause-effect relationship between the construction of transmission and the construction of new and increased use of existing resource-intensive generators. This relationship must be adequately analyzed by experts who understand these relationships and their consequences. Alt 1 would enable the construction of up to 1000MW of new generation and the attendant energy resource use impacts.

I158-D-17

Chapter 10

10.7.3.1.2 Alt 1A does not comply with King County, Redmond and Kirkland policies or regulations that specifically prohibit co-locating new or expanded transmission lines with hazardous material pipelines. The reasons for this prohibition should be analyzed and an in-depth assessment of risk to neighboring communities included in the DEIS. The feasibility of Alt 1A is questionable given these regulations.

10.7.3.1.1 The DEIS states that Alternative 1A could require up to 327 acres of housing, businesses and other land uses to be condemned and demolished for use as a utility corridor. It also states that at a minimum an additional 50 feet width of adjacent property would have to be added to the existing right of way. This would be an additional approximately 109 acres of housing and businesses that would have to be cleared of structures and trees. This analysis likely underestimates the amount of land required because it does not contain an analysis of how far away from the hazardous material pipelines the new lines must be built. If either of the two pipelines in the existing right of way are near the edge of the existing right of way, the proposed transmission lines in Alt 1A would, to be safe, have to be located at

I158-D -16 See responses for Key Themes EGY-1 and EGY-2.  
 I158-D -17 See responses for Key Themes LU-2 and LU-5.

I158-D-17

least 50 feet away. And to that 50 feet another 50 or so feet would have to be cleared of houses and other structures in order to maintain sufficient clearance from the new power lines. The current analysis is also inadequate because it does not include a discussion of the number of homes, businesses, other structures and trees which would have to be torn or cut down. For instance, if the average housing lot size along the right of way is 1/3 of an acre, the addition of 109 acres of additional right of way could require the condemnation and removal of up to 327 homes which is equivalent to every home located on one side or the other of the existing right of way. To obscure this impact in the fine print of such a long document and to label the impact of this amount of dislocation and trauma to the communities along the right of way anything less than beyond significant is untruthful and disingenuous at best.

I158-D-18

10.7.1.4 The cost discussion and analysis provided is totally inadequate because it relies entirely on only one out-of-date study which may or may not be relevant to property values in this particular location. The analysis contains no evidence that the study is applicable to the Eastside. Real estate values are widely known to depend on location, location, location yet the analysis makes no attempt to enlist the knowledge and expertise of local real estate experts. This must be done, otherwise the analysis is inadequate.

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I158-D -18 See response for Key Theme ECON-1.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                              | Timestamp             | First Name | Last Name |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
|          | My first comment is that this process should not be going on this far. This is a foreign owned company seeming to dictate to our elective officials a plan that is not backed by the citizens of Bellevue.                                                                                           | 3/14/2016<br>18:47:50 | Dale       | Hall      |
| I159-A-1 | Safety Gas Pipeline/Electrical Power Lines. This is a recipe for disaster.<br><br>Easements will have to be enlarged and therefore homes demolished. Shame on Bellevue for doing this.                                                                                                               |                       |            |           |
| I159-A-2 | Homes will be devalued on the market. Many homes that are close to the powerline easement will experience that their homes aren't worth as much. Most people of their greatest asset in their home. Again, a foreign entity is dictating that Bellevue's residents personal wealth will be lessened. |                       |            |           |
| I159-A-3 | Tearing down vast amounts of trees and vegetation.                                                                                                                                                                                                                                                   |                       |            |           |
| I159-A-4 | The power is not needed!!!!!!!!!!!!!! Please read the CENSE study                                                                                                                                                                                                                                    |                       |            |           |

- I159-A -1 See response for Key Theme OBJ-1.
- I159-A -2 See response for Key Theme ECON-1.
- I159-A -3 See response for Key Theme P&A-2.
- I159-A -4 Comment noted.



COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timestamp             | First Name | Last Name |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I161-A-1 | I live in Olympus and am protesting EIS transmission lines running through our neighborhood. The 230 kV lines and tall monopoles will create visual blight as well as environmental hazard. We have lived here since 1993 and love the tranquil neighborhood and views. I beg you to stop ruining the peace and tranquility we have moved here to enjoy. I am sensitive to environmental EMF's and will be forced out of our home we love. In addition this is going to cause us to lose property value. Please listen to us and do not allow this to proceed | 3/14/2016<br>18:58:45 | Susan      | Rosales   |
| I161-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |            |           |
| I161-A-3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |            |           |

- I161-A -1 See response for Key Theme VR-5.
- I161-A -2 See response for Key Theme EMF-1.
- I161-A -3 See response for Key Theme ECON-1.

**How you can make your comments most effective**



Check out the Department of Ecology Citizen's Guide to SEPA Review and Commenting at [EnergizeEastsideEIS.org/sepa-review](http://EnergizeEastsideEIS.org/sepa-review).

**Be clear, concise, and organized.** Decide what you need to say before you begin. If you have a number of points, group your comments in a logical order.

**Be specific.** Give support to your comments by including factual information. For instance, compare how things *were*, to how they *are*, to how you believe they *will be* in the future—and why.

Refer to Comprehensive Plans, development regulations, information on similar projects or situations, and other environmental laws or documents. Be as accurate as possible.

**Identify possible solutions.** Suggestions on reasonable mitigation—conditions to avoid, minimize, or reduce adverse impacts—can help influence how a project is ultimately built. After identifying your concern, suggest possible solutions.

—fold here—

**Comments on the Phase 1 Draft EIS of PSE's Energize Eastside Project**

Name Deborah Hayes Address\* 4208 137<sup>th</sup> Ave NE  
Bellevue WA 98005

\* You must provide your physical mailing address to be considered a "party of record," eligible to appeal the adequacy of the EIS.

Re: EIS for Energize Eastside

I162-A-1

I would like to voice my concern about this project. It is an overly costly project with regard to charges to PSE customers, the lost of property values and homes, habitat and trees.

I162-A-2

Alternative 2 will have a much ~~less~~ less impact on all concerned. Even though I feel we can completely avoid this whole project with conservation and higher tech methods that do not use massive power poles - if we must improve our electrical grid, I urge Alt. 2.

Thank you  
Deborah Hayes

I162-A -1 See responses for Key Theme ECON-4, Key Theme LU-1, Key Theme P&A-1, and Key Theme P&A-2.

I162-A -2 Comment noted.

COMMENT

RESPONSE

I163-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                             | Timestamp             | First Name | Last Name    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|--------------|
| It has become clear that the analysis for the need for the project is flawed. Assuming that six of the eight peak demand back-up generators don't come on and sending 150MW to Canada while we are at a peak load does not make sense. There is plenty of time to monitor and work alternatives. I appreciate the work of CENSE and Richard Lauckhart. See: <a href="https://youtu.be/jnV8TL_U_g0">https://youtu.be/jnV8TL_U_g0</a> | 3/14/2016<br>21:26:27 | Scott      | KASEBUR<br>G |

I163-A -1 See response for Key Theme OBJ-3.



COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
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|                                                                                                                                                                                                                                                      |                      |      |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|----------|
| As a homeowner in the Bridle Trails area of Bellevue with two sets of power poles currently on my property, I appreciate the opportunity to comment on the DEIS, and will focus on three issues: need, neighborhood/environmental impact and safety. | 3/8/2016<br>12:45:53 | Jill | Sulzberg |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|----------|

Need

PSE's Energize Eastside project is unnecessary and overreaching given current and near-term community needs. There is no proven, credible need for a project of this scope to serve the Eastside, and it is reasonable to question claims that the project is solely for local benefit. Chapter 1.3 of the DEIS asserts "there is a need to construct a new 230 kV bulk electrical transmission line." An independent study (Lauckhart-Schiffman load-flow study) shows the contrary: demand will not exceed peak flow until 2058. Even using PSE's own (inflated) rate of growth in electrical demand (2.4%), current capacity will suffice until at least 2027—a full 10 years longer than PSE claims. Clearly, there is time to pursue alternatives, especially as energy technologies rapidly develop. PSE must address this independent study as it goes forward and provide persuasive evidence of a near-term need.

I164-A-1

Neighborhood/Environmental Impact

The EIS "is intended to identify alternatives that could attain or approximate PSE's objectives at a lower environmental cost and disclose potential significant adverse environmental impacts associated with all alternatives identified." (DEIS Chapter 1.3, emphasis

I164-A-2

I164-A -1 See responses for Key Themes OBJ-2 and OBJ-3.

I164-A -2 See response for Key Theme ALT-1.



I164-A -3 Comment noted.

| Comment | Timestamp | First Name | Last Name |
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added). PSE must evaluate in good faith the consequences of all the proposed alternatives, not just those that allow PSE to attain its stated goals exactly as the corporation outlined.

I164-A-2

In the event that PSE moves forward with Energize Eastside, I urge it to consider more fully the DEIS Alternative 2 (as PSE appears to have dismissed outright the ability to place lines underground or underwater). If it consists of a realistic and cost-effective mix of proven and cutting edge technology, Alternative 2 will permit improvements to the existing grid as needed, but will have a lower impact than the current proposal. Bellevue is known as "the city in a park." We are surrounded by lush vegetation, and in some places, striking vistas. We are realists, and understand the existence of power poles and easements over public and private property, but request that PSE respect the current character of the city as a whole and PSE's existing rights-of-way and easements.

I164-A-3

The environmental destruction of Alternative 1-A is unacceptable. The DEIS describes devastation resulting from widening the corridor in Alternative 1-A—as many as 327 acres of canopy lost (Chapter 11.6.3.5.1). Even using existing corridors will result in lost habitat. "If an overhead transmission line were placed in an existing transmission right-of-way, the existing right-of-way would need to be extended to meet clear zone requirements...Replacing the existing line with a 230 kV line would involve a more limited amount of clearing than a new corridor, but could still require removal of up to 109 acres of vegetation."



|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timestamp | First Name | Last Name |
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| I164-A-3 | <p>(DIES Chapter 11.6.3.5.1) Either amount of lost greenery alone would permanently change the carbon footprint of our area, affect soil stability, noise levels and animal habitats. It could easily destroy neighborhood character. Alternative 2 minimizes these drastic effects through the use of and improvements to existing infrastructure. It will also permit PSE to explore 21st-century technology for reliable energy while maintaining neighborhoods, landscapes, vistas and Bellevue's park-like atmosphere.</p> <p>Environmental Health and Safety</p>                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |            |           |
| I164-A-4 | <p>There are at least two potential hazards specific to Energize Eastside that must be properly considered and evaluated, but which PSE glosses over: seismic dangers and risks from locating power lines near pipelines.</p> <p>Chapter 8.5.1.3 addresses seismic concerns, but only from earthquakes during construction. Residents of all communities affected deserve from PSE a full analysis of the seismic risk to the new and significantly larger poles and other infrastructure after construction is complete.</p> <p>PSE's power poles are not the only utility delivery mechanisms in the proposed corridor. The route is in close proximity to the Olympic Pipeline Company's underground petroleum pipeline. The pipeline is almost directly under the power lines on my property, yet when I met with Energize Eastside representatives in my neighborhood over a year ago as they introduced the project, they were not well-informed about pipeline risks, including risks during construction</p> |           |            |           |

I164-A -4 Seismic issues are discussed at a programmatic level for operation as well as construction. See responses for Key Themes PLS-2 and PLS-3, and Key Theme EARTH-1. Also see the Final EIS Section 4.11.

COMMENT

RESPONSE

I164-A -5 Comment noted.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Timestamp | First Name | Last Name |
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| I164-A-4 | <p>and from arcing that may occur in certain circumstances. It seems this lack of concern for safety persists in the DEIS, which gives little attention to this siting hazard.</p> <p>Conclusion</p>                                                                                                                                                                                                                                                                                                                   |           |            |           |
| I164-A-5 | <p>Residents of Bellevue (and the other affected cities) are tech-savvy consumers who understand the need for a reliable electrical supply. With power lines and poles on my property, I have learned to live with the daily visual reminders of this shared resource. Fairness dictates that PSE fully evaluate all alternatives and proceed only if there is a justifiable local need that can be met with limited impact on the environment and without compromising our safety and that of future generations.</p> |           |            |           |

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Timestamp         | First Name | Last Name |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------|-----------|
| I165-A-1 | For over a year, I have read about the proposed PSE Energize Eastside transmission lines, and recently the DEIS. I have come to the conclusion that the proposed Alternate 1-A is not necessary and will cause more problems than what it proposes to help. It appears the DEIS is inaccurate and incomplete about the hardships, costs, and dangers for the residents of Bellevue and surrounding cities.                                                                                                                                                                                                                                                                                                                                                                                   | 3/13/2016 0:01:02 | Marlene    | Meyer     |
| I165-A-2 | The major concerns include destruction of natural landscapes and homes through which these lines will run, the health risks from possible explosions of high voltage lines near pipelines as well as not having definite proof of no effects from EFMs (electromagnetic fields), especially high-voltage lines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |            |           |
| I165-A-3 | Finally, there seem to be an array of costs unaccounted for in this study that have been pointed out at various city hall meetings, and an investment interest by the owner bank Macquarie Group Limited.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                   |            |           |
| I165-A-4 | In addition, the proposal for this project was initially a concern for depletion in energy with the growth of our city. Apparently the independent study by a group hired by CENSE shows that when the proper parameters are placed into the test, there is not the danger that PSE seems to be presenting. The tests did not include an acceleration of new sustainable energy systems, such as wind and solar power. For example, Iowa now shows a 30% energy gain from wind power. Solar energy installations are now effective, even in states such as ours where we think we do not have enough available sun. Are we pushing enough in these progressive avenues to be less reliable on electric needs and to reduce our carbon footprint? The high voltage lines are a step backward. |                   |            |           |
| I165-A-5 | Finally, the DEIS does not include specialty concerns                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |            |           |
| I165-A-6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |            |           |

- I165-A -1 Comment noted.
- I165-A -2 The comment is not specific enough about the concerns with the EIS to allow a response.
- I165-A -3 See responses for Key Theme P&A-2, Key Theme LU-1, and Key Theme VR-1.
- I165-A -4 See response for Key Theme EMF-1.
- I165-A -5 See response for Key Theme ECON-3.
- I165-A -6 See response for Key Theme OBJ-3.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp | First Name | Last Name |
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| I165-A-6 | such as the following: First is danger to wildlife in the sky, including our bird population. National Audubon has done studies of power lines in the United States and the results show 175 million bird deaths occur per year from these power lines. Think of the effects for even higher and more powerful energy lines. Second,                                                                                                                                                                                                    |           |            |           |
| I165-A-7 | is noise factors from wires. I live near a power station and at 12 midnight there is a bus noise that comes through our walls. It keeps me from sleeping at night. I can imagine how loud the high voltage might sound like at night to those who live near it.                                                                                                                                                                                                                                                                         |           |            |           |
| I165-A-8 | All of these concerns for this project lead me to ask for our city to consider an alternative. We are a progressive and growing city that should not be looking backward to such out-of-date and disruptive methods. There are healthier and more progressive methods. When you drive into Bellevue, you see our amazingly new architectural city scape - we look like we are growing and progressive, so let's act like it by making this a city that knows how to grow in the right way. A way that honors and respects its citizens. |           |            |           |
| I165-A-9 | I ask for No Action at this time, or for Alternative 2. Please way your considerations carefully and listen closely to the concerns of your citizens who you represent.<br>Thank you, Marlene J. Meyer                                                                                                                                                                                                                                                                                                                                  |           |            |           |

- I165-A -7 See response for Key Theme P&A-4.
- I165-A -8 See response for Key Theme NOI-2.
- I165-A -9 See response for Key Theme ALT-1.



COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timestamp             | First Name | Last Name |
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| I165-C-1 | For over a year, as a resident of Bellevue, I have listened to the the proposal for PSE Energize Eastside transmission lines, and recently have looked over the DEIS stating proposed alternatives. I have come to the conclusion that the proposed Alternate 1-A is the wrong direction and will cause more problems than what it proposes to help. In addition, the DEIS seems to be inaccurate and incomplete about the hardships to nearby homeowners, destruction of landscapes, costs, and possible dangers of this alternative for the residents of Bellevue and surrounding cities.                                                                                                         | 3/14/2016<br>16:51:02 | Marlene    | Meyer     |
| I165-C-2 | The destruction of natural landscapes and homes through which these lines will run is not acceptable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |            |           |
| I165-C-3 | People will be displaced, hundreds of trees cut down, and ugly-looking power lines for 18 miles of our city scapes. Then there are the undetermined health risks from EFMs (electromagnetic fields), especially with high-voltage lines. Finally, there seem to be an array of costs unaccounted for in this study that have been pointed out at various city hall meetings that will come back to the home owners and tax payers.                                                                                                                                                                                                                                                                  |                       |            |           |
| I165-C-4 | In addition, the proposal for this project was initially a concern for depletion in energy with the growth of our city. However, as a member of Cense, I read about their independent study by Lauckhart-Schiffman that included more realistic parameters; the results for energy need was lower. And, PSE's test did not include an acceleration of sustainable systems, such as wind, solar, and better lighting. Other states, such as Iowa, are now showing a 30% energy gain from wind power. Solar energy installations are now effective, even in states such as ours, that are not sunshine states. Are we pushing enough in these progressive ways to be less reliable on electric and to |                       |            |           |
| I165-C-5 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |            |           |
| I165-C-6 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |            |           |

- I165-C -1 Comment noted.
- I165-C -2 The comment is not specific enough about the concerns with the EIS to allow a response.
- I165-C -3 See responses for Key Theme LU-1, Key Theme VR-1, Key Theme EMF-1, and Key Themes PLS-1 and PLS-2.
- I165-C -4 See response for Key Theme ECON-3.
- I165-C -5 See response for Key Theme OBJ-2.
- I165-C -6 See response for Key Theme P&A-4.



COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Timestamp | First Name | Last Name |
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| I165-C-6 | <p>reduce our carbon footprint? Or are we being pushed by an investment interest by the owner bank Macquarie Group Limited? The high voltage lines seem to be a step backwards.</p> <p>Finally, the DEIS does not include specialty concerns such as danger to wildlife in the sky and noise factors. National Audubon has done studies of power lines. The results show 175 million bird deaths occur per year from collision or being electrocuted by these power lines (Audubon.org/news May 22, 2015).</p>                                                                                                                                             |           |            |           |
| I165-C-7 | <p>Second, is the noise factor from the voltage lines. I live 1/2 block from what I believe is a power substation and at 12 o'clock midnight hear a buzzing noise come through our walls. It keeps me from sleeping at night. I can imagine how loud the high voltage might sound to those who will live along the 18-mile structures.</p>                                                                                                                                                                                                                                                                                                                 |           |            |           |
| I165-C-8 | <p>These are only some of the concerns for this project, but these alone lead me to ask for our city to consider an alternative. We are a progressive and growing city that should not be looking backward to such out-of-date and disruptive methods. When you drive into Bellevue, you see our amazingly new architectural city scape - we look like we are a progressive city. So, let's progress in a way that makes for a sustainable and pleasant environment. I ask for No Action at this time, or for Alternative 2.</p> <p>Thank you,<br/>                     Marlene J. Meyer (member of Cense) at 2408 131st Place NE, Bellevue, WA. 98005</p> |           |            |           |
| I165-C-9 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           |            |           |

I165-C -7 See response for Key Theme NOI-2.  
 I165-C -8 See response for Key Theme EIS-3.  
 I165-C -9 Comment noted.



COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                           | Timestamp          | First Name | Last Name |
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| I166-A-1 | PSE project Alternative 1-A - NO, NO, NO: -threatens community safety w/high voltage lines close to jet fuel increasing risk of catastrophic explosion.                                                           | 3/14/2016 16:47:28 | Michelle   | Hall      |
| I166-A-2 | Electromagnetic interference w/pipeline causes corrosion+damage to pipeline. Taller poles + higher voltage expose more schools, children + homes to risk if earthquake, extreme weather or terrorist attack!      |                    |            |           |
| I166-A-3 | Seismic hazards of Puget Sound increase risks of steep slope, Coal Creek, + slope liquefaction. -                                                                                                                 |                    |            |           |
| I166-A-4 | removal of 8,000 trees loses beneficial CO2 to Oxygen process provided by trees and impedes the reduction of noise and runoff absorption. PSE is not using honest data! Bellevue citizens are not their priority. |                    |            |           |
| I166-A-5 | PSE's financial bottom line is their "raison d'etre". Don't be fooled. Project alternative 1-A is scary!!                                                                                                         |                    |            |           |
| I166-A-6 | Modern energy technologies are what Bellevue, the City in the Park, should embrace! Thank you.                                                                                                                    |                    |            |           |

- I166-A -1 Comment noted.
- I166-A -2 See responses for Key Theme PLS-3, Key Theme EMF-4, and Key Theme EARTH-2.
- I166-A -3 See response for Key Theme EARTH-1.
- I166-A -4 See responses for Key Theme P&A-2 and Key Theme GHG-2.
- I166-A -5 Comment noted.
- I166-A -6 Comment noted.

COMMENT

RESPONSE

I167-A -1 See response for Key Theme OBJ-2.  
 I167-A -2 See response for Key Theme ALT-1.

| Comment | Timestamp | First Name | Last Name |
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I167-A-1

It has come to my attention that the load flow modeling done by PSE was based on inaccurate, unreliable, and inappropriate, information and assumptions. As a consequence of utilizing bad information and inappropriate modeling assumptions the results of the load modeling are inaccurate and misleading. Since the PSE load modeling study is the primary document substantiating PSE's argument for the need to increase it's distribution and generation capacity, I would advocate that the City of Bellevue hire an independent expert to conduct another load study to either refute or confirm the results and conclusions of the PSE load study. I am confident that a load study done utilizing appropriate, rational information and realistic assumptions will yield results that are significantly different then those presented in PSE's load study.

I167-A-2

Based on information contained in the Lauckhart-Schiffman Load Flow Study and the EQL Energy LLC reports, I am convinced that Alternative 2- "Integrated Resource Approach" in the DEIS is the best and least cost solution to satisfying the Eastside's electrical power needs into the mid-century.

The Integrated Resource Approach is smart, effective, reliable, diversified, eco-sensitive and the lowest cost solution to satisfying the Eastside's ongoing need for reliable electric power.

Sincerely, Bill Keppler - Renton

COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
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|                |                       |         |         |
|----------------|-----------------------|---------|---------|
| March 14, 2016 | 3/14/2016<br>15:45:29 | Richard | Bateman |
|----------------|-----------------------|---------|---------|

Energize Eastside EIS

Puget Sound Energy has proposed a new transmission line that runs from Renton to Redmond based on 1960's technology. However this is 2016, and today the rules are different.

One example of the differences was demonstrated in a recent meeting between the community and PSE: PSE showed their slide show and a member of the community asked to see the data that supported one of PSE claims on the charts. He was told that PSE could not provide the data to him until he gets clearance from the Department of Homeland Security.

We have been told that the United States needs to protect our critical infrastructure against the threat of terrorism. We have seen major changes implemented toward meeting this goal. One spectacular example is the new Highway 93 bridge over the Colorado River which bypasses the road over the top of Hoover Dam in Nevada. Cars are no longer allowed on the top of this and other dams.

So in the interest of national security which is better: a new transmission line encased in concrete and buried

I168-A -1 See responses for Key Theme UTL-2 and Key Theme PLS-2.

I168-A-1



I168-A-1

| Comment | Timestamp | First Name | Last Name |
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underground, or a new transmission line  
dangling on the top of a 130 foot steel pole? In  
addition PSE insists putting  
lighting on top of these new poles in some places  
making them greater targets.

Thank you for your consideration.

Richard Bateman  
4565 135th Place SE  
Bellevue, WA 98006  
(425) 747-7775  
rebateman@msn.com

COMMENT

RESPONSE

|          | <b>Comment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Timestamp</b>      | <b>First Name</b> | <b>Last Name</b> |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|------------------|
| I169-A-1 | Alternative 1A is the best solution for the Eastside. PSE should be able to rebuild the line in it's existing corridor. This would be the least impactful option and the least costly. The thought of making PSE develop a brand new corridor and purchase rights and property would generate unnecessary costs that would be passed on to rate payers for years. I've lived in Bellevue since the 1980s and I have seen the growth in Bellevue, it is time to build a robust electric system that will support that growth. | 3/14/2016<br>15:36:14 | Kim               | Stanford         |
| I169-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |                   |                  |
| I169-A-3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                       |                   |                  |

I169-A -1 Comment noted.  
 I169-A -2 See response for Key Theme ECON-3.  
 I169-A -3 Comment noted.

COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
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|                                                                                                                                                                                                                                |                       |       |        |
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| I have been a resident of the Olympus neighborhood for nearly 28 years. I have serious objections to Alternative 1 of the PSE Energize Eastside project. My primary objections are Safety Concerns and Neighborhood Character. | 3/14/2016<br>14:18:31 | Tamra | Kammin |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|--------|

I170-A-1

Clearly, safety is the most critical requirement for any action taken to address power needs in this area. Alternative 1, Option A introduces a high risk of explosion and/or fire both during construction and in the on-going operation of co-located power, gas, and potentially natural gas lines. This is well documented in the report from Dr. Frank Cheng. As stated in the DEIS, PSE workers have knowledge of the risks and we have regulations in place, however, we know that accidents do occur. Only last week, there was a natural gas explosion in Greenwood, destroying multiple businesses.

I170-A-2

In section 11.1.2 of the DEIS, Property Values are briefly discussed. Relying on the technical designation by the King County Assessor of what properties have a view that affects the value of the property does not even touch the impact of a neighborhood forced to view massive towers of from 85-135 feet ripping through the development. Not only are they unsightly, but they also "look" dangerous. Alternative 1 will have a significant negative effect on property values for the homes that remain and that assumes that current properties surrounding the affected areas could even be sold. In section 11.2.9 of the document, the Newcastle plan states that power is to be provided that is aesthetically acceptable to the community. This alternative violates that requirement.

I170-A -1 See responses for Key Themes PLS-2 and PLS-3.

I170-A -2 See responses for Key Theme ECON-1 and Key Theme VR-4.

I170-A -3 See response for Key Theme ALT-2.  
 I170-A -4 Comment noted.

| Comment | Timestamp | First Name | Last Name |
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I170-A-3

Section 2.5 of the DEIS provides the benefits and disadvantages of delaying the proposal, which could easily be applied to taking the steps identified in Alternative 2. All benefits identified are key and important. The most dramatic impact of the delay is that major investments would be avoided prior to actually identifying if they are even partially needed. There are only 2 disadvantages identified. First, power outages could develop over time. Given the results of the Lauckhart-Schiffman Load Flow Study, this appears very unlikely, especially given the conservation steps suggested AND rewarded by PSE. The second disadvantage is that development would be discouraged with the risk of power outages. Development would be discouraged even more from unsightly and dangerous massive power lines built through the neighborhoods.

I170-A-4

Given the risks, impacts, and unproven need of this project, it is my strong belief that Alternative 2 could be implemented over time to satisfy all power requirements of the area without destroying the character of the Eastside. I would be most interested in reviewing the business case for this project, which is not part of the DEIS.

Sincerely,  
 Tamra Kammin  
 8604 129th CT SE  
 Newcastle, WA 98056



COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp            | First Name | Last Name |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I171-A-1 | My home is on the easement off SE 44th in Somerset. I have been misslead on two occasions now with one on one meetings with PSE personnel. First on a phone call last March or April with Darby Broyles, the Right of Way person for PSE. I was considering solar panels for my home at a cost of 19,000 and synthetic turf for another \$19,000 I wanted to make sure my home would not be condemed or purchased for the Energize the Eastside project. The current wood poles are on my property. The Olympic Pipeline runs down the private drive to my assessed over a million dollar home on the easement. Darby assured me that my home would not be needed. Now After I have had solar panels and synthetic turf installed I read that this will not be true. The second incident was a coffee with Keri Plavitz and Jackson Taylor. They called and asked me to meet with them in my role as Somerset Community Association President. At this coffee Jackson told me that the current wood poles in my yard would be removed simutaneously when the new up to 135 foot towers were installed. I informed him that is not what he stated at the Newport Community Center meeting (filmed)early on with PSE. He stated that it would take up to three years to remove current poles if my route was chosen. I told him what he said on film. He denied saying it. | 3/14/2016<br>9:14:56 | Kathy      | Judkins   |
| I171-A-2 | This project will block access to my home for weeks for my driveway and garage. The money spent so far for nailing tag numbers into every tree and naming the kind of tree is huge plus another crew for wetlannd delineation. They were working on my 8 house                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                      |            |           |
| I171-A-3 | easement for three weeks. I told them there was a water problem from the hundreds of underground springs in Somerset. The men were not aware of that.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |            |           |

- I171-A -1 See response for Key Theme VR-5.
- I171-A -2 See response for Key Theme TRAN-1.
- I171-A -3 See response for Key Theme GHG-2.





COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                       | Timestamp | First Name | Last Name |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I171-A-3 | Two homes of the 8 have had severe mold problems due to the underground springs. One next door to me was torn down and a new foundation poured to rectify this problem. Another one is being totally fixed right now. A 30 foot tree next to the poles in my yard fell across my driveway due to the underground spring soaking . I had to get help to remove it so I could access my garage. |           |            |           |
| I171-A-4 | Please consider Alternative 2. I am against Alternative 1 which is not needed.                                                                                                                                                                                                                                                                                                                |           |            |           |
| I171-A-5 | I do not know one person in Somerset who approves of this project which will blight the City of Bellevue forever.                                                                                                                                                                                                                                                                             |           |            |           |
| I171-A-6 | Thank you.<br>Kathy Judkins                                                                                                                                                                                                                                                                                                                                                                   |           |            |           |

I171-A -4 Comment noted.  
 I171-A -5 Comment noted.  
 I171-A -6 See responses for Key Theme LU-4, and Key Themes VR-4, and VR-5.

I172-A -1 See responses for Key Themes OBJ-2 and OBJ-3.

I172-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp             | First Name | Last Name |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| <p>PSE was allowed to determine the assumptions and conditions used to determine if there is a need for Energize Eastside. Other contractors examined the methodology PSE used but no one ever investigated if the assumptions and conditions used to predict a potential an energy deficiency in 2017 were valid. Jens N. with PSE had said in several community meetings if someone could get a CEII clearance then they could review PSE's work product. When CENSE got a retired Puget Power/PSE expert qualified for clearance, Jens N. stonewalled them saying they already had several contractors (USE, Stantec, etc.) look at their work product and validate the need, therefore the CENSE consultant no longer had a need to know and was never allowed access. So what are they afraid of? The answer came out when CENSE hired two of their own consultants that showed 1500kV being sent to Canada as part of the project need is a false requirement. They found out that the peaker plants that are to be used as emergency back up in high demand times were not utilized to the extent available. They found out that the transformer load factor was set for summer conditions instead of winter conditions. All of these things need to be investigated to the fullest extent before this project is allowed to go forward. When you use false requirements and data you will get fake results. The energy use has been going down with all the new Energy Star rated appliances replacing old equipment. Energy companies are trying to line their pockets with infrastructure projects like this for their shareholders, earning a 10% return. Please hold off on this project until this can be thoroughly vetted by independent opposition.</p> | 3/13/2016<br>23:15:38 | Gary       | Albert    |

COMMENT

RESPONSE

I172-B -1 See responses for Key Themes PLS-2 and PLS-4.  
 I172-B -2 See response for Key Theme LU-2.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Timestamp             | First Name | Last Name |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I172-B-1 | I am opposed for safety reasons installing new power poles in the same easement with the Olympic Pipeline. I have heard of instances where the 115kV lines have fallen to the ground and electrical current has jumped to a neighbors invisible dog fence and irrigation system, exploding control boxes placed in the garage and causing fire damage. Also have heard of similar arcing damage to the Olympic Pipeline almost burning a hole in the line from a downed power line. With an upgrade to 230kV, the power companies categorize these not as High Power but as Ultra High Power lines.... four times the power, this is an unacceptable risk that homeowners don't need to take on. Recently, there have been other instances where buildings have been blown up from gas leaks. Fortunately, these have been in commercial areas and not residential areas. | 3/13/2016<br>23:28:35 | Gary       | Albert    |
| I172-B-2 | New power lines and gas or liquid gas need to be separated and kept out of residential neighborhoods. Use commercial, city or state property where they belong.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |

## COMMENT

## RESPONSE

**From:** [Barry Zimmerman](#)  
**To:** [info@energize-eastside.org](mailto:info@energize-eastside.org)  
**Subject:** Phase 1 Draft 1 EIS Review Comments  
**Date:** Monday, March 14, 2016 11:56:32 PM  
**Attachments:** [20160313\\_Zimmerman\\_Written\\_Comments\\_on\\_Phase\\_1\\_EIS.pdf](#)

---

I have attached comments for review and reply by the Lead Agency of the SEPA for Energize Eastside.

Thank you for your attention to this matter.

**Barry A. Zimmerman**

T: (206) 930-7585

March 13, 2016

Barry A. Zimmerman  
5007 Somerset Drive SE  
Bellevue, WA 98006

I have been a resident and homeowner in Bellevue since 1977, where I have raised my family, and developed my business. I have greatly appreciated the quality of life supported by a caring, capable and effective City Council and city Land Use policies. I am a graduate Electrical Engineer, and have been engaged in with the Power Industry for part of my career as a management and technical consultant. I am greatly disturbed to see that a rogue private utility company owned by foreign interests has been able to advance an expensive proposal for a destructive regional / international transmission line comprised of ten to fourteen story oversized towers for 18 miles throughout five Eastside residential areas.

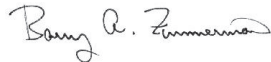
**If there is any one point I want to make with my comments on the Phase 1 First-Draft EIS, it is this:  
The Phase 1 Draft 1 EIS is woefully inadequate for use in down-selecting alternatives for Phase II.**

The City of Bellevue must take the lead and slow the EIS process down so that the necessary data can be obtained and incorporated into the Phase 1 EIS document, publish an update, and conduct a public review of "Phase 1 EIS - Draft 2". Massive transmission lines will negatively impact our city for the next century. There is no need for Bellevue's Land Use Coordinator to bow to an artificially aggressive EIS / SEPA schedule with inadequate documents that do not permit fulfillment of the SEPA Lead Agency charter as required by law. The city of Newcastle understands this and has imposed a six-month moratorium. The City of Bellevue must follow Newcastle's lead. Prior to a down-select and Phase II EIS, the City needs quantified analysis of the alternatives presented in Phase 1, including cost/benefit tradeoffs. Such analysis is not possible with the existing document.

I180-B-1 PSE has not credibly or adequately defined the terribly expensive and destructive Alternative 1a on the basis of projected power needs for the Eastside. PSE has never provided actual (historical) Eastside load-growth data for the past 25 high-growth years, or their Load-Flow study assumptions to justify EE Alternative 1a, or cost data for any of the Alternatives so that comparative cost/benefit analysis can be performed. There are multiple independent public participants who qualify for access to CEII data, and some of this data must be provided by PSE in order for the public to respond with meaningful comparative analysis of alternatives. Anything less strongly suggests that PSE is hiding something from the public, and that is not acceptable.

I180-B-2 The Eastside is blessed with a large number of highly educated and involved citizens. I ask that the City of Bellevue show respect for the hard (volunteer) work being contributed by its citizens in order to un-cover blatant mis-representations within the Energize Eastside project proposal. Slow this down, **now**. The City has taken over eight years of study and work for impact analysis of eastside light rail. PSE is two years into a proposal that is much more destructive to our city and its residents. **Slow this down, now** so the City and its residents have the time and data necessary to complete a credible Phase 1 EIS. Based on only the current incomplete Draft 1 EIS, **"No Action" or Alternative #1c or #2 are the only acceptable options to take forward.**

Sincerely,



Barry A. Zimmerman

I180-B -1 See response for Key Theme EIS-2.

I180-B -2 Comment noted.

Energize Eastside (EE) Phase 1 - Draft 1 EIS response:

- I180-B-3
  - Project is not properly, or completely, defined as required by WAC 197-11-060 (3)(a).
    - It is defined as a King County / Eastside need only, but Load-Flows used to justify EE include at least 1500Mw shipments to Canada. Is this a local or regional/international project?
    - The exact route for the preferred Alternative 1a is not defined, therefore the SEPA lead agency cannot say that this project is "defined" for EIS Phase 1 as required by law.
    - With the Alternative 1a, and 3 routes left un-defined, the public cannot comment on right-of-way, impact to trees, homes, or pipeline safety. i.e. no Environmental "analysis" or quantifiable review of alternatives can be performed. The SEPA Lead Agency has failed to "make certain" that this project is correctly and completely defined, and thus cannot down-select to a Phase II EIS until remedied.
- I180-B-4
- I180-B-5
  - The need for the project as marketed by PSE (**Local "Eastside" needs**, route & details TBD) is not supported by any quantitative empirical data on actual Load-Flow growth over the previous 25 years. Only artificial models with bizzare assumptions of multiple downed generators and huge load-flows to Canada that pre-empt local needs are provided to justify the project.
  - The Draft 1 EIS is woefully short of data required for quantitative analysis of alternatives.
    - No cost data for any of the alternatives. No cost / benefit evaluations can be done!
    - No mapping data of the routes for Alternative 1a or Alternative 3 and 4.
    - No engineered details on capacity, cost, and location of one or more peaking plant(s) that would meet these needs as part of Alternative 2.
- I180-B-6
- I180-B-7
  - The Bellevue SEPA review Coordinator is prioritizing an artificially aggressive schedule over demanding the data required to prepare an EIS that supports truly independent analysis of the suitability of alternatives to the Applicant's preferred 19th century wire technology through Eastside neighborhoods. Further work on a Phase-II EIS must be delayed until this data is obtained and made available in an updated Phase-1 EIS document. A Phase-2 EIS cannot be drafted when the entire project is not completely defined to, much less approved by, the public stakeholders.
- I180-B-8
  - The SEPA review process and objectives spelled out in the Draft 1 EIS cannot be completed until the Draft 1 EIS is updated and re-published for review to include:
    - Empirical data on historical load-flows in the impacted area over the past 25 years
    - Detailed data on parameters used to model Energize Eastside load-flows for 2014-2025, particularly as how and why they differ from data PSE submitted to the WECC. (which does not support the case being made for Energize Eastside Alternative 1a)
    - More detailed data on Alternative 2, particularly with respect to the costs of peaking plant(s) to handle the projected peak loads for the next 40 years.
    - Detailed data on why PSE believes that it is justified to charge its rate-payers for a \$1 billion+ lifecycle cost for infrastructure a Federal Treaty with Canada, and where it is written that PSE is required to do so.

- I180-B -3 See response for Key Theme EIS-1.
- I180-B -4 See response for Key Theme ALT-1.
- I180-B -5 See response for Key Theme OBJ-2.
- I180-B -6 See response for Key Theme EIS-1.
- I180-B -7 See response for Key Theme EIS-2.
- I180-B -8 See response for Key Theme EIS-2.



I180-B-8 ○ Inclusion of Cost Data for each alternative to be considered. Cost is a most critical factor to any sort of disciplined evaluation of alternatives. Section 2.2.2.4 indicates PSE has cost data, yet it is omitted. How are stakeholders expected to evaluate alternatives?

• DRAFT 1 EIS DOCUMENT COMMENTS

I180-B-9 ○ Page 1-5, Paragraph 1 - Stantec prepared a memorandum evaluating the stated need for the project, and confirmed that PSE's Eastside Needs Assessment was conducted in accordance with "industry standards" for utility planning (Stantec, 2015). See Appendix A for more information. **There is no information in Appendix A about "industry standards for utility planning". What, exactly, are the so-called "industry standards" used to validate PSE's load-flow data and assumptions of an N-1-1-1 case with 1500Mw load flow to Canada as reasonable?**

I180-B-10 ○ **Figure 1-2, Page 1-6** - the graph omits all-important empirical data for the past 25 years. Without this data, there is no credible support for the projected growth, or PSE's assumed correlations with population growth. PSE is hiding something.

I180-B-11 ○ **Section 2.3 and 2.3.1** – These sections are totally missing empirical data on electrical load growth on the Eastside for the past 25 high-growth years. We have "real" load and population data, and real correlations between the two, yet this data is purposefully omitted. There is no other conclusion but that the "real" data would not support the imaginary / estimated load-growth projections in PSE's proposal.

○ **Section 2.3.2.2** – More references to the influence of cost, but with zero cost data included, or any supported factual information on the assertion that "there are cost efficiencies with installing a second circuit transmission facility in the same corridor .."

I180-B-12 ○ **Section 8 – Page 1-32** - Risk to the public is not likely from constructing or operating the project near pipelines due to extensive safety policies and regulations. **Policies and regulations frequently give way to thoughts and prayers when burying the dead. Where are the specific best practices that suggest that PSE can operate safely? PSE has a poor track-record of infrastructure maintenance, the latest example being a natural gas explosion in Seattle's Greenwood area.**

○ **Section 8 – Page 1-32** - Earthquakes or lightning strikes could damage transformers or drop power poles or lines, but potential public safety risks are not likely and negligible to minor impacts could be expected. **This statement is totally unrealistic given the notion of 130 tall poles on a 75-150 ft wide right-of-way, built on top of two petroleum pipelines pressurized at over 3000psi. "Negligible" impacts? Are you kidding? Where is the supporting data on impacts? This glossing over of safety concerns permeates PSE's entire approach to their proposal.**

I180-B-13 ○ **Section 10 – Page 1-36** - Five jurisdictions promote combining utilities within the same corridors in some cases; some may prohibit combining regional utility lines with high flammable liquid pipelines for safety. **Bellevue should certainly be among those that prohibit co-location of 230Kv transmission lines with flammable liquid pipelines.**

I180-B -9 See response for Key Theme OBJ-5.  
 I180-B -10 See response for Key Theme OBJ-2.  
 I180-B -11 See response for Key Theme EIS-2.  
 I180-B -12 See responses for Key Theme UTL-5 and Key Theme PLS-2.  
 I180-B -13 See response for Key Theme LU-5.

I180-B-14

o **Section 11** – Pages 1-37 and 1-38 – Destroying the visual character of neighborhoods without adequate compensation to impacted property owners is a non-starter. These pages make note of the existing extensive powerlines in the area, but completely gloss-over the 20-30% value reduction that most property owners along the route would experience. Adding more 19<sup>th</sup>-century technology in the form of oversized power lines just to enrich foreign investors will not be permitted by local stakeholders. The proposed lines would be visible for miles, including every eastbound driver on I-90 or Rt 520.

I180-B-15

o **Figure 2-13 – Page 234** – Added non-transmission capacity numbers for Alternative 2 of 163MW in 2018 and 205MW in 2024 are un-substantiated. The DEIS must include the data used to derive these values. Nedrud’s personal email is not sufficient support, especially given that PSE has consistently increased growth projections over the past year, and aggressively denied access to the real, empirical load growth numbers for the past 25 years that is so critical in correlating load forecasts with population growth in a credible way.

I180-B-16

o **Section 2.4.2 - Page 2-51** – The DEIS cites “statutory and regulatory obligations” to provide power to Canada that are not supported by bibliographic citations, or justification as to why **PSE** ratepayers would be expected to carry the burden of a \$1.3 billion lifecycle cost to adhere to this treaty for the next 40+ years. This is a critical point. If there are statutory requirements to impose these exorbitant costs on PSE ratepayers, then PSE has been fraudulently marketing this entire proposal for over two years.

o **Section 2.5 – Page 2-54** - There are tremendous benefits to delaying the proposal given that independent studies have shown that the need for an oversized infrastructure project with anticipated lifecycle costs of over \$1.3 billion is not necessary when more realistic models are run. The Lauckhart-Schiffman Load Flow Study dated Feb. 18, 2016 includes supporting data and more credible fault cases.

If indeed this project is all about meeting terms of the Columbia River Treaty with Canada, then it should be defined and marketed as such, not mis-represented as a project to benefit communities on the “Eastside” of Seattle. These Eastside communities bear a tremendous risk of petroleum pipeline accidents, destroyed lifestyles, condemnation of property, reduction in property values, loss of over 8000 mature trees, and industrial blight all for the dubious privilege of paying more for their electricity so that a foreign investment company can increase profits.

I180-B-17

Alternative 1a is a non-starter based on the fluff provided in the Phase 1 – Draft 1 EIS. Without clear disclosure of load-growth over the past 25 years to support the estimates for the next 20 years, PSE only reinforces in the minds of stakeholders that they are only proposing this as a profit-making venture, at the expense of the five Eastside communities that will bear the brunt.

I180-B-18

DELAY THIS PROJECT UNTIL PSE COMES CLEAN WITH HISTORICAL LOAD-GROWTH DATA, THE REAL NUMBERS BEHIND LOAD GROWTH PROJECTIONS, AND COST DATA. THE CITY OF BELLEVUE CANNOT APPROVE A PLAN TO BLIGHT OUR NEIGHBORHOODS WITH 19<sup>TH</sup> CENTURY TECHNOLOGY BASED ON THE FALSE PRETENSE OR MANUFACTURED DATA CURRENTLY OFFERED.

MOVING TO A PHASE II EIS AT THIS POINT IS LIKE ARRANGING DECK CHAIRS ON THE TITANIC. A TOTAL WASTE OF TIME AND RESOURCES.

I180-B -14 See responses for Key Theme ECON-1 and Key Theme VR-1.

I180-B -15 See response for Key Theme EIS-2.

I180-B -16 See response for Key Theme OBJ-3.

I180-B -17 See responses for Key Theme ALT-1 and Key Theme OBJ-1.

I180-B -18 See responses for Key Theme EIS-2 and Key Theme OBJ-2.



From: [thatjirmeean](mailto:thatjirmeean)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: More Careful consideration please  
 Date: Monday, March 14, 2016 10:05:54 PM

I185-B -1 See response for Key Theme EIS-2.  
 I185-B -2 See response for Key Theme P&A-2.  
 I185-B -3 See response for Key Theme OBJ-2.

I185-B-1

I want to start this "comment" by saying that many people I shared information on the "energize eastside" project with said to me Jamie, you know that this is already done. And that they're just going thru the motions. But that it's going to happen. While this is possible, I hope that it's not true. I hope that someone's listening to what the concerned citizens (some of who've voted for you) have to say. I hope that integrity is valuable to someone other than me. I strongly oppose PSE'S "energize eastside" project. I don't feel that it is necessary and I don't think that it falls at all into any sort of resonance balance. Cutting down 8,000 trees should be illegal, who would give permission to do this. Are some people unaware of the importance of tree's? Just to touch on this slightly, trees are not only homes to many creatures we SHARE this earth with, they help protect against soil erosion (combating against landslides), they take in Carbon Dioxide, Sulfur dioxide, & carbon monoxide from the air and release oxygen, you know, the stuff every living thing on the planet needs to survive. Climate control and global warming are words thrown around alot lately. Think of the damage of cutting down 8,000 trees? Did i mention that trees also catch rain and slow it down as it heads into our streams (working to help maintain issues of overflow). Trees also help filter out pollutants that end up in the water (like chemicals from vehicles on the road, for instance oil leaks) when theyre working thru the soil. Im curious to know How does one measure environmental impact? And what if the environment isn't your backyard that your measuring. I sincerely feel that if anyone involved here had any care and concern for the environment this wouldn't be allowed to happen at all, and it would've already been stopped. 8,000 trees. Most if not all of the cities involved are Arbor day foundation "tree cities". How can the thought of this be entertained? While more and more people are making attempts to be greener, why would we need so much more power? And even if these cities want to plant more trees, a small tree doesn't just replace one of the large trees equally. Any tree you would plant wouldn't reach this large sized growth in our lifetimes. I don't want to live in an urban heat island, as a native Washingtonian I value greatly the canopy shade these lovely trees offer. Perhaps that's why PSE wants to cut down 8,000 trees. They cut down energy use in the summer (not having to use airconditioners), just by being the next to buildings. And in the winter they protect houses from the cold wind draft.

I185-B-2

I185-B-3

I consider PSE'S energize eastside plan much alike to a car salesman (PSE) trying to sell me on buying my 16 year old a brand new minivan for his first car. He doesn't need it, as he doesn't have a large family to cart around ("oh but might in the future. And we need to plan for the future"). Well it would probably encourage him to have lots of people in the car (encourage waste / overuse), therefore he would often be the driver costing him more money for gas and maintenance (like paying for PSEs excess of power to encourage us to be more wasteful, and for PSE to be able to sell to other markets) which can be equal to more distractions while driving (like the safety risk we would be encouraging by putting power lines atop of the old Olympic pipeline). Also keep in mind that that 16 year old may indeed have a family at a later point, but how likely is it he would still have the minivan? And that it would still be reliable? Why would we "invest" in a fairly ancient system, with more and more environmentally friendly, less costly and perhaps more reliable options available. Who do we trust to tell us what it is we need? And what credits the

## COMMENT

## RESPONSE

I185-B-3 | opinions we do trust? If these houses at risk of being demolished due to eminent  
 I185-B-4 | domain rules were the houses you grew up in, or were the homes of your parents,  
 I185-B-5 | or grandparents, or your own homes, how then would you feel about this plan? This  
 I185-B-6 | project in no way sounds like a good plan. These unsightly metal towers and wire do  
 I185-B-7 | not fall in line with the historic and cultural pacific northwest decor, we like trees  
 I185-B-8 | across our skyline, no power lines, poles, and towers. The best interest of your  
 | community is what has been put into the hands of our government, yet it is sadly so  
 | often pushed aside for profit. Please don't let these tree city's and there citizens who  
 | call it home fall victim to such a vastly barbaric plan.As our population grows we  
 | should be planting more trees, not cutting out fully grown large trees. If energize  
 | eastside is pushed thru, our birds, as well as countless critters and creatures all  
 | around, including our salmon, as well as human kind, not to mention our trees will  
 | fall victim. And all because someone decided it was more worth it to make a buck.  
 | Instead Let's work together as a real community to find a better and more  
 | reasonable solution, a solution that doesn't include cutting down 8,000 trees and  
 | subjecting the quality of our air, water and overall life to demise. I urge you to stand  
 | against the cutting / removal of 8,000 trees. Against PSE'S most desired plan, and  
 | consider alternative 2.b put together and submitted with careful consideration and  
 | thought by Cense's Don Marsh.  
 | Kindly  
 | Jamie Brown  
 |  
 | Sent from my T-Mobile 4G LTE Device

I185-B -4 | See response for Key Theme VR-4.  
 I185-B -5 | See responses for Key Themes P&A-1 and P&A-2.  
 I185-B -6 | See responses for Key Theme ALT-1 and Key Theme GHG-1.  
 I185-B -7 | Comment noted.  
 I185-B -8 | Comment noted.

Good evening everyone:

My name is Katherine Ma and I live at 13912 SE 44th ST, Bellevue with my family. We have two kids, one is 11 in middle school and the younger one will turn to 5 this month. We moved here from Chicago in summer 2014. We decided to settle down in Bellevue because of its excellent education system, diverse communities, lots of trees, flowers and beautiful views. Tonight I am here to OPPOSE PSE's Energize Eastside project from my own experience and safety for our kids.

The first time I learned about high-voltage power line was last June when I drove my son to King County Aquatic Center in Federal Way. While waiting for his swimming practice, I took a jog along a trail next to the Aquatic Center. There were high-voltage power lines above the trail. I felt scared because I heard lots of buzzing and saw sparks from tall metal tower power lines. It looked like dry grass underneath could catch fire at any moment. There were neither trees nor houses under those power lines.

I188-D-1

It is such an ABSURD idea to build a high-voltage transmission line through residential areas. NO one, even the National Cancer Institute, can say high-voltage power lines are safe to humans, especially to vulnerable kids. Professionals in eletromagnetic fields suggest the safety distance from high-voltage power lines is 1000 feet or more. Somerset elementary school, Tyee middle and Newport High have more than 3000 students together. Yet these three schools are either on or next to PSE proposed routes. As a mom, I plead: please do NOT sacrifice our children's' safety and health for money when we have other choices.

Tonight, now, my son's school is having a concert and he is the second chair in violin. It should be a night for a mom to be proud of and to enjoy music. I HATE to miss it. I said to my son "mommy is really really sorry to miss your concert. But mommy have to stand up to protect our communities, to protect YOU and your friends". My son totally supports me. Please help a mom do something for our next generations: stand up with me to OPPOSE PSE's Energize Eastside plan.

Thank you for your time and good night!

I188-D -1 See response for Key Theme EMF-3.

COMMENT

RESPONSE

|          | <b>Comment</b>                                                                                                                                                                                                                                                                                                  | <b>Timestamp</b>      | <b>First Name</b> | <b>Last Name</b> |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------|------------------|
| I194-A-1 | I object to scaring our Eastside neighborhoods with massive 230kV transmission lines. No convincing evidence has been provided to show these measures to be necessary. There are other options that are not a detriment to the character of the city and would better serve those living in the affected areas. | 3/10/2016<br>23:32:36 | Erik              | Hollingsworth    |
| I194-A-2 | Alternative 2 or Alternative 1C are the only options that are somewhat reasonable. Alternative 1A is                                                                                                                                                                                                            |                       |                   |                  |
| I194-A-3 | completely ridiculous and should not be considered.                                                                                                                                                                                                                                                             |                       |                   |                  |

I194-A -1 See response for Key Theme VR-5.  
 I194-A -2 Comment noted.  
 I194-A -3 Comment noted.

COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

|                                                                                                                        |                       |       |       |
|------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|-------|
| To: Heidi Bedwell, Energize Eastside EIS Program Manager<br>From: Eugen Pajor, 8441 129th Ave SE, Newcastle, WA, 98056 | 3/10/2016<br>14:52:04 | Eugen | Pajor |
|------------------------------------------------------------------------------------------------------------------------|-----------------------|-------|-------|

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I195-A-1

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I195-A-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I195-A-3

With the very minimum safety distance of 50 foot between the pipe lines and the high voltage lines the existing PSE corridor must be widened. This will result in a certain number of houses to be destroyed and certain land to be converted into utility land. I could not see an analyze of the impact on Newcastle tax revenue and on housing and house value loss in the EIS draft. How this tax loss will be mitigated? How the families affected by this changes will be compensated

I195-A -1 See response for Key Theme OBJ-3.  
I195-A -2 See response for Key Theme PLS-2.  
I195-A -3 See responses for Key Themes ECON-1 and ECON-2.

I195-A-4

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for their property loss? In the Olympus neighborhood, according with a preliminary study, 51 houses will be gone just to widen the corridor, that is about 19% of the community. How that will be mitigated? This is a big concern and it is not properly addressed in the EIS draft.

Regards,  
Eugen Pajor

I195-A -4 See response for Key Theme EIS-3.

COMMENT

RESPONSE

I196-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Timestamp             | First Name | Last Name |
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| Page 120 of the PEIS states that any Solar Panel or alternative electrical generating installation for reducing the overall capacity needed cannot be included in the overall capacity required. This forces all residents within the City of Bellevue to only purchase Electrical Power from PSE. That institutes a Monopoly on Power Sales. This discourages conservation and alternative sources of power for the Citizens of Bellevue. This project is unneeded, and is a way for this company to gouge the customers in the future. | 3/10/2016<br>12:23:30 | Paul       | Gibbons   |

I196-A -1 Comment noted.

COMMENT

RESPONSE

I197-A -1 See response for Key Theme OBJ-2.  
 I197-A -2 Comment noted.

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I197-A-1

This comment is related to the proposed project titled Energize Eastside, and their draft EIS. I disagree with some of their assumptions that drove their outcome of needing to expand capacity by winter 2017-18. Their growth projection is far higher than for other like utilities in this area, their winter loading but summer derating factors are conflicting, and their omission of conservation upgrades lead to what I consider to be a false outcome. Also, I disagree that we (the Northwest) should sacrifice our environment, lifestyle and health, not to mention our money, in order to support the power needs for Canada.

I197-A-2

Other power projection studies using more true-to-life assumptions show that we are not in dire needs for a system expansion at this time, and that we appear to have at least a couple of decades before this issue really needs to be discussed. Promotion of cost effective efficiency updates should come first before an expensive (and unhealthy?) expansion of our utility infrastructure.

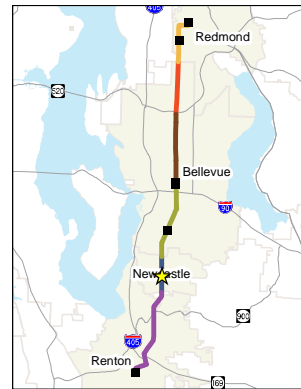


| Comment | Timestamp | First Name | Last Name |
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My name is Conald Kucera. My home, which I live at is 8300 128th Lane SE in Newcastle, WA in the Olympus subdivision community. I have lived there for over 27 years. My email address is cjkucera@hotmail.com. My West property line abuts onto the PSE electrical powerline easement. I am greatly concerned with the proposed construction of the 230 KVA transmission powerlines and the transmission towers along the powerline easement corridor which also contains two hazardous underground gasoline and aviation fuel distribution pipelines and their impact on me and my neighbors and residents along the PSE powerline easement, our health, safety and our very lives; as well as everyone else who lives along the proposed PSE transmission line route.

|                    |        |        |
|--------------------|--------|--------|
| 3/11/2016 11:53:46 | Conald | Kucera |
|--------------------|--------|--------|

COMMENTS LOCATION



Alternative 1-option A—is PSE’s favored route. This route through Newcastle currently has wooden H-poles along with the Olympic gas pipelines. These proposed steel monopole towers will be 85'-100' tall! This is almost twice as tall as the existing wood poles. The power will increase from 115KVA to 320KVA, doubled!

I198-A-1

#1 concern is safety of construction, heavy equipment, tower footings 25'-50' underground, in close proximity to the gas pipelines. See Chapter 2-page 23 of the Phase 1 Draft EIS 715 page document. Under PSE current proposal 1/2 of the transmission towers through Olympus will be in residential backyards. The steel monopole tower bases will be 36" to 42" in diameter and the concrete footings will be around 5 to 6 feet in diameter. This will destroy people's backyards: trees and landscaping and gardens

I198-A-2

I198-A-3

I198-A -1 Comment noted.  
 I198-A -2 See response for Key Theme PLS-1.  
 I198-A -3 See response for Key Theme VR-3.

COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Timestamp | First Name | Last Name |
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| I198-A-3 | destroyed, patios and decks removed, and accessory structures (ie. storage sheds, gazebos, greenhouses, etc.) demolished.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           |            |           |
| I198-A-4 | #2 concern is they will buy homes to accomplish this as they will need to widen the right of way 20'-50'. See Chapter 2-page 23. And Chapter 10-page 20. DEIS says impact to housing is "significant" in Olympus. See Chapter 10 page 21. PSE needs to respond to their plans for what becomes for those properties that are needed to place their power towers. If the properties are condemned and the houses are torn down what happens to the lot. Who maintains the grounds? PSE does next to nothing to maintain the existing powerline easement. Who wants to live next to a vacant trash filled lot. This will even further destroy the character of the neighborhood. Removal of homes will further reduce remaining property values, see item #3. |           |            |           |
| I198-A-5 | #3 concern is destroying our neighborhood character and affecting home values—they admit up to 20% home value depreciation. See Chapter 11-page 29.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |           |            |           |
| I198-A-6 | #4 Major safety concern when I spoke to PHSMA- Pipeline & Hazardous Material Safety Admin.— Western Regional office in Colorado. and is also outlined in the DEIS—Chapter 16-page 14. "Electromagnetic interference"—consequence of high voltage where power lines and petroleum pipelines run parallel for a distance sharing the same corridor causes pipe corrosion over time. Corrosion accounts for 23% of the significant pipeline failures! A chart done by industry expert DMV-GL says danger is off the charts at 5,000 feet in this scenario running                                                                                                                                                                                              |           |            |           |

I198-A -4 See response for Key Theme LU-2.  
 I198-A -5 See response for Key Theme ECON-1.  
 I198-A -6 See responses for Key Themes PLS-2 and PLS-3.

COMMENT

RESPONSE

|           | Comment                                                                                                                                                                                                                                                           | Timestamp | First Name | Last Name |
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| I198-A-6  | parallel together —Energize Eastside will run about 16 miles under this condition. This could result in a catastrophic gas explosion like which occurred on June 10, 1999 in Bellingham, WA on the same pipeline, only we live in a more densely populated area.  |           |            |           |
| I198-A-7  | #5 concern—is the EMF—electro-magnetic field corrodes pipes above—it cannot be safe for humans!! Increasing the existing 115 KVA to 320 KVA doubles our EMF exposure!                                                                                             |           |            |           |
| I198-A-8  | #6 DEIS states this corridor will be wired now for both lines to carry 230kV power in the future—with a flip of the switch in the future! The communications wire will also be there as well as a lightening wire. So is that 8 wires now or 9?—I can't keep up!! |           |            |           |
| I198-A-9  | #7 We are along the Seattle Fault Zone for earthquakes—described as seismically “active” area. See chapter 3-page 8. Seismic activity is likely to occur during life of the project and could be substantial damage or death—quoted in DEIS.                      |           |            |           |
| I198-A-10 | #8 Holes can be created in pipelines by "electrical arcing" from downed lines leading to leaks and explosions. See chapter 8-page 24.                                                                                                                             |           |            |           |
| I198-A-11 | #9 Lightening Strikes could send current to anything metal in area—and can create holes in pipeline.                                                                                                                                                              |           |            |           |
|           | #10 Views will be impacted—we have great Mt. Rainier views from many homes. Rated “significant”—views will be affected for 750' in neighborhoods. See                                                                                                             |           |            |           |

- I198-A -7 See responses for Key Themes EMF-1 and EMF-4.
- I198-A -8 See response for Key Theme EMF-4.
- I198-A -9 See responses for Key Themes EARTH-2 and PLS-2
- I198-A -10 See response for Key Theme PLS-2.
- I198-A -11 See responses for Key Themes VR-1 and VR-3.



COMMENT

RESPONSE

|           | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timestamp | First Name | Last Name |
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|           | Chapter 11-page 32. and poles will create contrast in the sky.                                                                                                                                                                                                                                                                                                                                                                                                                                |           |            |           |
| I198-A-11 | #11 This project will require removal of 8000 trees in the 18 miles and "significant" requirement of 327 acres of vegetation destroyed. See Chapter 11-page 32. Where the steel monopoles and their footings are in peoples backyards will destroy their trees and landscaping and gardens, patios and decks removed, and accessory structures (ie. storage sheds) demolished.                                                                                                                |           |            |           |
| I198-A-12 | #12 "Significant" impact on loss of habitat for animals—and will negatively affect enjoyment of the area. See Chapter 12 pages 13 and 14.                                                                                                                                                                                                                                                                                                                                                     |           |            |           |
|           | #13 Along gas pipelines—concern of heavy machinery and angering (drilling). —pipe disturbances (home damage?). See Chapter 16-page 21.                                                                                                                                                                                                                                                                                                                                                        |           |            |           |
| I198-A-14 | #14 Aviation fuel—which the underground pipelines carry—is a flammable liquid and vapor —it ignites by many sources—static electricity, cell phones—vapors travel considerable distances to a source of ignition, ignite, flash back or explode. See Chapter 8-page 10. Exactly what happened in the Bellingham disaster— cloud of smoke to 30,000 feet —visible from Canada!! Same Olympic Pipeline running through Olympus and other neighborhoods. Nothing is more important that safety!! |           |            |           |
| I198-A-15 | #15 Vineyards residents/other neighborhoods near— Seattle City Light Corridor (ERECTOR SET TOWERS) defined as Alternative 1-Option B in the DEIS. SEE                                                                                                                                                                                                                                                                                                                                         |           |            |           |

- I198-A -12 See response for Key Theme P&A-1.
- I198-A -13 See response for Key Theme REC-1.
- I198-A -14 See responses for Key Themes PLS-1 and PLS-2.
- I198-A -15 See responses for Key Theme ALT-1 and Key Theme OBJ-1.

I198-A -16 See response for Key Theme OBJ-3.

|           | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp | First Name | Last Name |
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| I198-A-15 | <p>CHAPTER 2-PAGE 25. This corridor could be used if they get SCL permission. The ROW distance is would not have to be widened, homes would not have to be purchased. They may be forced to go here as FERC order 1000 requires companies to work together in a region as one utility. But a big safety issue —they say they would leave those towers powered up during construction!</p> <p>This solution has been off the radar and appeared in the DEIS to our surprise. Beware-- since this is the only public comment time for this DEIS—they could be slipping this in without residents aware, pick this solution as a cheaper alternative to widening the PSE existing corridor and purchasing homes—and all those along this corridor.</p>                                                                                                                            |           |            |           |
| I198-A-16 | <p>The Lauckhart-Schiffman Load Flow Study shows this PSE powerline transmission project as proposed not needed. This is a for profit scheme by PSE to make money for their shareholders and we the PSE ratepayers get to pay for it!! In my own words—it will be consumer fraud—if they proceed at the scale they desire!</p> <p>There are new technologies PSE can utilize in addition to keeping the existing 115 KVA power transmission lines to offset those times of winter peak power usage which occurs a few times a year, such as storage batteries, fuel cells power plants, trash to energy power generation at the Factoria waste transfer station, and utilizing other localized power generation facility technologies. These options are far more economical and provide power directly to areas of use rather than traveling hundreds of miles from PSE's</p> |           |            |           |

I198-A-16

| Comment | Timestamp | First Name | Last Name |
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power production facilities. There is always a power loss over long transmission distances that have to be compensated.

I wholeheartedly agree and endorse CENSE position and their finding, solutions, and their documents submitted in response to PSE's EIS as my own.

Sincerely,  
Conald Kucera

8300 128th Lane SE  
Newcastle, Washington  
cjkucera@hotmail.com

COMMENT

RESPONSE

I199-A-1

| Comment                                                                                                                                                                                                                                                                                                                                                                                                                | Timestamp             | First Name | Last Name |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I have come to have doubts about the Energize Eastside project. I would like us to wait for at least a year to weigh both the true scope of our needs (not Canada's or PSE's) and alternatives to additional overhead lines in our communities. More broadly, I'd like us to investigate moving to a public utility company for our public utilities. Tired of being cannon fodder for coal, oil, and now electricity. | 3/11/2016<br>14:50:47 | sahny      | johnson   |

I199-A -1 See response for Key Theme OBJ-1.

I200-A-1

As fifty year residents of the Woodridge neighborhood in Bellevue, we are submitting comments on the Draft Environmental Impact Statement for the Energize Eastside Project. We have studied the reports, attended meetings, joined CENSE and are advocating the No Action Alternative and, as a second choice, Alternative 2, the Integrated Resource Approach, for two reasons.

Reason #1 Pipeline safety concerns.

I200-A-2

PSE's easement for high voltage power lines lies concurrent with the Olympic Pipe Line Company's petroleum pipeline on the Eastside. The pipelines are considered hazardous liquid pipelines and, if damaged, could cause explosions or fires. These pipelines run near residential neighborhood and schools. These pipelines could be damaged by corrosion from proximity to electromagnetic interference from high voltage power lines. These pipelines could also be damaged in the process of siting and construction of towers.

In addition, the location of high voltage power lines and petroleum pipelines in close proximity pose risks during seismic events and lightning strikes.

Reason #2 Costs of Energize Eastside

I200-A-3

What will be the total cost (direct and indirect) of Energize Eastside Alternative 1? We have seen several different estimates of the direct financial costs of the project, each higher than the prior one. In addition, the indirect costs involved with losing 8000 trees or disrupting family homes and property taken by condemnation have not been fully evaluated and considered.

I200-A-4

When considering conflicting assumptions regarding customer utility demands this project should be placed on hold and alternative technologies fully studied. PSE's forecast of energy problems as early as 2018 conflicts with the Lauckhart-Schiffman Load Flow Study that shows 'customer demand won't approach current system capacity until 2058.' Please look at all the evidence before approving the Draft Environmental Impact Statement for the unsafe, costly, and disruptive Energize Eastside Project

I200-A-5

Frank and Joan Cohee  
12109 SE 23<sup>rd</sup> Street, Bellevue WA 98005

March 7, 2016  
cc CENSE

- I200-A -1 See response for Key Theme ALT-1.
- I200-A -2 See responses for Key Themes PLS-1, PLS-2, and PLS-3 and Key Theme EARTH-1.
- I200-A -3 See responses for Key Themes ECON-4 and ECON-3.
- I200-A -4 See response for Key Theme EIS-2.
- I200-A -5 See response for Key Theme OBJ-3.



COMMENT

RESPONSE

I201-A -1 Comment noted.  
 I201-A -2 See response for Key Theme OBJ-3.  
 I201-A -3 See responses for Key Themes PLS-1, PLS-2, and PLS-3.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timestamp             | First Name | Last Name |
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| I201-A-1 | I write in strong opposition to Alternative 1 from the Draft EIS for Energize Eastside, and particularly Option A, which proposes a new 230kV transmission line as well as a new transformer. My reasons for opposing Alternative 1 are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3/12/2016<br>17:03:36 | Jennifer   | Wilson    |
| I201-A-2 | <ul style="list-style-type: none"> <li>• The new high-voltage line is not needed. While PSE argues, and the Chapter 1.3 of the Draft EIS states, that a new high-voltage power line is necessary to meet short term energy needs on the Eastside, the Lauckhart-Schiffman Load Flow Study (from 2/18/2016) shows that this is not the case. To quote that study, "PSE's system can avoid overloads and outages even when two critical transformers have failed during winter peak usage."</li> <li>• A new high-voltage power line that follows, and towers above, the aging Olympic gas pipeline is a catastrophe waiting to happen.</li> </ul>                                                                                                                                                                                                                                                                                              |                       |            |           |
| I201-A-3 | <ul style="list-style-type: none"> <li>o Chapter 16.3.7 of the Draft EIS mentions pipeline corrosion. Electromagnetic interference leads to pipeline corrosion, meaning a potential leak and devastating fire at any time during or after construction. Dr. Y. Frank Cheng of the University of Calgary and an expert on pipeline safety, has submitted, via CENSE, information confirming the dangers of locating high voltage power lines in close proximity to gas pipelines.</li> <li>o The installation of the poles for the power lines, as well as any maintenance activities further down the line, would be a dangerous enterprise. Though downplaying those dangers, the Draft EIS does note (Chapter 8.5.3.1.2) that "significant adverse impact to public safety could occur if a leak or an explosion... resulted from the project" and (Chapter 8.6.1.2) that "ongoing maintenance activities during operation could</li> </ul> |                       |            |           |

COMMENT

RESPONSE

I201-A -4 See response for Key Theme SVC-1.  
 I201-A -5 See responses for Key Themes PLS-2 and PLS-3, Key Theme EMF-4, and Key Theme EARTH-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Timestamp | First Name | Last Name |
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| I201-A-3 | <p>theoretically damage or break the OPLC pipelines or other pipelines in the area, leading to a chemical release or explosion.”</p> <p>o The location of the gas pipelines underground can shift over the years due to soil erosion, potentially bringing the (aged) pipelines into closer proximity to the power lines and leading to further dangers during maintenance activities. Keep in mind that the pipeline is already many decades old and has already had one major explosion (Bellingham, WA in 1999) resulting in loss of life.</p> <p>o BP, the operator of the Olympic Pipeline, noted that “the location of the pipelines may be found anywhere within the easement from the center of the right-of-way to either side” and as a result recommended against route segments Oak and Willow. Yet Oak and Willow are the only two routes still being considered.</p> |           |            |           |
| I201-A-4 | <p>o As noted by CENSE, the Bellevue Fire Department writes in their Standards of Response Coverage, “Given that pipeline incidents continue to occur in this country, and many for undetermined reasons, the community is still at risk. The combination of a highly flammable liquid, in large quantities, and in [an] urban environment translates into a significant consequence risk that approaches the ‘catastrophic’ level.” Thus, local emergency responders feel this is a dangerous proposition.</p>                                                                                                                                                                                                                                                                                                                                                                    |           |            |           |
| I201-A-5 | <p>o Most importantly, this entire proposed power line lies upon a major fault line. As recent media attention has shown, and as has been confirmed by national government agencies, the Pacific Northwest is long overdue for a major earthquake. A high voltage power line on top of an aging gas pipeline that runs through almost exclusively residential neighborhoods will</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |           |            |           |

COMMENT

RESPONSE

I201-A -6 Comment noted.  
 I201-A -7 See responses for Key Theme OBJ-1 and Key Theme ALT-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Timestamp | First Name | Last Name |
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| I201-A-5 | <p>cause a catastrophic and easily predictable loss of life. In the Somerset and Eastgate neighborhoods alone, aside from running through many residents' back yards, the pipeline/powerline combination runs underneath and above the neighborhood swim and tennis pool, where multi-generational families spend their summer days and evenings. The combination runs over and below the public Tyee Middle School, where hundreds of local children spend 8-9 hours a day, 5 days a week studying. The combination runs right alongside a Bright Horizons daycare facility, where our community's youngest, most vulnerable (and least likely to be successfully evacuated) members spend their days year-round. Somerset/Eastgate is but one of the many potentially-impacted neighborhoods. Further south in Newport Hills, these lines will come dangerously close to yet another public school, Jing Mei Elementary. Other neighborhoods will be similarly impacted.</p> |           |            |           |
| I201-A-6 | <p>In sum, choosing Alternative 1 is a negligent, if not clearly reckless, choice on the part of our local governments and government agencies.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |           |            |           |
| I201-A-7 | <p>Alternative 2 from the Draft EIS for Energize Eastside is the only safe option. The EQL Energy study, submitted by CENSE, shows that Alternative 2, if properly implemented, would be much more energy efficient for our wider community and have lower long-term costs. It will have a much lower impact on the local community than Alternative 1 (see Chapter 10.7.1 and Chapter 11.6.3.5.1 of the Draft EIS), which, in addition to all of the concerns listed above, requires the widening of the existing utility corridor and thus the destruction of many homes and other community resources – indeed, it's hard to fathom how places like</p>                                                                                                                                                                                                                                                                                                                     |           |            |           |

I201-A-7

| <u>Comment</u> | <u>Timestamp</u> | <u>First Name</u> | <u>Last Name</u> |
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| the Somerset Community Pool could continue to exist if Alternative 1 is put into place since it is well within the 120-150 foot "clear zones" that Alternative 1 requires (Chapter 11.6.3.5.1). Alternative 2 options were not adequately analyzed during the Draft EIS process and should be given greater attention going forward. Our community leaders should not allow a foreign-owned, private, and profit-driven company (PSE) to determine the course of our energy future. |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|

**From:** [Jennifer.Neighbors](mailto:Jennifer.Neighbors@energizeeastside.org)  
**To:** [info@energizeeastside.org](mailto:info@energizeeastside.org)  
**Cc:** [pls@cense.org](mailto:pls@cense.org)  
**Subject:** comment on Energize Eastside Draft EIS  
**Date:** Saturday, March 12, 2016 5:14:31 PM

To Energize Eastside:

I write in strong opposition to Option A of Alternative 1 from the Draft EIS for Energize Eastside, which proposes a new 230kV transmission line as well as a new transformer. My reasons for opposing that option are as follows:

I201-C-1

The new high-voltage line is not needed. While PSE argues, and the Chapter 1.3 of the Draft EIS states, that a new high-voltage power line is necessary to meet short term energy needs on the Eastside, the Lauckhart-Schiffman Load Flow Study (from 2/18/2016) shows that this is not the case. To quote that study, "PSE's system can avoid overloads and outages even when two critical transformers have failed during winter peak usage."

A new high-voltage power line that follows, and towers above, the aging Olympic gas pipeline is a catastrophe waiting to happen.

I201-C-2

- o Chapter 16.3.7 of the Draft EIS mentions pipeline corrosion. Electromagnetic interference leads to pipeline corrosion, meaning a potential leak and devastating fire at any time during or after construction. Dr. Y. Frank Cheng of the University of Calgary and an expert on pipeline safety, has submitted, via CENSE, information confirming the dangers of locating high voltage power lines in close proximity to gas pipelines.

I201-C-3

- o The installation of the poles for the power lines, as well as any maintenance activities further down the line, would be a dangerous enterprise. Though downplaying those dangers, the Draft EIS does note (Chapter 8.5.3.1.2) that "significant adverse impact to public safety could occur if a leak or an explosion... resulted from the project" and (Chapter 8.6.1.2) that "ongoing maintenance activities during operation could theoretically damage or break the OPLC pipelines or other pipelines in the area, leading to a chemical release or explosion."
- o The location of the gas pipelines underground can shift over the years due to soil erosion, [1] potentially bringing the (aged) pipelines into closer proximity to the power lines and leading to further dangers during maintenance activities. Keep in mind that the pipeline is already many decades old and has already had one major explosion (Bellingham, WA in 1999) resulting in loss of life.

I201-C -1 See response for Key Theme OBJ-3.  
 I201-C -2 See response for Key Theme PLS-3.  
 I201-C -3 See responses for Key Themes PLS-1, PLS-2, and PLS-3.

COMMENT

RESPONSE

I201-C-3 ○ BP, the operator of the Olympic Pipeline, noted that “the location of the pipelines may be found anywhere within the easement from the center of the right-of-way to either side” and as a result recommended against route segments Oak and Willow.<sup>[2]</sup> Yet Oak and Willow are the only two routes still being considered.

I201-C-4 ○ As noted by CENSE, the Bellevue Fire Department writes in their Standards of Response Coverage, “Given that pipeline incidents continue to occur in this country, and many for undetermined reasons, the community is still at risk. The combination of a highly flammable liquid, in large quantities, and in [an] urban environment translates into a significant consequence risk that approaches the ‘catastrophic’ level.”<sup>[3]</sup> Thus, local emergency responders feel this is a dangerous proposition.

I201-C-5 ○ Most importantly, this entire proposed power line lies upon a major fault line. As recent media attention has shown, and as has been confirmed by national government agencies, the Pacific Northwest is long overdue for a major earthquake. A high voltage power line on top of an aging gas pipeline that runs through almost exclusively residential neighborhoods will cause a catastrophic and easily predictable loss of life. In the Somerset and Eastgate neighborhoods alone, where I live, aside from running through many residents’ back yards, the pipeline/powerline combination runs underneath and above the neighborhood swim and tennis pool, where multi-generational families spend their summer days and evenings. The combination runs over and below the public Tyee Middle School, where hundreds of local children spend 8-9 hours a day, 5 days a week studying. The combination runs right alongside a Bright Horizons daycare facility, where our community’s youngest, most vulnerable (and least likely to be successfully evacuated) members spend their days year-round. Somerset/Eastgate is but one of the many potentially-impacted neighborhoods. Further south in Newport Hills, these lines will come dangerously close to yet another public school, Jing Mei Elementary. Other neighborhoods will be similarly impacted.

I201-C-6 In sum, choosing Alternative 1 Option A is a negligent, if not clearly reckless, choice on the part of our local governments and government agencies.

I201-C-7 Alternative 2 from the Draft EIS for Energize Eastside is the only safe option. The EQL Energy study, submitted by CENSE, shows that Alternative 2, if properly implemented, would be much more energy efficient for our wider community and have lower long-term costs. It will have a much lower impact on the local community than Alternative 1 Option A (see Chapter 10.7.1 and Chapter 11.6.3.5.1 of the Draft EIS), which, in addition to all of the concerns

I201-C-8 listed above, requires the widening of the existing utility corridor and thus the destruction of

I201-C -4 See response for Key Theme SVC-1.

I201-C -5 See responses for Key Themes PLS- and PLS-3, Key Theme EARTH-1, and Key Themes EMF-3 and EMF-4.

I201-C -6 Comment noted.

I201-C -7 See response for Key Theme ALT-1.

I201-C -8 See responses for Key Theme REC-3, and Key Themes VR-3 and VR-5.

## COMMENT

## RESPONSE

I201-C-8

many homes and other community resources – indeed, it’s hard to fathom how places like the Somerset Community Pool could continue to exist if Alternative 1 Option A is put into place since it is well within the 120-150 foot “clear zones” that Alternative 1 Option A requires (Chapter 11.6.3.5.1). Alternative 2 options were not adequately analyzed during the Draft EIS process and should be given greater attention going forward. Our community leaders should not allow a foreign-owned, private, and profit-driven company (PSE) to determine the course of our energy future.

I201-C-9

Sincerely,  
Jennifer Wilson  
14312 SE 45th Street  
Bellevue, WA 98006  
jenniferneighbors@hotmail.com

<sup>[1]</sup> Frank Cheng. 2013. *Stress Corrosion Cracking of Pipelines*. Section 8.7.1.

<sup>[2]</sup> For a copy of the letter from the Olympic Pipeline Company, follow the link at the following web address: <http://sane-eastside-energy.org/2014/04/02/olympic-pipeline-company-opposes-transmission-lines-over-its-pipelines-for-several-reasons-including-safety/>

<sup>[3]</sup> [http://www.bellevuewa.gov/pdf/Fire/Standards\\_of\\_Coverage.pdf](http://www.bellevuewa.gov/pdf/Fire/Standards_of_Coverage.pdf), p. 66

I201-C -9 See response for Key Theme OBJ-1.

COMMENT

RESPONSE

I202-A -1 See response for Key Theme ALT-1.

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

|           |                       |           |        |
|-----------|-----------------------|-----------|--------|
| Dear PSE, | 3/12/2016<br>15:03:35 | Kristofer | Straub |
|-----------|-----------------------|-----------|--------|

After reviewing the report and discussing with neighbors, I cannot endorse Alternative 1 or Alternative 3. I am skeptical of the true need for this project. If the demand for energy is truly as PSE states, I would prefer Alternative 2, for these reasons:

- Safe (no concerns about accidents with the Olympic pipeline)
- Cost effective (it is easier to scale to our local needs, and will reduce future utility bills for customers)
- Reliable (it doesn't put all our energy eggs in one basket the way a huge transmission line does)
- Better for the environment (preserves 8,000 trees and reduces carbon emissions)
- Respectful of neighborhood character (no giant utility poles running through residential areas)
- Secure (less vulnerable to terrorism than big utility poles over petroleum pipelines)
- Smart (in line with conservation and energy policies in the Seventh Northwest Power Plan)

The cities of the Eastside must invest in more progressive energy solutions. My family and I are planning on getting solar panels installed.

Sincerely,  
Kristofer Straub

I202-A-1





COMMENT

RESPONSE

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                              | Timestamp             | First Name | Last Name |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I203-A-1 | This was a very lengthy report, and the risks don't seem to outweigh the benefits. I am particularly concerned about risks related to the Olympic Pipeline (rupture or explosion), as that would be potentially damaging and costly to fix. As a homeowner with a young family only two blocks from current power lines and two blocks from the Olympic Pipeline (we walk this trail every day), I prefer the No Action alternative. | 3/12/2016<br>14:50:13 | Marlo      | Straub    |
| I203-A-2 | From what I've learned about the Energize Eastside project, all of this is to supply demand that may not actually be necessary, as well as to serve Canada.                                                                                                                                                                                                                                                                          |                       |            |           |
| I203-A-3 |                                                                                                                                                                                                                                                                                                                                                                                                                                      |                       |            |           |
| I203-A-4 | Our family will look at ways to reduce energy consumption and we are currently exploring Solar Panels for our home.                                                                                                                                                                                                                                                                                                                  |                       |            |           |

Sincerely,

Marlo Straub

- I203-A -1 See responses for Key Themes PLS1 and PLS-4.
- I203-A -2 Comment noted.
- I203-A -3 See response for Key Theme OBJ-1.
- I203-A -4 Comment noted.

COMMENT

RESPONSE

From: [SJNunnelee@bellevuewa.gov](mailto:SJNunnelee@bellevuewa.gov)  
 To: [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Cc: [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)  
 Subject: FW: Energize Eastside Project  
 Date: Tuesday, March 15, 2016 1:41:51 PM

Sandra Nunnelee  
 Executive Assistant to the City Council  
 450 110th AVE NE  
 Bellevue, WA 98004  
 425.452.4088 Direct Line  
[sjnunnelee@bellevuewa.gov](mailto:sjnunnelee@bellevuewa.gov)  
[www.bellevuewa.gov](http://www.bellevuewa.gov)

-----Original Message-----  
 From: scott jeffco [[mailto:sjeffco@yahoo.com](mailto:mailto:sjeffco@yahoo.com)]  
 Sent: Saturday, March 12, 2016 10:23  
 To: Council <[Council@bellevuewa.gov](mailto:Council@bellevuewa.gov)>  
 Subject: Energize Eastside Project

Hello Council Members:

We wanted to write and copy you on comments we submitted to Puget Sound Energy regarding their environmental impact statement for the Energize Eastside project. We urge each council member to vote to require PSE to adopt either alternative 4 or alternative 2 going forward. We have lived in Bellevue since 1995, love living here, and have a strong commitment to keeping the city a beautiful and desirable place to live. We also vote in every election, and how each member comes down on this issue will determine how we vote when council members seek re-election. Here are our comments to PSE:

Hi:

These comments concern the proposed Energize Eastside Project's environmental review, and your outreach for public comments. My wife and I support these two alternatives in the Phase 1 EIS, in our order of preference:

- Alternative 4 (no action)
- Alternative 2(integrative resource approach)

We find alternatives 1 and 3 unacceptable, and PSE's studies supporting them unconvincing. Let's not build a dinosaur project using early 20th century transmission technologies and instead focus on conservation, and green energy production and storage/transmission methods. Let's not destroy our beautiful wooded environment and vistas, which are one of the primary reasons that people want to live on the Eastside. Let's not diminish property values with these unsightly transmission lines!

Thank you,  
 Scott Jeffcoat & Han Gao  
 5712 143rd Pl. SE  
 Bellevue, Wa. 98006

- I204-A -1 See response for Key Theme ALT-1.
- I204-A -2 See response for Key Theme VR-4.
- I204-A -3 See response for Key Theme ECON-1.

I204-A-1

I204-A-2

I204-A-3



COMMENT

RESPONSE

I204-B -1 See response for Key Theme ALT-1.

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

|     |                      |       |          |
|-----|----------------------|-------|----------|
| Hi: | 3/12/2016<br>9:45:30 | Scott | Jeffcoat |
|-----|----------------------|-------|----------|

These comments concern the proposed Energize Eastside Project's environmental review, and your outreach for public comments. My wife and I support these two alternatives in the Phase 1 EIS, in our order of preference:

- Alternative 4 (no action)
- Alternative 2(integrative resource approach)

I204-B-1

We find alternatives 1 and 3 unacceptable, and PSE's studies supporting them unconvincing. Let's not build a dinosaur project using early 20th century transmission technologies and instead focus on conservation, and green energy production and storage/transmission methods. Let's not destroy our beautiful wooded environment and vistas, which are one of the primary reasons that people want to live on the Eastside. Let's not diminish property values with these unsightly transmission lines!

Thank you,  
Scott Jeffcoat & Han Gao

COMMENT

RESPONSE

I205-A -1 See response for Key Theme ECON-1.

|          | <b>Comment</b>                                                                                | <b>Timestamp</b>      | <b>First Name</b> | <b>Last Name</b> |
|----------|-----------------------------------------------------------------------------------------------|-----------------------|-------------------|------------------|
| I205-A-1 | We are against the new power line with its impact on my view and my house value in Newcastle. | 3/13/2016<br>18:06:13 | Mary              | Ryker            |

March 13, 2016

### Comments on Phase I Draft EIS for the Energize Eastside Project

My name is Eldon H Graham and I live at 13629 SE 20th Street, Bellevue, WA 98005.

I have an Electrical Engineering Bachelor of Science degree from Oregon State University and a Federal Communication Commission (FCC) Extra Class Personal Radio Service (Amateur) license.

Chapter 15.6.2 of Puget Sound Energy's Energize Eastside Project Phase I Draft Environmental Impact Statement fails to address radio frequency interference the proposed 230 KV transmission line will likely cause to Personal Radio Service (PRS) licensees located along the proposed transmission line route. This is not a trivial matter. There are 480 PRS licensees in the 98005 and 98006 ZIP codes alone. Those are just two of the ZIP code areas the proposed transmission line would pass through.

PRS has a well-established reputation for providing emergency communications support to both government and non-government emergency services organizations during disasters here in the United States and in other countries throughout the world. And PRS licensees have played a crucial role in numerous at-sea-rescues, receiving distress calls transmitted from vessels via PRS and then alerting the Coast Guard to those imminent tragedies. The PRS station in City of Bellevue's Emergency Operations Center, along side the 911 dispatch facility, provides communications support to City emergency services and is further testimony to the value of PRS.

The DEIS acknowledges the proposed project's potential for interference with communications services such as those used by fire, police and medical response, and by cell phones and GPS but does not address PRS. Because PRS must operate at lower frequencies, at lower transmitter power, and operates over longer transmitter-to-receiver distances and with different modulation types, PRS is more susceptible to power line interference than those that have been discussed in this DEIS. Since Puget Sound Energy is aware that this proposed transmission line could interfere with PRS, it has been dismissive to have not addressed the service in this DEIS.

The DEIS says, "*Communication interference is dependent upon the frequency of the system in use, the relative locations of the transmitters and receivers with respect to one another, and other parameters (Enertech, 2015). Overhead transmission lines do not, as a general rule, interfere with radio or TV reception. Corona-generated radio frequency noise decreases with distance from a transmission line and also*

1

I206-A -1 See response for Key Theme SVC-2.

I206-A-1

**decreases with higher frequencies.** Whenever corona is a problem, it is usually for amplitude modulation (AM) radio and **not the higher frequencies** associated with frequency modulation (FM) radio or TV/satellite signals. Generally most modern fire and emergency responder communication systems (such as mobile-radio communications) utilize either FM or digital signals that are not affected by transmission line corona. In addition, interference is unlikely with other communications devices such as cell phones and GPS units that operate with digital signals at much higher microwave frequencies."

**Transmit frequency:** Interference to cell phones and GPS may not be likely because they operate at higher microwave frequencies, but those frequencies are between 28 and 89 times the highest frequency possible with my PRS station and the frequencies at which most other PRS stations operate. Even FM and TV signals are at frequencies between 2 and 32 times the maximum frequency of my station.

**Relative locations of transmitters and receivers:** With the exception of GPS, transmitter-to-receiver distances of the services cited in this DEIS are in the vast majority of cases less than 100 miles. My PRS station is used exclusively for communication with stations located around the world, thousands of miles distant. Distant station signals are often very weak. Interference created by the proposed power line would make weak signals impossible for me to understand and others impossible to even be detected. This would be true for other similarly situated PRS licensees.

**Distance from the proposed transmission line:** My PRS station is located less than 300 feet from Segment E of the proposed route and as is stated in the DEIS would be more susceptible to power line corona-generated radio frequency noise. This would be true for other PRS stations located close to the proposed power line route.

**Transmitter Power:** The strength of a received signal is a function of transmitter power and will determine whether interference from a power line is of significance. It is no wonder that AM broadcast, FM broadcast and Television might not be affected, for they are permitted to transmit at substantially higher power levels than PRS licensees are allowed. Maximum AM broadcast power is 50 times, maximum FM broadcast power can be 100 times and television can be more than 300 times maximum PRS power levels. As a consequence, power line interference that would not be perceptible to someone listening to broadcast radio or watching TV can make a PRS signal unintelligible or undetectable. Many PRS stations transmit at much less power than they are allowed, some as low as 1/200 of the maximum permitted, making power line radio frequency interference an even greater impediment to their reception.

**Modulation type:** The DEIS also states that because emergency response systems, cell phones, and GPS use FM or digital modulation they are not effected by

I206-A-1

transmission line corona. That may be so for those services, but the preponderance of PRS signals are not FM or digitally modulated.

The DEIS also says “. . . engineers take steps in the design of overhead transmission lines to **limit corona activity to acceptable levels**. . . . Corona is affected by the local electric field at the surface of the conductor (called the surface gradient.) Engineers can **control the conductor gradients by selection of conductor size** (larger conductors have lower gradients), phase spacing and arrangement, and sometimes by bundling (use of multiple conductors per phase lowers the surface gradient).”

**Acceptable levels:** What will Puget Sound Energy’s acceptable level of corona activity and radio frequency emissions be and what will the acceptable level chosen be based upon? There will certainly be a tension between Puget Sound Energy’s cost of construction and willingness to limit corona produced radio frequency emission levels that could interfere with PRS. And who would verify that the proposed power line was actually designed and constructed to not exceed the corona/radio frequency emission standard? In past instances of power line interference PRS licensees have had to seek assistance from the Federal Communications Commission in order to force power line operators to take corrective action. Unreasonable amounts of time and effort have been required. And during those protracted periods the licensees’ operations were degraded.

**Selection of conductor:** It is my understanding that both conductor design and conductor diameter influence corona susceptibility (and radio frequency interference) and that for economic reasons Puget Sound Energy currently does not favor the conductor design that is least susceptible.

In summary:

The Federal Communications Commission grants PRS licensees certain privileges and prohibits everyone, including Puget Sound Energy, from interfering with the licensees’ exercise of those privileges.

The DEIS does not address PRS. The conclusions drawn in Chapter 15.6.2 cannot be applied to the PRS. Virtually all PRS communications are restricted to much lower frequencies than those the DEIS suggests are largely immune from interference, use different modes of modulation than those suggested to be immune, operate at much lower transmitter power, and involve very large distances (often thousands of miles) between the transmitters and receivers. All the foregoing factors make PRS more susceptible to radio frequency interference than the communication services addressed in the DEIS.

I206-A-1

I206-A-1

Finally, my PRS station is located less than 300 feet from Segment E of the Plan and I believe is especially vulnerable to radio frequency interference if the proposed 230KV power line were allowed to occupy that segment.

It is Puget Sound Energy's responsibility to ensure that there will be no interference with my operations and the operations of other PRS licensees.

Eldon H Graham  
13629 SE 20<sup>th</sup> Street  
Bellevue, WA 98005  
425-644-4282



COMMENT

RESPONSE

I207-A -1 Comment noted.  
 I207-A -2 See response for Key Theme EIS-1.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timestamp            | First Name | Last Name |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------|-----------|
| I207-A-1 | In order of preference for me and my family:<br>Alternative 2<br>Alternative 1, Option C<br>Alternative 4<br>We consider Alternative 1, Options A/B/D and<br>Alternative 3 unacceptable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3/13/2016<br>4:25:30 | Julia      | Ziobro    |
| I207-A-2 | Eastside residents are not doing enough to conserve,<br>and for a tiny fraction of what is being proposed, could<br>be incentivized to conserve much more.<br>Expand the appliance replacement program back to<br>1990.<br>Expand the LED light bulb rebates/discounts (and get<br>ALL city buildings 100% LED fitted in 2016 - no<br>excuses!)<br>Expand EV charging rebates/programs - yes, this is<br>counterintuitive, but EVs are much better for the<br>environment overall and do most of their charging<br>overnight when the grid has excess capacity).<br>Make sure all Eastside schools are 100% LED.<br>Add solar panels to most or all city buildings.<br>There is so much that we can do! You could go<br>bananas with all kinds of programs and spend less<br>than 10% of the crazy amounts being proposed for<br>giant, ugly, tree-slaughtering high-tension transmission<br>lines! |                      |            |           |

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Timestamp             | First Name | Last Name |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I208-A-1 | Concerns about the PSE project to be driven through the beautiful Bellevue Bridle Trails neighborhood, continue to be alarming. My first choice is conservation, efficiency and solarization.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3/13/2016<br>16:55:52 | Pat        | McGiffert |
| I208-A-2 | <p>One of the chosen routes, C, collocates the 230 kV lines with the existing Olympic Pipelines. Two very large pipes that carry a variety of fuels including aviation fuel that go right through my back yard. Looking at studies done, by other states as well, show that there are many factors that make this hazardous. The collocation length affects the magnitude of induced AC potential that causes corroding in metal pipes. Whereas, crossing over the pipes at 90 degrees, for the least impact, is not as hazardous. In addition to this risk, with the higher elevation of the properties near NE 40th and 42nd St., is lightning has struck a number of times, one time it caused a gas meter to explode and damage a home.</p> <p>I hope PSE will reconsider choosing route C, which would be a combination of high voltage 230 kV lines, 2 large Olympic pipelines and risk of construction damage to the pipelines, as a possible solution to the projected energy shortfall.</p> |                       |            |           |
| I208-A-3 | I would suggest that PSE working with SCL's 230 kW corridor, for this project, could also improve SCL equipment replacing the old erector set towers to the more modern towers and updated wires, especially if both companies can coordinate the project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |
| I208-A-4 | Instead of this huge, controversial 230 kV project, I also stress that any other alternative power and                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |            |           |



- I208-A -1 Comment noted.
- I208-A -2 See responses for Key Themes PLS-2 and PLS-3.
- I208-A -3 Comment noted.
- I208-A -4 See response for Key Theme EIS-1.

I208-A-4

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

modern technology, such as solar power panels that now can work well even when in part shade or on cloudy days be a supplemented option for home owners. I encourage additional rounds of Solarize Bellevue and Kirkland projects. Take this and conservation / efficiency routes as the first choice. Thank you for your consideration.

COMMENT

RESPONSE

I209-A -1 See response for Key Theme OBJ-3.  
 I209-A -2 See response for Key Theme ECON-4.

|          | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timestamp             | First Name | Last Name |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
| I209-A-1 | My comment is that the Energize Eastside project proposed by PSE is not justified. I believe PSE may have economic motives for wanting to build the project, but as a ratepayer, I object to paying for infrastructure improvements that aren't really needed. PSE seems have done a sloppy job in their studies that purport to show that the project is required. The independent analysis of load flows by Lauckhart and Schiffman demonstrates that PSE's analysis is flawed. | 3/13/2016<br>22:35:46 | Paul       | McKee     |
| I209-A-2 | I am sympathetic to complaints that the proposed project suffers from safety and aesthetics problems, but for me simply the fact that it is expensive (where I am among those ultimately paying the bill) and unnecessary is enough for me to ask that the proposal be rejected.                                                                                                                                                                                                  |                       |            |           |

**From:** [Steve Wagner](mailto:Steve.Wagner@energizeeastside.org)  
**To:** [Info@EnergizeEastsideEIS.org](mailto:Info@EnergizeEastsideEIS.org)  
**Subject:** Comments on: Energize Eastside Project Phase I Draft Environmental Impact Statement  
**Date:** Sunday, March 13, 2016 4:02:10 PM

My name is Stephen Wagner. I live at 13440 NE 45TH ST, BELLEVUE, WA 98005

I210-A-1

Unfortunately, the DEIS is incomprehensible as written. The writers have failed miserably. It needs to be comprehensively restructured, rewritten, and an effort should be made to provide a less PSE-biased perspective on the impacts of the various alternatives. Please consider my sincere suggestions for improving the current document:

#### Structure

- A 716-page document violates SEPA:
  - "Are there page limits for an EIS? A: Yes, the text of an EIS shall not exceed 75 pages, except for proposals of unusual scope or complexity, which shall not exceed 150..."
- Eliminate the 8 pages of fact sheet. The fact sheet prevents discovery of the Table of Contents (TOC), repeats information found elsewhere in the document, and is generally redundant.
- The document has a 22-page TOC that is completely useless, since it does not provide a way to find the beginning of each chapter in the document. Please number all pages in the document consecutively and include a simple 2-level TOC that at a minimum allows readers to find their way to the beginning of each chapter. Include real document links in the PDF version of the TOC to make jumping to sections of interest possible. Include an index (with links) at the end of the document.
- Provide an Executive Summary. This is significant in its absence from the document. I provide my own summary below, which may help explain why the document doesn't have one.
- Move the ACRONYMS AND GLOSSARY section to an appendix at the end of the document. Consider eliminating it, since some quick checking on my part revealed that many of its items are not even mentioned in the document. Consider, instead, defining acronyms when they are used.
- The Introduction section of Chapter 1 (18 pages) should be eliminated because it is just a description of Alternative 1.
- If there is to be a summary chapter, it should not be combined with the Introduction section. The existing summary (39 pages) is unnecessarily verbose and manages to not only prevent reaching any conclusions but is contradictory:

I210-A-2

I210-A -1 See response for Key Theme EIS-1.

I210-A -2 See response for Key Theme EIS-1.

I210-A-2

it contradicts itself and it contradicts what is stated in other chapters of the document. The summary need not be more than a couple of pages long – it can probably be done via an executive summary.

- Consider devoting a separate chapter to each alternative – concatenating all alternatives together in Chapter 2 makes for difficult and confusing reading.

**Executive Summary (my suggestion, since this section does not currently exist)**

- No Action Alternative (PSE continues to do what they do now). While this alternative represents the status quo and is inadequate in terms of energy conservation and prevention of outages due to storms and other equipment failure events, it has no impact on the environment.
- Alternative 1-A, B, C, D (Energize Eastside). This alternative is unnecessary because there is not a need to improve existing transmission or capacity for many years. This alternative would seriously undermine scenic views and property values both along it's route and throughout the Eastside. It would expose the Olympic Pipeline to completely unnecessary rupture and explosion risk. This alternative would increase cost to ratepayers and earn PSE a 10% profit on its total cost.
- Alternative 2 (Integrated Resource Approach). This alternative represents all the things PSE should be doing to address future electrical energy needs on the Eastside. It is unclear why all of these technologies are lumped together as a single alternative, since each component (Energy Efficiency, Demand Response, Distributed Generation, Energy Storage, Peak Generation Component) standing alone, with appropriate analysis and investment, could contribute to a highly efficient, environmentally appropriate electrical energy future.
- Alternative 3 (New 115-KV Lines and Transformers). This alternative is clearly inferior to all others and is just thrown in to confuse the reader.

**Definition of No Action Alternative**

The writers do not get the point of the SEPA *No Action* alternative. By definition, this alternative can have no impact on the environment vis-à-vis the Energize Eastside project. However, the summary pages repeatedly lump the No Action alternative into the various “Summary of Impacts Common to all alternatives” sections even though this makes no sense. Further, the summaries grade the No Action alternative as non-negligible in eight categories, which, again, makes no sense. Of course, the impact grading in general is often illogical, counter-intuitive, contradictory, or ambiguous when compared to the discussions in the main text. The

I210-A -3 See response for Key Theme ALT-1.

I210-A-3

I210-A-3

most ridiculous examples of this are on page 1-32, where the No Action alternative is given this impact description: "Earthquakes or lightning strikes could damage transformers or drop power poles or lines..." (Is the No Action alternative expected to do something about earthquakes or lightning strikes?) and on page 1-48, where the No Action alternative is accused of "A potential significant adverse impact if Olympic Pipeline were damaged and explodes near existing PSE lines..." (How can No Action cause damage or an explosion?) Suffice it say, the document needs to properly depict and compare the No Action alternative.

#### **Inappropriate lumping of alternatives within Alternative 2**

Strangely, the writers have chosen here to lump five different approaches to dealing with energy demand into one. I believe this was done primarily to introduce a not-so-subtle bias in favor of the Energize Eastside alternative for the following reasons:

- It allows the qualitative summing of all alternative 2 components' non-negligible impact scores and thus condemns all of them in one fell swoop.
- It allows the writers to claim that they do not have the time or expertise to explore any of the considered technologies in sufficient detail. Thus they do not accurately describe or understand any of them.
- Gets PSE off the hook by suggesting implicitly that PSE should not be pursuing these technologies as their normal responsibility as the Eastside's designated electric utility.

I210-A-4

#### **Definition of Voluntary Conservation**

I take particular umbrage at the stance that PSE and the writers take when they repeatedly refer to *voluntary conservation* in the Energize Eastside propaganda campaign and in the document (pages 2-23, 2-37, 16-34, A-1). In what we can only conclude is a determined pejorative fashion, PSE implies that volunteerism is **the** barrier to significantly increasing electrical energy conservation. I believe that it is *incentivized* conservation that PSE currently pursues and should be promoting in a much more aggressive way. Far from considering it *voluntary*, we have considered it imperative to do many, many things to improve the energy efficiency of my home, including:

- PSE energy audits
- Additional insulation
- Replaced my incandescent bulbs with fluorescents, then replaced my fluorescents with LEDs
- 

I210-A -4 See response for Key Theme ALT-1.

I210-A -5 See response for Key Theme UTL-2.

I210-A -6 See response for Key Theme OBJ-1.

Installed energy-efficient windows

- Replaced my house and water heating units with more efficient units
- Added a generator and transfer switch to deal with the power outages I must endure almost every winter and ever more frequently at other times of the year

I210-A-4 I did these things not, primarily, out of my regard for the environment, but because they made financial sense. PSE and the writers of this document need to better understand and communicate to those who are not aware of rebate programs, do not understand the financial benefits of energy conservation, and do not have the means to conserve without financial assistance. There is no question that incentivized conservation could and should be the way forward, regardless of PSE's protestations to the contrary.

#### **Terrorism**

I210-A-5 PSE's propaganda campaign for Energize Eastside has raised awareness of the potential for giant power towers and international transmission of 230-KV power from Renton to Everett. But the document does not mention the possibility of physical or cyber terrorism with Energize Eastside as its target. Ted Koppel, in his new book *Lights Out*, makes it clear that an attack on such an infrastructure could cause months of hardship. By drawing attention to its project, PSE may have increased the likelihood of such an attack. Ironically, PSE has invoked terrorism as a reason for denying full access to the assumptions they made when they modeled system load to justify the Energize Eastside project!

I210-A-6 Of course, Energize Eastside can not be justified on the basis of benefit or cost – it is just a way for PSE to make a profit. The DEIS is a waste of money, especially as currently structured and written. The Washington Utilities and Transportation Commission (WUTC) should



I210-A-6

have put a stop to Energize Eastside long before the DEIS was even started. They should stop the DEIS and the Energize Eastside project immediately.

## COMMENT

## RESPONSE

**From:** [Jim Price](mailto:Jim.Price)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Cc:** [keri.pravitz@pse.com](mailto:keri.pravitz@pse.com)  
**Subject:** Eastside Energize Project through Newcastle  
**Date:** Monday, March 14, 2016 4:07:30 PM

To Whom it May Concern,

I have followed the discussion about the Eastside Energize program over the past months. As an active appraiser of major right of way projects, I have heard many concerns about new projects that I have been involved with. Recently, I prepared appraisals for Snohomish County Public Utility District for a monopole project in the high end Canyon Park office project in Bothell. There was considerable objection of the project for aesthetic reasons and I was asked to study the effect of new power lines in other areas. I found that there was minimal to no effect on rental rates and property values as a result of other office projects.

In my opinion, the main objection to the Energize Eastside Project is the aesthetic factor of property values by homeowners. Other objections such as proximity to pipelines, electromagnetic fields, etc. can either be solved by good engineering or are not a scientific factor.

The plain fact is that we need the electrical capacity soon to meet the demands on the Eastside and alternative solutions are either impractical or uneconomic.

Sincerely,

James Price, MAI, SR/WA  
 Appraisal Group of the Northwest

I211-A -1 See response for Key Theme ECON-1.

I211-A-1

## Additional comments for Energize Eastside DEIS

March 14, 2016

To: Heidi Bedwell, Program Manager

From: Lindy Bruce, Sunset Community Assn. and CENSE board member

Home Address: 13624 SE 18<sup>th</sup> St., Bellevue, WA 98005

Dear Ms. Bedwell,

To briefly summarize my previous comments: on March 1, 2016, I delivered oral and written comments about my neighborhood, as well as CENSE's, concerns regarding overburdening the ROW, the escalated safety hazards of co-locating 230kv lines with existing 115kv "H" poles, existing PSE pipeline and the two Olympic 20" and 16" jet fuel and petroleum pipelines along Segment E in an area designated Very Severe Soil Erosion by Bellevue's Critical Hazard Map, particularly with regard to nearby homes and a children's park, as well as neighborhoods that are downhill from the proposed Alternative 1A.

PSE and their consultants have revised their opinion of how many poles will be in the ROW several times, suggesting two years ago that our two sets of "H" poles would be replaced by a single monopole; then telling us that one set of "H" poles would be retained, as well as one monopole; subsequently their Power Rangers Energy consultant told us that there would be two new steel 85-100" monopoles everywhere the Olympus pipeline ran down the center of the ROW, as it does where many of our neighborhoods are located, in addition to either one or two sets of "H" poles permanently. **We want to know how many poles and what height they will be during the construction phase and on a permanent basis.**

**I requested a specific study of all construction-related issues and any precedents for such an overburdening of the ROW in a dense urban corridor.**

**Recent events point to an extremely important study of post-construction issues, as well.** The Greenwood PSE pipeline explosion from a gas leak, the Lynnwood home fires that resulted from a fallen tree that caused a PSE pipeline leak, the Tukwila Westfield Mall gas leak that prevented them from opening the mall, electrical/wind storms such as the one we had last night that produced galloping lines and extensive power outages – all of these in the last week - could easily produce an explosion that could take out numerous homes near the ROW.

The level of potential hazard from 230kv wires, mixed with a high-pressure jet fuel pipeline, a gasoline pipeline, and PSE's own natural gas line along with the potential for corrosion that is increased considerably with 230kv EMFs suggests a level of volatility that, when combined with heavy rains, winds, landslides, electrical storms or earthquakes, is an extreme hazard for nearby neighborhoods.

Please study and reveal the results of the elevated level of risk to which Alternative 1A exposes many neighborhoods on the Eastside and consider the vastly more benign, less costly, but sufficiently power-producing Alternative 2 or new Alternative 4.

Thank you,

Lindy Bruce

- I212-A -1 See response for Key Theme EIS-1.  
 I212-A -2 See responses for Key Themes PLS-2 and PLS-3.  
 I212-A -3 See response for Key Theme ALT-1.

I212-A-1

I212-A-2

I212-A-3

COMMENT

RESPONSE

**From:** [shanli799@gmail.com](mailto:shanli799@gmail.com) on behalf of [Shan Li](#)  
**To:** [Info@EnergizeEastsideEIS.org](mailto:Info@EnergizeEastsideEIS.org)  
**Subject:** Public comments on EIS - Energize Eastside  
**Date:** Monday, March 14, 2016 4:17:29 PM

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Name: Shan Li  
Address: 8411 SE 47th Pl, Mercer Island, WA 98040

Hi,

This is my public comment for the draft EIS for the Energize Eastside project. I support Alternative 2, since this alternative uses modern energy solutions and does not require building a 230KV transmission line through residential areas. Also with Alternative 2 we save thousands of trees from being cut.

Sincerely,

Shan Li

I213-A -1 See response for Key Theme ALT-1.

I213-A-1

**From:** [whalvrsn1@frontier.com](mailto:whalvrsn1@frontier.com)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Fw: DEIS Comment - Pipeline & Alternative 1a  
**Date:** Monday, March 14, 2016 3:53:18 PM  
**Attachments:** [PSE - DEIS Comment - Pipeline.docx](#)

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This is a resend @ 3:49  
Maryanne Halverson

----- Forwarded Message -----

**From:** "whalvrsn1@frontier.com" <whalvrsn1@frontier.com>  
**To:** "info@EnergizeEastsideEIS.org" <info@EnergizeEastsideEIS.org>  
**Sent:** Monday, March 14, 2016 5:48 PM  
**Subject:** DEIS Comment - Pipeline & Alternative 1a

Attached are my concerns about the DEIS, Olympic Pipeline and Safety. Having lived in Bridle Trails for 40 years; raised two daughters; having five grandchildren in the neighborhood and pasturing two horses on our property, I trust the DEIS will seriously consider my concerns.

Maryanne Halverson

Sent March 14th @ 3:46.

March 12, 2016

Ms. Heidi Bedwell, Senior Planner  
Land Use Division – Development Services, City of Bellevue  
450 110<sup>th</sup> Avenue NE  
Bellevue, Washington 98004

Dear Ms. Bedwell:

My name is Maryanne Halverson. My husband and I have lived in Bridle Trails for 40 years. We raised our daughters here and now have five grandchildren in the neighborhood and pasture our two horses on our property. I am deeply concerned that the current DEIS does not adequately address safety, particularly as it relates to Olympic Pipeline.

Your conclusion (Chapter 1, pg 32) "Risk to the public is not likely from constructing or operating the project near pipelines due to extensive safety policies and regulations" is highly questionable. I guess there are no laws against smoking on a haystack but that does not make it a wise thing to do. Common sense says you should not do that. As you know, these two pipelines supply fuel to the entire eastside and to Sea-Tac airport. So any accident, natural disaster, or act of terrorism will produce catastrophic results to individuals, property and the city's infrastructure. A few years a disastrous pipeline explosion occurred in Bellingham. On March 11, 2016, a pipeline explosion occurred in Seattle. It destroyed three buildings; caused millions of dollars in damage; and, it took several hours before the line was shut down. Fortunately, because of the time of day, no lives were lost. Accidents do happen even with the best regulations, coordination and intentions. These risks alone should disqualify PSE from adding a set of 230KV lines on top of TWO major pipelines.

Because of these concerns I did attend PSE's Community Action Group meetings. The collocation of the pipeline and PSE's predetermined route was never mentioned. When I brought up my concerns about set backs off of these pipelines I was told by both PSE's consultant, Lowell Rogers, and PSE's Jens Nedrud that "There are no setback requirements between pipelines and power lines." My husband then asked: "What are the best practices?" They said: "There are none." These denials belie common sense. I then showed them a study done after the Bellingham pipeline explosion "Setbacks and zoning for natural gas and hazardous liquid transmission pipelines" prepared by Jim Doherty, August 2004. This document recommends 50' setbacks. Recently, I was told that the Bonneville Power Administration recommends 50', and that is without even considering TWO hazardous pipelines.

I would hope that the DEIS team knows that these two pipelines are over 40 years old. They should also know that Olympic pipeline has just been fined several million dollars and ordered by Federal Pipeline Safety to conduct extensive studies and repairs for corrosion. Olympic Pipeline is required to do this as part of their safety requirements. Olympic Pipeline has not yet followed through. With that in mind, I would hope your research team has fully analyzed the risks and impacts of a 230KV line on THIS pipeline. I understand this corrosive issue is significant.

I214-A -1 See responses for Key Themes PLS-2, PLS-3, PLS-5, and PLS-6.

I214-A-1

COMMENT

RESPONSE

Page 2 – Maryanne Halverson

I214-A-2

My final comment has to do with the comparison of alternatives. In Chapter 3 Earth 3.6.1.5 the DEIS states: "Therefore, no potentially significant adverse impacts related to work near pipelines are expected under any of the alternatives". Bearing in mind that there are no pipelines along Alternatives 2 & 3, one must question if you are comparing the alternatives potential impacts in an equal manner.

I214-A-3

I would hope that the DEIS team will wake up and take a more complete look at the potential impacts of co-locating a 230KV in the same narrow easement as TWO hazardous pipelines. For the safety of my children, grand children, residents along this corridor and Bellevue's investment in infrastructure, I urge you to disapprove of Alternative 1a. From simply a safety standpoint, it makes no sense at all.

Sincerely,

Maryanne Halverson  
13701 NE 32<sup>nd</sup> Place  
Bellevue Washington 98005

I214-A -2 See response for Key Theme ALT-2.

I214-A -3 Comment noted.

**From:** [Rich Wagner](#)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Comments on Energize Eastside  
**Date:** Monday, March 14, 2016 12:56:31 PM

I am a resident of the Kennydale neighborhood of Renton and an architect practicing across all of our Southend, Eastside and Northend communities from offices in downtown Bellevue.

I write to confirm and support the goals of the Energize Eastside project and to register my support to complete the eastside loop with the important missing link necessary for energy management. To implement the program:

I215-A-1

<!--[if !supportLists]-->• <!--[endif]-->**I do not support the No Action alternative**, as such an alternative invites more black-outs and brown-outs, and worse, Third World rolling-brown-outs. The No Action alternative would have an unsurmountable challenge in the decades ahead and lead to negative economic impacts and job loss, especially for our working families.

I215-A-2

<!--[if !supportLists]-->• <!--[endif]-->**I support Conservation, but not as a stand-alone alternative**. My work as an architect has been about sustainability and conservation for forty years and has shown me that, although critical to our world and our region, it is an important complimentary but not a complete solution.

I215-A-3

<!--[if !supportLists]-->• <!--[endif]-->**I do not support underground distribution**, except in our downtown cores, and not just Bellevue. I think that an underground solution will have massive impacts on the cost of energy and bring too little value to nearby property owners, wherever the corridors are located. Such rates increases would have a devastating impact on the low and middle income neighbors of my town. Further, I think the necessary rate increases would be deemed imprudent and rejected by the Washington State Utilities Board.

I215-A-4

<!--[if !supportLists]-->• <!--[endif]-->**I support the overhead option and the use of existing utility corridors**. These corridors were established generations ago and should be honored.

Through my home town of Renton, I support the N and the M sections as these keep the impacts in the existing and established corridors.

I215-A-5

The sections through Summerset or Factoria will be a matter of negotiation with those two neighborhoods, but whatever route is designated as “preferred”, these negotiations should not be allowed to delay or hold hostage the overall project.

Thank you for your consideration of these comments.

Rich Wagner | FAIA

- I215-A -1 Comment noted.
- I215-A -2 Comment noted.
- I215-A -3 Comment noted.
- I215-A -4 Comment noted.
- I215-A -5 Comment noted.



COMMENT

RESPONSE

**From:** [George Joy](mailto:George.Joy@EnergizeEastsideEIS.org)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Cc:** [mary\\_ann\\_joy](mailto:mary_ann_joy)  
**Subject:** Energize Eastside EIS and impact to Bridleview community  
**Date:** Monday, March 14, 2016 8:42:24 AM

I216-A-1

We are writing to provide feedback on the proposed Energize Eastside alternatives as we would be highly impacted by the choices made. Our residence is located at 13536 NE 66th St, directly adjacent to the easement corridor where the new power lines are being proposed. Currently we enjoy a lovely Eastern view to modestly impacted by the pair of low-height north-south lines at the western boundary of the Sixty-01 Condominium complex. Our neighborhood is low-density residential with an equestrian flavor. Most of the houses, including our own are low-profile ramblers or two-story houses. The alternative 1 Option A threatens to negatively impact the character and livability of our house in significant ways. The high-voltage lines with 85 to 100ft poles that are described in the EIS are approximately twice as high as the existing poles. The visual impact of the higher poles, and thicker cables this close to our property is hard to quantify but likely to be significant, as acknowledge in the EIS.

I216-A-2

The current easement and pole locations are barely 100 to 200 feet from our eastern property boundary. This separation is inadequate for high voltage above-ground transmission lines proposed under alternative 1 Option A.

I216-A-3

My family and I would strongly urge the planners not to adopt this option as currently described and instead use Option C (underground cables) or one of the other alternatives which respect the residential neighborhoods that have been around for decades.

I216-A-4

Respectfully,  
 George Joy  
 Mary Ann Joy  
 13536 NE 66th St  
 Kirkland  
 WA 98033

- I216-A -1 See response for Key Theme VR-5.
- I216-A -2 See response for Key Theme LU-5.
- I216-A -3 Comment noted.
- I216-A -4 See response for Key Theme ALT-1.

I217-A

COMMENT

RESPONSE

**From:** [wolfgangsix@gmail.com](mailto:wolfgangsix@gmail.com)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Energize Eastside EIS Comments  
**Date:** Monday, March 14, 2016 11:50:51 PM

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I217-A-1

I hereby support and endorse all comments to the Energize Eastside EIS made by CENSE.

Wolfgang Sixl  
26 Glacier Key  
Bellevue, WA 98006

Sent from my iPad

I217-A -1 Comment noted.



I218-A -1 See response for Key Theme EIS-3.

**From:** [goness@comcast.net](mailto:goness@comcast.net) <[goness@comcast.net](mailto:goness@comcast.net)>

**Sent:** Tuesday, March 1, 2016 7:17 AM

**To:** Council

**Subject:** Why not combine the Renton to Redmond Puget Sound Energy transmission line development with the regional Renton to Redmond walking/bike trail development along the old rail route through Bellevue?

Bellevue Council members,

Two projects are being considered that could be combined to save money for local & regional governments while giving PSE a wonderful public service project. The existing eastside power line trail that goes NW out of Redmond is used for walking, bike and horse travel that could, by the present proposal, be extended along the old rail route South to Renton.

I suggest that a combined project would also provide a way for Puget Sound Energy to repay its customers for their recent conservation efforts in a way that does not involve another rate hike for PSE to remain 'revenue neutral'. In addition, sharing the use of the heavy equipment between the transmission line construction and laying the trail would not duplicate costs. Perhaps the combination of the project under PSE line construction management would bring in the timeline by tying the power provision to the completion regional trail.

Sounds like a rare win-win...

Thanks,

Greg

Greg Ness  
14114 176th Ave NE  
Redmond, WA 98052  
[goness@comcast.net](mailto:goness@comcast.net)  
(425) 681-4269 cell  
(425) 861-6671 home

Sent from a mobile device.

I218-A-1

**From:** [Mike Hubbard](#)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** EIS Comments  
**Date:** Tuesday, March 15, 2016 10:06:51 AM  
**Attachments:** [Capstone DEIS.pdf](#)

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Hi – please see attached. Thank you.

Mike

Mike Hubbard  
Capstone Partners  
[mhubbard@capstone-partners.com](mailto:mhubbard@capstone-partners.com)  
206-652-3364  
206-953-6089 (cell)  
[www.capstone-partners.com](http://www.capstone-partners.com)

March 10, 2016

Heidi Bedwell  
Energize Eastside EIS Program Manager  
City of Bellevue Office of Planning & Community Development  
PO Box 90012  
Bellevue, WA 98009

**RE: Comments for Energize Eastside Phase 1 Draft EIS**

Dear Ms. Bedwell:

On behalf of Capstone Partners, I am writing to share brief comments for the Energize Eastside Phase 1 Draft EIS.

Capstone Partners plans, finances, implements and manages commercial real estate investments for investors and organizations in the Pacific Northwest from offices in Seattle and Portland.

We are currently constructing a project on the Eastside called Esterra Park. This project will include 3 million square feet with 1.2 million feet of commercial space, over 1400 residential units, a 275 room hotel, all surrounding a new 2.7 acre park. Capstone purchased the land from Group Health Cooperative and demolished a vacant 550,000 square foot hospital to make way for the project. Roads and utilities were completed in 2014. The first 500 units of residential apartments are under construction – occupancy expected in early 2016. A 275 room dual branded Starwood Hotel will break ground in June of 2015. Capstone has permits to construct a 235,000 square foot office building; an additional 400,000 square feet of office can start six months later. Capstone estimates 7,000 - 8,000 people will live and work at Esterra Park. The project is the first phase of Redmond's 170 acre Overlake Village master plan which will house 30,000 - 40,000 people when completed; approximately half the size of South Lake Union.

We share this information because we are representative of the enormous growth the entire Eastside has seen over the past 50 years and will see in the next 20 years both in population and in jobs. As such, it is imperative that the DEIS, while considering all options, move forward only those that are proven to be able to meet our Eastside region's electrical needs (recently re-affirmed in the City of Bellevue's Independent Technical Analysis) for the next 10-20 years. For our company to be able to attract tenants to our development, we must be able to ensure that our electrical infrastructure is proven, reliable and built in a timely manner. This is an urgent issue for our Eastside communities and businesses. As such we request that Alternative 1a be taken forward for further study in Phase 2 of the EIS. We also request that the process continue to move forward with no delay as time is of the essence for ensuring the Eastside's ongoing electrical reliability.

We appreciate the opportunity to comment on the Phase 1 DEIS and we congratulate the five jurisdictions on working together in a timely manner to help solve this urgent community need.

Sincerely,



Mike Hubbard, Partner

Capstone Partners

I219-A -1 Comment noted.

I219-A-1



March 17, 2016

Heidi Bedwell  
 Energize Eastside EIS Program Manager  
 City of Bellevue  
 450 110<sup>th</sup> Ave NE  
 Bellevue WA 98004

Re: Energize Eastside

Dear Ms. Bedwell:

I write as a resident of southeast Bellevue, as the owner of a business based in Bellevue, and as the managing member of several companies which own various properties throughout the city. I will spare you a recitation of dueling statistics and technical studies and concentrate on one central point: There is perhaps no local economy in the nation as dependent on a stable supply of electricity as greater Bellevue.

Not only has our population grown exponentially since existing transmission lines were installed, the importance of technology jobs has grown even faster. The specter of power interruption would make it unthinkable for most of our businesses to remain in this market. One example: I represented a building in Bothell that was threatened by floods several years ago. The tenant was a switching center, and indicated that if that location had to shut down it would cost them \$1 Million per day. They were literally desperate to move.

This is an infrastructure issue, no more complicated than deciding where to locate roads and sewers. We build utilities to support a growing populace and economy. It is shameful that so much credibility has been given to detractors who are a tiny fraction of the community who benefit from stable power.

The EIS adequately documents the need for these improvements and sets forth reasonable mitigation measures. Let's get on with it.

Sincerely yours,

Robert C. Wallace

Cc: Brad Miyake, Bellevue City Manager

aatmpWpiLtrhdClr2011a,3/17/2016 Wallace Properties, Inc., PO Box 4184, Bellevue, WA 98009  
 Phone (425) 455 9976 / Fax (425) 646 3374 / e-mail: rwallace@wallaceproperties.com

I220-A -1 See response for Key Theme OBJ-2.

I220-A-1



March 14, 2016

To: City of Bellevue

RE: Public Comment on Draft EIS for Energize Eastside

To Whom it may concern:

As a family who has been a part of Bellevue's history since 1967, we are and have been invested in the future of Bellevue. We are the owners and managers of Brierwood Center at 12001-12005 NE 12<sup>th</sup> St. and also part of many facets of our Bellevue Community

Last fall at the Economic Forecast breakfast last week – economist Joe Quinlan said that the underpinning of economic development is infrastructure (Councilmembers Lee and Robinson were also in attendance). Infrastructure means transportation, water, AND reliable power.

Our Bellevue electrical infrastructure has not been updated since the 1960's – imagine what 405 would look like if we hadn't upgraded it in over 50 years.

I221-A-1

PSE's proposed Energize Eastside project as identified in Alternative 1a in the Draft EIS literally powers our city's future. The need for this project has been clearly established through 5 studies and PSE's planning standards have been validated by FERC.

The No Action alternative in the Phase 1 Draft EIS is contrary to Bellevue's own initiatives. Bellevue is working hard on the "Bellevue is open for business" campaign for the Eastlink construction projects. Without reliable power – we WON'T be open for business.

Through the regulatory process of the EIS, I urge you to move the solutions forward to solve this critical infrastructure problem.

I221-A-2

Please no more delays - no action alternative NOT ok and hoping there is another solution that hasn't been discovered or invented yet is also not ok.

I221-A-3

Thank you for your consideration.

T.J. Woosley

Hal Woosley Properties, inc.

Hal Woosley Properties, Inc. Suite 44 Brierwood Center 12001 N.E. 12th St. Bellevue, WA 98005  
 Mailing Address P.O. Box 3325 Bellevue, WA 98009-3325 425-455-5730 FAX: 425-646-4577  
 www.woosleyproperties.com



- I221-A -1 Comment noted.
- I221-A -2 Comment noted.
- I221-A -3 Comment noted.

14 March 2016

City of Bellevue  
 Development Services Department  
 Attn: Heidi Bedwell  
 450 110th Ave NE  
 Bellevue, WA 98004

RE: Energize Eastside DEIS

My wife and I are fixed-income senior citizens and 16+ year residents of Bellevue (names & address below). My 30 year US Coast Guard career included 2½ years as a planning officer for our California district headquarters, and as agency liaison to the California Coastal Commission, and later was 3 years in charge of the Coast Guard's Strategic Planning Staff (long-range, big-picture issues analysis) in Washington DC. Joan did much of the heavy lifting raising our three now-adult children while I traveled for the Coast Guard. We were lucky to retire to Bellevue and settle in Somerset.

Having been a government agency planner, drafting several EAs and EISs, and sitting on both sides of the table as both staff presenter and decision maker, I truly appreciate your difficult role to fairly and accurately represent all issues and parties to a project.

We are very concerned with several aspects of the proposed Energize Eastside project and draft EIS:

I222-A-1

a. Flawed or inaccurate data and assumptions: As you surely know, our neighborhood citizens group CENSE had a Load Flow Modeling Analysis done by a former transmission/power planner and executive for PSE. The study noted PSE used assumptions and proposed demand requirements that were biased to justify PSE's position, and did not follow PSE's own planning factors. Using more realistic assumptions and correct planning factors shows no project is required for 40 years, if then. There should be greater transparency from PSE, and a direct explanation as to how the CENSE Load Flow Analysis, by PSE's former senior planner, may not be correct.

I222-A-2

b. Safety: PSE's proposed project alternative choice is very risky, safety wise. It would overburden the Olympic Pipeline easement and likely damage underground utilities during transmission tower construction (noted in DEIS Chapter 16). And once in place, the project would place a high energy ignition and electromagnetic pipeline corrosion source in close proximity to a fuel source (petroleum pipeline) while slicing through a major residential area.

I222-A-3

c. Environmental and Quality of Life: The environmental impacts seem fairly well described in DEIS Chapters 5 and 6. However the Quality of Life, including how the proposed powerlines affect the neighborhood character and property values, seems to be insufficiently considered. Residents invested in their homes with expectations of value retention and appreciation. While our home is not located where our view will be impacted, we will lose value as our neighborhood's character is diminished by the proposed land use changes. Chapter 10 of the DEIS touches on this but makes no conclusion to what is intuitively obvious. Our home value is part of our retirement "nest egg" investment, and devaluation certainly hurts us.

1.

- I222-A -1 See responses for Key Themes OBJ-2 and OBJ-3.
- I222-A -2 See responses for Key Themes PLS-1 and PLS-3.
- I222-A -3 See response for Key Theme ECON-1.



I222-A -4 See response for Key Theme OBJ-3.

Of the four project alternatives considered by the DEIS, CENSE's Load Flow Modeling Analysis describes Alternative 4 (no action) as appropriate for the next few decades. But that choice isn't 100% clear because PSE seems to have stacked the data deck and assumptions in favor of their Alternative 1 Option A, and challenging and agreement on the assumptions of need for that much additional system capacity has been thwarted by PSE.

We, the citizens, must rely on our City Planners and City Council to insist PSE share their GE PSLF modeling software and all the data assumptions they applied, and their justification rationale for those modeling inputs. PSE's analysis methodology and inputs should be brought into alignment with Western Electricity Coordinating Council (WECC) industry standards.

- I222-A-4
- a. Why does PSE assume six local generation plants will simultaneously be out of service? When has that ever happened?
  - b. Why must the worst case continue providing 1500MW to Canada during a PSE power emergency? Why not zero to Canada? What part of Canada is Energize Eastside territory?
  - c. Why does PSE use a demand growth of 2.4%/year for Eastside, when their own data, submitted to WECC, show only a 0.5%/year demand growth for their baseline case?
  - d. Why has PSE not applied newer technology advancements such as distributed power generation, power storage, and critical infrastructure avoidance?

In summary, the DEIS, while a good start, should be used to require PSE to be more forthcoming in several areas of information sharing, alternative justification analysis, standards application, and be forward looking in future systems description, timeline, and technology application. Without these, Bellevue Planning, the City Council, and the affected citizens cannot fairly assess the proposed Energize Eastside powerline expansion project.

Please include us as a party of record.

Thank You!



Terry & Joan Sinclair  
4510 144<sup>th</sup> Ave SE  
Bellevue WA 98006-2325  
twinsinclair@comcast.net

March 14, 2016

Response to Draft EIS for Energize Eastside

Written by Christina Aron-Sycz on behalf of CENSE.org and  
Christina Aron-Sycz  
13725 NE 34th Place  
Bellevue, WA 98005

**Introduction**

This document is a response to the Draft EIS of PSE's Energize Eastside project. I am a board member of CENSE.org, and I represent the views and opinions of CENSE.org. I also serve as President of the Shadow Wood Lane homeowner's association. The Energize Eastside project will have a tremendous negative impact on two of the thirteen homes in our association.

I have devoted over a year and a half to an in-depth study of all aspects related to the Energize Eastside project. After all this time, I continue to be stunned by what PSE is attempting to build through the heart of the Eastside and the lack of thorough and truly independent analysis by industry experts retained by the City of Bellevue.

I am saddened that PSE is able to dictate the criteria for such a tremendous project (both in terms of its cost and impact on the entire city) and the City of Bellevue continues to fail to independently examine and evaluate these criteria. There is no meaningful due diligence by the authorities, including you, the EIS team, and Ms. Carol Helland, who is the SEPA officer in charge of the project. As a result, the Energize Eastside project has fundamental flaws. Its proposed execution, as Alternative 1A, represents a failure of the local government to fulfill its key role of an arbiter and enforcer of applicable WAC regulations.

**Problems with Selection of 19 Project Criteria**

Section 2.2 of the DEIS describes in detail PSE's objectives for building Energize Eastside. It lists 19 criteria: 15 electrical and 4 non-electrical criteria that Alternative 1A (Energize Eastside as proposed by PSE) or any other alternative project must meet. These criteria were proposed by PSE itself. The DEIS does not contain any discussion whatsoever whether these 19 collective criteria have merit or are even reasonable and the only logical basis for accepting them is PSE's claim that PSE must meet "applicable transmission planning standards and guidelines".

Despite absence of any in-depth analysis of the reasons for these criteria, they are the backbone for the entire 711 page-long DEIS. Every alternative is vetted against these 19 points and no alternative can satisfy them completely, except for Alternative 1A.

The most shocking element of DEIS is that 18 out of 19 criteria come directly from PSE's own Supplemental Eastside Study Solutions Report ("**Supplemental Report**"). This Supplemental

I223-A -1 See response for Key Theme OBJ-2.

I223-A-1

I223-A-1

Report was not written prior to the proposal of Energize Eastside. Instead, PSE published the Supplemental Report nearly two years after the Energize Eastside project was announced. The Supplemental Report is of questionable trustworthiness. Not only does it lack independent analysis and vetting but it is a self-serving document clearly designed to support a previously proposed project. The timing of the Supplemental Report suggests that PSE commissioned it to exaggerate the electrical needs of the Eastside to ensure that their project (Alternative 1A) gets built.

**Problems with Certain Selected Criteria**

Section 2.2 of the DEIS states:

*"Electrical Criteria Summary*

*The project would meet the following criteria:*

1. *Applicable transmission planning standards and guidelines, including mandatory North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) standards (e.g., NERC TPL-001-4 and WECC TPL-001-WECC-CRT-2)"*

The DEIS claims that "PSE's criteria are based on regulations for utilities and prudent, safe industry practices." The DEIS references two documents in support of this criteria: (1) "Applicable transmission planning standards and guidelines, including mandatory North American Electric Reliability Corporation ("**NERC**") and (2) Western Electricity Coordinating Council ("**WECC**") standards (e.g., NERC TPL-001-4 and WECC TPL-001-WECC-CRT-2)".

*Comment by Rich Lauckhart: NERC TPL-00104 is the national requirement. Local (e.g. WECC) areas can add further criteria if accepted by FERC. WECC TPL-001-CRT-2 is the local criteria proposed by WECC and approved by FERC. There is nothing substantive in the local criteria that would appear to be directly related to Energize Eastside. It is also not clear what TPL-001-4 stated requirement would be violated if Energize Eastside is not built<sup>1</sup>*

*Comment by Christina Aron-Sycz: Pursuant to WAC 197-11-060-3(a) "agencies **shall make certain** that the proposal that is the subject of environmental review is **properly defined**." The DEIS violates WAC 197-11-060-3(a). A properly defined proposal would include extensive explanation for each of the 19 criteria supported by an independent third party analysis. The criteria PSE "wants" to include here and the criteria PSE is required to meet*

<sup>1</sup> Comments in RED have been authored by Richard Lauckhart, former VP of transmission planning for Puget Power. His full credentials are available at the end of the Lauckhart-Schiffman Load Flow Study in attachment 2.

are two vastly different things. Instead of pressure testing these criteria, using independent experts, the City of Bellevue chose to rely on PSE to dictate what the parameters of the project should be. Because PSE has a major financial stake in the project, it cannot be solely trusted to provide the necessary and objective criteria without substantive verification by an independent 3rd party. The sheer size and cost of the project demands an in-depth analysis by independent third parties of its every aspect. PSE has a proven track record of breaking rules and cheating the public (including its own customers)<sup>2</sup> and it is absolutely imperative that the lead agency acts in a truly impartial manner by writing a DEIS which does not simply accept PSE's 19 criteria in a "no questions asked" fashion as the current DEIS does.

*"2. Within study period (2015–2024);"*

Comment by Rich Lauckhart: PSE is saying if the need materializes by 2024, PSE needs to start working on it now. That can make sense if there is a long lead time on some solution options. This sounds like the lead time on building a nuclear plant, not a transmission line.

*"3. Less than or equal to 95 percent of emergency limits for lines;"*

Comment by Rich Lauckhart: This is not consistent with TPL-001-4. This criteria seems to be a PSE desire **that is not required**.

*"4. Less than or equal to 90 percent emergency limit for transformers;"*

Comment by Rich Lauckhart: This criteria is not consistent with TPL-001-4. This criteria seems to be a PSE desire **that is not required**.

*"5. Normal winter load forecast with [both] 100 percent and 75 percent conservation;"*

Comment by Rich Lauckhart: This criteria has nothing to do with a TPL-001-4 requirement. If conservation can be done, then it should be done. Why would PSE study with less than the maximum amount of conservation? The NWPPC suggests building a few emergency back-up peaker plants to be used if the conservation does not materialize.

*"6. Normal summer load forecast with 100 percent conservation;"*

---

<sup>2</sup> <http://www.seattletimes.com/seattle-news/pse-charging-too-much-attorney-general-contentends/>

Comment by Rich Lauckhart: PSE is a big heavy winter peaking utility. If the winter peak can be reliably served, summer should not be a problem because the load is so much lower in the summer. For the Eastside, the peak winter load of 400 MW drops to 280 MW in the summer.

*"7. Adjust regional flows and generation to stress cases similar to annual transmission planning assessment;"*

Comment by Rich Lauckhart: This is bogus. The 2013 ColumbiaGrid Planning Assessment said this case is for informational purposes only and there does not need to be any fixes to problems found from this case study **because the case exceeds NERC Reliability Criteria.**

*"8. Take into account future transmission system improvement projects that are expected to be in service within the study period;"*

Comment by Rich Lauckhart: This makes sense as long as there is a very high probability that future transmission system improvement projects will actually be in place. What future transmission system improvement projects is PSE thinking will be in place that will impact the EE study?

Comment by Christina Aron-Sycz: The DEIS does NOT provide this critical information and must be amended to show what transmission system improvement projects will be in place.

*"9. Minimal or no re-dispatching of generation;"*

Comment by Rich Lauckhart: This is a bogus criteria. FERC has stated that re-dispatching of generation is the logical first step in solving a problem. Where did PSE come up with this criteria? If redispatch is cheaper and less environmentally problematic, why would it not be the preferred solution?

*"10. No load shedding;"*

Comment by Rich Lauckhart: There are instances in TPL-001-4 tables (and footnote 12 to tables) where it is OK to interrupt Firm Transmission and have certain kind of load loss. This criteria [PSE's claim of no load shedding] is more stringent than TPL-001-4.

*"11. No new Remedial Action Schemes"*

Comment by Rich Lauckhart: This is a bogus criteria. TPL-001-4 allows for Remedial Action Schemes (aka Corrective Action Plans) such as Automatic Generation Tripping... see e.g. 2.7.1 bullets in TPL-001-4.

**DEIS Impermissibly Limits Reasonable Alternatives**

This DEIS fails to meet WAC 197-11-070 which states “(1) *Until the responsible official issues a final determination of nonsignificance or final environmental impact statement, no action concerning the proposal shall be taken by a governmental agency that would:*

- (a) *Have an adverse environmental impact; or*  
 (b) ***Limit the choice of reasonable alternatives.***”

This DEIS fails to comply with WAC 197-11-070 because this DEIS has unlawfully limited the choice of reasonable alternatives to PSE’s preferred project. As discussed above, PSE has a material financial stake in pursuing Alternative 1A. The DEIS reflects that preference. Alternative 2 does not represent a reasonable alternative mandated by the law. Many suggestions and comments written by industry experts were submitted by CENSE.org in the initial scoping phase, yet these suggestions were prematurely discarded. It is astounding that the lead governmental agency of Bellevue has taken steps in effect limiting the choice of reasonable alternatives before issuance of a final determination of nonsignificance or final environmental impact statement.

Furthermore, Alternative 2 as currently described in the DEIS fails to meet any industry standard for “reasonable”. See Attachment entitled “Alternative 2B” as supporting documentation and full discussion of the deficiencies of Alternative 2 and CENSE.org’s suggestions for an alternative that has merit.

**The City of Bellevue Failed to Revise the Scope of EIS**

DEIS fails to comply with the following criteria and must be corrected:

WAC 197-11-408

**“Scoping.**

***(5) The lead agency shall revise the scope of an EIS if substantial changes are made later in the proposal, or if significant new circumstances or information arise that bear on the proposal and its significant impacts.”***

“Significant new circumstances or information” have arisen that bear on the proposal and its significant impacts. This has occurred in the following two ways:

1. CENSE.org independently contracted with two industry experts, Roger Schiffman and Richard Lauckhart, to perform a load flow study using industry standards, based on PSE’s own data. The load flow study shows that the need for the project has been **grossly exaggerated**. The study further asserts that PSE has potentially made false claims regarding the threshold compliance requirements. The study shows that PSE has

created an impossible set of electrical standards that far exceed federal criteria. See Attachment 2 for a complete copy of the Load Flow Study by Schiffman and Lauckhart.

2. "Significant new circumstances or information" have also arisen in the form of information submitted by Don Marsh on behalf of CENSE.org regarding a proposed Alternative 2B which corrects multiple material deficiencies in Alternative 2 as currently described in the DEIS. The new Alternative 2B proposed by CENSE.org contains new and improved solutions compared with Alternative 2 that it meets the criteria for "significant new information".

**DEIS Should Not Be Accepted by the City of Bellevue**

This DEIS fails to meet the following criteria and must be corrected:

WAC 197-11-420

***"EIS preparation.***

*For draft and final EISs and SEISs:*

*(1) Preparation of the EIS is the responsibility of the lead agency, by or under the direction of its responsible official, as specified by the lead agency's procedures. No matter who participates in the preparation of the EIS, it is the EIS of the lead agency. **The responsible official, prior to distributing an EIS, shall be satisfied that it complies with these rules and the procedures of the lead agency.***

As outlined above, this DEIS does not comply with multiple WAC rules and procedures. As such it cannot be accepted in its current form and content and must be remedied.

**Conclusion**

A DEIS is just that - a DRAFT. Now is the time for the lead governmental agency to correct serious and material deficiencies in the scope of background work, vetting of project criteria. It is also time to overhaul Alternative 2 in a manner that will make it reasonable and realistic. I look forward to seeing the improvements in the final EIS based on my comments as well as the hundreds of comments from CENSE supporters.

I223-A -2 See response for Key Theme EIS-2.

I223-A-2

**From:** [Christina Aron-Sycz](mailto:Christina.Aron-Sycz)  
**To:** [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org); [hbedwell@bellevuewa.gov](mailto:hbedwell@bellevuewa.gov)  
**Cc:** [Christina Aron-Sycz](mailto:Christina.Aron-Sycz)  
**Subject:** Fwd: DEIS comments by Christina Aron-Sycz  
**Date:** Monday, March 14, 2016 11:16:04 PM  
**Attachments:** [DEIS comments by Christina Aron-Sycz.pdf](#)  
[Lauckhart-Schiffman Load Flow Study.pdf](#)  
[Alternative 2B.pdf](#)

Please find attached my comments to the DEIS as well as three attachments:  
 Attachment 1: document written by Don Marsh of CENSE.org entitled "Alternative 2B"  
 Attachment 2: Lauckhart-Schiffman Load Flow Study  
 Attachment 3: my comments

Please respond and acknowledge receipt of this email.

Thank you,  
 Christina Aron-Sycz  
 13725 NE 34th Place  
 Bellevue, WA 98005

Here is the text in-line in case there is an issue with the attachment.

March 14, 2016

Response to Draft EIS for Energize Eastside

Written by Christina Aron-Sycz on behalf of CENSE.org and  
 Christina Aron-Sycz  
 13725 NE 34th Place  
 Bellevue, WA 98005

**Introduction**

This document is a response to the Draft EIS of PSE's Energize Eastside project. I am a board member of CENSE.org, and I represent the views and opinions of CENSE.org. I also serve as President of the Shadow Wood Lane homeowner's association. The Energize Eastside project will have a tremendous negative impact on two of the thirteen homes in our association.

I223-C-1

I have devoted over a year and a half to an in-depth study of all aspects related to the Energize Eastside project. After all this time, I continue to be stunned by what PSE is attempting to build through the heart of the Eastside and the lack of thorough and truly independent analysis by industry experts retained by the City of Bellevue.

I223-C-2

I am saddened that PSE is able to dictate the criteria for such a tremendous project (both in terms of its cost and impact on the entire city) and the City of Bellevue continues to fail to independently examine and evaluate these criteria. There is no meaningful due diligence by the authorities, including you, the EIS team, and Ms. Carol Helland, who is the SEPA officer in charge of the project. As a result, the Energize Eastside project has fundamental flaws. Its proposed execution, as Alternative 1A, represents a failure of the local government to fulfill its key role of an arbiter and enforcer of applicable WAC regulations.

I223-C -1 See response for Key Theme LU-1.  
 I223-C -2 See response for Key Theme EIS-2.





I223-C -3 See responses for Key Themes OBJ-1 and OBJ-2.

**Problems with Selection of 19 Project Criteria**

Section 2.2 of the DEIS describes in detail PSE's objectives for building Energize Eastside. It lists 19 criteria: 15 electrical and 4 non-electrical criteria that Alternative 1A (Energize Eastside as proposed by PSE) or any other alternative project must meet. These criteria were proposed by PSE itself. The DEIS does not contain any discussion whatsoever whether these 19 collective criteria have merit or are even reasonable and the only logical basis for accepting them is PSE's claim that PSE must meet "applicable transmission planning standards and guidelines".

Despite absence of any in-depth analysis of the reasons for these criteria, they are the backbone for the entire 711 page-long DEIS. Every alternative is vetted against these 19 points and no alternative can satisfy them completely, except for Alternative 1A.

The most shocking element of DEIS is that 18 out of 19 criteria come directly from PSE's own Supplemental Eastside Study Solutions Report ("**Supplemental Report**"). This Supplemental Report was not written prior to the proposal of Energize Eastside. Instead, PSE published the Supplemental Report nearly two years after the Energize Eastside project was announced. The Supplemental Report is of questionable trustworthiness. Not only does it lack independent analysis and vetting but it is a self-serving document clearly designed to support a previously proposed project. The timing of the Supplemental Report suggests that PSE commissioned it to exaggerate the electrical needs of the Eastside to ensure that their project (Alternative 1A) gets built.

**Problems with Certain Selected Criteria**

Section 2.2 of the DEIS states:

*"Electrical Criteria Summary*

*The project would meet the following criteria:*

1. *Applicable transmission planning standards and guidelines, including mandatory North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) standards (e.g., NERC TPL-001-4 and WECC TPL-001-WECC-CRT-2)"*

The DEIS claims that "PSE's criteria are based on regulations for utilities and prudent, safe industry practices." The DEIS references two documents in support of this criteria: (1) "Applicable transmission planning standards and guidelines, including mandatory North American Electric Reliability Corporation ("**NERC**") and (2) Western Electricity Coordinating Council ("**WECC**") standards (e.g., NERC TPL-001-4 and WECC TPL-001-WECC-CRT-2)".

**Comment by Rich Lauckhart:** NERC TPL-00104 is the national requirement. Local (e.g. WECC) areas can add further criteria if accepted by FERC. WECC TPL-001-CRT-2 is the local criteria proposed by WECC and approved by FERC. There is nothing substantive in the local criteria that would appear to be directly related to Energize Eastside. It is also not clear what TPL-001-4 stated requirement would be violated if Energize Eastside is not built.

**Comment by Christina Aron-Sycz:** Pursuant to WAC 197-11-060-3(a) "agencies shall make

I223-C-3

**certain** that the proposal that is the subject of environmental review is **properly defined.**"

The DEIS violates WAC 197-11-060-3(a). A properly defined proposal would include extensive explanation for each of the 19 criteria supported by an independent third party analysis. The criteria PSE "wants" to include here and the criteria PSE is required to meet are two vastly different things. Instead of pressure testing these criteria, using independent experts, the City of Bellevue chose to rely on PSE to dictate what the parameters of the project should be. Because PSE has a major financial stake in the project, it cannot be solely trusted to provide the necessary and objective criteria without substantive verification by an independent 3rd party. The sheer size and cost of the project demands an in-depth analysis by independent third parties of its every aspect. PSE has a proven track record of breaking rules and cheating the public (including its own customers) and it is absolutely imperative that the lead agency acts in a truly impartial manner by writing a DEIS which does not simply accept PSE's 19 criteria in a "no questions asked" fashion as the current DEIS does.

"2. Within study period (2015–2024);"

Comment by Rich Lauckhart: PSE is saying if the need materializes by 2024, PSE needs to start working on it now. That can make sense if there is a long lead time on some solution options. This sounds like the lead time on building a nuclear plant, not a transmission line.

"3. Less than or equal to 95 percent of emergency limits for lines;"

Comment by Rich Lauckhart: This is not consistent with TPL-001-4. This criteria seems to be a PSE desire **that is not required.**

"4. Less than or equal to 90 percent emergency limit for transformers;"

Comment by Rich Lauckhart: This criteria is not consistent with TPL-001-4. This criteria seems to be a PSE desire **that is not required.**

"5. Normal winter load forecast with [both] 100 percent and 75 percent conservation;"

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I223-C-3

I223-C -4 See response for Key Theme EIS-2.

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Comment by Christina Aron-Sycz: The DEIS does NOT provide this critical information and must be amended to show what transmission system improvement projects will be in place.

I223-C-3

"9. Minimal or no re-dispatching of generation;"

Comment by Rich Lauckhart: This is a bogus criteria. FERC has stated that re-dispatching of generation is the logical first step in solving a problem. Where did PSE come up with this criteria? If redispatch is cheaper and less environmentally problematic, why would it not be the preferred solution?

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Comment by Rich Lauckhart: There are instances in TPL-001-4 tables (and footnote 12 to tables) where it is OK to interrupt Firm Transmission and have certain kind of load loss. This criteria [PSE's claim of no load shedding] is more stringent than TPL-001-4.

"11. No new Remedial Action Schemes"

Comment by Rich Lauckhart: This is a bogus criteria. TPL-001-4 allows for Remedial Action Schemes (aka Corrective Action Plans) such as Automatic Generation Tripping... see e.g. 2.7.1 bullets in TPL-001-4.

**DEIS Impermissibly Limits Reasonable Alternatives**

This DEIS fails to meet WAC 197-11-070 which states "(1) *Until the responsible official issues a final determination of nonsignificance or final environmental impact statement, no action concerning the proposal shall be taken by a governmental agency that would:*

- (a) *Have an adverse environmental impact; or*
- (b) **Limit the choice of reasonable alternatives."**

I223-C-4

This DEIS fails to comply with WAC 197-11-070 because this DEIS has unlawfully limited the

I223-C -5 See response for Key Theme EIS-2.

choice of reasonable alternatives to PSE's preferred project. As discussed above, PSE has a material financial stake in pursuing Alternative 1A. The DEIS reflects that preference. Alternative 2 does not represent a reasonable alternative mandated by the law. Many suggestions and comments written by industry experts were submitted by CENSE.org in the initial scoping phase, yet these suggestions were prematurely discarded. It is astounding that the lead governmental agency of Bellevue has taken steps in effect limiting the choice of reasonable alternatives before issuance of a final determination of nonsignificance or final environmental impact statement.

Furthermore, Alternative 2 as currently described in the DEIS fails to meet any industry standard for "reasonable". See Attachment entitled "Alternative 2B" as supporting documentation and full discussion of the deficiencies of Alternative 2 and CENSE.org's suggestions for an alternative that has merit.

**The City of Bellevue Failed to Revise the Scope of EIS**

DEIS fails to comply with the following criteria and must be corrected:

WAC 197-11-408

**"Scoping.**

*(5) The lead agency shall **revise the scope of an EIS** if substantial changes are made later in the proposal, or if **significant new circumstances or information arise that bear on the proposal and its significant impacts.**"*

"Significant new circumstances or information" have arisen that bear on the proposal and its significant impacts. This has occurred in the following two ways:

1. CENSE.org independently contracted with two industry experts, Roger Schiffman and Richard Lauckhart, to perform a load flow study using industry standards, based on PSE's own data. The load flow study shows that the need for the project has been **grossly exaggerated**. The study further asserts that PSE has potentially made false claims regarding the threshold compliance requirements. The study shows that PSE has created an impossible set of electrical standards that far exceed federal criteria. See Attachment 2 for a complete copy of the Load Flow Study by Schiffman and Lauckhart.
2. "Significant new circumstances or information" have also arisen in the form of information submitted by Don Marsh on behalf of CENSE.org regarding a proposed Alternative 2B which corrects multiple material deficiencies in Alternative 2 as currently described in the DEIS. The new Alternative 2B proposed by CENSE.org contains new and improved solutions compared with Alternative 2 that it meets the criteria for "significant new information".

**DEIS Should Not Be Accepted by the City of Bellevue**

This DEIS fails to meet the following criteria and must be corrected:

WAC 197-11-420

I223-C-4

I223-C-5

I223-C-5

**"EIS preparation.**

*For draft and final EISs and SEISs:*

*(1) Preparation of the EIS is the responsibility of the lead agency, by or under the direction of its responsible official, as specified by the lead agency's procedures. No matter who participates in the preparation of the EIS, it is the EIS of the lead agency. **The responsible official, prior to distributing an EIS, shall be satisfied that it complies with these rules and the procedures of the lead agency."***

As outlined above, this DEIS does not comply with multiple WAC rules and procedures. As such it cannot be accepted in its current form and content and must be remedied.

**Conclusion**

A DEIS is just that - a DRAFT. Now is the time for the lead governmental agency to correct serious and material deficiencies in the scope of background work, vetting of project criteria. It is also time to overhaul Alternative 2 in a manner that will make it reasonable and realistic. I look forward to seeing the improvements in the final EIS based on my comments as well as the hundreds of comments from CENSE supporters.

----- Forwarded message -----

From: **Christina Aron-Sycz (via Google Docs)** <[aronsycz@gmail.com](mailto:aronsycz@gmail.com)>

Date: Mon, Mar 14, 2016 at 11:10 PM

Subject: DEIS comments by Christina Aron-Sycz

To: [aronsycz@gmail.com](mailto:aronsycz@gmail.com)

Christina Aron-Sycz has attached the following document:

 DEIS comments by Christina Aron-Sycz

Google Docs: Create and edit documents online.



**ARAMBURU & EUSTIS, LLP**

Attorneys at Law

J. Richard Aramburu  
rick@aramburu-eustis.com  
Jeffrey M. Eustis  
eustis@aramburu-eustis.com

720 Third Avenue, Suite 2000  
Seattle, WA 98104  
Tel 206.625.9515  
Fax 206.682.1376  
www.aramburu-eustis.com

March 14, 2016

Carol Helland  
Development Services Land Use Director  
City of Bellevue  
PO Box 90012  
Bellevue, WA 98009

Via Email:  
CHelland@bellevuewa.gov

Heidi Bedwell  
Senior Planner  
City of Bellevue  
450 110<sup>th</sup> Avenue N.E.  
Bellevue WA 98004

Via Email:  
HBedwell@bellevuewa.gov

Re: PSE 230kV Transmission Line Proposal:  
Phase 2 DEIS and Scoping

Dear Ms. Helland:

I224-A-1

As you know, this office represents CENSE, a local community organization concerned with the proposal of PSE to construct new 230 kV transmission lines in the City of Bellevue and other Eastside cities. I have sent several letters to the City identifying how the proposal for consecutive DEIS's is inconsistent with SEPA. The City has decided to ignore my correspondence and other communications from CENSE members and proceed with this inappropriate procedure. I write today to address issues related to the Phase 2 DEIS and Scoping.

I224-A-2

The comment period for the Phase 1 DEIS will close on March 14, 2015. We understand from City correspondence that scoping for the Phase 2 DEIS will begin on April 15, 2015.

Your email to Loretta Lopez dated March 11, 2016 addresses when there will actually be an application for the PSE 230 kV transmission lines proposal. You state that PSE has not applied for a conditional use permit, which you say "will be required once the EIS is complete." In fact, both the SEPA rules and City of Bellevue codes require that

I224-A -1 See response for Key Theme EIS-2.

I224-A -2 See response for Key Theme EIS-2.

March 14, 2016  
Page 2

PSE submit an application for their proposal before scoping begins on the Phase 2 DEIS.

The Phase 1 DEIS describes the Phase 2 DEIS process as follows:

The Phase 2 Draft EIS will be a project-level evaluation, describing impacts at a site-specific and project-specific level. This approach is consistent with the requirements for Phased Review outline in WAC 197-11-060(5)(c),

Page 1-4.

However, the "site-specific and project-specific level" parameters can only be known when a project application has been received from PSE. As you know, per LUC 20.20.255, in the case of a proposal for an "electrical utility facility" on a sensitive site, a conditional use permit application must be filed and reviewed by the City. A conditional use permit is a Process III decision under LUC 20.35.015.D. Procedures for a conditional use permit are found in BMC 20.35.300 through 20.35.365. These procedures include issuance of a notice of application, a "notice of completeness" (LUC 20.35.320.A), a minimum comment period and a public meeting. If "an application is within the jurisdiction of a Community Council," then a public meeting must be held as a part of one of the Community Council's regular meetings. LUC 20.35.327.B.

An additional - and critical - element of a conditional use permit application for an electrical utility facility on a sensitive site is the "Alternative Siting Analysis" required by LUC 20.20.255.D. This "alternative site analysis" requires the following:

the applicant shall identify alternative sites, provide required content showing analysis relating to identified sites, describe technologies considered, and describe community outreach conducted for proposals relating to new or expanding electrical utility facilities on sensitive sites as described in this section.

As noted in LUC 20.20.255.D.1:

Prior to submittal of the application for Conditional Use Permit required pursuant to subsection C of this section, the applicant shall identify not less than three alternative site options to meet the system needs for the proposed new or expanding electrical utility facility. At least one of the alternative sites identified by the applicant shall be located in the land use district to be primarily served by the proposed electrical utility facility.

(Emphasis supplied.) As described above, the Alternative Siting Analysis must be prepared before the conditional use permit application for the 230 kV proposal. As noted, one of the alternative sites must be located in the land use district "primarily served" by the proposal. In this case, PSE has routinely identified Bellevue's downtown

I224-A-2

March 14, 2016  
Page 3

core as its area of substantial growth and thus the area "primarily served" by the 230kV transmission lines.

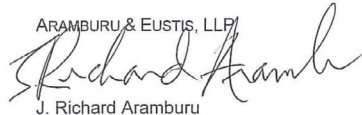
Based on the foregoing, and the recognition that the Phase 2 DEIS will be "site-specific and project-specific," an application by PSE for its proposal must precede scoping for the Phase 2 DEIS. The public, and commenting agencies, must have a proposal to review and consider to determine what environmental impacts and considerations must be reviewed in the "site-specific and project-specific" Phase 2 DEIS. Of particular importance for review is the "Alternative Siting Analysis" that must precede any application.

Accordingly, PSE must submit its conditional use permit application for the transmission lines proposal prior to scoping for the Phase 2 DEIS, including the "Alternative Siting Analysis." The public and commentors must know what the proposal is before proceeding with scoping. Failure to follow these standard SEPA procedures would be clearly illegal and put into jeopardy the entire DEIS process.

I am sending a copy of this letter to Heidi Bedwell for inclusion in comments on the Phase 1 DEIS.

Sincerely,

ARAMBURU & EUSTIS, LLP



J. Richard Aramburu

JRA:cc  
cc: CENSE



**ARAMBURU & EUSTIS, LLP**

Attorneys at Law

J. Richard Aramburu  
rick@aramburu-eustis.com  
Jeffrey M. Eustis  
eustis@aramburu-eustis.com

720 Third Avenue, Suite 2000  
Seattle, WA 98104  
Tel 206.625.9515  
Fax 206.682.1376  
www.aramburu-eustis.com

March 14, 2016

Heidi Bedwell  
Senior Planner  
City of Bellevue  
450 110<sup>th</sup> Avenue N.E.  
Bellevue WA 98004

Via Email:  
HBedwell@bellevuewa.gov

Re: Comments on DEIS for "Energize Eastside" Project.

Dear Ms. Bedwell:

This office represents CENSE, the Coalition of Eastside Neighbors for Sensible Energy, which is concerned with the proposed construction of new 230 kV electric transmission lines through Bellevue and other eastside communities. I write today to comment on the Phase 1 Draft environmental impact statement prepared and circulated on January 28, 2016.

I have previously commented on the scoping process and other elements of the 230 kV transmission proposal. My letters to the city of June 15, 2015, August 27, 2015, and December 23, 2015 are attached and incorporated by reference herein. In addition, questions have arisen as to whether the PSE 230 kV proposal is an "essential public facility" under the Growth Management Act. I have prepared a memo to you on that subject which is also attached hereto.

I224-B-1

My prior correspondence has focused on the seeming unwillingness of the City to give serious consideration to alternatives to address the supposed need for the current proposal. My letter of December 23, 2015, which addressed a DEIS, provided comments on this subject. The City has ignored my correspondence and discussion of alternatives is still insufficient to meet SEPA requirements. The DEIS, while hundreds of pages long, still does not provide the kind of detailed review and analysis necessary to meet SEPA requirements for discussion of alternatives.

I224-B-2

In addition, the process of preparing two consecutive draft environmental impact statements before a final environmental impact statement is prepared is unprecedented and inconsistent with SEPA regulations, as indicated in my June 15, 2015 letter

I224-B -1 See response for Key Theme EIS-2.

I224-B -2 See response for Key Theme EIS-2.



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Page 2

attached hereto. In my forty years of working with SEPA, I have never encountered the bizarre proposition that two DEISs will be prepared before a FEIS. This orderly process that has been a part of the SEPA Rules for more than thirty years is that a non-project DEIS and FEIS are prepared to consider a "programmatic" decision. Indeed, pages 1-13 of the DEIS confirms this procedure. But this procedure requires a decision on the programmatic elements, here whether the claimed need can be met by conservation and demand response or whether the 230 kV Transmission lines or other alternatives are appropriate. Only when a decision is made on the program to be adopted is further SEPA review contemplated on a site specific "project-level" action.

The adoption of the concept of preparing two DEISs, one after the other, also violates another fundamental tenet of SEPA. No decision regarding non-project proposals can be made without full SEPA compliance, which of course includes the preparation of a final EIS. As stated in WAC 197-11-443:

(2) A nonproject proposal may be approved based on an EIS assessing its broad impacts. When a project is then proposed that is consistent with the approved nonproject action, the EIS on such a project shall focus on the impacts and alternatives including mitigation measures specific to the subsequent project and not analyzed in the nonproject EIS. The scope shall be limited accordingly. Procedures for use of existing documents shall be used as appropriate, see Part Six.

I224-B-2

In the present case, no programmatic decision can be made absent the preparation of a final EIS. However, as stated at page 1-4 of the DEIS:

The Phase 1 Draft EIS broadly evaluates the general impacts and implications associated with feasible and reasonable options available to address PSE identified objectives for the project. The evaluations conducted during Phase 1 will be used to narrow the range of alternatives for consideration in the Phase 2 Draft EIS. The approach is consistent with the requirements for Phased Review outlined in WAC 197-11-060(5)(c).

(Emphasis supplied.) WAC 197-11-060(5)(c) provides as follows:

- (5) Phased review.
- (a) Lead agencies shall determine the appropriate scope and level of detail of environmental review to coincide with meaningful points in their planning and decision-making processes. (See WAC 197-11-055 on timing of environmental review.)
- (b) Environmental review may be phased. If used, phased review assists agencies and the public to focus on issues that are ready for decision and exclude from consideration issues already decided or not yet ready. Broader environmental documents may be followed by narrower documents, for example,

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Page 3

that incorporate prior general discussion by reference and concentrate solely on the issues specific to that phase of the proposal.

(c) Phased review is appropriate when:

(i) The sequence is from a nonproject document to a document of narrower scope such as a site specific analysis (see, for example, WAC 197-11-443 ); or

(ii) The sequence is from an environmental document on a specific proposal at an early stage (such as need and site selection) to a subsequent environmental document at a later stage (such as sensitive design impacts).

I224-B-2

As stated, the apparent intention is to select the alternative which will undergo detailed consideration by staff and which will then be the subject of the Phase II DEIS. However, it would be illegal and inconsistent with SEPA to make this important decision without the FEIS required by SEPA.

The City should proceed to prepare the required final EIS on the programmatic aspect of the project before proceeding to narrow options for site-specific review.

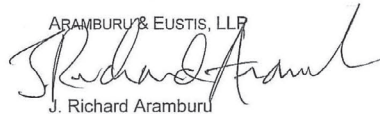
In addition, CENSE's December 23, 2015 letter, attached hereto, made specific reference to the then-pending 7<sup>th</sup> Pacific Northwest Power Plan. Since that letter the Plan has been formally adopted. See <http://www.nwcouncil.org/energy/powerplan/7/home/>. The plan makes clear that conservation, demand response and gas turbines can meet electric need over the next twenty years. Claims by PSE that such efforts will not reduce incremental load are simply incorrect.

I224-B-3

Thank you for this opportunity to comment on the Phase 1 DEIS.

Sincerely,

ARAMBURU & EUSTIS, LLP



J. Richard Aramburu

JRA:cc  
cc: CENSE

I224-B -3 See response for Key Theme ALT-1.

COMMENT

RESPONSE

**From:** [Loretta Lopez](#)  
**To:** [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov); [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** RE: Comments to DEIS PROPOSED PSE Project/Citation to federal standards  
**Date:** Monday, March 14, 2016 4:35:06 PM

My address is  
 13419 NE 33<sup>rd</sup> Lane Bellevue WA 98005

**From:** Loretta Lopez  
**Sent:** Monday, March 14, 2016 4:05 PM  
**To:** HBedwell@bellevuewa.gov; 'info@EnergizeEastsideEIS.org'  
**Subject:** Comments to DEIS PROPOSED PSE Project/Citation to federal standards

The DEIS states that based upon federally mandated planning standards PSE analysis found the existing transmission lines could place Eastside customers at risk of power outages. Page 1.2

There is no footnote which sets forth the citation to the federally mandated planning standards. The DEIS should contain a specific citation to the federal standards. The reason: Then all readers can go directly to the source and read the standards.

What is the specific citation to federal standards?

Loretta Lopez

Bridle Trails Community Club, Vice President

CENSE Member

I225-A -1 See response for Key Theme OBJ-2.

I225-A-1



**From:** [Loretta Lopez](#)  
**To:** [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov); [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Comments to DEIS PROPOSED PSE Project/January 28 DEIS/1.5 paragraph 4  
**Date:** Monday, March 14, 2016 5:42:56 PM

According to DEIS, the set of facilities is proposed in order to address a deficiency that PSE has identified by PSE through its system planning process. Page 1.1

The DEIS states that the deficiency is based upon a number of factors. Page 1-5. The DEIS continues that deficiency arises from growing population and employment, changing consumption patterns associated with large buildings, more air conditioned space and a changing regulatory structure that requires a higher level of reliability than what was required in the past. Page 1.5. Paragraph 4.

What is the basis for the statement regarding changing patterns of consumption associated with larger buildings?

What is the source of information regarding more air conditioned space?

What are the specific regulatory changes that require higher reliability than what was required in the past? What is the specific set of citations?

Loretta Lopez

13419 NE 33<sup>rd</sup> Lane  
 Bellevue Wa 98005

Bridle Trails Community Club, Vice President

CENSE Member

I225-B -1 See response for Key Theme OBJ-2.

I225-B-1

**From:** [Loretta Lopez](#)  
**To:** [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov); [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** Comments to DEIS PROPOSED PSE Project/January 28 DEIS/Page 1-5 P 5/Growth  
**Date:** Monday, March 14, 2016 6:15:12 PM

The DEIS states that the population of the Eastside is expected to grow at a rate of approximately 1.2 percent annually over the next decade and employment is expected to grow at an annual rate of approximately 2.1 per cent, a projection based upon internal forecasting conducted by PSE. Page 1-5 paragraph 5.

The DEIS continues and states that PSE used demographic data based upon based on U.S. Census Information and the Puget Sound Regional Council. Page 1-5

Both organizations publish many reports. What is the specific document or report published by the U.S. Census Information and the Puget Sound Regional Council that PSE relied upon? Did anyone other than PSE employees review the information which formed the basis of PSE's assertions as set forth above regarding population growth? If so, who reviewed?

The DEIS further states that PSE relies on Moody's Analytics U.S. Macroeconomic Forecast, a long term forecast for the U.S. Economy with adjustments for PSE's service territory using equations that relate to national to regional conditions. Page 1-5.

I225-C-1

What is the date and year of the Moody's Macroeconomic Forecast that PSE relied upon? What equations did PSE use to relate national to regional conditions? Did anyone other than PSE employees review the equations and check the results that PSE used to relate national to regional conditions? If so, who reviewed?

Did anyone other than PSE employees review the information which formed the basis of PSE's assertions as set forth above regarding population growth? If so, who reviewed?

The DEIS continues with local economic data are provided by the Washington State Department Employment Security Department, U.S. Bureau of Labor Statistics and Bureau of Economic Analysis, and local organizations such as the Washington Builders Association. Page 1-5

What are the citations to the specific information or reports that PSE relied upon?

The DEIS states: "This forecast is based upon the assumption that economic activity has a significant effect on energy demand. Given the nature of expected development, PSE has projected that electrical demand will grow at an annual rate of 2.4 percent."

Is "forecast" stated in the DEIS statement above referring to PSE's population forecast. PSE's employment forecast, PSE's energy demand forecast?

Loretta Lopez

13419 NE 33<sup>rd</sup> Lane  
 Bellevue Wa 98005

Bridle Trails Community Club, Vice President

CENSE Member

I225-C -1 See response for Key Theme OBJ-2.

I225-D -1 See response for Key Theme EIS-2.

**From:** [Loretta Lopez](mailto:Loretta.Lopez@energizeeastside.org)  
**To:** [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov); [info@energizeeastside.org](mailto:info@energizeeastside.org)  
**Subject:** Comments to DEIS PROPOSED PSE Project/January 28 DEIS/RCW/WAC Need  
**Date:** Monday, March 14, 2016 6:40:06 PM

The DEIS states that the EIS will not be used to reject or validate the need for the proposal. Rather, the EIS is intended to identify the alternatives that could attain or approximate PSE's objectives at a lower environmental cost and disclose potential significant adverse environmental impacts associated with all alternatives identified. Page 1-5

If the information cannot be validated or checked then this means that PSE's assertions cannot be questioned. If this were the case, that citizens cannot question PSE assertions, then it would be impossible to suggest or assess Alternatives. The reason: One cannot determine a solution to a problem if one cannot understand the problem or analyze the problem. This is inconsistent with the purpose of SEPA.

What is the citation to the RCW or the WAC which supports the statement that "the EIS will not be used to reject or validate the need for the proposal?"

Loretta Lopez

13419 NE 33<sup>rd</sup> Lane  
 Bellevue Wa 98005

Bridle Trails Community Club, Vice President

CENSE Member

I225-D-1

I225-E-1

**From:** [Loretta Lopez](mailto:Loretta.Lopez@energizeeastside.org)  
**To:** [HBodwell@bellevuewa.gov](mailto:HBodwell@bellevuewa.gov); [info@energizeeastside.org](mailto:info@energizeeastside.org)  
**Subject:** Comments to DEIS PROPOSED PSE Project/January 28 DEIS/Request for clarification  
**Date:** Monday, March 14, 2016 7:08:30 PM

Don Marsh, President of CENSE has repeatedly asked for information from PSE supports PSE's assertions about Need. See stream of email messages attached below to this email. Email from Don Marsh to Jens Nedrud 1/18/16, 1/25/16, 1/26/16 and 1/29/16,

PSE bases, in part, its refusal to provide information upon CEII requirements. Section 1-3, page 1-4.

Citizens cannot assess PSE's assertions of need without the access to information. The City states it cannot release the information. See email 2/23/16 message from Carol Helland to Loretta Lopez in email stream below.

I request that the City of Bellevue, determine a method for providing the information that Don Marsh has requested in his emails which are forth below.

Loretta Lopez

13419 NE 33<sup>rd</sup> Lane  
 Bellevue Wa 98005

Bridle Trails Community Club, Vice President

CENSE Member

**From:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov) [mailto:CHelland@bellevuewa.gov]  
**Sent:** Tuesday, February 23, 2016 3:08 PM  
**To:** Loretta Lopez  
**Subject:** RE: PSE Refusal to provide information#2

Apologies Loretta for the delay. The issue that you raised about information sharing was previously responded to as part of the City Attorney's reply to Rich Aramburu. Specifically, the City Attorney included the following information in her October 23, 2015, letter.

[4. Access to Critical Energy Infrastructure Information](#)

Stantec plays an important role on the EIS team as reviewer of the utility planning and operations information associated with PSE's electrical utility system that is protected as Critical Energy Infrastructure Information (as such term is defined in 18 C.F.R. 388.113 or as amended, otherwise known as CEII). The City is precluded from releasing un-redacted utility planning and operation information protected by federal law, therefore we are unable to comply with your request that we produce the CEII document related to this project. This does not mean that the information is unavailable to your clients. The information reviewed by Stantec is available upon request from PSE with appropriate advance security clearance. PSE has a standardized security screening process in place to assist in providing access to un-redacted information. We understand that there is some ongoing disagreement between PSE and CENSE about PSE's screening process impacting your client's ability to access the documents, however the City does not have authority to resolve that disagreement. Parties interested in reviewing the protected utility planning and operations information associated with PSE's electrical utility system, can request a security clearance from NERC.

One of the reasons that Stantec was included on the EIS consultant team was to evaluate the process utilized by PSE to model operation of their electrical system. Reviewers that are either unable to secure CEII clearance or unwilling to go through the necessary security steps should review the materials prepared by Stantec as a component of the development of the DEIS. With respect to the "need" question, PSE is a privately held regulated utility, and as such they are responsible for identifying the objectives they are trying to achieve with their proposed project. That said, I have forwarded to your comment regarding consultation on to the City Attorney and to Nicholas and Kate.

Regards, Carol

**From:** Loretta Lopez [mailto:loretta@mstarlabs.com]

I225-E -1 See responses for Key Theme OBJ-1 and Key Theme EIS-2.



**Sent:** Tuesday, February 23, 2016 12:51 PM  
**To:** Helland, Carol <CHelland@bellevuewa.gov>  
**Subject:** RE: PSE Refusal to provide information#2

Carol,

I am checking on whether you received my message below.

Please let me know that you received it.

Loretta

PS I was at the City Council meeting last night. I was surprised to hear Nicolas Matz and Kate Berens response regarding the issue of Need for PSE project. Their position is that the neither the City nor the public can question the Need for the project. I suggest that they consult with the City Attorney for clarification and provide substantive legal support for advice to the City Council.

---

**From:** Loretta Lopez  
**Sent:** Friday, February 19, 2016 11:01 AM  
**To:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)  
**Subject:** PSE Refusal to provide information

Carol,

Don Marsh has repeatedly asked for information from PSE. See the stream of email messages below. PSE has not provided the information.

The information Don Marsh is requesting is necessary for citizens to understand the basis of PSE's assertions. The City has a responsibility to require PSE to provide information to support its position that there is a need for the proposed project.

PSE refusal to respond to Don's question is unacceptable. PSE cannot assert that its position is true and expect citizens to accept without question.

We request that you, as the Environmental Coordinator for this EIS, require PSE to respond to Don's requests.

Thank you.

Loretta

---

**From:** Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]  
**Sent:** Thursday, February 11, 2016 11:19 AM  
**To:** 'Don Marsh' <[don.m.marsh@hotmail.com](mailto:don.m.marsh@hotmail.com)>; Pravitz, Keri <[Keri.Pravitz@pse.com](mailto:Keri.Pravitz@pse.com)>  
**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov); [BMiyake@bellevuewa.gov](mailto:BMiyake@bellevuewa.gov); [MKBerens@bellevuewa.gov](mailto:MKBerens@bellevuewa.gov)  
**Subject:** RE: Two questions regarding Eastside need

Don -

It is apparent from your response that we are at a point where continued email exchanges are not helpful. I have done my best to explain complex issues in a way that you can understand, and clearly that is not working. All the experts agree that the need has been established.

On other issues you may wish to engage in the public process - currently there is a public comment period for Phase I of the Draft Environmental Impact Statement in which you can participate - please see the cities' [EnergizeEastsideEIS.org](http://EnergizeEastsideEIS.org) website.

Sincerely,  
Jens

**Jens Nedrud, P.E.**

Senior Project Manager

**energizeEASTSIDE**

PUGET SOUND ENERGY

PO Box 97034, EST03W, Bellevue, WA 98009

d (425) 462-3818 | c (425) 533-5307 | [jens.nedrud@pse.com](mailto:jens.nedrud@pse.com)

The Energize Eastside project is undergoing environmental review, which includes preparation of a Washington State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS). The City of Bellevue is leading the EIS process in cooperation with Kirkland, Newcastle, Redmond and Renton. The City of Bellevue and the coordinating jurisdictions published the Phase 1 Draft EIS on Jan. 28, 2016. The public comment period for the Phase 1 Draft EIS ends on Monday, March 14, 2016. For more information on the EIS and to submit comments to be included as part of the EIS and the public record, please visit [EnergizeEastsideEIS.org](http://EnergizeEastsideEIS.org).

Please note:

- The City of Bellevue is leading the SEPA EIS process. No comments or questions submitted to Puget Sound Energy will be considered part of the EIS. To submit comments as part of the EIS, please visit [EnergizeEastsideEIS.org](http://EnergizeEastsideEIS.org).
- For background information about the Energize Eastside project, please visit [pse.com/energizeeastside](http://pse.com/energizeeastside) or refer to the project's [Frequently Asked Questions](#).

**From:** Don Marsh [<mailto:don.m.marsh@hotmail.com>]

**Sent:** Friday, January 29, 2016 8:25 AM

**To:** Nedrud, Jens V; Pravitz, Keri

**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov); [BMiyake@bellevuewa.gov](mailto:BMiyake@bellevuewa.gov); [MKBerens@bellevuewa.gov](mailto:MKBerens@bellevuewa.gov)

**Subject:** RE: Two questions regarding Eastside need

Dear Jens,

Thank you for your lengthy (and quick) response. You have explained a bit of your methodology. However, there are still some things that are not made clear in your answers or the studies you mention:

1. Did you or your team personally review each of the 6.25 million contingency cases that you simulated to determine the system capacity line?
2. If not, how many of the cases were reviewed?
3. Was the system capacity determined by the worst case you observed, or did you combine some number of cases to calculate the capacity?
4. In any system that has a limited capacity, the limit is usually determined by one or two "weak links." For example, my car engine may be able to go 100 mph, but if my tires are only rated for 90 mph, that's as fast as my car can go. I must ask again, is the system capacity limited by the two 230 kV transformers that are overloading, or is there some other component of the system that is limiting the total capacity?

Your answers to these questions are important, because neither PSE, Quanta, Utility System Efficiencies, nor Stantec has described the methodology used to produce the result. If the need for the project is as obvious as you claim, and if the methodology is as solid as you imply, then we should be satisfied as soon as we know these details.

We seem to have different interpretations of the FERC ruling on our complaint. You have focused on one part of FERC's ruling, but we think the following conclusion is important: "The record before us shows that the Energize Eastside Project is located completely within Puget Sound's service territory, ... and that neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation; therefore, the project is not subject to the Order No. 1000 regional approval process." In other words, FERC dismissed the case at least partly because the

commission lacked jurisdiction. FERC did not say PSE is correct in its assertion that it must transmit electricity to Canada under all conditions. In fact, FERC seems to think that the project will play no significant role in regional transmission.

Your email says PSE must participate in "regional power flows" that are not optional. Your consultant, Mark Williamson, told the Newcastle Planning Commission that the project has nothing to do with Canada, and that there are better ways to transmit energy to Canada than pushing it through the Eastside. Can you explain these apparent contradictions?

It is also puzzling to us that you seem unaware that the NERC Reliability Coordinator headquartered in Vancouver, Washington would cut power flows to Canada within minutes if an N-1-1 emergency occurred during peak winter loads. Do you assert that the coordinators responsible for grid reliability would force you to overload your transformers to continue transmitting a large flow of electricity to Canada when it isn't required to keep lights on in British Columbia?

Sincerely,  
Don Marsh

---

**From:** Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]

**Sent:** Thursday, January 28, 2016 4:24 PM

**To:** 'Don Marsh' <[don.m.marsh@hotmail.com](mailto:don.m.marsh@hotmail.com)>; Pravitz, Keri <[Keri.Pravitz@pse.com](mailto:Keri.Pravitz@pse.com)>

**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov); [BMiyake@bellevuewa.gov](mailto:BMiyake@bellevuewa.gov); [MKBerens@bellevuewa.gov](mailto:MKBerens@bellevuewa.gov)

**Subject:** RE: Two questions regarding Eastside need

Don,

I am sorry you do not think we have answered your questions; I do know that we have discussed these very issues with you and your CENSE colleagues several times. Perhaps this is a case of not understanding the answers. Therefore, in an effort to explain our answers to you again, I have addressed each question below.

**Question 1:** "Is this capacity determined by adding the capacities of the two 230/115 kV transformers that would serve the Eastside in the event of an N-1-1 outage of the other two transformers?"

**ANSWER: The simple, non-technical answer is No.** The system capacity lines on the graph were NOT determined by the ratings of the two 230 kV transformers. They were determined from power flow studies as a result of simulating approximately 6.25 million contingencies. As we have previously discussed, the "system capacity" or "level of concern" shown on the graph relates to system performance primarily under N-1-1 or N-2 contingency conditions as required by federal mandates. After my colleagues met with John Merrill and Steve O'Donnell some time ago, you even acknowledged your understanding of this in emails you exchanged with us.

The system capacity range of 688 MW to 708 MW is based on power flow studies. PSE's power flow studies are conducted pursuant to mandatory federal regulations with the assistance of nationally recognized system planning experts using industry established study protocols. There is no simple "adding" of nameplate capacities of transformers in power flows studies. Power flow equations are non-linear which requires a numerical iterative solution to solve such equations. The equations use complex numbers (vectors), which include magnitudes and phase angles in determining the power flows.

Also, your continued insistence that PSE can eliminate the power flows to Canada shows your misunderstanding of electric system planning and its mandatory regulations. All regional power flows are included in the base cases from WECC and ColumbiaGrid. They are required to be included in PSE's load flow studies, as the electrical system serving the Eastside is part of the regionally integrated electric system. It is not optional. We have explained this to you numerous times and FERC agreed with our methodology in dismissing your complaint regarding our planning process.

**Question 2:** "...is about the "Customer Demand" level shown at approximately 580 MW in 2014. Is this number based on a measurement of the demand on the two transformers calculated by a load flow

simulation of the N-1-1 contingency? Or is it the summation of loads on individual Eastside substations?"

**ANSWER: The 2014 customer demand value is NOT based on loads on the remaining two 230 kV transformers or the summation of loads on substation transformers.** Customer Demand value is a **forecasted** value; please note the chart is labeled as "Customer Demand Forecast." As we have explained multiple times, PSE's corporate load forecast process has been performed for many years and the results have served PSE customers well. Our forecasts are a complex econometric model that takes into account not just historical data but a variety of other inputs, such as information about regional and national economic growth, demographic changes, weather, prices, seasonality, and other customer usage and behavior factors. Growth data used in the studies were primarily provided by **third party agencies**, such as the PSRC and Eastside jurisdictions. The usage data appropriate to producing a valid electric load forecast is incorporated, along with all other appropriate forecasting data, in the PSE load forecast. The same data has been reviewed by Bellevue's consultant, Utility System Efficiencies, Inc. (USE), as part of the "Independent Technical Analysis of Energize Eastside" commissioned by Bellevue for reviewing the project. The result of their analysis is consistent with PSE's load forecasts and confirmed the need for the project.

To explain further, the data is split: Actuals in winter 2013-14 and Forecasted in winter 2014-15. You can see this more clearly in USE's report, page 33, Figure 6.19. Due to the split, PSE considers the graph you have attached for 2014 Customer Demand Forecast as a **Forecast**, and is labeled as such. To clarify further, actuals for 2013 and before are noted in USE's Report on page 33. It is the actual peak loadings of substations on the Eastside. The specific list of substations and their peak loadings is confidential.

I cannot emphasize enough, the Forecasted customer demand is what we are required to use in meeting our mandatory federal planning requirements. Your list of questions regarding electric system planning and customer demand forecast leads me to believe you misunderstand the regulatory requirements regarding how utilities study and plan electric power systems. You appear to be confusing the operation of the electric system with planning of the electric system. PSE is required to comply with mandatory planning standards, which includes planning to **Forecasted numbers**. Independently, PSE's electrical operations department operates the system on a day-to-day basis based on actual conditions and expected load levels.

Regarding your request for experts to see the data and results, this has been accomplished. Multiple experts in power system engineering and transmission planning have reviewed, studied and confirmed the need for this project. Five total studies have been completed, three of which were publically funded. USE, Bellevue's analyst, was one of those five and not only reviewed PSE's studies (as mentioned previously in this response) but also performed studies of their own which showed there was a clear need for the project, and even if you change some of the assumptions, there are still overloads.

As previously stated, the Federal Energy Regulatory Commission (FERC), dismissed your complaint and determined that PSE complied with the mandatory federal requirements in evaluating the Energize Eastside project. In short, the experts have reviewed the studies and confirmed that the project is needed.

I truly hope this provides some clarity for you.

Sincerely,

Jens

**Jens Nedrud, P.E.**

Senior Project Manager

**energizeEASTSIDE**

PUGET SOUND ENERGY

PO Box 97034, EST03W, Bellevue, WA 98009

d (425) 462-3818 | c (425) 533-5307 | [jens.nedrud@pse.com](mailto:jens.nedrud@pse.com)

The Energize Eastside project is undergoing environmental review, which includes preparation of a Washington State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS). The City of Bellevue is leading the EIS process in cooperation with Kirkland, Newcastle, Redmond and Renton. For more information on the EIS, please visit [EnergizeEastsideEIS.org](http://EnergizeEastsideEIS.org).

Please note: Inquiries made to Puget Sound Energy will not be included as part of the EIS process.

**From:** Don Marsh [<mailto:don.m.marsh@hotmail.com>]

**Sent:** Tuesday, January 26, 2016 10:11 AM  
**To:** Nedrud, Jens V; Pravitz, Keri  
**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov); [BMiyake@bellevuewa.gov](mailto:BMiyake@bellevuewa.gov); [MKBerens@bellevuewa.gov](mailto:MKBerens@bellevuewa.gov)  
**Subject:** RE: Two questions regarding Eastside need

Dear Jens,

Your reply did not answer our specific questions.

We are asking to what extent the system capacity line is determined by the ratings of the two operational transformers. We are also asking what the **2014** customer demand value is based on: loads on the remaining two 230 kV transformers or the summation of loads on substation transformers?

The answers to these questions are not contained in your previous replies or the studies you mentioned. Bellevue's analyst, USE, performed a load flow study that showed four of the five overloads identified in the Quanta study were eliminated if 1,500 MW of energy transmitted to Canada were removed from the study assumptions. Other than that interesting finding, USE only examined the *process* used to produce the Eastside Needs Assessment, not the underlying *data*. Stantec performed no independent analysis of the data, but again rubber-stamped the process.

The questions we ask are practically the most basic questions that one can ask about this graph. They should not be hard to answer.

The ratepayers who will pay nearly a billion dollars for this project over the next 40 years deserve to understand the case you are making for the need. If you believe the data and the methodology are too complex for us to understand, you must allow our experts to verify that.

**Please respond more precisely or grant our experts clearance to see your data.**

Sincerely,

Don Marsh

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**From:** Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]  
**Sent:** Monday, January 25, 2016 12:43 PM  
**To:** 'Don Marsh'; Pravitz, Keri  
**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov); [BMiyake@bellevuewa.gov](mailto:BMiyake@bellevuewa.gov); [MKBerens@bellevuewa.gov](mailto:MKBerens@bellevuewa.gov)  
**Subject:** RE: Two questions regarding Eastside need

Don,

Perfect timing, I was just hitting send on my response. Regarding your latest inquiry, our team has provided responses to these same questions for you in the past; the answers have not changed.

As we previously told you, the "system capacity" or "level of concern" shown on the graph relates to system performance primarily under N-1-1 or N-2 conditions as required as part of the federal mandates. The N-1-1 and N-2 system capacity level is dependent on system conditions and system topology as it is anticipated to exist at the time of modeled contingencies. This is explained in the Needs Assessment. The usage data appropriate to producing a valid electric load forecast is incorporated, along with all other appropriate forecasting data, in the PSE load forecast. The same data has been reviewed by Bellevue's consultant U.S.E. as part of the "Independent Technical Analysis of Energize Eastside" commissioned by Bellevue for reviewing the project. The result of their analysis is consistent with PSE's load forecasts and confirmed the need for the project.


And, as we have previously advised you many times, the customer demand you ask about is "Customer Demand Forecast." PSE's corporate load forecast process has been performed for many years and the results have served PSE customers well. As we have discussed before, the process utilizes historic data and the latest information available at the time as well as captures achievable conservation potential. Growth

data used in the studies were primarily provided by third party agencies, such as the PSRC and Eastside jurisdictions. PSE's studies are conducted pursuant to mandatory federal regulations with the assistance of nationally recognized system planning experts using industry established study protocols. As you also may know, the Federal Energy Regulatory Commission confirmed this in its ruling in dismissing CENSE's complaint and stating PSE complied with the transmission planning responsibilities in proposing and evaluating the Energize Eastside Project.

The need for Energize Eastside has not changed; the need is driven by PSE's responsibility to comply with federal rules. Five studies have been completed – two by PSE and three by independent consultants – that all confirm the need for the Energize Eastside project.

Respectfully,

Jens

**Jens Nedrud, P.E.**  
Senior Project Manager  
 **ENERGIZE EASTSIDE**  
PUGET SOUND ENERGY  
PO Box 97034, EST03W, Bellevue, WA 98009  
d (425) 462-3818 | c (425) 533-5307 | [jens.nedrud@pse.com](mailto:jens.nedrud@pse.com)

The Energize Eastside project is undergoing environmental review, which includes preparation of a Washington State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS). The City of Bellevue is leading the EIS process in cooperation with Kirkland, Newcastle, Redmond and Renton. For more information on the EIS, please visit [EnergizeEastsideEIS.org](http://EnergizeEastsideEIS.org).

Please note: Inquiries made to Puget Sound Energy will not be included as part of the EIS process.

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**From:** Don Marsh [<mailto:don.m.marsh@hotmail.com>]  
**Sent:** Monday, January 25, 2016 12:39 PM  
**To:** Nedrud, Jens V; Pravitz, Keri  
**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov); [BMiyake@bellevuewa.gov](mailto:BMiyake@bellevuewa.gov); [MKBerens@bellevuewa.gov](mailto:MKBerens@bellevuewa.gov)  
**Subject:** RE: Two questions regarding Eastside need

Dear Jens and Energize Eastside team,

Seven days ago, I sent you two basic questions about a graph showing the Eastside Customer Demand Forecast. This is the graph PSE has been used to illustrate the need for Energize Eastside for the past two years. It still appears on the Energize Eastside website today: <http://www.energizeeastside.com/need>.

I am puzzled why I haven't received a response. No acknowledgment of my email. No estimate of when you will provide answers. Just silence.

Since this graph is fundamental to our understanding of the project need, it is important for people to know what they're looking at. We need a level of transparency and critical review that has not yet happened. We have asked PSE to allow well-qualified industry experts engaged by CENSE to examine your data and verify that the need exists. Only then can we be satisfied that this project (or a less expensive, less damaging alternative) benefits the Eastside.

Sincerely,

Don Marsh, President  
CENSE.org

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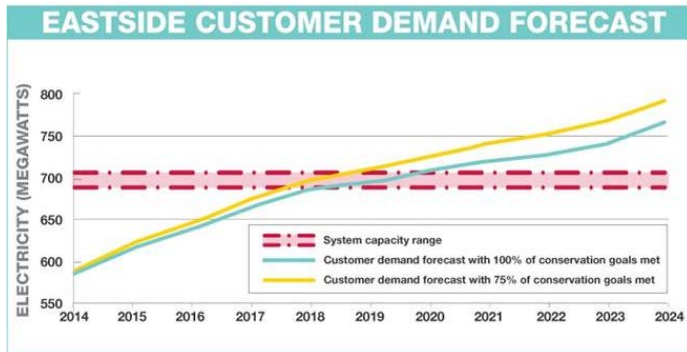
**From:** Don Marsh [<mailto:don.m.marsh@hotmail.com>]  
**Sent:** Monday, January 18, 2016 8:49 AM

To: 'Nedrud, Jens V'; 'Pravitz, Keri'  
 Cc: [council@bellevuewa.gov](mailto:council@bellevuewa.gov); [BMiyake@bellevuewa.gov](mailto:BMiyake@bellevuewa.gov); [MKBerens@bellevuewa.gov](mailto:MKBerens@bellevuewa.gov)  
 Subject: Two questions regarding Eastside need

Dear Jens and Energize Eastside team,

In preparation for the release of the Draft EIS later this week, we have two basic questions regarding the Eastside Customer Demand Forecast. I am copying council members and the city manager on this email, so we can all appreciate the timeliness and thoroughness of your response.

Our first question is about the "System Capacity" line shown at approximately 700 MW in this graph:



Is this capacity determined by adding the capacities of the two 230/115 kV transformers that would serve the Eastside in the event of an N-1-1 outage of the other two transformers?

Our second question is about the "Customer Demand" level shown at approximately 580 MW in 2014. Is this number based on a measurement of the demand on the two transformers calculated by a load flow simulation of the N-1-1 contingency? Or is it the summation of loads on individual Eastside substations? If so, which substations were included in this summation? Were those loads measured on a particular date, or calculated as a peak or average of some number of samples?

We seek timely answers to these questions of methodology because we have a limited time to comment on the Draft EIS after it is issued this week. As you know, this phase of the EIS establishes the need for the project and the viability and desirability of project alternatives. Transparent information is needed so that all stakeholders can be sure we are appropriately addressing our need for reliable power and properly evaluating solutions that maximize cost effectiveness and environmental responsibility.

Sincerely,

Don Marsh, President  
 CENSE.org

**From:** [Loretta Lopez](#)  
**To:** [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov); [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** Comments to DEIS PROPOSED PSE Project/January 28 DEIS/Authority for Phased EIS  
**Date:** Monday, March 14, 2016 7:32:37 PM

The DEIS states that the Phase 1 Draft EIS broadly evaluates the general impacts and implications associated with feasible and reasonable options available to address PSE 's identified objectives for the project. The evaluations conducted during Phase 1 to will be used to narrow the range of alternatives for consideration in Phase 2 Draft EIS. Section 1-2, page 1-4

The City of Bellevue's decision to refusal to issue a Final Decision after Phase 1 prevents citizens from addressing the problem regarding the lack of appropriate Alternatives and to assess the big picture issue of Need until end of Phase 2. The decision to conduct the EIS in consecutive phases without a Final Decision after Phase 1 is an unwise use of time, energy and taxpayer and rate payer's money.

What is the specific citation to an RCW or WAC which supports the basis of the City's decision to conduct the EIS in this manner?

The DEIS continues and states that the Phase 2 Draft EIS will be a project level evaluation, describing impacts a site specific and project- specific level. Section 1-2, page 1-4.

I assume that this statement means that the citizens will know the exact route and will know exactly which trees will be cut. PSE, however, has not yet filed an application for a permit for this project. And according to Carol Helland, City of Bellevue, PSE will not file an application until PSE applies for a conditional use permit. See email 3/11/16 from Carol Helland.

How will the citizens know the project specific details of the proposed project if there is no application filed? How can PSE assess the information submitted in Phase 1 and plan to issue scoping for Phase 2 on April 8 in such a short amount of time? Is this possible due to the lack of specific information? If so, then why have citizens been told that the site specific details will be addressed in Phase 2?

\*\*\*\*\*  
**From:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov) [mailto:CHelland@bellevuewa.gov]  
**Sent:** Friday, March 11, 2016 7:39 PM  
**To:** Loretta Lopez  
**Subject:** Re: PSE Application

PSE filed an application for an EIS, which is customary for a project that ends up with a determination of significance. They have not formally submitted for a conditional use permit (which will be required once the EIS is complete).

Once an application for a conditional use permit is filed, a notice of the application will go out broadly. Hope this information is useful.

Carol Helland

On Mar 11, 2016, at 7:08 PM, Loretta Lopez <[loretta@mstarlabs.com](mailto:loretta@mstarlabs.com)> wrote:

Carol,

I assume that PSE has not yet filed and application. Is this correct?

Would you let me know as soon as PSE files an application.

Thank you.

I225-F -1 See response for Key Theme EIS-2.

I225-F -2 See response for Key Theme EIS-2.

I225-F-1

I225-F-2





COMMENT

RESPONSE

Loretta  
.....

Loretta Lopez

13419 NE 33<sup>rd</sup> Lane  
Bellevue Wa 98005

Bridle Trails Community Club, Vice President

CENSE Member

From: [Loretta Lopez](#)  
 To: [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov); [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
 Subject: Comments to DEIS PROPOSED PSE Project/January 28 DEIS/NW 7th Power Plan  
 Date: Monday, March 14, 2016 8:04:42 PM

The DEIS states that PSE has determined that there is a deficiency in electrical transmission capacity and that the PSE proposed project of building 18 miles of 230KV transmission lines is the solution. Page 1-1

The City and PSE refuse to acknowledge that that growth and demand will not be as great at PSE asserts.

I225-G-1

Recently, the Northwest's official power planning agency – the Northwest Power and Conservation Council -- conducts a fresh assessment of the region's long-term electricity needs and issues a blueprint for meeting them. This year the Council released the 7<sup>th</sup> Northwest Power Plan  
<https://www.nwcouncil.org/energy/powerplan/7/home/>

This plan establishes that the need for power can be met with a combination of demand response, conservation, new technology.

Loretta Lopez

13419 NE 33<sup>rd</sup> Lane  
 Bellevue Wa 98005

Bridle Trails Community Club, Vice President

CENSE Member

I225-G -1 See response for Key Theme OBJ-1.

**From:** [Loretta Lopez](#)  
**To:** [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov); [info@energizeeastsideeis.org](mailto:info@energizeeastsideeis.org)  
**Subject:** Comments to DEIS PROPOSED PSE Project/January 28 DEIS/City review of process  
**Date:** Monday, March 14, 2016 8:23:15 PM

The DEIS states that the purpose of this EIS is not to determine whether the project is needed, but to confirm that the methods used to define the need are consistent with industry standards and generally accepted methods. After determining that PSE's evaluation process has been conducted according to industry standards, the lead agency and the partner cities... Section 1.12.1, page 1-56.

I225-H-1

Does this statement mean that the Cities only reviewed the process but not the actual data? And if the data was reviewed who reviewed it? The City of Bellevue does not have anyone on its staff who has the technical expertise to review the data.

The DEIS continues and states that the Cities have worked to understand the nature of the need that PSE has identified and to look broadly at the possible alternatives that could address the need. Section 1.12.1, page 1-56.

The citizens also want to understand the nature of the need in order to review alternatives. The City of Bellevue, as the lead agency, has refused to allow the citizens the ability to understand the need.

I225-H-2

I request that the City of Bellevue, as lead agency, facilitate and require the release of information from PSE. The City continues to assert that PSE is a private company and it (City) cannot regulate PSE. PSE plans to use our community to build the lines it chooses. It is unacceptable that PSE could possibly do so without questions. The City staff is not asking questions so the citizens must.

I225-H-3

What is the source of authority that the City of Bellevue has no authority to require PSE to answer questions about its assertion of need?

Loretta Lopez

13419 NE 33<sup>rd</sup> Lane  
 Bellevue Wa 98005

Bridle Trails Community Club, Vice President

CENSE Member

I225-H -1 See response for Key Theme OBJ-2.

I225-H -2 See response for Key Theme EIS-2.

I225-H -3 See response for Key Theme OBJ-2.

I225-I-1

**From:** [Loretta Lopez](#)  
**To:** [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov); [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Comments to DEIS PROPOSED PSE Project/January 28 DEIS/Findings  
**Date:** Monday, March 14, 2016 8:32:47 PM

The DEIS states the findings from this Phase 1 Draft EIS will and comments received on it will be used to help outline proposed alternatives for inclusion in the Phase 2 (project level ) Draft EIS. Section 1.13 page 1-57.

What if citizens do not agree with the findings that will be issued after Phase 1? What remedy does the community have to take issue with the findings?

Loretta Lopez

13419 NE 33<sup>rd</sup> Lane  
Bellevue Wa 98005

Bridle Trails Community Club, Vice President

CENSE Member

I225-I -1 See response for Key Theme EIS-2.

**From:** [todd@MATADORTECH.COM](mailto:todd@MATADORTECH.COM)  
**To:** [info@energizeeastsideEIS.org](mailto:info@energizeeastsideEIS.org); [council@bellevuewa.gov](mailto:council@bellevuewa.gov)  
**Cc:** [Don March](mailto:Don.March); [Larry Johnson](mailto:Larry.Johnson); [Janis Medley](mailto:Janis.Medley); [sdfour@aol.com](mailto:sdfour@aol.com); [Richard Kaner](mailto:Richard.Kaner); [Richard.info@cense.org](mailto:Richard.info@cense.org); [todd@matadortech.com](mailto:todd@matadortech.com)  
**Subject:** Energize Eastside draft EIS comments from Todd Andersen & Jennifer Steinman  
**Date:** Monday, March 14, 2016 6:37:54 PM  
**Attachments:** [ToddAndersenJennDraftEIScommentforMar14.2016deadline.pdf](#)

To: Bellevue City Council and City of Bellevue Energize Eastside draft EIS staff  
 From: Todd Andersen (MS Electrical Engineering, BS Mechanical Engineering) and Jennifer Steinman (MS IT/ED – Stanford University)  
 Address: 4419 138th Ave SE, Bellevue WA 98006  
 Attached: PDF of comments on Draft Energize Eastside EIS

Please accept my apologies in advance for not having the time to clean up the attached written comments as the 42 day comment window is so short and there is so much wrong with the Energize Eastside draft EIS.

Anybody have a copy of the Olympic Pipeline break disaster plan?

On the very last page of the attached doc is a picture of the damage from the 2010 San Francisco metro natural gas explosion, San Bruno, that went up mostly into the air, unlike what an Olympic pipeline break will do. Its jet fuel being liquid will spread horizontally and rush downhill. Even with automated shut off the jet fuel could easily result in the burning of hundreds if not thousands of homes unlike the natural gas pipeline explosion in San Bruno CA fire which killed 8.

Having personally conducted fire protection testing on the V-22 Osprey, it takes AFFF "A triple F" (Aqueous Film Forming Foam) to put out a jet fuel fire. And putting out just 40 gallons of jet fuel is not easy, even with prepositioned and built in fire fighting equipment on our testing pads it could take 20 minutes to put out 40 gallons. Using water just spreads the fire. AFFF works great if you have enough of it and there is no wind. Given the size of the Olympic pipeline it is going to take a lot of AFFF equipped fire trucks at all the local firehouses. The stuff at SEATAC will be too late to help.

Todd Andersen  
 425-449-8889

I226-A -1 See response for Key Theme SVC-1.

I226-A-1

Date: March 13, 2016  
 Email Subject: Energize Eastside draft EIS comments  
 Email date: March 14, 2016 due to PSE 177,000 customer power outage on March 13th.  
 To: Bellevue City Manager, Council and City of Bellevue Energize Eastside draft EIS staff  
 From: Todd Andersen (MS Electrical Engineering, BS Mechanical Engineering) and Jennifer Steinman (MS IT/ED – Stanford University) 4419 138<sup>th</sup> Ave SE, Bellevue WA 98006

Please accept my apologies in advance for not having the time to clean up these written comments as the 42 day comment window is so short and they is so much wrong with the draft EIS.

I226-A-2

The City of Bellevue (COB), which is overseeing the State EIS, is as capable in detecting PSE falsehoods (or possible fraud) has the COB has been in detecting its own staff's credit card fraud in its Parks department, taking over two years to do so. Something that requires a small bit of technical expertise to evaluate PSE's Energize Eastside grid expansion is way over COB's head. COB current performance on the draft EIS proves this lack of expertise in spades and will unfortunately land the COB in court, wasting taxpayer dollars. To date the COB actions on EE and the draft EIS have severely damaged the City of Bellevue's credibility. The below comments are geared to reduce the potential damage to COB and citizens.

**The first request** is that COB halt the EIS until the need for Energize Eastside is independently proven. This author has PSE's lawyer/Profession Engineer (P.E.)/utility grid consultant Mark Williams on video stating that if FERC or NERC or WECC stated that the 1500 MW to/from Canada was not "firm" (required at all times) than PSE would have to redo its all of its load flow studies. If that 1500 MW load is not firm, then PSE's deception of need disappears for more than 3 decades, sometime starting in 2060.

I226-A-3

**If this 1500 MW flow is assumed to be valid then** conservation savings through the entire region of PSE's territory is valid and all saving has to be included in alternatives not just 14% of PSE territory, Energize Eastside, as the draft EIS/PSE claims. See page 143 of 714 (page 2-34) of the draft EIS. *"The Eastside represents approximately 14 percent of the total load for the PSE system, and therefore 14 percent of the total projected conservation (119 MW of conservation)."* Using just 14% is utter garbage thinking and analyzes given the EIS is considering it is valid to include power flows and suspensions of generation out of Eastside. Yet another blow to COB's credibility.

The overall theme of the need for Energize Eastside is multiple falsehoods if not out right fraud. Lauckhart Schiffman have documented PSE's claim of need for new power lines called for in Energize Eastside to be false on numerous fronts, which CENSE and others have given to COB. The two authors used PSE's power grid database to do so. PSE provided that database to the Western Electricity Coordinating Council (WECC) and the Federal Energy Regulatory Commission required WECC to release the PSE database to Lauckhart and Schiffman. Lauckhart Schiffman have shown numerous errors including using summer transformer temperatures not winter temperatures where peak loading would occur. Others include unrealistic complete

I226-A -2 See response for Key Theme EIS-1.

I226-A -3 See responses for Key Themes OBJ-2 and OBJ-3.

I226-A -4 See response for Key Theme EIS-1.

I226-A -5 See response for Key Theme EIS-2.

I226-A-3 shut down of 10 backup generators and sever reduction of many others during the few winter peak load and the delivery of 1500 MW to Canada during a rare peak load emergency. See my Jun 14 2015 testimony, attached to this doc.

**Second request** – for the City to hire consults that have the necessary technical skills to detail electrical power alternatives to Energize Eastside. The City of Bellevue (COB) or the contractors the City has hired to date are not uncovering PSE’s falsehoods by not doing technical engineering work that is **independent** of PSE work but rather just reviews PSE’s assertions. The COB is continuing with the past incompetent actions include:

1) Choosing a State Environmental Impact Statement (SEIS) when power loads used by PSE to justify the project include international flows to/from Canada AND power flowing over Energize Eastside lines will be from dams both in the US and Canadian already built or in planning stages but cannot be built until power lines like PSE’s EE are in place. These dams effect endanger species of Orca and salmon and thus require a National Environmental Impact Statement. The City was previous notified by me in written and verbal testimony during other Energize Eastside comment periods that a National EIS is required. See item 2 in the EE EIS testimony submitted June 14 2015 and reattached, see item 2 (page 24 of 40 of this doc) on why Energize Eastside requires a National EIS is needed.

I226-A-4 2) Not using work independent of PSE for other alternatives including conservations. When one uses independent sources one gets significantly different results disproving PSE’s /COB’s draft EIS results which rely solely on PSE’s work or those hired by PSE. All of these have been documented and sent to the City by me in past comment periods. See that testimony June 14 2015 attached below starting on page 23 of this doc.

**Detailed comments**

I will comment on just the process issues with the State EIS and then the lack of critical information not in the draft phase 1 EIS.

Process issues with the Energize Eastside draft EIS.

I226-A-5 1. The contractor selected for the EIS is completely incompetent in citing references appropriately and is deliberately hampering citizens’ review documenting the very limited and poor EIS information. Foremost is that the draft EIS do not use even use standard reference citations required by all technical and even most non technical organizations. Thus the allowed time to comment is vastly insufficient for even citizens skilled in the Energize Eastside controversy and technologies to comment. **Please extent the comment period at least 3 months.** The draft EIS was release on Jan 28 , 2016 leaving 42 days to comment on a 715 page which do not use detailed nor specific references but yet vaguely point to over 2000 page of additional documents.

a) The draft EIS goes out of it way to complicate and deplete the citizens time to review the DEIS with hundreds vague and obfuscating and non-standard methods of referencing sources, **never with page numbers to the source as is common practice.** Given the project is well over \$1 billion dollars including the \$800 million in profits PSE is guaranteed, this level of vagary is unacceptable. One of hundreds of examples is on page 2-34 (page 143 of 714pages) of the DEIS (Draft EIS) is “According to PSE

projections, it would take 74 MW of additional transmission capacity to marginally meet the demand through 2018 (Gentile et al., 2015)” No page number is referenced nor which version of the document nor is an full accounting of all relevant documents provided. The draft EIS’s most complete documentation to these document(s) which is the far from complete, references to PSE’s core “need” documents from page 1-4 (pg56/715) as “PSE provided two documents that describe the need: the *Eastside Needs Assessment Report* and the *Supplemental Eastside Needs Assessment Report* (Gentile et al., 2014, 2015).”

- b) Continuing with above point of PSE’s claim on page 2-34 (page 143 of 714pages) of the DEIS (Draft EIS) that “74 MW of additional transmission capacity to marginally meet the demand through 2018 (Gentile et al., 2015)” the 74MW **never appears** in the Oct 2013 (and original version) *Eastside Needs Assessment Report Transmission System King County Redacted Version October 2013 Puget Sound Energy Report prepared by: Thomas J. Gentile, P.E. – Quanta Technology Donald J. Morrow, P.E. – Quanta Technology Zach Gill Sanford – Puget Sound Energy Carol O. Jaeger, P.E. – Puget Sound Energy*. PSE does manage to sneak 74 MW in to a *Supplemental Eastside Needs Assessment Report* dated April 2015 two years after the first Needs assessment report but the reader is left to guess where the correct document referenced is. Given the vagary of the DEIS references one is forced to wade through thousands of pages of documents at the PSE and City of Bellevue’s EIS websites. Looking at the EE EIS.org website setup by the COB on Mar 1, 2016 we find these possible relevant documents with no reference to Gentile without requiring to the Citizens to opening up all documents 15 on PSE website and over three dozen on PSE’s website.

Here is a screen shot of draft EIS website show the vagary of references not aligning with the 715 page draft EIS for Energize Eastside. No reference to *Gentile et al., 2014, 2015* without opening up all the docs. And the below are just a partial view of the available docs.



I226-A-5



and looking at PSE website we find the same lack of ability to reference without opening up all the documents and each citizen developing it own document management and reference system.

| Study                                                 | Author                    | Description                                                                                        |
|-------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------|
| Needs assessment executive summary                    | PSE and Quanta Technology | Explains the need for the Energize Eastside project                                                |
| Needs assessment report (redacted)* 2013              |                           |                                                                                                    |
| Supplemental needs assessment report (redacted)* 2015 |                           |                                                                                                    |
| Solutions report executive summary                    | PSE and Quanta Technology | Describes potential options for solving the identified problem, and details the preferred solution |
| Solutions report (redacted)* 2014                     |                           |                                                                                                    |
| Supplemental solutions report (redacted)* 2015        |                           |                                                                                                    |

PSE's claim of 74 MW (on page 2-34 (page 143 of 714pages) of the DEIS (Draft EIS) quoted as "According to PSE projections, it would take 74 MW of additional transmission capacity to marginally meet the demand through 2018 (Gentile et al., 2015)" not in the following documents:

- TransmissionSolutionStudyFebruary2014REDACTEDv2-118pgs.pdf
- SupplementalSolutionsReport\_Redacted\_May2015-146pgs.pdf
- Eastside\_Needs\_Assessment\_Final\_Draft\_10-31-2013v2REDACTEDR1-78pgs.pdf

The 74 MW is found on page 21of32 in SupplementalNeedsAssessmentReport\_Redacted\_April2015-32pgs.pdf but given the vast amount of time to find it AND yet another PSE outage this weekend 177,000 without power for which EE does nothing to fix, this author has not time left to comment further to meet the March 14 2016 deadline.

- c) The underlying PSE documents have had updates and the vague referenced to 2013 PSE's Integrated Resource Plan alone is exactly 1000 pages (245 pages for chapter 1 to 7 and 755 pages of Appendixes which have the core of the technical details)
- d) The only way to efficiently review the draft EIS is electronically, not paper, and as a single pdf However the document in that form is not effectively usable in the common Adobe pdf readers without crashing a computer that is not the latest hardware and operating system. This leaves out poorer citizens without the latest computer hw and sw and retirees with the most time to comment but are not able to effectively do so. Paper copies cannot effectively be reviewed at the City given the hundreds of hours it would take to do so and the lack of effective references. The City could print them and allowed them to be taken home but 42 days to review is simply not enough time.
- e) The draft EIS has no hyper links within reference internal to the document as is common publishing standard. And had a cumbersome page numbering system that does not allow common pdf viewer total page vs specific page tools to be used. The reviewer is forced to moved to internally referenced pages manually looking at each pdf page.

I226-A-5

I226-A -6 See response for Key Theme OBJ-3.

I226-A -7 See response for Key Theme EIS-1.

I226-A-5 f) The reviewer had to use specialized pdf reviewing software (non Adobe) meant for reviewing long and dense medical and scientific papers. None of my fellow citizens are using such software.

**Some of Conservations issues with the Energize Eastside draft EIS ~~due to the vague references used in the draft EIS.~~**

I226-A-6 If the 1500 MW flow to/from Canada Energize Eastside claims and the shutting off generators outside of the Eastside is assumed to be valid for load then the same assumption has to be made for than conservation **that savings through the entire region of PSE's territory is valid to be included in alternatives not just 14% territory of Energize Eastside as the draft EIS/PSE claims.** See page 143 of 715 pages (or page 2-34) *"The Eastside represents approximately 14 percent of the total load for the PSE system, and therefore 14 percent of the total projected conservation (119 MW of conservation)."* Using just 14% is technically a double standard. If generation outside the Eastside can be turned off or load to from Canada can be included even though the Columbia River Treaty allows it to be schedulable, then the load via conservation saving outside Eastside must also be included.

I226-A-7 2. THE EIS's review of LED is thoroughly incompetent. Pg 70 of 715 (1-18) is the only mention of LED light bulbs in the entire document. The current EIS uses the word LED lightbulb just once! Please detail LED Street lights currently installed and the remaining lights that are not yet LED and the saving from switching out old street lights to LED. Please detail the entire load on PSE's system not only in the Energize Eastside area but PSE's entire territory load outside of Eastside is counted then reductions of load outside Eastside needs to be counted too. Please include lights on federal, state, county and city roads. The power savings of street light to LED counts 100% toward peak load reduction as the load PSE is the claiming overloading is occurring at a winter peak load at 23F temperature load (see draft EIS pg 559 of 715 which is page A-1) from 4pm to 8pm (work to home transition time) that will be dark to dark twilight light with ALL street lights on as it is nighttime that time of year.

Switching out Federal, state, county and City street like seems much easier and cheaper the the many houses PSE will have to take via Eminent Domain.

3. Please detail LED Residential and commercial remaining incandescent stock, taking into account the Dept of Energy's multiple reports on the CFL failure rates which has driven most users back to incandescent lighting. LEDs light bulbs have a 85% to 90% power and energy savings over incandescent and at least 50% over CFL with proven longevity unlike CFL. This should be easy once the COB hire staff competent in this area. Given the extreme short time of 42 days that citizens have to review all I have time for is the punch lines. There are 600 Mega Watts of incandescent & halogen & high pressure sodium & related power reduction left in PSE's territory using NEEA.org and Dept of Energy reports. That least 200 megawatts of that savings will come from non-street-light bulbs that will be on during

peaking winter load, more counting street lights. PSE has never advertised the +85% saving of LED over incandescent light bulbs yet will spend for thousands of full and half page ads touting the "need" for Energize Eastside to date. Citizens have full documented this online, in Home Depots/Lowes/Costcos, PSEs on cable TV and PSE bill insert (I think these will be particularly powerful in any court case action on Energize Eastside with ones before the Stephen Colbert Shows and bill inserts particularly damning to PSE)

Some relevant DOE reports for the EIS to pay attention to are :  
[www.energystar.gov/ia/partners/downloads/ENERGY\\_STAR\\_CFLs\\_OEM\\_Performance\\_Assessment\\_May\\_2013.pdf?0544-2a1e](http://www.energystar.gov/ia/partners/downloads/ENERGY_STAR_CFLs_OEM_Performance_Assessment_May_2013.pdf?0544-2a1e) and the three batch reports. The first report, published in May 2011, covers the 68 models that completed testing by February 5, 2011 (Batch 1), and the second report covers the 68 models that completed testing between February 6 and July 31, 2011 (Batch 2). A later report covers the 118 models that completed testing between August 1, 2011 and July 31, 2012. On average, the models in Batch 3 came on the market nearly 1 year after those in Batch 2, and thus represent newer models. And the newer results are even more damning to CFL viability. See the 62 page, ENERGY\_STAR\_CFLs\_Batch\_3\_Report\_Public\_Feb\_2013.pdf

Here is a taste of how bad compact Florence light bulbs are per Dept of Energy:



Table 1: Summary Performance Results of All CFL Products Tested May 2009 – March 2013\*\*

| Year       | Products Tested | Passed All Tests | Failures | Passing Rate |
|------------|-----------------|------------------|----------|--------------|
| 2010       | 61              | 39               | 22       | 64%          |
| 2011       | 129             | 71               | 58       | 55%          |
| 2012       | 111             | 67               | 43       | 60%          |
| 2013       | 33              | 8                | 25       | 24%          |
| Cumulative | 334             | 185              | 148      | 55%          |

\*\* The markedly reduced passing rate for 2013 testing is likely a result of recent changes to the testing program. For 2013 testing, EPA removed the product testing cap that limited a partner's total testing exposure to 3 products per testing cycle and had somewhat distorted testing exposure among manufacturers. Once the cap was removed,

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EPA, utilities, and other parties were better able to nominate without constraints products of interest, including those with potential performance concerns, as well as products from sources with limited verification data.

The above are first year failure rates NOT counting any failures that occur in the first 3 months of use as the consumer is assumed to return those to the store for refund replacement. If the Dept of energy counted the failure rates in first three months or light flipping by little kids the failure sky rockets from 45% to well over 70%. Thus it is easily to see why there is still so much incandescent light bulbs installed and why all PSE CFL bulb give-aways have been an enviromental disaster.

**First Important LED conservation Note:**

Compact Florescent Bulbs (CFL) failure rate is so well know as demonstrate they show up in culture including comics, see below. Yet PSE is pretending it has had great successes in this conservation effort including PSE's massive rebating of them well after it was shown by DOE that CFL are a disaster and only LED should be rebated. Where are the regulators on PSE? A massive environmental crime. In fact, as of this writing PSE still is rebating CLFs in a continuation of what I consider to be a highly fraudulent conservation program.

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'And the beauty of these low energy bulbs is they're so pathetically dim that if your wife or kids leave them on in an empty room you won't even notice.'

Compact Florescent Bulbs (CFL) are a massive failure and is well known to honest conservation experts and anyone who has tried CFLs. The reports from the US Dept of Energy on the failure rates of CFL explain the light bulb demographics report from

NEEA.org for WA OR ID and Montana. And I look forward to the Energize Eastside EIS detailing this failure rate and the rate reverting back to the incandescent bulbs. The answer is at least 600MW of savings of which at least 200 MW will be pure peak power reduction.

The below just a taste of what explains why there are far more incandescent lights to be replaced with LED's than NEEA is recognizing because CFLs failure rate is so high and why "stored" rates are climbing very year. People are not storing very expensive and good CFL's so much has they can't bring themselves to throwaway CFLs they just bought for 7x over incandescent bulbs, threw away the receipt before the bulb went bad. The 7x pricing is for the time periods when the below chart was made. Why else would the "CFL currently stored" number go up every year? Or is it because people wanted to buy 7x more expensive bulbs to store on their shelves to show off to friends? I will bet those "stored" are really just bad bulbs.

Below from pg27/375 NEEA-2011-2012.375pg.-northwest-residential-lighting-tracking-and-monitoring-study.pdf

**Table 3  
Lamp Disposition in Purchaser Households by Survey Year, 2005-2012**

| Disposition of All CFLs Ever Acquired by Purchaser Household | 2005 Survey (n=220) |            | 2006 Survey (n=411) |            | 2010 Survey (n=399) |            | 2011 Survey (n=646) |            | 2012 Survey (n=459) |            |
|--------------------------------------------------------------|---------------------|------------|---------------------|------------|---------------------|------------|---------------------|------------|---------------------|------------|
|                                                              | Mean # of lamps     | % of lamps | Mean # of lamps     | % of lamps | Mean # of lamps     | % of lamps | Mean # of lamps     | % of lamps | Mean # of lamps     | % of lamps |
| CFLs currently installed                                     | 6.1                 | 70%        | 6.3                 | 68%        | 10.9*               | 64%        | 11.0                | 53*        | 10.2                | 49%        |
| CFLs ever removed                                            | 0.3                 | 4%         | 0.4                 | 4%         | 1.4                 | 8%         | 3.8*                | 18%        | 4.3                 | 21%        |
| CFLs currently stored                                        | 2.3                 | 26%        | 2.6*                | 28%        | 4.8*                | 28%        | 6.0                 | 29%        | 6.2                 | 30%        |
| Total CFLs ever acquired                                     | 8.7                 | 100%       | 9.3*                | 100%       | 17.1*               | 100%       | 20.7                | 100%       | 20.7                | 100%       |
| Purchaser base                                               | 58%                 |            | 67%*                |            | 81%*                |            | 75%*                |            | 77%                 |            |

\* Difference from prior study period is statistically significant.

The reason CFL use went down is CFLs are a disaster. Are people really buying CFL bulbs that are 7X more expensive and just storing them more and more every years? Really or is the real fact that people have stopped buying and just going back to incandescence. The EIS will need to dig through a lot of NEEA.org reports on lighting but with staff with the right skill it is just a 80 hour job to get the 600MW over all savings number.

**Second Important LED conservation Note:** PSE will claim they funded million of CFLs and that there is simply little saving to be gained going to LED. However the VAST majority of the millions of CFL's PSE funded went into the trash per Dept of Energy CFL failure rate studies and as the above NEEA.org chart (funded 19% by PSE) show in painful detail.

- Besides analyzing the lithium ion, redox flow battery and other grid storage batteries, please include grid storage using simple lead acid grid storage which even Alaska utilities use, read in production. This is impressive and relevant given their poor performance during cold temperature yet Alaska still uses. This temp issue is something which will not be an issue for PSE's worse case temperature of 23F given their use in Alaska.

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I226-A -8 See response for Key Theme OBJ-3.

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5. How does grid level battery storage compare cost wise to pump storage (pumping water up hill to a reservoir during low usage time) to meet PSE's (claimed) high peak load issue. Los Angeles' uses pumped storage facility is rated at 1,247 Megawatts. See [https://en.wikipedia.org/wiki/Castaic\\_Power\\_Plant](https://en.wikipedia.org/wiki/Castaic_Power_Plant) Even with PSE's highly unrealistic assumptions, over load occurs just few hours once every 20 years, every 50 years if global warming is considered. And given the PSE's Needs reports can include shutting down power outside of the Eastside area, then hilltops and **plateaus in those same areas or equivalent distance from other part of the grid OR where the grid (Non PSE) where 1500 MW to/from flows Canada can be considered for pumped storage.** Pump storage could also consider local water towers as reservoirs for the PSE EE peak load "problem" as the water usage during PSE's 23F low temperature also corresponds to the lowest water usage during the year, leaving plenty of spare current water storage for peak electrical demand use.
6. Please analyze distributed electric car batteries run in reverse, that is powering the grid. This will have a cost outlay in both inverter and net meter will be an order of magnitude cheaper than PSE's fraudulent Energize Eastside (the latter is in my opinion, the former is fact). PSE is very interested in the electric car count and usage characteristics as PSE has given \$700 conservation rebates for electric car chargers to home owners. Environmental groups have testified car charger rebates do nothing to reduce energy use. However here they will reduce unnecessary grid expansion and in the summer can be used to counter excess solar PV power generation which over powers the electrical grid as has been seen massively in Germany and in Hawaii which has stopped new solar panel installs for over a year. Old Tesla cars have 60, 70 and 85 kWh batteries and the latest ones are 90 kWh. Nissan Leafs have 48 kWh batteries, KC Metro has many electric buses with massive batteries. All of these can be run in reverse for a few hours to counter peak winter load. The buses can offer Uber free pass which PSE pays for the once every 20 year peak load event. Assume one can only discharge 50% of the car for the next day use then 1000 Teslas at 70kWh =  $.5(1000)(70kWh) = 35,000kWh$  or 3.5 Megawatt-hours of peak savings. 2000 Electric Leafs yield  $(.5)(48kWh)(2000) = 4.8$  MW-hours. What is the growth rate of electric cars/buses and what is overall total potential for all vehicle in PSE's territory not just the Eastside. Using just the Eastside cars is a false standard as PSE is using load needs and generation losses outside of Eastside to justify this grid expansion so using conservation and temp generation (electric vehicle batteries discharging to the grid) outside Eastside is valid too.
7. The draft EIS has zero mention of time-based pricing as the means of load reduction. This is simply unacceptable. PSE has already successfully implemented this to counter impacts that the Enron frauds from California where having on the WA grid during the late 1990s and early 2000s. The reduction (via time shifting, washing, microwave vs oven etc) of peak loading must be studied in detail. All +1.2 million of PSE electrical meters were converted to FM transmitters around 2000 to allow time based pricing and PSE has already ran time based pricing during the Enron frauds and PSE personnel publically praised the results in the

I226-A -9 See response for Key Theme EIS-3.

I226-A-8

press. This time-based peak load reduction will have the lowest of cost of all alternatives including both monetary and environmental. Please detail the success of other utilities both non profit and for profit utilities in using demand pricing in addition to PSE's efforts has it is widely used by other utilities in the US and other countries.

One source of information for the COB for the EE EIS is "A new mobile app from People Power has helped customers in a small pilot program on Oahu cut their energy use by up to 10%, according to Energy Efficient Markets." <http://www.utilitydive.com/news/customers-reduce-use-up-to-10-in-hawaii-behavioral-dr-pilot/370344/> People Power is going after demand response market of Opower, which PSE is already a bottom level customer. People Power is doing so because after going public Opower was forced to morphed into a shell for for-profit utilities to hide behind, meaning PSE wants to act like are doing reductions so they can show stuff to tiny bit of regulators PSE to see. Opower is now claiming just 3% reduction power yet use to say 20%. In reality PSE is/was just using Opower's graphing function to make those little charts on your PSE bill. As Opower realized it can't make money from the 20% energy saving it promised at it IPO on CNBC from government run utilities it was forced to for-profit utilities which depend upon massive inefficiencies to make money. Even NEEA.org has detailed how PSE has 28% more expensive electrical rates than ALL other 137 government run utilities in WA, OR, ID and Montana. Cutting 20% power consumption from for-profit utilities would kill profit margins as Opower depends on the for-profit utilities ability to generate MASSIVE excess profits from unneeded grid expansion.

On the other hand is People Power "In a pilot program from People Power, a new mobile app, "Presence," being tested in Hawaii, is yielding surprising energy savings--9 percent to 10 percent--by motivating people to change their energy use behavior. That's nearly three times higher than the energy savings reaped by Opower's program, also designed to change consumers' behavior, said Gene Wang, CEO and co-founder of People Power." PSE is not using the stuff that matters. Eastside Citizens expect a full accounting of real alternatives. So far the draft EIS is a joke in this regard. The EIS needs to evaluate this and other like systems including those in other countries. Please use this thing called the internet, call me at 425-449-8889 if you need help.

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8. Please include the type and quality "demand response" programs that have been testified to the WA State legislature committees including joint committee hearings. Some are already out of pilot phase and are in full production demand response here in WA. Please detail why those same actions can or cannot be done throughout PSE's territory. Given the very limited time the COB has given citizens to respond I cannot provide specific at this time. Call 425-449-8889 and I can give you specific programs in WA underway by responsible utilities in the State of WA. See item 6 h) in my comments to the EIS start process on June 14 2015 which the draft EIS ignores several key comments on need and alternatives. They are attached to the end of this doc.

9. Please detail the Electrical savings by converting current electrical customers using electrical heating to natural gas. This is a 100% reduction of the peak power load PSE is claiming to

try to solve. Natural gas is something that is readily stored and for which PSE has much experience in adding natural gas trucks onto pipes line during rare winter peak loads. Natural gas usage can be reduced further with cold water ozone laundry expansion across hotel and anyone doing large amounts of laundry. Two Puget Sound region Marriott owned Hotesl one in Renton and the other in Seattle having been using ozone based laundry for over a decade now in the, each reducing their natural gas bill by over \$35,000 dollars per year. ROI on commercial ozone year as system generally cost \$30K.

The draft EIS falsely states that "Conservation is achieved mainly by customers implementing voluntary energy efficiency improvements". (see draft EIS pg 559 of 715 which is page A-1) The facts prove this wrong! This is a strong indication that the COB has chosen staff and contractors that are at not technically skilled enough to analyze the available energy information and coherently detail actual alternatives requiring ZERO voluntary implementation or get voluntary participation as PSE has gone out of it way to discourage participation with PSE's HomePrint program just one example. Why is this the staff of EIS simply parroting PSE and in particular PSE's Manager of Communication Initiatives Gretchen Aliabadi? She has used this theme publicly for over three years now and the EIS is parroting it. Edward Bernays is proud but the people thrown in the gas chambers of pollution are not. Here are significant non voluntary conservation facts that need to be included in the EIS. I find the lack of detailing the savings and instead choosing to claim conservation is mainly the consumers responsibility after feed them false propaganda is highly unacceptable.

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Example 1 of massive Non voluntary conservation: WA State currently allows hot climate windows to be sold in WA as there is no minimum requirement for how much solar energy the window should be required to pass, a minimum solar heat gain coefficient. The draft EIS mentions windows 22 times yet details no magnitude energy savings and only false states that "Conservation is achieved mainly by customers implementing voluntary energy efficiency improvements". Completely wrong and ignorant. A windows code change would significantly flatten any peak winter power load that occurred during the work/home transition period.

The savings using Lawrence Berkeley National Labs (LBNL) analysis is 29.5 annual MegaWatts (aMW) PER year just for residential windows, more if adding nonresidential windows. And valid for the 2009-2015 time period, past that, the savings will be higher as the area of window sold is increasing. And since the 2009 economic stimulus only rebated hot climate windows; cold climate windows did not qualify and since the WA building code allows hot climate windows to be sold in WA; the total extra energy waste installed in WA from 2009 to 2015 is 206.5 aMW using LBNL analysis and growing by at least 29.5 aMW per year! No wonder Bernie and Trump are doing so well. Even President Reagan's NAFTA negotiator Clyde Prestowitz agrees with Sanders on CNBC March 14 2016. Can't wait to see what the DOE Secretary for Reagan says about PSE and the EPA! More than just the PSE falsehoods are falling.



The above is LBNL energy savings is completely and independently validated using by the UK government. Measured a second way, using the UK government's Window Energy Rating (WER) equation, WA would save 20.77 aMW for the residential window area sold in 2015. The results from LBNL and UK government are remarkably close ~30% error given the values for total WA/USA window sales (mine vs LBNL) and air leakage per house stock (LBNL vs UK Gov) is likely different. Maybe LBNL include small commercial too, I did not.

The accumulated extra energy waste from 2009 to 2015 in WA State via the UK government's mythology is 123.2aMW by not using cheaper and more energy efficient cold climate windows but instead allowing hot climate windows to be the only windows sold in WA. This saving would be built in and additive every year. Instead we have and are continuing to dig a deeper energy waste hole. Assuming 10% of this total energy saving would be electrical vs gas, thus ~3 aMW reduced energy use per year for just residential windows. In ten years this would be over 35 aMW per year saving, we already have at least a 123 to 206 aMW hole dug as detailed below. The peak power reduction could easily be 30 MegaWatts (not aMW which is energy, MW as in power) just in the first year as sub 25F temperatures (23F) only happen during largely clear skies in PSE's territory, (see NOAA data) meaning solar heat gain via windows would push the heating peak later and thus dampen peak load as the work-home transition effect are both starting from lower energy need levels.

As the average reader does have a feel for how much energy 3 aMW is lets compare it to the total energy installs in WA from solar PV panels. To date, all years included going back to the 1990 to Jan 2016, about ~2aMW of energy production from PV have been installed. This comes from 9 MW peak power worth of solar panels. Given they can only produce when the Sun is up, 1/3 of the time out of 24 hours, and are limited further by clouds we only get ~2 aMW/yr. The cost for this Solar PV is massive in comparison to solar PV. The average price to install 10kW is \$50,000 using the lowest price period of 2015. Thus the 9 MW of peak power costs  $(10,000W/\$50000 = 0.5Watt/\$)$  or \$2 per Watt. Thus 9MW cost at least \$18 million not counting tax rebate cost and other subsidies. Stopping the sale of hot climate window sold in WA would not cost but rather save \$12.65 million up front in just 2015 in just the residential market. In 2015 there were about 2.53 million square meters of residential window glass sold in WA; all of it (+99.9%) is hot climate glass hoping for another 2009 tax rebate round 2. Assuming and \$5 extra per square meter for the silver coatings from Cardinal Glass (they do 70% of the entire USA residential market coatings) to make a hot climate window the savings going to cold climate window is \$12.65 million plus 20.77 to 29.5 aMW of annual energy savings!

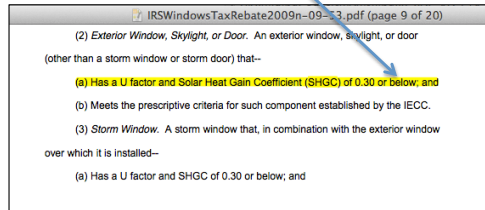
**Details of the Window code Change Energy Savings (given the current staff preparing the draft EIS is severely below the technical level needed to properly address the alternatives to Energize Eastside's life cycle cost to rate payers of \$1.2 billion dollars at present and growing.)**

I226-A -10 See responses for Key Themes ECON-3 and ECON-4.

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One example is this residential building code change. A simple updating of the eastside building codes and WA States window code to ban hot climate windows from being sold in WA has massive energy saving capability. (Cities have the power to do such code changes if it is more restrictive than the State's) Hot climate windows are the **only** windows offered for sale in WA since a hot climate window is the only window rebated by the 2009 economic stimulus plan.

See the screenshot of the IRS's only 2009 economic stimulus plan below [www.irs.gov/pub/irs-drop/n-09-53.pdf](http://www.irs.gov/pub/irs-drop/n-09-53.pdf). A u value =0.3 and SHGC=0.3 is a very hot climate window!!!



The momentum of all 635 window makers in the USA taking off ALL cold climate windows off there sales pipelines/websites/brochure to gain back from government handouts the 40% sales in lost by 2008, never resulted in the window makers placing the cold climate windows back into the sales pipeline. Some have been hopping for a second round of rebates, most are just on status quo. However the NFRC's database shows hundreds of window makers know better and have cold climate windows already approved and teed up for shipment. There are thousands of cold climate windows in the NFRC database all ready to go as window makers have undoubtedly expecting this code loop hole / stupidity to be fixed as many have testified to the EPA. This code hole is a massive energy waste for the northern climate zone as will be detailed below. These cold windows are even slightly cheaper as they do not need silver coatings and are massive energy savers for Washington State 4 to 9 time more than any other northern state given we have the highest heating cooling ratio.

A hot climate window as defined by the EPA is u value  $\leq 0.3$  and solar heat gain (SHGC)  $\leq 0.3$  setting a ceiling for SHGC. A cold climate window would be u value  $\leq 0.3$  and SHGC  $\geq 0.6$  meaning letting in 60% of the suns energy, setting a floor for SHGC. The EPA has yet to detail a cold climate window for the consumer, as the EPA knows how badly it screwed up. The EPA's official and very delayed response in 2014 to massive testimony from 2009 about the Northern climate zone window code is this: "EPA is in the process of developing consumer materials that provide additional information on high-gain windows See ref <sup>1</sup>

<sup>1</sup> pg8/20 [www.energystar.gov/sites/default/files/ESWDS-ResponseToComments-Part1.pdf](http://www.energystar.gov/sites/default/files/ESWDS-ResponseToComments-Part1.pdf)

Also see <sup>2</sup>.” As of 2016 no consumer material have yet to be produced by the EPA on cold climate windows.

The US Dept of Energy and the UK government both see the massive savings of requiring only cold climate windows to be sold in cool and cold climates. The UK took action, the EPA is doing its best to sweep yet another massive screw up under the rug<sup>3</sup>

The UK government banned hot climate windows in England as of at least 2010 something the US Dept of Energy testified should be done in the northern zone of the USA done as well. **The UK's 2010 code for new construction for England requires windows to have a SHGC=0.63 and u-value=0.246 or better or offset the energy using the Window Energy Rating (WER)<sup>4</sup> equation. The USA uses SHGC and the UK's/Europe's uses g-value which equals SHGC, they both measure exactly the same thing. Existing construction requires a WER<sub>UK Gov. grade</sub> of C or better for any new windows.<sup>5</sup> In order to achieve a rating of C<sub>UK Gov.</sub> or better using the USA's insulation value of  $u \leq 0.3$  needing a SHGC 0.49 or better per the WER<sub>UK Gov.</sub> equation. This lower requirement for existing is the result of matching existing gridded windows, the new code of 0.63 effectively bans gridded windows as offsetting is so expensive. Note the WER<sub>UK Gov.</sub> equation is a close but not the same as the non government WER<sub>BFRC</sub>. The WER<sub>UK Gov.</sub> equation is a bit more refined than the British Fenestration Rating Council's equation. It is important to note that while Denmark, Germany and the European Commission have or are in process of following the UK window code; the EPA, the Dept of Energy and the Canadian agencies gov and non gov are nearly completely ignorant of the UK's progress with key players at DOE and EPA admitting such. Regardless, the Dept of Energy has arrived to the same conclusions as the UK and testified to the EPA on the stupidity of their northern zone window code with the publically available testimony.**

WA should exactly copy England as England has an identical climate to WA and all of PSE's territory. England and WA have identical in Heating Degree Days (HDD) and Cooling Degree Days (CDD) and the ratio of 30 HDD to every 1 CDD is the same in England as WA as a whole. This high ratio means any changes gaining free heating in winter is vastly better

<sup>2</sup> For the high level site of all testimony to the EPA docs see [www.energystar.gov/products/spec/residential\\_windows\\_doors\\_and\\_skylight\\_specification\\_version\\_6\\_0\\_pd](http://www.energystar.gov/products/spec/residential_windows_doors_and_skylight_specification_version_6_0_pd)




<sup>3</sup> pg 8 of 20 [www.energystar.gov/sites/default/files/ESWDS-ResponseToComments-Part1.pdf](http://www.energystar.gov/sites/default/files/ESWDS-ResponseToComments-Part1.pdf)

<sup>4</sup> For new dwellings in England the baseline requirement to meet or tradeoff are a SHGC=0.63 (UK & Europe use g-value notation for SHGC with the exact same meaning both dimensionless unit from 0 to 1) and a u-value of 0.2465 Btu/hr-ft<sup>2</sup>-F which is 1.4 W/m<sup>2</sup>-K in the UK as Britain/England use SI units. See page 34 for SHGC=g-value =0.63, and u-value. Also see pg 12 and 24 of 48 of this UK building code [www.planningportal.gov.uk/uploads/br/BR\\_PDF\\_AD\\_L1A\\_2013.pdf](http://www.planningportal.gov.uk/uploads/br/BR_PDF_AD_L1A_2013.pdf). Page 2/48 states "A summary of the Part L 2013 notional dwelling is published at Table 4 in the approved document with the full detail in SAP 2012 Appendix R. If the actual dwelling is constructed entirely to the notional dwelling specifications it will meet the carbon dioxide and fabric energy efficiency targets and the limiting values for individual fabric elements and buildings services. Developers are, however, free to vary the specification, provided the same overall level of carbon dioxide emissions and fabric energy efficiency performance is achieved or bettered." For a detailed historical review British window code see [www.pilkington.com/en-gb/architects/glass-information/energycontrolthermalsolarproperties/window-energy-ratings](http://www.pilkington.com/en-gb/architects/glass-information/energycontrolthermalsolarproperties/window-energy-ratings)

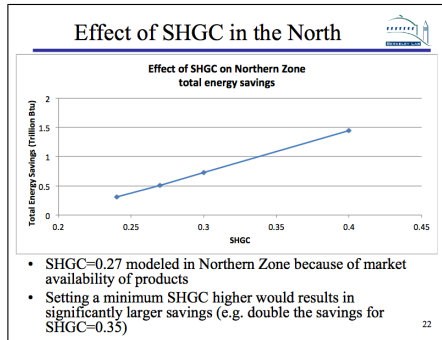
<sup>5</sup> [www.planningportal.gov.uk/buildingregulations/approveddocuments/part/](http://www.planningportal.gov.uk/buildingregulations/approveddocuments/part/) For existing dwellings see Table 1 pg16/31 of [www.planningportal.gov.uk/uploads/br/BR\\_PDF\\_AD\\_L1B\\_2010.pdf](http://www.planningportal.gov.uk/uploads/br/BR_PDF_AD_L1B_2010.pdf). The UK Gov.'s WER is nearly the same but a bit more refined than the BFRC's WER. The UK Gov. is stricter using  $WER = 196.7 \times ((1 \times f) \times g_{glass}) - 68.5 \times (U \times (0.0165 \times AL))$  and the BFRC's is  $218.6g_{window} - 68.5 \times (U_{window} + \text{Effective LSO})$  both with the units of [kWh/m<sup>2</sup>/yr] where m<sup>2</sup> is square meters of glass.

than the extra cooling spent in the summer. DOE modeled this down to the county level. However the EPA threw the northern US climate zone under the bus to fix the EPA's previous screw-up of having a very bad southern climate zone window code starting in 2009. That is a very poor insulation value, u-value. This bad code was blow back from the EPA's bad change management process which resulted in the southern climate zone window makers hiring a bunch of ex US Senators and House members to hand the EPA their behind to the massive detriment to the environment; with WA State suffering the greatest damage as it has 4 to 9 times greater heating to cooling ratio than all other northern climate States.

The Dept of Energy's also sees how much energy can be saved banned hot climate windows Window and Building Envelop lab and has the detailed this to the Environmental Protection Agency in 2012. Below is the energy savings as the solar heat gain of windows is increased for the USA housing stock. This was Lawrence Berkeley National Lab's (LBNL) Window and Building Envelope Group determination by for the Northern climate Zone.<sup>6, 7</sup> LBNL is the preeminent experts for energy usage/generation from windows for the USA. The northern zone is in blue on the map below and is the same as the EPA's northern zone or IECC zones 4(maritime), 5,6 and 7. This work was done specifically for the EPA's ENERGY STAR Windows group by LBNL and presented to the EPA's public meeting on August 27th, 2012. LBNL shows the higher the SHGC, the higher the savings in the northern zone. The UK sets Englands code at 0.63 forcing the window makers to use the most transparent glass to the Sun's energy which is also cheaper than low SHGC glass.

|                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Energy Star Program Savings Estimates</b><br><br>Gregory K. Homan<br>Richard E. Brown<br>Dariush Arasteh<br>Christian Kohler<br>Josh Apte<br>Steve Selkowitz<br><br>August 27, 2012<br><br>Windows & Daylighting Group<br>Lawrence Berkeley National Laboratory<br>Berkeley, California USA<br>Supported by U.S. Department of Energy | <br><b>Energy Simulations</b><br><br><ul style="list-style-type: none"> <li>• DOE-2 energy simulations for homes                         <ul style="list-style-type: none"> <li>- 98 Climates</li> <li>- 40+ window types per climate</li> <li>- Gas, Electric Resistance, and HP heating</li> <li>- Electric Air Conditioning</li> <li>- New and Existing, 1 and 2 story homes</li> <li>- RESFEN 6 available:<br/> <a href="http://wchdown.lbl.gov/softwares/energy/ResFen_06nLoad.asp">http://wchdown.lbl.gov/softwares/energy/ResFen_06nLoad.asp</a> </li> </ul> </li> <li>• Converted simulation results to Equations                         <ul style="list-style-type: none"> <li>- Heating/cooling data regressed for each climate as a function of U and SHGC</li> <li>- Regressions form the basis for National Energy Savings Model</li> </ul> </li> </ul>  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

<sup>6</sup> [www.energystar.gov/sites/default/files/WindowsEnergySavingsAnalysis-LBNL.pdf](http://www.energystar.gov/sites/default/files/WindowsEnergySavingsAnalysis-LBNL.pdf) For the high level site of all docs see [www.energystar.gov/products/spec/residential\\_windows\\_doors\\_and\\_skylight\\_specification\\_version\\_6\\_0\\_pd](http://www.energystar.gov/products/spec/residential_windows_doors_and_skylight_specification_version_6_0_pd)  
<sup>7</sup> <http://windows.lbl.gov/energystar/version6/>



Cut off of graph at 0.4 is only an artifact of the 2009 Stimulus Act rebating only hot climate windows SHGC<0.3. EVEN in cold climates including Alaska. The line is linear and straight to at least 0.63 as the UK has shown. The leadership of LBNL and EPA windows group were not even aware of the UK's work as of 2015. Varying the SHGC from 0.2 to 0.4 gives 1.45 Trillion BTU of savings, thus every 0.1 increase in SHGC is worth 0.725 trillion BTU/per year.

LBNL is the core technical resource for energy performance of windows in the USA for all relevant governing bodies, EPA, NFRC, LEED etc. They also build & maintain the "blessed" computer software to model all the energy characteristics of windows for which the IECC, EPA and NFRC depend on and require others to use. LBNL is also the main technical advisor to the EPA's Window Group.<sup>8</sup> This includes the determination of u-values and solar heat gain coefficients of windows.

**Calculation for Non Voluntary window energy Savings for WA State.**

**First Way =Using LBNL's work.**

LBNL calculated the savings at the county by county level for the Northern region and rolled it all up to get the above energy savings to per increase in SHGC graph. Given the 2009 tax rebate was solely for hot climate windows the average SHGC sold in northern climate is SHGC=0.224. This number is from averaging 1363 Pella windows rated by the NFRC. The results from other window maker's data are very similar as the SHGC values between the hot and cold climate windows. This is not surprising as ~70% of the coatings for all +600 window makers in the USA are done by Cardinal Glass. Thus using a UK's window code for England of 0.63 we have 0.63-.224 =0.406 delta between current US northern climate window code as of 2009 and what England is using.

The energy saving can be picked off LBNL graph from above and corrected for WA climate. The saving is completely linear as one would expect particularly for the high heating to cooling ratio areas like WA at 30:1. From the LBNL graph every 0.1 increase in a windows

<sup>8</sup> <http://windows.lbl.gov/energystar/version6/>

solar heat gain coefficient saves 0.725 Trillion BTU/ per year. Thus a 0.406 delta between current WA window installs and what a code banning hot climate windows in WA, using England's 0.63 requirement for solar heat gain gives 4.06 (0.406/.1) times 0.725 Trillion BTU/ per year per 0.1 SHGC increase. This math gives 2.9435 trillion BTU/yr. Using 1 BTU<sub>IT</sub> = 0.29307 Watt-hr we can convert 2.9435 trillion BTU/yr to Watt-hrs. Multiplying 2.9435 TBtu/yr by 0.29307(Watt-hr/BTU) gives 0.863 trillion Watt-hrs/yr. Or more simply, 863 billion Watt-hr/yr of saving for the Northern USA climate zone.

To get WA only energy saving we need to reduce the entire northern region number to just WA's population and correct for Washington climate which has the highest heating to cooling energy use ratio out of all states save Alaska.

Assuming 100 million people live in the Northern Zone and prorating to 7 million for WA. This gives 7/100 times 863 billion Watt-hr/yr or 60.39 Billion Watt-hr/yr. To get a better feel for how much energy that is lets convert that to a constant power level for an entire year. To get that we divide by the number of hours in a year. (60.39 BillionWhr)/(24\*365)= 6.89 aMW. This is uncorrected for WA's climate. The real number for WA state is much higher.

Next to correct for Washington States climate. This is needed because LBNL rolled up nearly hundred northern micro climates, county by county. These climates vary greatly from Puget Sound with 31 times heating to cooling, Kansas City with 4.2 heating as cooling, Chicago at 8.6, Washington DC at 5 and NY City at 7.2. Thus correcting for this one can see WA would see much higher energy savings per capita than the rest of the northern states. Using the population weighted and blended heating to cooling ratio average for LBNL graph as 7, then the correction factor for savings for WA is 30/7 or 4.28 times greater than the blended average. I confirmed this methodology this LBNL staff. This 4.28 correction factor times 4.28 equals **29.5 aMW per year of waste**. I used 30 as the blended population weighted average of Puget Sound and mountains with Spokane. Using this potential energy waste built in since 2009 and the window sale growth of since 2012 is roughly offset by the lesser sale 2009 to 2012 the overall EXTRA energy use from having hot climate windows in WA is 7 years times 29.5 aMW= 206.5 aMW

#### **Second Way =Using UK's window building code work**

No voluntary participation in England, you want a window then it had better be an energy saving cold climate window or you have to offset the energy waste in other permanent manner.

Here is the UK's new building code for windows.<sup>9</sup>

<sup>9</sup> For new dwellings in England the baseline requirement to meet or tradeoff are a SHGC=0.63 (UK & Europe use g-value notation for SHGC with the exact same meaning both dimensionless unit from 0 to 1) and a u-value of 0.2465 Btu/hr-ft<sup>2</sup>-F which is 1.4 W/m<sup>2</sup>-K in the UK as British/England use SI units. See page 34 for SHGC=g-value =0.63, and u-value. Also see pg 12 and 24 of 48 of this UK building code [www.planningportal.gov.uk/uploads/br/BR\\_PDF\\_AD\\_L1A\\_2013.pdf](http://www.planningportal.gov.uk/uploads/br/BR_PDF_AD_L1A_2013.pdf). Page 2/48 states "A summary of the Part L 2013 national dwelling is published at Table 4 in the approved document with the full detail in SAP 2012

UKBuildingCodeNewDwellingBR\_PDF\_AD\_L1A\_2013.pdf (page 33 of 48)

**Table 4 Summary of concurrent notional dwelling specification**

| Element or system                                           | Values                                                                                                                                                                                          |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Opening areas (windows and doors)                           | Same as actual dwelling up to a maximum proportion of 25% of total floor area                                                                                                                   |
| External walls (including opaque elements of curtain walls) | 0.18 W/(m <sup>2</sup> ·K)                                                                                                                                                                      |
| Party walls                                                 | 0.0 W/(m <sup>2</sup> ·K)                                                                                                                                                                       |
| Floor                                                       | 0.13 W/(m <sup>2</sup> ·K)                                                                                                                                                                      |
| Roof                                                        | 0.13 W/(m <sup>2</sup> ·K)                                                                                                                                                                      |
| Windows, roof windows, glazed roof-lights and glazed doors  | 1.4 W/(m <sup>2</sup> ·K) <b>1.4W/(m<sup>2</sup>·K)(5.678)=0.2465 BTU/ft<sup>2</sup>F</b><br>(whole window U-value)<br><b>g-value = 0.63</b>                                                    |
| Opaque doors                                                | 1.0 W/(m <sup>2</sup> ·K)                                                                                                                                                                       |
| Semi-glazed doors                                           | 1.2 W/(m <sup>2</sup> ·K)                                                                                                                                                                       |
| Airtightness                                                | 5.0 m <sup>3</sup> /(h·m <sup>2</sup> )                                                                                                                                                         |
| Linear thermal transmittance                                | Standardised psi values – see SAP 2012 Appendix R, except use of $y = 0.05 \text{ W/(m}^2\text{·K)}$ if the default value of $y = 0.15 \text{ W/(m}^2\text{·K)}$ is used in the actual dwelling |
| Ventilation type                                            | Natural (with extract fans) <sup>2</sup>                                                                                                                                                        |
| Air-conditioning                                            | None                                                                                                                                                                                            |

UK's g value is the same as USA's SHGC, both are a number between 0 and 1 where 0.63 means 63% of the sun's energy or more come through the glass and into the home.

Building Regulations 2010 **ONLINE VERSION** Approved Document L1A, 2013 edition **25**

Existing construction requires a WER<sub>UK Gov.</sub> grade of C or better for any new windows. The UK historical building look and feel has orders of magnitude more gridded windows than the USA which is why they have an effective SHGC=g-value= 0.49 or better for existing buildings using the USA's northern climate zone u-value of u ≤0.3. Using the UK's government's window energy rating equation for England, which has exactly the same climate as WA, we have:<sup>10</sup>

$$WER_{UK\ Gov.} = 196.7 \times ((1 \times f) \times g_{glass}) - 68.5 \times (U \times (0.0165 \times AL))$$

Where:

*Appendix R. If the actual dwelling is constructed entirely to the notional dwelling specifications it will meet the carbon dioxide and fabric energy efficiency targets and the limiting values for individual fabric elements and buildings services. Developers are, however, free to vary the specification, provided the same overall level of carbon dioxide emissions and fabric energy efficiency performance is achieved or bettered.* For a detailed historical review British window code see [www.pilkington.com/en-gb/uk/architects/glass-information/energycontrolthermalsolarproperties/window-energy-ratings](http://www.pilkington.com/en-gb/uk/architects/glass-information/energycontrolthermalsolarproperties/window-energy-ratings)  
<sup>10</sup> [www.planningportal.gov.uk/buildingregulations/approveddocuments/part/](http://www.planningportal.gov.uk/buildingregulations/approveddocuments/part/) For existing dwellings see Table1 pg16/31 of [www.planningportal.gov.uk/uploads/br/BR\\_PDF\\_AD\\_L1B\\_2010.pdf](http://www.planningportal.gov.uk/uploads/br/BR_PDF_AD_L1B_2010.pdf). The UK Gov.'s WER is nearly the same but a bit more refined than the BFC's WER. The UK Gov. is stricter using  $WER = 196.7 \times ((1 \times f) \times g_{glass}) - 68.5 \times (U \times (0.0165 \times AL))$  and the BFC's is  $218.6g_{window} - 68.5 \times (U_{window} + \text{Effective L50})$  both with the units of [kWh/m<sup>2</sup>/yr] where m<sup>2</sup> is square meters of glass.

f= the frame factor i.e the percentage of the window obscured by frame and gaskets;  
 $g_{\text{glass}}$ = the normal total solar energy transmittance of the glass as determined by BS EN 410,  
U= the whole window U-value as specified in paragraph 4.20 and 4.21; and  
AL = the air leakage through the window in  $\text{m}^3/\text{h}\cdot\text{m}^2$  at 50 Pa pressure difference based on testing to BS 6375-1:2009.

Using UK government's SHGC value (g-value) building code requirement for England we can see the delta between our EPA's u-value for the USA and that what the UK requires. All we need is the amount of residential window glass sold in Washington State to understand how big the energy disaster the current residential building code has caused WA since 2009.

To get this information let us turn to the Northwest Energy Efficiency Alliance (NEEA.org) which covers the four state region of Washington, Oregon, Idaho and Montana. NEEA has done a great job at detailing the energy usage infrastructure in the four state area, such as total window sales. This can be found in NEEA's Long-Term Monitoring and Tracking Report on 2011 Activities. This reports gives us the foundation data we need up to 2011. NEEA got its core data from Ducker Research, the Window and Door Manufacturing Association (WDMA) and the American Architectural Manufacturers Association (AAMA), those folks we will see later on testifying to the EPA for a SHGC  $\geq 0.4$  in the Northern Zone, and rightfully so, note that for just WA they would undoubtedly support a SHGC  $\geq 0.63$ .

NEEA.org adjusted the national data to get the four state sales numbers for the Pacific NW. We will update this NEEA blessed data with the 2015 and 2014 updates from WDMA and AAMA for residential prime window sales. Prime windows are defined as building envelope enclosures made of glass, window, glass doors and skylights, with the latter making up just 0.8% of units. We will prorate NEEA's four state numbers to just Washington State by population. As one can see prorating WDMA/AAMA data for 2013 for all USA to WA significantly under reports WA units sold when comparing to NEEA's work narrowing the same source data to the four Pacific Northwest states. Given NEEA has only published data to 2011 we will use the USA growth rate to get the residential window sales for Washington State for the years 2012-2015. This is a very conservative assumption as WA is in the top two or three fastest growing states from the financial crisis to date.



**Residential Prime Windows (Windows, glass doors, skylights=0.8% )**

|             |                                                                                                                                                                                |                             |                                                                         |                       |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------|-----------------------|
|             | NEEA 2012 Window Sales Tracking Rpt. (Ducker, WDMA/AAMA data, scrubbed by NEEA.org for PacNW). Prorated with 2010 popul. data. <b>The best known window sales data for WA.</b> |                             | WDMA/AAMA 2014&15 updates. Use USA growth rates to update NEEA.org data |                       |
|             | <b>PacNW</b>                                                                                                                                                                   | <b>WA prorated NEEA.org</b> | <b>USA</b>                                                              | <b>Yr/yr growth %</b> |
| <b>Year</b> | <b>Millions of Units</b>                                                                                                                                                       |                             | <b>Millions of Units/Notes</b>                                          |                       |
| 2006        | 2.736                                                                                                                                                                          | 1.41                        | 66.7                                                                    |                       |
| 2007        | 2.425                                                                                                                                                                          | 1.25                        | 59.1                                                                    |                       |
| 2008        | 1.973                                                                                                                                                                          | 1.01                        | 48.4                                                                    |                       |
| 2009        | 1.945                                                                                                                                                                          | 1.00                        | 38.9                                                                    |                       |
| 2010        | 2.096                                                                                                                                                                          | 1.08                        | 41.6                                                                    |                       |
| 2011        | 2.159                                                                                                                                                                          | 1.11                        | 37.9                                                                    |                       |
| 2012        |                                                                                                                                                                                |                             | 43.9                                                                    | 15.83% note 1         |
| 2013        |                                                                                                                                                                                |                             | 44.5                                                                    | 1.37% note 2          |
| 2014        |                                                                                                                                                                                |                             | 46.73                                                                   | 5.00% note 3          |
| 2015        |                                                                                                                                                                                |                             | 49.061                                                                  | 5.00% note 3          |

Table 1.

**Note 1.** May 1, 2014 AAMA updates 2012 sales to 43.9M units & 15.8% growth, see [www.aamanet.org/news/2/10/0/all/1058/aama-predicts-fenestration-industry-trends-in-new-market-studies](http://www.aamanet.org/news/2/10/0/all/1058/aama-predicts-fenestration-industry-trends-in-new-market-studies) All growth rates are AAMA or WDMA data.

**Note 2.** June 10, 2014 WDMA article states 44.5M unit number, <http://windowanddoor.com/news-item/markets/new-wdma-report-predicts-market-growth-through-2015>

**Note 3.** Apr 30, 2015 AAMA article= 5% residential window growth (+10% new, 2% remodel increase for 2015, a repeat of 2014) [www.aamanet.org/news/1/10/0/all/1179/aama-releases-2014-2015-industry-review-and-forecast](http://www.aamanet.org/news/1/10/0/all/1179/aama-releases-2014-2015-industry-review-and-forecast)

Now that we have actual units of residential windows, glass doors and skylights sold, we have to convert those to square meters of total glass installed. Luckily NEEA.org faced the same problem and we will copy their methodology. See appendix of this report for a snap shot of that methodology. In a nutshell the average window unit has 16ft<sup>2</sup> of glass, patio door has 40 and average skylight has 6. The blend ratio of those three types of units sold over the years per NEEA data is very constant at 17.3 ft<sup>2</sup>. We will use this blended area per unit of 17.3 for the for 2012 to 2015 data, see third column in the table 2 below, to get the total surface area sold in each year.

**Residential Prime Windows surface area sold per year**

|             |                                                                                            |                                                           |                               |                         |
|-------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------|-------------------------|
|             | WA prorated with USA growth rates. Conservative as WA has grown faster in 2009-15 than USA |                                                           |                               |                         |
|             | <b>WA</b>                                                                                  | <b>Feet<sup>2</sup>/unit NEEA.org #'s, pg88 (95of159)</b> |                               |                         |
| <b>Year</b> | <b>Million of Units</b>                                                                    |                                                           | <b>Million-Ft<sup>2</sup></b> | <b>Million SqMeters</b> |
| 2006        | 1.41                                                                                       | 17.308                                                    | 24.34                         | 2.26                    |
| 2007        | 1.25                                                                                       | 17.301                                                    | 21.57                         | 2.00                    |
| 2008        | 1.01                                                                                       | 17.333                                                    | 17.58                         | 1.63                    |
| 2009        | 1.00                                                                                       | 17.367                                                    | 17.36                         | 1.61                    |
| 2010        | 1.08                                                                                       | 17.325                                                    | 18.67                         | 1.73                    |
| 2011        | 1.11                                                                                       | 17.333                                                    | 19.23                         | 1.79                    |
| 2012        | 1.29                                                                                       | 17.33                                                     | 22.27                         | 2.07                    |
| 2013        | 1.43                                                                                       | 17.33                                                     | 24.71                         | 2.30                    |
| 2014        | 1.50                                                                                       | 17.33                                                     | 25.95                         | 2.41                    |
| 2015        | 1.57                                                                                       | 17.33                                                     | 27.25                         | 2.53                    |

Table 2  
 see Reference for square foot per window unit see pg 96/159 of NEEA report  
<http://neea.org/docs/default-source/reports/long-term-monitoring-and-tracking-report-on-2011-activities.pdf?sfvrsn=18>

Next, using the WER energy equation from the UK government we can calculate the energy waste that is locked into Washington State for each year of hot climate window sales in Washington State since 2009. As explained above this is done taking the average hot climate window parameter sold in WA by taking a typical series of windows in the NFRC database that meets the USA northern climate zone u-value code requirement, plugging those parameters in the equation. In this case it was one of six of Pella's single hung vinyl windows. This gives a very good sample of the average hot climate window sold in Washington State. This is an annual summary of energy used (if negative) or saved if positive by a specific window accounting for extra cooling energy used in the summer and extra heat gained in winter. See table 3 energy saved [aMW/year] for windows sold in WA for 2015.

| $f_x = 196.7 \cdot C1897 - 68.5 \cdot (F1897 \cdot 5.678 + 0)$ | U-factor | SHGC  | UK Equation Energy with U value correct to SI units [W/m2/Kelvin] | Energy Delta Ave Hot C.W. sold in WA vs UK [kWhr/m2/yr] | aMW/year saved for windows installed in 2015 |
|----------------------------------------------------------------|----------|-------|-------------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------|
| Ave Uval and SHGC Hot Climate Windows in WA                    | 0.2818   | 0.224 | -60.75                                                            | 88.99                                                   | 23.2                                         |
| Englands SHGCg New dwelling w/ uk Uvalue                       | 0.246    | 0.63  | 28.24                                                             | 73.82                                                   | 19.25                                        |
| Englands SHGCg New dwelling w/ Pella ave Uval for C.W.         | 0.285    | 0.63  | 13.07                                                             | 79.66                                                   | 20.77                                        |
| Englands SHGCg New dwelling w/LBNL ave Uval,2012 study         | 0.27     | 0.63  | 18.91                                                             |                                                         |                                              |

Table 3 The extra energy that could have been saved had cheaper and more energy efficient windows be used in WA over the hot climates windows that are the only window sold in the WA due to the EPA's 2009 hot climate windows tax rebate policy and a building code which allows hot climate windows to be sold in cold climates.

Using a window with the insulation value (u-value) and solar gain (g-value) as the UK requires in England would save **23.2 aMW/year of 2015 windows sold**. Using LBNL u and SHGC values (which are poor energy saving value but ones LBNL sees as out of the box viable) in their 2012 massive analyses for the EPA we get **20.77 aMW**. Using the even poorer USA insulation value of 0.285 (this is EPA driven, from the EPA that dumps toxic mining sludge into rivers) and the same solar gain value (SHGC=0.63) as England requires its builders we get 19.25 aMW. This uses the average cold climate windows u-value for a typical vinyl series with 446 Pella cold climate windows that are in the Nation Fenestration Rating Council database. This a bit lower than from the energy saved than that using the Lawrence Livermore Nation Labs value of 29.5 aMW. This level of delta could easily be from air leakage values assumed for each respective house stock, UK vs USA. The delta could also be from my total square footage of windows assumptions vs that what LBNL made. Given they are only 30% off (29.5 from LBNL and 20.77 from UK WER equation) their agreement is remarkable close.

Three important item are:

- 1) these cold climate windows are cheaper as they do not require silver coatings as used for hot climate window to reflected away the suns energy) using the UK's methodology.
- 2) the energy saving is additive year over year. By using the u-values for cold climate window current in the NFRRC data (seems that many window makers are ready for the EPA to fix the 2009 northern climate window build code) and the NEEA.org/Ducker/WDM/AAAMA window sales data for 2009 to 2015, WA has already built in 123.2aMW using the 79.66 kWhr/m2/yr energy delta for cold climate windows. This is growing by at least 20.77 aMW per year and more like the 29.5 a MW the LBNL derived number.
- 3) the above energy saving from either methodology UK or LBNL is only for residential housing stock. And does not include small commercial buildings which when added will further increase the savings. And given no one in the commercial building industry stood up to testify to the EPA on the EPA's mistake (like the window and glass makers have) it is quite possible commercial energy saving work is as bad as the EPA's when it comes to the northern climate zone. All of the major glass makers and window makers for Washington State did testify to the stupidly of the EPA's window building code not having a solar heat gain minimum. And the EPA even admitted it in 2014 as detailed above.

- I226-A-11 10. Please detail the electric load change from climate change as a warming climate in WA means the assumption of 23F is vanishing small. The Eastside & Puget Sounds energy peak is always in the winter, overall warming will just reduce that peak and any need for grid expansion in the next decades. This July 2015 report from the Dept of Energy is one of many places to start. "Predicting the Response of Electricity Load to Climate Change" <http://www.nrel.gov/docs/fy15osti/64297.pdf>
- I226-A-11 11. The EIS relies solely on PSE studies or studies for which PSE selected and paid the consultants to conduct for both conservation and non conservation alternatives!  
a) Let us look at page 143 of 715 of the draft EIS (page 2-34) {notice this author's full use of standard reference quoting page numbers that the DEIS is going out of its way not to use} Here the DEIS states "Determining the amount of non-transmission resources that would be needed to address the capacity deficiency that PSE has identified is complex because every solution has a different degree of effectiveness and reliability."  
{unfinished – time ran out}
- I226-A-12 12. Pg76of 715 "Peak generation plants could produce GHG emissions during operation and result in a moderate GHG impact." This is a worthless statement if not show in context of the green house gas that the new powerlines would allow to be transmitted like dams (dams do emit GHG, warmer the water the higher the emission) Please provide this statement and ones like in in context with range level not just vague assertion of low moderate high.
- I226-A-13 13. Please detail rate, cost impacts the US governments complaints against the Olympic Pipeline company and electromagnetic field corrosion from current power line including the 115 kV powerlines running over the Olympic Pipeline pipes and what additional corrosion, environmental to mitigate and cost impact new 230 kV lines would cost citizen local and otherwise. Also detail the time line to turn off pipelines should a leak occur.
- I226-A-14 14. HomePrint another other PSE vauge and obfuscated conservation programs [=author ran out of time to finish]  
15. I see the draft EIS has ignored the real reason PSE whats this project to get power to from Canada and California see item  
16. UNANSWERED CENSE QUESTIONS

A resubmittal of our June 14, 2015 comments

Date: June 14, 2015

Email Subject: Energize Eastside EIS - Scoping input and requirement for use of NEPA vs SEPA

To: City Manager and Council

From: Todd Andersen, Jennifer Steinman 4419 138<sup>th</sup> Ave SE, Bellevue WA 98006

My feedback on scoping comes in three areas. These are summarized below, with supporting details following.

- I226-A -11 See response for Key Theme OBJ-2.  
I226-A -12 See response for Key Theme GHG-1.  
I226-A -13 See responses for Topic PLS and Topic EMF.  
I226-A -14 See response for Key Theme OBJ-1.

1. UNANSWERED CENSE QUESTIONS

While I was initially encouraged that Bellevue was acting in the best interest of its citizens by approving the "Independent Technical Analysis of Energize Eastside, April 29, 2015 by Utility System Efficiency, Inc.", I am deeply disappointed that we have wasted more taxpayer money on a study that failed to answer the fundamental questions many of the citizens of Bellevue have been asking. These questions and incongruities were recapped in CENSE.org's response "Cense rejects U.S.E.'s report on Eastside Energy, May 4, 2015."

Most importantly, an independent load forecast was not created based on more realistic parameters for demand/growth, local generation, energy savings and trends, and north-south transfer. It is critical these questions be carried forward into the input and scope of the EIS. Without this, the entire EIS is based on a shaky foundation that doesn't have community support.

2. FEDERAL / NEPA RULES

It's clear from reading Bonneville Power Administration (BPA), Seattle City Lights(SCL) and Columbia Grid consortium (BPA, SCL, PSE) documentation that we can't consider Energize Eastside (EE) as an independent or local project to be governed by SEPA. BPA, a federal agency, is the driver of this, and as EE is a subset of a federal effort and should fall within Federal / NEPA jurisdiction. Columbia Grid documents clearly show EE is only one possible way to address North-South Transfer Reliability and is only part of the broader picture of the grid /bulk power planning spanning Canada, Pacific Northwest, California.

Also, the majority of power and energy sent over the proposed lines are from hydro operations both in the US and Canadian, and for some of the cases conditions PSE/BPA/ColumbiaGrid are using for justification of EnergizeEastside(EE) ALL power/energy are from hydro operations. Hydro operations are specifically called out in the US government's 10 year review of threat to the Salish orca (a.k.a Southern Resident Orca) listed as an endangered species

As such, the EIS for EE should clearly be governed under NEPA / Federal guidelines and possibly be expanded to look at the broader Columbia Grid plans. Legal challenges arise when large-scale projects are broken up into smaller projects to avoid federal oversight.

It is my understanding that under NEPA (versus SEPA), the scoping impact would primarily mean EE would need to be evaluated in the context of the regional strategy as a whole and alternatives would need to be considered more broadly.

- Under NEPA, more comprehensive inclusion of the impacts should be weighted including the evaluation of the impact of international endangered species, the risk of massive build out on top of an aging gas pipeline that already sits on fault line (when a safer alternative exists with SCL), and degradation of property values in cost calculations.

- Under NEPA, broader consideration should be given to alternatives such as SCL (Maple-Valley SnoKing) improvements/re-conductoring to support N-S Transfer or alternatives for balancing peak loads with PSE. Today, the only alternatives being promoted by PSE are minor route permutations.

### 3. ALTERNATIVE SOLUTIONS

Please make sure a thorough analysis of demand side reductions are not only investigated but as stated before, factored into the demand forecast. These solutions are key to why cities keep growing but their traditional energy needs do not.

- Grid Batteries to manage peak load
- Solar Power for continual cost reduction
- Geothermal as cost effective alternative
- Building Materials (e.g. LED Bulbs, Canada/UK Window Standards vs California)

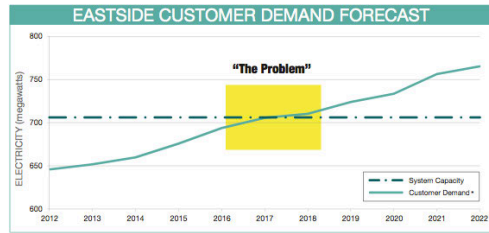
Under the guise of EE, BPA benefits as their reliability challenges are solved by PSE despite more cost effective solutions being available, PSE can charge higher rates with a 40-year guarantee of profits on their investment, and PSE customers (who already pay 28% higher rates than those served by cooperatives, municipalities or public utility districts) will bear the burden, not only of higher costs but also the negative impact to their neighborhoods.

Lastly, I wanted to make you aware of two “off-the-record” comments that I have heard in recent months that highlight the possible collusion that goes on within these organizations – the City of Bellevue, PSE, BPA. These are the types of comments that erode public confidence.

- Hardev Juj – formerly with SCL & PSE, is VP or Transition Planning and Asset Management at BPA. He actually made the comment that EE is largely to serve BPAs needs and BPA would be swapping costs on other projects. Seems Mr. Juj expectantly retired from BPA this month and this author finds that very odd. As BPA is a federal agency, which BPA itself is/was under several federal sanctions for misbehavior, EE should be a NEPA supervised project.
- Nicolas Matz – City of Bellevue Senior Planner. I commented that EE’s need is about keeping PSE (a Bellevue company) solvent. Nicholas’ response was “that was a need as well”. Given PSE’s rates per NEEA are 28% higher than all other utilities in WA maybe that is not a need as clearly public utilities are better run for the ratepayers.

SUPPORTING MATERIAL

1. UNANSWERED CENSE QUESTIONS – The biggest unanswered question has to do with the supply / demand forecast. PSE states demand will exceed supply in 2017 based on the chart below, but there are many issues with their analysis that remain unanswered. An independent forecast was requested but not completed.

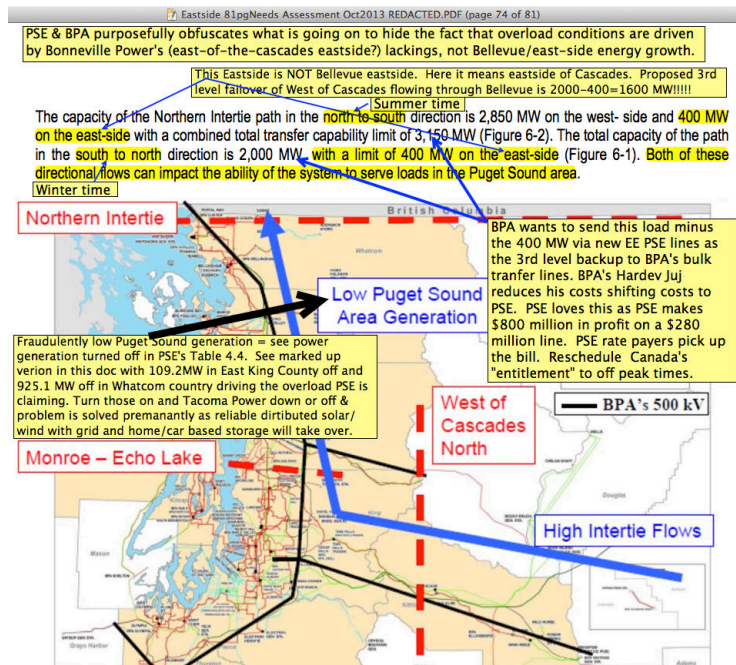


\*Customer Demand assumes 100% of conservation goals are met.  
This chart shows customer demand with 100% conservation goals met compared to our current electric transmission system's capacity. By 2017-2018, demand will exceed our ability to provide dependable power.

[www.pse.com/energizeeastside](http://www.pse.com/energizeeastside)

2

1. The next series of charts comes directly from PSE’s own documentation “Eastside Needs Assessment Report – Transmission System – King County, October 2013”.
  - i. Since its original publication, PSE has redacted (hidden) the details behind their assumptions posted on their website, however, I downloaded a copy before they hid the few facts they show, so can highlight specific questions. Comments in yellow.
  - ii. This first chart is an overview that explains the high-level flow of the Northern Intertie path.



2. This second chart below shows the Puget Sound Generation Capability that was "used" in the PSE modeling. This is a key input into their model and will be discussed below.



Eastside\_78pgNeeds\_Assessment\_Final\_Draft\_10-31-2013v2 REDACTED R1.pdf (page 32 of 78)

change.

4.1.8 Transfer Levels

These are schedulable with flexible timetable and not required to happen during peak system loads. And could go away completely depending of Columbia River Treaty renewal/cancellation in 2015/16. Why is PSE/BPA hiding this?

The NI (Northern Intertie) flows were assumed based on season and historic flows; Winter Peak NI-1500 MW S-N and Summer Peak NI-2850 MW N-S.

Why is Tacoma Power left off table 4.4? Is it not a generator? Does adding it raise too many questions? It took careful cherry picking to get those WECC computer simulations to overload!

4.1.9 Generation Dispatch Scenarios

For the winter peak load cases, no PSE and SCL generation west of the Cascades were run. Tacoma Power generation was left on due certain internal system constraints. The generators off-line in the Eastside Needs Assessment are listed in Table 4-4.

A low-generation case was simulated as a sensitivity. The Puget Sound area generation run during that case is indicated in Table 4-4.

How is this valid? 925.1 MW of power generation turned off?? Even the Low case is fraudulently set up!!

Table 4-4. List of Puget Sound Area Generators Adjusted in the 2013 Eastside Needs Assessment

| Generation Plant | Winter MW Rating | Expected MW Output during Winter Peak for Low-Generation Sensitivity Case | Type                        | Owner              | Transmission Delivery     |
|------------------|------------------|---------------------------------------------------------------------------|-----------------------------|--------------------|---------------------------|
| Enserch          | 84.8             | 25                                                                        | Natural Gas, Combined Cycle | PSE                | Whatcom County            |
| Sumas            | 139.8            | 0                                                                         | Natural Gas, Combined Cycle | PSE                | Whatcom County            |
| Ferndale         | 282.1            | 0                                                                         | Natural Gas, Combined Cycle | PSE                | Bellingham Whatcom County |
| Whitehorn        | 162.2            | 0                                                                         | Natural Gas, Simple Cycle   | PSE                | Whatcom County            |
| Fredonia         | 341              | 0                                                                         | Natural Gas, Simple Cycle   | PSE                | Skagit County             |
| Sawmill          | 31               | 22                                                                        | Biomass                     | Private Owner      | Skagit County             |
| Upper Baker      | 108              | 80                                                                        | Hydro Dam                   | PSE                | Skagit County             |
| Lower Baker      | 78               | 54                                                                        | Hydro Dam                   | PSE                | Skagit County             |
| Komo Kulshan     | 14               | 0                                                                         | Hydro Run-of-River          | Private Owner      | Skagit County             |
| March Point      | 151.6            | 134                                                                       | Natural Gas, Combined Cycle | Shell              | Skagit County             |
| Ross             | 450              | 295                                                                       | Hydro Dam                   | SCL                | Snohomish County          |
| Gorge            | 190.7            | 157                                                                       | Hydro Dam                   | SCL                | Snohomish County          |
| Diablo           | 166              | 160                                                                       | Hydro Dam                   | SCL                | Snohomish County          |
| South Tolt River | 16.8             | 0                                                                         | Hydro Run-of-River          | SCL                | Northeast King County     |
| Snoqualmie       | 37.8             | 0                                                                         | Hydro Run-of-River          | PSE                | East King County          |
| Twin Falls       | 24.6             | 0                                                                         | Hydro Run-of-River          | Private Owner      | East King County          |
| Cedar Falls      | 30               | 0                                                                         | Hydro Run-of-River          | SCL                | East King County          |
| Freddy 1         | 270              | 0                                                                         | Natural Gas, Combined Cycle | Atlantic Power/PSE | Pierce County             |
| Electron         | 20               | 4                                                                         | Hydro Run-of-River          | PSE                | Tacoma Pierce County      |
| Fredericksen     | 162.2            | 0                                                                         | Natural Gas, Simple Cycle   | PSE                | Pierce County             |

Simply turning on East King County dams just 10% of winter rating will support massive 3rd level failure power flows through Bellevue (EE)

Expected MW output during Winter peak is based off of actual 2011-2012 Winter peak output except for SCL hydro, which is based off of modeled generation levels in WECC winter peak case.

Total Generation= 2858.6 MW    109.2MW    Low Generation = 1031 MW

How MASSIVELY overbuilt is PSE currently in Bellevue/Renton/Redmond/Kirkland??? (Sammamish-Lakeside-Talbot Hill power lines) Putting ALL to ZERO and adding ~2.5x times Eastside's PEAK power from 3rd level failures from BPA AND leaving on Tacoma Power to drive even more power through Bellevue to barely overload PSE.

3. This third chart below shows the Assumptions used in their models to calculate the capacity gap and overload percentages. This is a key input into their model and will be discussed below.
  - a. For Northern Intertie, the full amount is included in PSE's calculations, however, several areas should be checked:
    - i. Why is PSE EE being proposed when it highest overload is 127.8% for a 115kV line when SCL's Maple Valley-Snoking- line overloads at 157.8% see table 6-5 below. SCL's line is a 230kV line carrying 4 time the power. Fixing that first is cheaper by rewiring with modern higher load lines like ceramic core and solves BPA's issues. Beside BPA already leases those lines from SCL, with any known compensation to SCL. Maybe EE is SCL's payment from BPA? Is that legal?
    - ii. Assumes the full amount during an overload situation. What are the Columbia River Treaty rules for power transmission during an overload scenario? Thought there was flexibility.
    - iii. What is the status/details of the renewal of the treaty, which expires here in 2015/16 or so. Local & national press report the US wants to scale back power sent back to Canada by 90%. As such, this number in the model is high.
  - b. For PSE/SCL Westside Generation, winter was reduced to 0.
    - iv. The base case, is 2858 MW
    - v. The low generation scenario was 1031.
    - vi. How can zero be justified as a good parameter? Unless PSE decides to behave like Enron and turn off the power as they did during California's energy crisis!

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**Table 5-2: Winter and Summer Case Study Assumptions**

When is this ever valid? This is 100% BPA issue 0% PSE's. Schedulable per US treaty agreement. The USA plans are to cut this way back or zeroed, if treaty is not renewed then this is zero. If not schedule transfers off peak.

| Case Name                          | Amount of Conservation | System Load | Eastside Load | Northern Intertie | PSE/SCL Westside Gen | Other Adjustments Modeled                                                                                                                                                                                                                                                                          |
|------------------------------------|------------------------|-------------|---------------|-------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 100% Conservation 2013-14 Winter | 100%                   | 5055 MW     | 652 MW        | 1500 MW Export    | 0 MW                 | Saint Clair 230-115 KV transformer; Talbot Hill - Berrydale #1 line uprate; Starwood autotransformer removal with Tacoma Power voltage increase                                                                                                                                                    |
| 1 75% Conservation 2013-14 Winter  | 75%                    | 5090 MW     | 656 MW        | 1500 MW Export    | 0 MW                 | Saint Clair 230-115 KV transformer; Talbot Hill - Berrydale #1 line uprate; Starwood autotransformer removal with Tacoma Power voltage increase                                                                                                                                                    |
| 2014 Heavy Summer                  | 100%                   | 3343 MW     | 516 MW        | 2850 Import       | 2171 MW              | Saint Clair 230-115 KV transformer; Talbot Hill - Berrydale #1 line uprate; Starwood autotransformer removal with Tacoma Power voltage increase                                                                                                                                                    |
| 2018 Heavy Summer                  | 100%                   | 3554 MW     | 552 MW        | 2850 Import       | 2276 MW              | Planned improvements include 2013 adjustments + Alderton 230-115 KV transformer; Beverly Park 230-115 KV transformer; White River - Election Heights 115 KV line re-route into Alderton; White River 2nd bus section breaker; Lake Hills - Phantom Lake 115 KV line; Sammamish-Juanita 115 KV line |

Magically PSE can turn on 80% of the power generation while the system imports 5x the Eastside load of 552MW

4. This fourth chart (snapshot) below shows the “Eastside” overloads predicted for 2017/18 are based on these assumptions at specific substations – all based on the above faulty assumptions.

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**4.1.7 Load Power Factor Assumptions**

The power factor at each substation was based on the MW and MVAR loadings at the time of the January 18, 2012 system peak. As the load levels changed based on the load forecast, the power factor at each substation did not change.

- a. In addition, the data shows overload trends at specific sub-stations, however, the modeling was done another “cherry picked” at a point in time? What are the loads and power factors at each substation going back 10-15 years for the winter and summer peaks? Electric car charging is improving this power factor with capacitive load, how much? There are mitigations at the sub-station level that are far cheaper than a \$1 billion dollar power line (\$280M plus \$800 million in profit interests and O&M). Grid batteries and electric cars need to be modeled for power factor effects.
5. FEDERAL / NEPA RULES – The following documents provide evidence that Energize Eastside should not be considered as a local project subject to SEPA rules, but rather part of a broader strategy across BPA, a federal agency, and PSE, a for-profit utility, for overall international energy plans that should fall under Federal or NEPA jurisdiction.
1. Columbia Grid documentation clearly shows EE is part of their broader plans. I have highlighted key points in yellow.
    - i. EE is part of the larger project to increase international power flows between Canada and the US as required by Bonneville Power Authority (BPA), treaty obligations, and to prepare for Canada’s “Site C” dam coming on line with ~1,200 MegaWatts of power. A NEPA process is required for international projects, which both BPA and Canadian power authority want to deny, but is clearly the case.
    - ii. Furthermore, using PSE’s own document “Eastside Needs Assessment Report Transmission System King County”, EE is for reliability of the grid SOLEY for BPA purposes. If one takes out BPA’s bulk power flow to Canada OR not use a falsified low power generation case of shutting off all the northern gas turbine generators at the exact same time as all the hydro dams are off, then EE’s business case falls apart. PSE/BPA went extraordinary lengths to get the model to show overloads.
    - iii. The new hydro dam will further stress the endangered species listed as the Salish Orca (aka as Southern Resident Orca). A 10 year study published by NOAA in June 2014 states expanding hydro dam use threatens the habits of several endangered species including pacific salmon and the last remaining 77 Salish Orca (these Orca are 1 million years distinct for other Orca) which are an international endangered species further supporting NEPA review.

17 Eastside 81pgNeeds Assessment Oct2013 REDACTED.PDF (page 55 of 81)  
 There are six (6) potential thermal violations (same as 2013-14) of PSE lines or transformers in the King County area for **Category C contingencies**. These facilities are highlighted in yellow on **Table 6-5**, which shows that the potential thermal overloads vary up to a high of 128%. Overloads caused by BPA facility outages which are controlled by BPA generation dispatch are not highlighted.

| Case                                                                                                                                                             | Category | Worst Contingency                                                                       | Owner of Facilities Out | Element(s)                                                                   | Owner of Overloaded Facilities | Percent Overload |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------|-------------------------|------------------------------------------------------------------------------|--------------------------------|------------------|
| 17 Eastside 81pgNeeds Assessment Oct2013 REDACTED.PDF (page 60 of 81)                                                                                            |          |                                                                                         |                         |                                                                              |                                |                  |
| <b>Table 6-5: Elements above Emergency and Operating Limits: 2017-18 Winter Peak, 100% Conservation, Normal Weather, Thermal Loadings (CONTINUED) (Redacted)</b> |          |                                                                                         |                         |                                                                              |                                |                  |
| 2017-18 Winter                                                                                                                                                   | C        | N-1-1: Echo Lake - SnoKing - Monroe 500 kV line & Maple Valley - SnoKing #1 230 kV line | BPA & SCL               | Maple Valley - SnoKing #2 230 kV line                                        | SCL                            | 157.8%           |
| 2017-18 Winter                                                                                                                                                   | C        | N-1-1: Echo Lake - SnoKing - Monroe 500 kV line & Talbot Hill - Lakeside #2 115 kV line | BPA & PSE               | Talbot Hill - Lakeside #1 115 kV line (Redispatch not enough)                | PSE                            | 127.8%           |
| 2017-18 Winter                                                                                                                                                   | C        | N-1-1: Echo Lake - SnoKing - Monroe 500 kV line & Talbot Hill - Lakeside #1 115 kV line | BPA & PSE               | Talbot Hill - Lakeside #2 115 kV line (Redispatch not enough)                | PSE                            | 127.6%           |
| 2017-18 Winter                                                                                                                                                   | C        | N-1-1: Talbot Hill 230-115 kV transformer #2 & Berrydale 230-115 kV transformer         | PSE                     | Talbot Hill 230-115 kV transformer #1 (Redispatch not enough)                | PSE                            | 105.7%           |
| 2017-18 Winter                                                                                                                                                   | C        | N-1-1: Echo Lake - SnoKing - Monroe 500 kV line & O'Brien - Falcon 115 kV line section  | BPA & PSE               | Talbot Hill - Boeing Renton - Shuffleton 115 kV line (Redispatch not enough) | PSE                            | 110.6%           |
| 2017-18 Winter                                                                                                                                                   | C        | N-1-1: Talbot Hill 230-115 kV transformer #1 & Berrydale 230-115 kV transformer         | PSE                     | Talbot Hill 230-115 kV transformer #2 (Redispatch not enough)                | PSE                            | 105.7%           |

**REQUIRES National Environmental Impact Review Process, not SEPA as requirements driving overload are for BPA's needs to do bulk power transfer to Canada, for one example see this case. And NEPA required as power flows come from hydro operations in an endangered species habitat.**

Below are the case study assumptions causing "PSE's" "overloading". Sure looks like BPA power to Canada and all generators "West of the Cascades" off causing the "problem".

**Table 3-2: Winter and Summer Case Study Assumptions**  
 How is this BPA's requirement to ship "entitlement" power back to Canada valid during outages? This is 100% BPA issue 0% PSE's. Schedulable per US treaty agreement. USA plans are to cut this way back or zeroed in 2015/16

| Case Name                                   | Amount of Conservation | System Load | Eastside Load | Northern Intertie | PSE/SCL Westside Gen | When is this ever valid? All 20 generators west of cascades shut off? See table 4.4 to understand how fraudulent this is. Other Adjustments Modeled                                                                                                                                                |
|---------------------------------------------|------------------------|-------------|---------------|-------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 100% Conservation 2017-18 Winter          | 100%                   | 5208 MW     | 706 MW        | 1500 MW Export    | 0 MW                 | Block load allocated per King Co Dist. Planners; Planned improvements include 2013 adjustments + Alderton 230-115 kV transformer; Beverly Park 230-115 kV transformer; Raver 500-230 kV transformer; SCL series inductors                                                                          |
| 2 75% Conservation 2017-18 Winter           | 75%                    | 5325 MW     | 722 MW        | 1500 MW Export    | 0 MW                 | Block load allocated per King Co Dist. Planners; Planned improvements include 2013 adjustments + Alderton 230-115 kV transformer; Beverly Park 230-115 kV transformer; Raver 500-230 kV transformer; SCL series inductors                                                                          |
| 3d 100% Conservation 2017-18 Extreme Winter | 100%                   | 5742 MW     | 782 MW        | 1500 MW Export    | 0 MW                 | Block load allocated per King Co Dist. Planners; Planned improvements include 2013 adjustments + Alderton 230-115 kV transformer; Beverly Park 230-115 kV transformer; Raver 500-230 kV transformer; SCL series inductors                                                                          |
| 2014 Heavy Summer                           | 100%                   | 3343 MW     | 516 MW        | 2850 Import       | 2171 MW              | Saint Clair 230-115 kV transformer; Talbot Hill - Berydale #1 line uprate; Starwood autotransformer removal with Tacoma Power voltage increase                                                                                                                                                     |
| 2018 Heavy Summer                           | 100%                   | 3554 MW     | 552 MW        | 2850 Import       | 2276 MW              | Planned improvements include 2013 adjustments + Alderton 230-115 kV transformer; Beverly Park 230-115 kV transformer; White River - Electron Heights 115 kV line re-route into Alderton; White River 2nd bus section breaker; Lake Hills - Phantom Lake 115 kV line; Sammamish-Juanita 115 kV line |

yet PSE can magically generate 2171MW in Summer both 2014 and 2018 when they

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want to. Winter is Bellevue/Eastside's greatest local power need, summer is much lower locally. Power headed to California is at its greatest in summer as the 2850 MW import numbers above show.

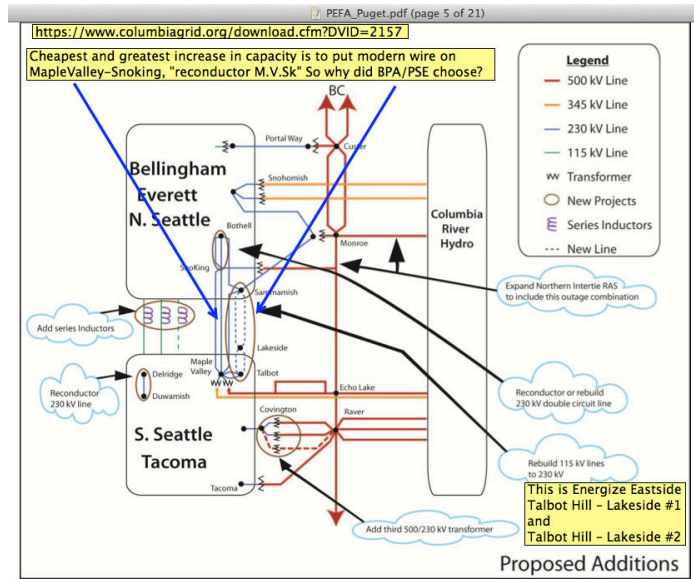
Here is Columbia Grid comments on what EE is for.<sup>11</sup> Even the reliability issues are BPA's as PSE's 81 page "Eastside Needs" report clearly shows.

PEFA\_Puget.pdf (page 2 of 21)

**Introduction and Conclusions**

In October of 2010, the Puget Sound Area Study Team issued a report entitled "Transmission Expansion Plan for the Puget Sound Area." The report is available via the ColumbiaGrid website. **The report details a transmission plan for the Puget Sound region that would, as a basic requirement, provide for reliable system performance while significantly improving the ability of the transmission grid to support power transfers between the Northwest and British Columbia.** Since the release of the original report, the following changes have occurred that have led to the need for the Puget Sound Area Study Team to revise their transmission plan:

<sup>11</sup> <https://www.columbiagrid.org/download.cfm?DVID=2157>



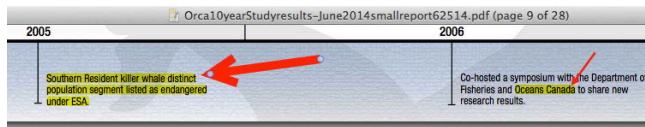
Columbia Grib Doc tells you the real reason for EnergizeEast project = to move power to from Canada/California. NOT FOR LOCAL Bellevue energy growth!!!!!!

**Figure Two: Revised Puget Sound Area Transmission Expansion Plan for Supporting South-to-North Transfers**  
 With Canada's Site C dam coming on line 2024 with 1200 MW of power with no place to sell but USA, Canada is over supplied. PSE plans to have EE done so it move this power and use when joining EIM in 2016

<https://www.columbiagrid.org/download.cfm?DVID=2157>  
 See Site C dam progress at [https://en.wikipedia.org/wiki/Site\\_C\\_dam](https://en.wikipedia.org/wiki/Site_C_dam)

More on EIM, CA-ISO's energy market, which even Hardev Juj, BPA's head of grid planning touch on, see very end.

This is a screen shot below from NOAA's 10 year study on the endangered Orca whales, with only 78 leave in the entire world. This alone forces the EIS to be a NEPA not a SEPA as issues cross international boundary with Canada.



Southern Resident Killer Whales: 10 Years of Research and Conservation

Reducing Threats to Southern Resident Killer Whales

Federal agencies must insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered or threatened species or destroy or adversely modify critical habitat. NOAA Fisheries consults on federal actions under section 7 of the Endangered Species Act to reduce or mitigate impacts and ensure the survival and recovery of Southern Resident killer whales. Section 7 consultations are an important and effective management tool to reduce impacts on Southern Residents.

| Types of Actions                                          |                                                                                                                                                                                                                                                             | Mitigation/Conservation Measures                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Actions that affect the salmon prey of Southern Residents | <ul style="list-style-type: none"> <li>Harvest management, such as fisheries regulations or fishery management plans</li> <li>Hydropower operations</li> <li>Hatchery production and management</li> <li>Freshwater and estuary habitat projects</li> </ul> | <ul style="list-style-type: none"> <li>Risk analysis to assess salmon abundance levels and relationships to killer whale survival and recovery</li> <li>Identify workgroups and research projects to address data gaps.</li> <li>Minimize occurrence of derelict gear.</li> <li>Protective measures for salmon habitat, populations, and hatchery operations.</li> </ul> |

- [http://www.nwfsc.noaa.gov/news/features/killer\\_whale\\_report/pdfs/smallreport62514.pdf](http://www.nwfsc.noaa.gov/news/features/killer_whale_report/pdfs/smallreport62514.pdf)
- [http://www.nwfsc.noaa.gov/news/features/killer\\_whale\\_report/pdfs/bigreport62514.pdf](http://www.nwfsc.noaa.gov/news/features/killer_whale_report/pdfs/bigreport62514.pdf)
- [www.nmfs.noaa.gov/pr/species/mammals/whales/killer-whale.html](http://www.nmfs.noaa.gov/pr/species/mammals/whales/killer-whale.html)
- [http://www.nwfsc.noaa.gov/news/features/killer\\_whale\\_report/](http://www.nwfsc.noaa.gov/news/features/killer_whale_report/)

2. PSE announces plans to join EIM (Energy Imbalance Market) in 2016. Again, key points are highlighted or underscored.
  - i. As PSE operates primarily in Puget Sound’s East Side (and near British Columbia), Bellevue needs to question if the proposed highly expandable, and much taller 230kv lines are really to serve Bellevue’s needs or to prepare for expansion efforts to maximize profit via North-South Transfer expansion and EIM agreement. PSE will need to have the capacity to sell/transport bulk high voltage power from Canada. PSE has no other plans for expansion that could support this outside of EE, so we can only assume the ulterior motive. Again, the Energize Eastside project is a small part of a much bigger picture.

CAISO EIMFAQ.pdf (page 1 of 2)

# EIM FAQ

## Expanding regional energy partnerships

**WHAT DOES IT MEAN TO PARTICIPATE IN THE EIM?**

The Energy Imbalance Market (EIM) strengthens grid reliability by allowing participants to buy and sell power closer to when electricity is consumed and by allowing system operators real-time visibility across neighboring grids, which supports balancing supply and demand at less cost. The ISO market systems identify fluctuations in supply and demand and then automatically finds the best resource from across a larger region to meet immediate power needs (demand). This activity optimizes the interconnected high-voltage system as market systems automatically manage congestion on transmission lines which not only helps maintain reliability (system up time) but manage and mitigate the cost of congestion as well.

**WHO ARE THE CURRENT PARTICIPANTS IN EIM?**

The ISO and PacifiCorp, which serves customers in six states, launched the first western real-time energy balancing market on November 1, 2014. Las Vegas-based NV Energy has approvals from both the Federal Energy Regulatory Commission (FERC) and the Public Utilities Commission of Nevada (PUCN) and will begin participating in the EIM on October 2015. Puget Sound Energy of Bellevue, Washington, and Arizona Public Service headquartered in Phoenix, Arizona, have announced their plans to enter the EIM on October 1, 2016. This means the EIM will provide cost savings for consumers in eight western states. In addition, comprehensive studies show significant reliability benefits result from leveraging generation resources across the entire EIM region with the added benefit of more frequent power plant dispatching in real time to cost efficiently use available energy supplies.

- i. Even with PSE’s inflated demand picture, an alternative is to install 50 foot poles (+5 feet from today) to support the 230kv and easily meet their demand projections for next 40 years. PSE argues that it is more cost effective to install fewer 130 foot poles (+85 feet from today); however, it is out of character for a residential area, and would end in deadly disaster with the added stress to the and aging gas pipeline running directly underneath.

The real reason to go with larger poles is that they can easily be expanded to carry 500kv with no additional permissions or pole installation required. Again, not needed to meet Eastside demand, only needed for North-South Transfer. The picture below (Antelope-Pardee corridor in Lancaster) shows unsightly 500kv being proposed by PSE. These are typically rural not urban. And, PSE can add a wireless cable company to the area and expand the poles to 150feet with new federal rules without even have to ask the City of Bellevue permission.





<sup>1</sup> <http://www.cpuc.ca.gov/Environment/info/aspen/antelopepardee/photos.htm>

#### 6. ALTERNATIVE ENERGY

- a. Grid Batteries / Storage – Lots of press and real world examples on this – New York, California, Hawaii are examples. Many states have already implemented this as alternative to infrastructure / power line build out, and more cost effective way to achieve reliability. With this trend, it's hard to believe we are even having a discussion around EE.
- b. Solar – Given solar is now cheaper than grid in 20 states (including WA Hydro) what are the projections of solar displacing utility power? Major banks are now funding hundreds of utility scale solar projects in the 50 states.
  - i. See Deutsche Bank's work reference in on page 3/12 of *Tech & financial issues with PSE Energize Eastside1.4w.o.affil.doc*
  - ii. References Edison Electric Institute's, (the lobbying group for the utilities) urgent call to action in their 2013 report *Disruptive Challenges: Financial Implications and Strategic Responses to a Changing Retail Electric Business*.
  - iii. This was sent to the City of Bellevue on 2/12/2014 for the independent consultant review.
- c. LED bulb replacement - Confirm via statistically significant survey that there is at least 600MW (calculated in detail by this MSEE for PSE service area) at peak load of incandescent bulbs inside PSE's territory per NEEA.org numbers when accounting for the 45% first year failure rate of compact florescence bulbs as determined by the Dept of Energy reports across +300 bulb models sold. I look forward to comparing

numbers to what the NEPA EIS gets. Fix the current 11kW of incandescent waste at City Hall!

- d. Windows – Washington currently only sells hot climate windows in Washington State wasting at least 100 aMW/year. These windows would retain heat reducing peak load in winter. What is PSE’s share of saving when hot climate windows are banned in WA and only cold climate ones allowed? New building code proposals are with the Washington legislature.
- e. Geothermal – My former employer let a 280 MW geothermal power plant be installed on our Navy Lab without cost to it in 1986, assuming the research and develop lab with 5000 employees (China Lake) got all its power for free and what was left over, then the California Energy Inc, could sell the rest. PSE’s territory is as close, if not lot closer, to geothermal in terms of drilling depth. The major cost here is replacing heat exchangers; far cheaper over 40 years than \$1 billion dollars of new power lines. Please fully detail that option. May need to confirm if BLM land is available for this purpose. The Navy had to have ownership transferred from BLM to Navy which Clean Air Act 111D and related rules can expedite transfer to City of Bellevue or other state/city government agency.
- f. Callable Power - Solve PSE’s inflated power needs with reverse Demand Response “call to turn on power” from distributed from electric car batteries to solve peak power loads. See more on flatten peak loads with Energy North West below.
- g. Please evaluate all power options in the National Association of Clean Air Agencies (NACAA) May 2015 many of which have been testified to the WA State House and Senate committees . This is the +400 page document of menu items for states to get onto better energy resources.  
[www.4cleanair.org/sites/default/files/Documents/NACAA\\_Menu\\_of\\_Options\\_HR.pdf](http://www.4cleanair.org/sites/default/files/Documents/NACAA_Menu_of_Options_HR.pdf)
- h. What is the total cost of EE including profit, interests and assumed operation & maintenance fees over the 40 year payback period? And how does this compare to lifecycle costs for distributed generation or Demand Response (ability to call-to-turn-off-as-desired) actual project and potential projects by the likes of Stan Gent, CEO of Seattle Steam Company (just bought by the largest US private equity for renewable energy Brookfield and is now called Enwave Seattle, but for WA Senate/House invited presentations search with Seattle Steam) & WSU’s Energy Program specialist Dave Sjoding or Energy North West’s John A. Steiger’s 509-377-4547 (the civil service guys running the grid/nuke facilities in eastern WA) 100MW Demand Response project in WA. All these folk of whom invited to give presentations to WA House and Senate Energy Committees represent the future. Demand Response is measured in 1000s of MegaWatts in East coast which is far more advanced than WA which has just 100MW which John A. Steiger has put together for sale to utilities even PSE. How about Overlake Hospital get more reliable power like Huston’s medical center did with co-heat-power and ditched ALL of their emergency generators.
- i. Peaking generator. PSE’s technical consultants claimed to have asked Dept of Ecology for permission to install a peaking generator but was turned down. Please detail why and the cost and environmental impact to install a peaking generator at

say the lite rail garage/system or in the Spring Business District as co-heat-power systems.

- j. Heliostats = \$300 dollar self powered sun tracking mirror reflecting 500Watts of sun energy into home. What if PSE bought all it electric heating homes one? Costs & impact?
  - k. What are Canada's site C dams impacts for any WECC or other computer modeling?
7. Investor owned utility (primarily PSE) customers already pay 28% higher rates than those served by cooperatives, municipalities or public utility districts.

NEEA 2014-WA-report-final.pdf (page 5 of 21)



**UTILITY AND ENERGY STATISTICS<sup>2</sup>**

There are 3.2 million utility customers in Washington, 2.85 million of which are residential accounts. Residential customers in Washington account for 4,079 average megawatts (aMW) of

demand and 35 million megawatt hours (MWh) of usage. More than 55 percent of residential customers in Washington (representing 58 percent of annual usage) are with Cooperatives, Municipalities, or Public Utility Districts. **Investor Owned Utilities customers in Washington pay 28 percent more per kilowatt-hour (kWh) than other utility types**, but use about 14 percent less kWh per month.

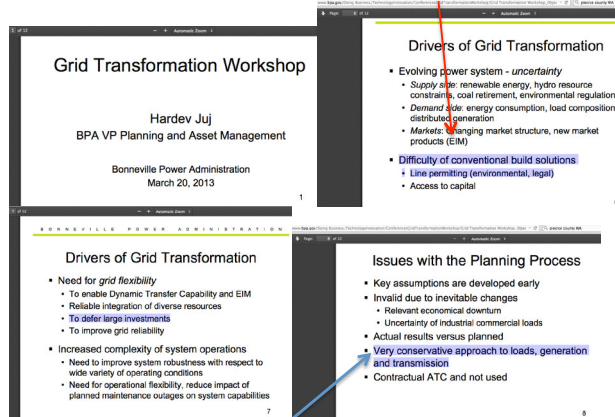
| Customers by Utility Type (2012)        | Cooperatives   | Municipalities | Public Utility Districts | Investor Owned Utilities | BPA      | Total            |
|-----------------------------------------|----------------|----------------|--------------------------|--------------------------|----------|------------------|
| Residential                             | 141,165        | 572,208        | 861,085                  | 1,278,302                | -        | 2,852,760        |
| Commercial & Industrial                 | 23,135         | 69,915         | 115,136                  | 175,505                  | 9        | 383,700          |
| Public Street & Highway Lighting        | -              | -              | -                        | -                        | -        | -                |
| Other Public Authorities/Transportation | -              | 5              | -                        | 1                        | -        | 6                |
| Other Sales to Retail Energy Customers  | -              | -              | -                        | -                        | -        | -                |
| <b>Total Customers</b>                  | <b>164,300</b> | <b>642,128</b> | <b>976,221</b>           | <b>1,453,808</b>         | <b>9</b> | <b>3,236,466</b> |

| Residential Electricity Costs | Cooperatives      | Municipalities  | Public Utility Districts | Investor Owned Utilities | BPA | Total             |
|-------------------------------|-------------------|-----------------|--------------------------|--------------------------|-----|-------------------|
| Average Cost per kWh          | 7.84¢             | 7.62¢           | 7.82¢                    | 9.91¢                    | -   | 8.53¢             |
| Average Monthly Cost          | \$101.44          | \$65.31         | \$95.42                  | \$96.32                  | -   | \$88.48           |
| <b>Average Annual Cost</b>    | <b>\$1,400.43</b> | <b>\$927.71</b> | <b>\$1,320.82</b>        | <b>\$1,052.02</b>        | -   | <b>\$1,122.80</b> |
| Average Monthly kWh           | 1,294             | 857             | 1,220                    | 972                      | -   | 1,037             |
| Average Annual kWh            | 15,526            | 10,285          | 14,643                   | 11,663                   | -   | 12,448            |
| Total Annual MWh              | 2,191,697         | 6,083,474       | 12,326,735               | 14,909,055               | -   | 35,510,961        |
| Total Annual aMW              | 252               | 699             | 1,416                    | 1,713                    | -   | 4,079             |

- i. PSE is happy to take on capital investment projects. They are guaranteed profits for 40 years through their contracts with the state and can pass the costs (with profit margin) along to their customers.
- ii. With the profit protection in place, there is no downside to this investment, and only possible upsides with North-South Transfer expansion.

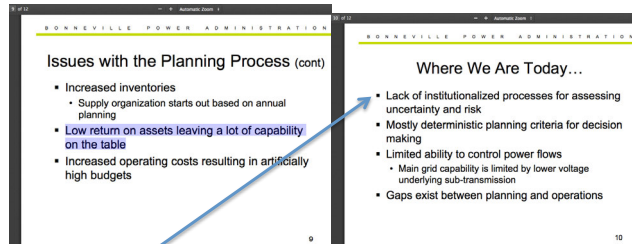
Here is another reason why PSE & BPA are obfuscating the real need behind Energize Eastside in BPA's Hardev Juj's own words.<sup>12</sup> See above for Energy Imbalance Market (EIM)



What is being said here is we MASSIVELY over Build.

<sup>12</sup>

[www.bpa.gov/Doing%20Business/TechnologyInnovation/ConferencesGridTransformationWorkshop/Grid%20Transformation%20Workshop\\_Objectives\\_by%20Hardev%20Juj.pdf](http://www.bpa.gov/Doing%20Business/TechnologyInnovation/ConferencesGridTransformationWorkshop/Grid%20Transformation%20Workshop_Objectives_by%20Hardev%20Juj.pdf)



Is Hardev Juj foreshadowing Energize Eastside destabilizing the Olympic pipe line?

Here is picture of the damage from the 2010 San Bruno natural gas explosion in San Francisco metro that went up into the air, unlike what the Olympic pipeline break will do with its jet fuel which will spread horizontally. Even with automated shut off the jet fuel could easily result in thousands of deaths unlike the natural gas pipeline explosion in San Bruno CA fire which killed 8. A liquid jet fuel spill will flood neighborhoods quickly and instead of just 100 homes damaged or destroyed there will be a thousands.



Having personally conducted fire protection testing on the V-22 Osprey it takes AFFF "A triple F" (Aqueous Film Forming Foam) to put out jet fuel fire. Using water just spreads the fire. AFFF works great if you have enough of it and there is no wind. Given the size of the Olympic

COMMENT

RESPONSE

pipeline it is going to take a lot of AFFF at all the local firehouses. The stuff at SEATAC will be too late to help. Anybody have a copy of that Olympic Pipeline break disaster plan?

Lauckhart Comments on the [Phase 1 Draft EIS](#), published on January 28, 2016.

Email: [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)

My name is Richard Lauckhart. While I live near Davis, California I have gotten involved in the Energize Eastside matter by performing a loadflow study on the need for Energize Eastside. The work was done by my colleague Roger Schiffman and myself. Our report (The "Lauckhart-Schiffman" report) has been provided to the DEIS comment process by Don Marsh of CENSE at the March 1 2016 Draft EIS Public Hearing/Open House.

These are my personal comments on the DEIS.

The DEIS includes a "No Action" alternative. The Washington State SEPA Handbook describes what is meant by the legally required No Action alternative as follows, in relevant part:

*3.3.2.1 No-Action Alternative*

*SEPA requires the evaluation of the no-action alternative, which at times may be more environmentally costly than the proposal, or may not be considered "reasonable" by other criteria. Still, it provides a benchmark from which the other alternatives can be compared.*

*The identification of a no-action alternative can sometimes be difficult. It is typically defined as what would be most likely to happen if the proposal did not occur. [emphasis added] If a rezone is proposed, what is the most likely development on the site under existing zoning? ...*

*There are other methods of defining the no-action alternative, such as "no new government action," or the "lock the gate and walk away" scenario where all current activities are also ceased. As the SEPA Rules do not define what the no-action alternative must look like, the lead agency has some discretion in its design.*

**What would most likely happen if the proposal (i.e. the proposal to build EE) does not occur?**

It is clear from the Lauckhart-Schiffman study that if EE is not built, there will be no electric reliability problem and there will be no adverse environmental impacts. That being the case, the No Action alternative would seem to be the best alternative for the foreseeable future.

**Should PSE and stakeholders simply stop looking at reliability issues on the eastside?**

No. It is prudent to look at what can be done on the eastside to possibly improve the environment and to assure no reliability problems crop up in the more distant future. Energy conservation programs (which also reduce peak load), peak load focused demand reduction programs, and other distributed energy resources could reduce load now which should cause a reduction in Green House Gas emissions from existing power plants in the region. These programs can be implemented now to allow such an environmental benefit even though there is no electrical reliability problem now.

I227-A -1 See responses for Key Themes OBJ-2 and OBJ-3.

I227-A-1

I227-A-1

In the industry, there is a concern that some programs included in distributed energy resource plans may not perform as well as hoped. So it is common to have an insurance policy in place to step in to avoid reliability problems should this occur. In the industry today, those insurance safeguards are provided by small emergency gas or oil fired standby generators. These can be so small they fit inside an existing substation. Or they can be somewhat larger so as to have their own site. But typically these backup/emergency supplies are distributed throughout the service territory so as to be able to help meet load if necessary without having to build new transmission lines and for “environmental justice” reasons.

The Northwest Power Planning and Conservation Council (NWPPC) has recently indicated that this package of Distributed Energy Resources (including back-up gas fired emergency generators) is the best plan for meeting future needs for power in the Northwest. This plan is very much like Alternative 2 in the DEIS.

I227-A-2

Alternative 2 (Integrated Resource Approach) in the DEIS is an Integrated Resource Plan approach to meeting the power needs on the eastside. I generally endorse Alternative 2 in the DEIS and suggest that it proceed now even though the EE line is not needed now. However, I believe the version of Alternative 2 that is being proposed by CENSE in their comments on the DEIS is a preferable version of Alternative 2

I227-A-3

than what is written in the DEIS, with the understanding that if the Combined Heat and Power or the Dispatchable Standby Generation cannot be put in place, then small standby generators may need to be installed in substations.

Richard Lauckhart  
Energy Consultant  
44475 Clubhouse Dr.  
El Macero, Ca 95618  
916-769-6704

I227-A -2 See response for Key Theme ALT-1.

I227-A -3 See response for Key Theme ALT-1.



COMMENT

RESPONSE

10435 NE 15<sup>th</sup> Street  
 Bellevue, WA 98004  
 March 9, 2016

Ms. Heidi Bedwell, Senior Planner  
 Land Use Division-Development Services, City of Bellevue  
 450 110<sup>th</sup> Ave NE  
 Bellevue, WA 98004

**RE: DRAFT EIS FOR PSE ENERGIZE EASTSIDE**

Dear Ms. Bedwell:

As a senior resident of Bellevue, I am concerned that the Draft EIS for PSE's Energize Eastside fails to adequately address the impacts of PSE's preferred alternative nor the impacts of Alternative 2, which I strongly believe is a sounder approach.

I228-A-1

Puget Sound Energy's "Energize Eastside" project proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A). PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I228-A-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I228-A -1 See response for Key Theme OBJ-2.  
 I228-A -2 See response for Key Theme PLS-2.

## COMMENT

## RESPONSE

I228-A-3

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I228-A-4

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

I228-A-5

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

As a senior citizen of our community, I urge the City to do further analysis of Alternative 2 which I favor because it is:

- Safer
- Smarter
- More cost effective
- Reliable
- Better for the environment
- Respectful of neighborhood character
- More secure

Thank you for your consideration.

Sincerely,

  
Ann Schroeder Osterberg

I228-A -3 See response for Key Theme ALT-1.

I228-A -4 Comment noted.

I228-A -5 See response for Key Theme ALT-1.

March 9, 2016

Heidi Bedwell  
Energize Eastside EIS Program Manager  
City of Bellevue, Development Services Department  
450 110th Ave NE  
Bellevue, WA 98004

RE: Energize Eastside Phase 1 Draft EIS Comments

Dear Ms. Bedwell:



On behalf of The Boeing Company, I thank you for the opportunity to review and comment on the Energize Eastside Phase 1 Draft EIS.

Since our founding in 1916, we have been an integral part of the region's growth and prosperity. Investment in the region's infrastructure has been a critical reason why we and hundreds of other aerospace companies throughout the Puget Sound have been able to thrive.

We have thousands of employees working in Renton and Bellevue. At our 1.1 million-square-foot factory in Renton we assemble 737 commercial airplanes. Our skilled employees currently assemble 42 planes per month, and we anticipate ramping that up to 52 per month before the end of the decade.

There are often years between when a customer orders a plane and when we deliver it. Delivery schedules are important and require us to plan years in advance. In order to design, assemble and deliver superior airplanes to our customers, we must have reliable power.

We believe, of the options evaluated, Alternative 1A using poles and wires in PSE's existing corridor and public rights of way, is the best option to provide the certainty our industry needs. The Draft EIS describes a no action scenario where the Eastside could soon face rolling blackouts or full-scale power outages. To do nothing means we put our delivery timelines and production schedules at risk, not to mention the effects to our suppliers and the surrounding communities. Doing nothing isn't an option.

The power lines serving our Renton and Bellevue campuses were installed back when we were assembling our first 727 airplanes. Since then the Eastside and Renton's population, both business and residents, has grown significantly.

As a company we actively work to conserve energy, but we rely on the dependable delivery of a substantial amount of power. The existing power lines need to be upgraded to address the growth the Eastside and Renton has experienced as well as what is expected for the future.

We urge the EIS team to proceed without delay. The Phase 2 EIS should focus on Alternative 1A, which is technically feasible, can be built on time, and will provide reliable power for the future.

Thank you again for the opportunity to offer these comments.

Sincerely,

Dean Gallinger  
Senior Manager  
Enterprise Utilities Management  
The Boeing Company

I230-A -1 Comment noted.

I230-A-1



MBA of King and Snohomish Counties  
 335 116th Avenue SE  
 Bellevue, Washington 98004  
 t 425.451.7920 / 800.522.2209  
 f 425.646.5985 www.masterbuildersinfo.com

March 14, 2016

Heidi Bedwell  
 Energize Eastside EIS Program Manager  
 Senior Land Use Planner  
 City of Bellevue  
 450 110<sup>th</sup> Ave. NE  
 P.O. Box 90012  
 Bellevue, WA 98009

Re: Energize Eastside Draft Phase 1 EIS

Dear Ms. Bedwell,

On behalf of the 2,800 member companies of the Master Builders Association of King and Snohomish Counties (MBA), I appreciate the opportunity to comment on the draft Environmental Impact Statement (EIS) for Phase 1 of the Energize Eastside project. I'm writing in support of Alternative 1a in the draft Phase 1 EIS.

The facts involved in the Energize Eastside project, and the overall need for a robust and updated electric grid serving the fastest growing region in Washington State, are available and have been reviewed by many of our members. I personally had the honor of representing both our membership and the broader business community during Puget Sound Energy's (PSE) Community Advisory Group process, with a group of nearly 25 citizens, made up primarily of homeowners on the proposed corridor's various route options. During that process many good and appropriate questions were asked about alternative options for overhead 230kV power lines. When those questions were asked, the answers given were satisfactory to all but a relatively small minority whose concerns and ideas were still heard and noted.

Over the last 106 years, MBA members have built the communities we all call home. From the Great Depression to the Great Recession, our members have seen incredible changes, and we have all watched as our local economy has generated thousands of new jobs, which of course equates to new families moving to our region and new homes and communities for these new neighbors to live in.

Our members continue to build homes, apartments, townhomes and condominiums. As these new housing units come on line, they demand more and more from every segment of our region's infrastructure. Roads, buses, trains, sidewalks, parks, sewer and refuse facilities, schools and hospitals are all being expanded to meet the demand created by our growing population or options for expansion are under serious consideration.

The only segment of our infrastructure that hasn't been increased on the Eastside since the 1960's is the electric power delivery grid. PSE has described the situation in realistic terms, while charting a timeline

I231-A -1 Comment noted.

I231-A-1

I231-A

COMMENT

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I231-A -2 Comment noted.

I231-A-1

that illustrates a very real challenge to our economic vitality as a region. This timeline, and the need for more electric transmission capacity, has been independently verified.

Some have argued that all we must do is wait and technological advances in battery storage or electrical generation will solve the challenges outlined by PSE. Our region cannot afford to wait on a solution that may or may not happen in our lifetime. We must rely on proven, reliable technology that meets the transmission deficiencies that PSE has outlined.

I231-A-2

Further, the use of existing right-of-way to accommodate the upgraded lines can and should be the preferred route for the new transmission lines as this will minimize the impact on homeowners and residential neighborhoods.

It is for these reasons that, as stated above, I am writing in support of Alternative 1a of the draft Energize Eastside Phase 1 EIS. Thank you for the opportunity to comment on this incredibly important issue.

Sincerely,



David Hoffman  
North King County Manager

cc: Bellevue City Council

**Liv Benson**

**From:** Esther Moloney <esmolnn@outlook.com>  
**Sent:** Thursday, March 17, 2016 12:44 AM  
**To:** info@energizeeastsideeis.org; Moloney, Esther; esmolnn@hotmail.com  
**Subject:** Letter originally sent to you on 3/14/2016 at 8 pm, from esmol@msn.com (Email of Esther Moloney (re: PSE Draft EIS)  
**Attachments:** Draft EIS from PSE.docx

I have received two emails to [esmol@msn.com](mailto:esmol@msn.com) saying that my email was delayed and would be sent. At 11 p.m., 3/16/2016 I received another email to [esmol@msn.com](mailto:esmol@msn.com) saying that my letter could not be delivered.

I will also use my alternate email account to see if this email will arrive at its correct destination.

I did include my full name, address and phone number and pinpointed the location of my home on your map.

Esther Moloney, 4551 135<sup>th</sup> PI SE, Bellevue, WA 98006, 4252698357

Please let me know if you receive this email.

Thank you

COMMENTER LOCATION



Re: Draft EIS from PSE

March 14, 2016

The installation of tall metal towers adjacent to schools e.g. Tye Middle School or Recreation Clubs e.g. Somerset Recreation Club and Pool is truly alarming especially when the following data from the Draft EIS report is considered:

- I442-B-1 | 1. Accidental disruption of the underground Olympic fuel pipeline causing explosions/fire very likely causing hundreds of deaths of children and adults.
- I442-B-2 | 2. Earthquake\* damage of the Olympic pipeline and metal power poles causing widespread collateral damage to schools and recreation clubs further complicated by the fact that Rescue Crews will be unable to readily access these sites.  
The EIS report did address the fact that an earthquake could occur during installation of the poles, but not the real possibility of a earthquake\* at other times when the 230kV poles coexist with OPLC's petroleum lines. Please see Draft EIS Chapter 8.5-1.3 Public Safety Risks.
- I442-B-3 | 3. EMFs from the high voltage power lines causing erosion of the pipeline and rupture - Result: numerous deaths
- I442-B-4 | 4. Lightning strikes to the 230kV poles especially those located near gas pipelines with consequential damage to Schools, other buildings and homes causing deaths to numerous children and adults. See Chapter 8, 6.1.3.
- I442-B-5 | \*If earthquake were not a real possibility in this area, why did 6,000 Rescue Workers recently rehearse for such an event??? And why does Bellevue actively encourage neighborhood groups to prepare for such an event?  
**All of the above is a "disaster waiting to happen"**
- I442-B-6 | PSE's maps (Chapter 3) make it impossible to pinpoint designated potential hazard areas particularly near Olympic pipeline plus planned 230kV poles. It certainly appears they are hiding something!!  
In Chapter 8 The maps locating current pipelines/poles are not designed to show exact locations when the street names are also visible. Why are they hiding this "real location data"???? I can't believe that they don't already have this data.
- I442-B-7 | Blight, Blight, Blight in Bellevue. Along with destroying 345 acres of vegetation with 8,000 trees, the following should be considered:  
Putting large poles on Somerset will not only ruin the beautiful views for residents, but also views of the hill for all Bellevue residents and businesses having a view of this hill. The blight will also be noticed by motorists on I-90, 405, boaters on Lake Washington and residents of East Mercer Island as well as planes landing at SeaTac. Whew, that's a lot of people noticing that Bellevue can no longer claim it is a "Park".

- I442-B -1 | See response for Key Theme PLS-4 and Key Theme EARTH-1.
- I442-B -2 | See response for Key Theme PLS-2 and Key Theme EARTH-1.
- I442-B -3 | See response for Key Theme PLS-3.
- I442-B -4 | See response for Key Theme PLS-3.
- I442-B -5 | See response for Key Theme SVC-1 and Key Theme EARTH-1.
- I442-B -6 | See the Phase 2 Draft EIS and Final EIS for project-level detail and analysis.
- I442-B -7 | See responses for Key Themes VR-3, VR-1, and VR-4.

**From:** [CHelland@bellevuewa.gov](mailto:CHelland@bellevuewa.gov)  
**To:** [info@Energize-Eastside-EIS.org](mailto:info@Energize-Eastside-EIS.org); [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov)  
**Subject:** FW: Answers to your two remaining Eastside Need questions  
**Date:** Tuesday, March 29, 2016 1:07:25 AM  
**Attachments:** [CEU\\_application.pdf](#)

---

**From:** Nunnelee, Sandra J.  
**Sent:** Wednesday, March 09, 2016 11:35 AM  
**To:** Helland, Carol  
**Subject:** FW: Answers to your two remaining Eastside Need questions

FYI

**Sandra Nunnelee**  
 Executive Assistant to the City Council  
 450 110th AVE NE  
 Bellevue, WA 98004  
 425.452.4088 Direct Line  
[sjnunnelee@bellevuewa.gov](mailto:sjnunnelee@bellevuewa.gov)  
[www.bellevuewa.gov](http://www.bellevuewa.gov)

---

**From:** Don Marsh [[mailto:don.m.marsh@hotmail.com](mailto:mailto:don.m.marsh@hotmail.com)]  
**Sent:** Sunday, March 06, 2016 21:17  
**To:** 'Nedrud, Jens V' <[jens.nedrud@pse.com](mailto:jens.nedrud@pse.com)>  
**Cc:** Council <[Council@bellevuewa.gov](mailto:Council@bellevuewa.gov)>  
**Subject:** RE: Answers to your two remaining Eastside Need questions

Dear Jens,

Thank you for your email. I am happy to confirm my pledge to move past the issue of need when you provide sufficient detail for us to understand it. I'm encouraged that this promise has restarted the discussion that you closed in your email dated February 11, 2016. We all agree that it is important for residents to be well informed on issues pertaining to the future supply of electricity on the Eastside.

Your email states, "the notion that the 1,500 MW flows through the Eastside is simply incorrect." It is important to note that CENSE has never made that statement. Flows of this magnitude that occur simultaneously with heavy winter consumption place extraordinary stresses on the *regional* grid. The Lauckhart-Schiffman study found that heavy flow to Canada causes voltage problems on the 11 transmission lines that supply electricity to the Puget Sound area from central Washington, regardless of the amount of local generation that is running. These voltage issues would threaten the entire Puget Sound region with blackouts. This is the first issue we must resolve: **How did PSE/Quanta change the WECC Base Case to avoid these voltage problems, or were the problems simply ignored?**

I1037-A-1

I1037-A -1 See response for Key Theme OBJ-3.



I1037-A-1

To increase our understanding, I have personally applied for CEII clearance from PSE (application attached). I note that you have been asking me to do this for almost a year. Although I am not an expert on load flow studies, I feel confident that I can understand the basics well enough to ask pertinent questions, with Mr. Lauckhart's help.

I would be grateful if you can provide an estimate of how long it takes to receive CEII clearance.

Sincerely,  
Don Marsh

---

**From:** Nedrud, Jens V [<mailto:jens.nedrud@pse.com>]  
**Sent:** Friday, March 04, 2016 10:31 AM  
**To:** Don Marsh ([don.m.marsh@hotmail.com](mailto:don.m.marsh@hotmail.com)) <[don.m.marsh@hotmail.com](mailto:don.m.marsh@hotmail.com)>  
**Cc:** [council@bellevuewa.gov](mailto:council@bellevuewa.gov)  
**Subject:** Answers to your two remaining Eastside Need questions

Don,

I'm following up on your personal guarantee at Tuesday Feb 23<sup>rd</sup>'s DEIS meeting in Kirkland regarding the Energize Eastside project need. You have asked two questions regarding the project need and, if answered, you gave me your personal guarantee that you and CENSE will put this behind you, stop questioning the need for the project, and move forward with the alternatives along with the rest of the community.

Question 1:

Why is 1,500 MW modeled to Canada in PSE's studies?

Question 2:

Why did PSE model the local generation plants in the Puget Sound area turned off?

The answers are straightforward and simple:

Answer 1:

PSE does not set the value of the power that flows, nor does it operate power flowing to/from Canada. This is set by the regional planning authority in conjunction with other regional utilities.

PSE's modeling assumptions of the Northern Intertie are consistent with NERC, WECC, and ColumbiaGrid Planning and Expansion Functional Agreement (PEFA) requirements and the Puget Sound Area Study Team. PSE is correct in modeling 1,500 MW south to north for the heavy winter cases and the notion that the 1,500 MW flows through the Eastside is simply incorrect. Over the past number of years, for heavy winter cases, the Northern Intertie has been modeled at 1,500 MW. As I mentioned on Tuesday night, that requirement has been spelled out quite clearly in Columbia Grid's Biennial reports (excerpt below). ColumbiaGrid's 2015 Biennial Transmission Expansion Plan - Transmission Modeling Assumptions, explicitly states

how the Northern Intertie is modeled in planning studies and PSE modeled the Northern Intertie appropriately:

"As required by the NERC Reliability Standards and ColumbiaGrid Planning and Expansion Functional Agreement (PEFA), it was necessary to model firm transmission service commitments in the System Assessment....Both of these firm transmission service commitments are on the west side of the path, thus 1,500 MW of transfers are modeled in the south to north direction in heavy winter cases." – 2016 Update to the 2015 Biennial Plan, pgs. 49-50, ColumbiaGrid, February 2015.

The 1,500 MW of power flow to Canada is not flowing through Bellevue on PSE's system; the 1,500 MW is an initial condition in the heavy winter cases based on NERC and ColumbiaGrid requirements.

Answer #2:

PSE studied multiple different generation levels including a low generation case and one with an additional 1000 MW of generation turned on. This was based on the past history of the area's generation to see how different generation levels affected the electric system. The study results were clear - turning on existing generation does not solve the problem.

As I mentioned in my comments to council on Feb. 22<sup>nd</sup>, this lingering question is an example of not understanding the difference between planning vs. operating the electric system. Planning studies combine contingency analysis with sensitivity analysis to assess the overall system adequacy. Although there is no guarantee that major disturbances cannot or will not happen, the assessment procedures do provide reasonable assurance that the system as designed will ultimately be capable of being operated with an acceptable level of reliability over a sufficient range of operating states.

The varying of generation is one of the sensitivity conditions that electric system planners utilize to understand the boundaries of the overall system adequacy of the electric network. There are several types of sensitivity conditions the planner tests. They include, but are not limited to, system load, transmission configuration, generation, and levels of scheduled interchange. System planners determine these boundaries of system adequacy by performing "what-if" tests (studies or simulations) of a set of credible contingencies at different levels of generation dispatch (real and reactive), demand, and interchange, and with various transmission configurations, and then observe whether the electric network meets the mandatory performance requirements required by federal regulations.

PSE applied this concept in our studies by varying generation levels in the Puget Sound area. For example, in the heavy winter cases, PSE simulated a low generation scenario which included many PSE generation turned off and then a higher generation scenario which turned on 1000 MW of generation in the Puget Sound

area. Those values for the Puget Sound area were chosen based on past history of the area's generation. The simulations showed that there still were equipment overloads, thus violations of the mandatory performance requirements, even with the additional 1,000 MW of generation. To get even more specific, the results showed that with 1000 MW of generation turned on there was a very small (approximately 15 MW) reduction in loading on the overloaded transformer. This was not enough relief to bring the loading on the transformer below 100% to avoid an overload. It also points to the local nature of the problem facing the eastside and the inability of existing generation to provide relief.

I truly hope this detailed response provides the answers to your questions and that you follow through with your personal guarantee as we discussed. Pulling quotes out of context to support erroneous false points, such as your extra heavy winter post on the CENSE website, distorts the facts about this project, confuses the public – and ultimately it detracts from us having a healthy dialogue about the project, the alternatives, and eventually how project specific impacts could be mitigated. The **extra** heavy winter cases were not used as a basis for the project need, rather our studies used the heavy winter (not extra) cases because they are required by NERC as described in the Energize Eastside Needs Assessment ([Needs Assessment 2013](#), Pg. 7 – Method and Criteria).

Regards,  
Jens

**Jens Nedrud, P.E.**

Senior Project Manager

**energizeEASTSIDE**

PUGET SOUND ENERGY

PO Box 97034, EST03W, Bellevue, WA 98009

d (425) 462-3818 | c (425) 533-5307 | [jens.nedrud@pse.com](mailto:jens.nedrud@pse.com)

The Energize Eastside project is undergoing environmental review, which includes preparation of a Washington State Environmental Policy Act (SEPA) Environmental Impact Statement (EIS). The City of Bellevue is leading the EIS process in cooperation with Kirkland, Newcastle, Redmond and Renton. The City of Bellevue and the coordinating jurisdictions published the Phase 1 Draft EIS on Jan. 28, 2016. The public comment period for the Phase 1 Draft EIS ends on Monday, March 14, 2016. For more information on the EIS and to submit comments to be included as part of the EIS and the public record, please visit [EnergizeEastsideEIS.org](http://EnergizeEastsideEIS.org).

Please note:

- The City of Bellevue is leading the SEPA EIS process. No comments or questions submitted to Puget Sound Energy will be considered part of the EIS. To submit comments as part of the EIS, please visit [EnergizeEastsideEIS.org](http://EnergizeEastsideEIS.org).
- For background information about the Energize Eastside project, please visit [pse.com/energizeeastside](http://pse.com/energizeeastside) or refer to the project's [Frequently Asked Questions](#).

**From:** [Energize Eastside -- mail --](mailto:HBedwell@bellevuewa.gov)  
**To:** [HBedwell@bellevuewa.gov](mailto:HBedwell@bellevuewa.gov)  
**Cc:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Subject:** Energize Eastside DEIS comment - Past the comment period  
**Date:** Wednesday, March 30, 2016 4:46:04 PM

Hello,

We wanted to forward along this website comment we received to you and your team. We received it after the EIS comment period ended. We are not going to respond to the comment, there was no question asked.

Thank you,

PSE Energize Eastside Team

Original message:

From: Oralia Lynch, Orallalynch@comcast.net <<mailto:Orallalynch@comcast.net>>  
 6236 HAZELEOOD LANE SE  
 BELLEVUE, WA 98006

ENERGIZE EASTSIDE: DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

Summary of Comments:

NEED:

Chapter 1.3 of the DEIS discusses PSE determining "there is a need to construct a new 230 kV bulk electrical transmission line" This is not an accepted fact despite PSE's assertions. The Lauckhart-Schiffman load-flow study dated February 18, 2016 shows multiple flaws in PSE's assumptions. It shows that if winter emergency conditions are used instead of summer normal conditions and if .5%/year growth for Eastside energy demand is used, demand does NOT exceed peak flow until 2058. Even if PSE's inflated rate of growth is used (2.4%-almost 4 times what they submitted to ColumbiaGrid and WECC) the capacity isn't exceeded until ~2027. That's 10 years further down the road when new technologies will be online and new options will be available to us. In short, a project of this size is not needed and the NO BUILD OPTION (Alternative 4) actually becomes the most logical if the Eastside needs are the driving force. The fact, however, is that the Eastside needs are not the driving force; transfer of electricity to and from Canada and the profit to be made from that transfer are amongst the main reasons for Energize Eastside(EE). This is outlined in the 2013 memo from ColumbiaGrid to WECC that I submit for the record. It states that the purpose of EE is to "improve South-to-North transfer capability between the Northwest and British Columbia."

I1038-A-1

ALTERNATIVES:

In reviewing the alternatives proposed, the only alternative not preferable to Energize Eastside (1-A) is alternative 3 which would add a spider web of new wires. Use of the Seattle City Light (SCL) corridor (1-B) is preferable since it already exists and would have little additional impact on corridor size, trees and property values. We have been told that this is off limits since SCL will not grant access. Options to underground and submerge (1-C & 1-D) are preferable options that are safer with less impact on property and environment. We have been told flat-out that both of these options are cost prohibitive. Therefore, I am in support of alternative 2 that is referenced in chapter 2.3.3. PSE has claimed in the DEIS that this option is risky and undesirable. In fact, the presentation of this alternative was not created nor evaluated by analysts familiar with the technologies and policies involved. I feel that an evaluation of the data shows that it is derived from studies that are now outdated with the rapid changes in technologies. As an example, the article on Forbes.com January 13, 2015 titled "Battery Revolution: A Technology Disruption, Economics and Grid Level Application Discussion with EOS Energy Storage." highlights the improvements in capacity and drop in prices seen with battery technology.

I1038-A-2

I1038-A -1 See response for Key Theme OBJ-3.

I1038-A -2 See response for Key Theme ALT-1.

I1038-A

COMMENT

RESPONSE

I1038-A-3

Throughout this document, verbiage is used to magnify the possible impact of Alternative 2 and minimize the impact of Alternative 1-A. PSE has been disingenuous raising the estimate of winter

energizeEASTSIDE

pse.com/energizeeastside  
Voicemail: 1-800-548-2614

I1038-A -3 See response for Key Theme OBJ-1.

COMMENT

RESPONSE

**From:** [Jessica Conquest](#)  
**To:** [Jessica Conquest](#)  
**Subject:** FW: Energize Eastside EIS- Phase 1 Draft EIS Comment Summary Available  
**Date:** Friday, April 22, 2016 8:23:05 AM

**From:** Jodi Maldonado [<mailto:jlosek@gmail.com>]  
**Sent:** Friday, April 22, 2016 8:12 AM  
**To:** Energize Eastside EIS  
**Subject:** Re: Energize Eastside EIS- Phase 1 Draft EIS Comment Summary Available

Here is my 2nd version of my comment from the Phase 1 draft:

I1039-A-1 | I am against this project. According to some research there is need for this project and  
I1039-A-2 | according to other research there is no need. I do not think that the neighborhoods (people and  
I1039-A-3 | wildlife) need to suffer with tearing down trees, removing wooded poles that the woodpeckers  
I1039-A-4 | spend lots of time on (they are now going to live on our houses), and how unsafe it is to put  
I1039-A-5 | these metal poles next to the pipeline. There needs to be alternative methods and ideas, such  
I1039-A-6 | as constructing these near main highways or roads and away from neighborhoods. According  
to the draft, you may need to tear down peoples homes. How can you justify tearing down a  
home of the elderly, disabled, or parents of a new baby? PSE, you need to come up with  
better alternatives.

Thanks,  
Jodi Maldonado

I1039 -1 Comment noted.  
I1039 -2 See response for Key Theme P&A-1.  
I1039 -3 See response for Key Theme PLS-3.  
I1039 -4 Comment noted.  
I1039 -5 See response for Key Theme LU-1.  
I1039 -6 Comment noted.

ENERGIZE EASTSIDE  
PHASE 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT  
PUBLIC HEARING/PUBLIC TESTIMONY

6:00 p.m.  
February 23, 2016  
11750 NE 118th Street  
Kirkland, Washington

LISA R. MICHAUD, CCR  
NORTHWEST COURT REPORTERS  
1415 Second Avenue, Suite 1107  
Seattle, Washington 98101  
(206) 623-6136  
[www.northwestcourtreporters.com](http://www.northwestcourtreporters.com)

Phase 1 Draft EIS Hearing - February 23, 2016

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PANEL MEMBERS

- MARK JOHNSON - ESA
- JEREMY McMAHAN - CITY OF KIRKLAND
- ERIC SHIELDS - CITY OF KIRKLAND
- CAROL HELLEND - CITY OF BELLEVUE
- HEIDI BEDWELL - CITY OF BELLEVUE

ALSO PRESENT:

- MARCIA WAGONER - FACILITATOR - 3SB
- CASEY BRADFIELD - TIME KEEPER - 3SB

PUBLIC SPEAKERS

- DON MARSH
- LORETTA LOPEZ
- JOY PHELPS

ALSO PRESENT:

- MARCIA WAGONER - FACILITATOR - 3SB
- CASEY BRADFIELD - TIME KEEPER - 3SB

PUBLIC SPEAKERS

- DON MARSH
- LORETTA LOPEZ
- JOY PHELPS

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Phase 1 Draft EIS Hearing - February 23, 2016

3

1 MR. MARSH: Thank you, and thank you  
 2 for giving us this opportunity to submit comments  
 3 into the EIS and shed some light on this project.  
 4 We appreciate it. My name is Don Marsh. I live  
 5 at 4411 137th Avenue Southeast in Bellevue. And  
 6 I'm also the president of CENSE the Coalition of  
 7 Eastside Neighborhoods for Sensible Energy.

8 And I recognize some of you from the last  
 9 scoping thing, and I'm very pleased to meet you,  
 10 Heidi. My manager from UW, Brendan McClean, says  
 11 hi. You come with high recommendations, so very  
 12 happy to have you engaged in this.

13 If there's just one thing that I would love  
 14 for the EIS to make clear to me is, what is the  
 15 role of expanded energy delivery to Canada?

16 We know that in the Eastside needs  
 17 assessment PSE says this is one of the top five  
 18 criteria that are assumptions that they had for  
 19 that project. And we know from the independent  
 20 technical analyst that Bellevue hired that if you  
 21 don't have that level of flow to Canada, then  
 22 most of the overloads, four out of the five  
 23 overloads in the PSE system go way.

24 And we found later on that the fifth  
 25 overload is very small. It could easily be

O1-C-1

O1-C-1 See response for Key Theme OBJ-3.



Phase 1 Draft EIS Hearing - February 23, 2016

4

1 addressed by something -- by a project that's  
2 smaller than \$250,000,000. So if we could find  
3 out where that requirement is coming from. I  
4 just asked Jens Nedrud that question, and he's  
5 the project manager for Energize Eastside, and he  
6 says that's a Columbia grid requirement that they  
7 have to expand energy delivery to Canada.

8 And, you know, maybe that's true. But when  
9 FERC ruled on a CENSE complaint, that we weren't  
10 quite sure whether this was the right project for  
11 our region, they said, well, this is a local  
12 project and so FERC really doesn't have  
13 jurisdiction to rule on that. So as a local  
14 project, I don't understand how the flow into  
15 Canada comes into the thing.

16 Flow to Canada is regional. It's actually  
17 an international issue. So if we're expanding  
18 that flow into Canada, I would expect maybe some  
19 help from federal tax dollars or something. And  
20 also I just question whether it's reasonable to  
21 expand the electricity flow to this extent  
22 through 18 miles of heavily residential  
23 neighborhoods.

24 We've been looking at the pipeline safety  
25 issue for a while. And just looking around on

O1-C-1

O1-C-2

O1-C-2 See response for Key Theme PLS-1.

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1 the web, I found this great article, it's a great  
2 paper from the respected risk analyst DNVGL, just  
3 came out in October 2015. And it was titled  
4 Criteria for Pipelines Coexisting with Electric  
5 Power Lines. And in the executive summary of  
6 this report it names five different criteria by  
7 which you can judge how dangerous it is to  
8 co-locate transmission lines and petroleum  
9 pipelines.

10 And the first criteria was separation  
11 distance and they had a table that showed what's  
12 the risk for different separation distances. And  
13 it turns out for us we rate high risk because of  
14 the narrowness of the corridor and especially if  
15 the poles come down to 85 feet or something, it  
16 puts the electric influence of those transmission  
17 lines in closer conjunction with the pipeline.

18 The next criteria was the amount of current  
19 that's running on the line. And we know  
20 approximately what this is from, the low flow  
21 study that Rich Lockhart did on this. We ranked  
22 either high or very high risk on that category.

23 The next category was soil resistivity. And  
24 I don't know what soil resistivity is. I looked  
25 on the website and it said that the soil that's

O1-C-2

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Phase 1 Draft EIS Hearing - February 23, 2016

6

1 going through New Castle is highly corrosive to  
2 steel, but it didn't say what resistivity was.

3 The last two are co-location length and  
4 co-location angle. That's basically how long  
5 these things run together and whether they're  
6 parallel or perpendicular. And we rate as high  
7 risk or basically off the chart for the length  
8 because their chart ended at 5000 feet.

9 And we've got the better part of 16 miles of  
10 running together here. So this just raised real  
11 big questions for us about the risk to our  
12 communities and the offsetting risk of possibly  
13 having a power outage for a few hours in the  
14 year, but that's what the Eastside needs  
15 assessment says.

16 This is aimed at a few hours per year. And  
17 so trading the pipeline and transmission lines  
18 next to my kid's school and the possibility of  
19 danger there. I'm out of time, so thank you very  
20 much.

21 MS. LOPEZ: My name is Loretta Lopez  
22 and I'm vice-president of the Bridle Trails  
23 Community Club. I'm representing the club  
24 tonight. My comments are regarding the process.  
25 My first comment is with respect to the issue of

O1-C-2

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Phase 1 Draft EIS Hearing - February 23, 2016

7

1 need. And our position is this:

2 That the citizens have a right, obligation,  
3 duty to ask whether this project is even needed.  
4 The city has repeatedly refused to address that  
5 issue. The EIS I know states that this is not  
6 about need. Our position is that it is about  
7 need. That's the whole point of this.

8 And in order to even evaluate the  
9 alternatives, in order to even think about this  
10 and what is possible, one has to understand what  
11 the need is. Part of understanding the need is  
12 assessing and analyzing the data that PSE has  
13 used to come to the conclusion that there is a  
14 deficiency in the system.

15 Don Marsh who just spoke before me has  
16 repeatedly asked Jens Nedrud for this  
17 information. I have a series of email messages  
18 between Don and Jens, nine pages. I've asked  
19 Carol Helland in a message to address this issue.

20 And I'd like to include this and present it  
21 for the record tonight. And I'll hand it to this  
22 person right here to the right. Thank you. It's  
23 nine pages, and I numbered the pages.

24 In addition then I also will address the  
25 aspect of process with respect to the way in

O3-C-1

O3-C-1 See response for Key Theme OBJ-1.

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Phase 1 Draft EIS Hearing - February 23, 2016

8

1 which this EIS has been organized. Now we know  
2 why it is that the city has phased this process  
3 in phase one and phase two with no intervening  
4 final decision. When we were at the scoping  
5 meeting, it wasn't obvious. But it's obvious  
6 now. It was obvious some time ago.

7 The result is that without final decision,  
8 no one can appeal this decision until the very  
9 end of this process, but that makes no sense.  
10 Why doesn't it? Because we don't have to reach  
11 the issue of the specific issue if we conclude  
12 that there's simply no need for this.

13 So why do we have to go on to the second  
14 phase? We've asked the City of Bellevue to stop  
15 this process and pause. The city has refused.  
16 The city has stated there's no -- they cannot  
17 control this process and that simply is not the  
18 case. PSE has filed. There is no application.

19 The city has and the cities have complete  
20 discretion about how to organize this process and  
21 have decided to do it in a way that causes in  
22 effect many citizens to be excluded from this  
23 process. Most people along this power line have  
24 no idea of what is going to go on when those  
25 bulldozers go through.

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O3-C-2 See response for Key Theme EIS-2.

O3-C-2

Phase 1 Draft EIS Hearing - February 23, 2016

9

O3-C-2

1 No one can possibly imagine this because  
 2 this programatic [sic] EIS is a big picture.  
 3 There is no way that people have adequate notice  
 4 on this. And the Bridle Trails Community Club  
 5 objects to this. Thank you.

6 MS. WAGONER: So do we have others that  
 7 would like to speak?

I61-A-1

8 MS. PHELPS: My name is Joy Phelps and  
 9 I live at 4548 144th Avenue Southeast in  
 10 Bellevue. My question, which I understand you  
 11 can't answer it now, but I would like it to be  
 12 explained in the documentation, is at some point  
 13 in the past there was a substation called  
 14 Shuffleton at the south end of Lake Washington,  
 15 which was decommissioned.

16 That would have been an opportunity to  
 17 generate more power in the event of an emergency.  
 18 Since that power station is gone, my question is,  
 19 could it be preplaced? Could there be another  
 20 facility put into the system that would provide  
 21 the power that is no longer available at that  
 22 subject station? Thank you.

23 MS. WAGONER: Are there any others who  
 24 would like to speak?

25 (No response.)

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I61-A -1 See responses for Key Theme ALT-1 and Key Theme OBJ-1.

Phase 1 Draft EIS Hearing - February 23, 2016

10

1 MS. WAGONER: Then that concludes the  
2 public comment portion of our hearing.  
3 (Meeting adjourned 7:04 p.m.)  
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ENERGIZE EASTSIDE  
PHASE 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT  
PUBLIC HEARING/PUBLIC TESTIMONY

6:00 p.m.  
February 25, 2016  
1055 South Grady Way  
Renton, Washington

LISA R. MICHAUD, CCR  
NORTHWEST COURT REPORTERS  
1415 Second Avenue, Suite 1107  
Seattle, Washington 98101  
(206) 623-6136  
[www.northwestcourtreporters.com](http://www.northwestcourtreporters.com)

Phase 1 Draft EIS Hearing - February 25, 2016

2

1 PANEL MEMBERS  
2 JENNIFER HENNING - CITY OF RENTON  
3 CLAIRE HOFFMAN - ESA  
4 CAROL HELLEND - CITY OF BELLEVUE  
5 HEIDI BEDWELL - CITY OF BELLEVUE  
6  
7 ALSO PRESENT:  
8 MARCIA WAGONER - FACILITATOR - 3SB  
9 CASEY BRADFIELD - TIME KEEPER - 3SB  
10  
11 PUBLIC SPEAKERS  
12 LORI ELWORTH  
13 LAURIE BAKER  
14 BRIAN ELWORTH  
15 BARBARA BRAUN  
16 CURTIS ALLRED  
17 RICARDO GARMENDIA  
18 DARIUS RICHARDS  
19 VICTORIA KAPITAN  
20 DON MARSH  
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22  
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Phase 1 Draft EIS Hearing - February 25, 2016

3

1 MS. ELWORTH: My name is Lori Elworth.  
2 I live at 8605 129th Court Southeast, New Castle.  
3 Thank you for allowing me the time to speak. One  
4 aspect of the project that has not been addressed  
5 in the DEIS is the need. It states on Page 156  
6 that the purpose of the DEIS is not to determine  
7 the project is needed as if that is a given.  
8 However, I question that claim and I believe  
9 that PSE has done a poor job establishing the  
10 necessity of the Energize EastSide Project.  
11 CENSE, a citizen's, group asked nationally  
12 recognized power and transmission planners  
13 Richard Lauckhart and Roger Schiffman who have  
14 specific knowledge of the northwest power grid to  
15 study this project.  
16 On November 18, 2015 they concluded their  
17 study of the project titled Lode Flow Modeling  
18 for Energize Eastside. The study found that the  
19 current system was sufficient capacity and will  
20 continue to meet customer demands until the year  
21 2058 without any improvements.  
22 Unless PSE can offer a legitimate  
23 explanation for where they got their assumptions  
24 and why they claim that customer demand will  
25 exceed the system capacity in 2018, then the need

I79-A-1

I79-A -1 See response for Key Theme OBJ-3.

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Phase 1 Draft EIS Hearing - February 25, 2016

4

1 remains in question.

2 The project should be paused until need is  
3 demonstrated. Continuing on a project without a  
4 need established is a pointless exercise that  
5 serves no purpose other than to waste the time of  
6 the city's and taxpayer money.

179-A-1

7 My question for the City Councils is why was  
8 the need not addressed in the DEIS? And in light  
9 of recent conflicting studies, will an  
10 independent load flow study be performed? Thank  
11 you.

12 MS. BAKER: My name is Laurie Baker and  
13 I currently live in Renton. For over 40 years I  
14 lived on a power line. And from an environmental  
15 perspective, I would have to say it's a scar on  
16 the earth. It's well maintained scar on the  
17 earth meaning they come regularly and re-scar it  
18 because it has to be kept clear.

182-A-1

19 So in general I would say I certainly am  
20 against creating more scars. Cities who wave the  
21 flag of trees and arbors and things like that  
22 would seem to recognize the value of trees and  
23 vegetation for all the well publicized reasons.  
24 And, therefore, I think that the simple fact of  
25 putting another scar on the earth in our

182-A -1 See response for Key Theme VR-3.

Phase 1 Draft EIS Hearing - February 25, 2016

5

182-A-1

1

neighborhoods is not a good idea.

2

I also will confess I have not read the

3

715-page document nor am I likely to read it all.

4

First of all, I don't read very well and I don't

5

read very often and I don't like to read. But I

6

take it from many of my neighbors who are very

7

concerned about this that there are many

8

questions about whether or not this is really

9

needed.

10

When I arrived tonight my question was, is

11

there a citizen organization that is supporting

12

this project? That is waving the flag and saying

13

yay, yay, we think PSE is exactly right. And as

182-A-2

14

far as I know, there isn't. There is one that's

15

saying perhaps it's not needed.

16

And I think that says it all in terms of how

17

citizens feel about its impact on the community.

18

Thank you very much.

19

MR. ELWORTH: Hello, my name is Brian

20

Elworth. I live at 8605 129th Court Southeast in

21

New Castle. I've lived in my current location

22

since 1988 adjacent to the power line. I want to

23

talk about research integrity.

24

In the field of science and engineering

25

research, there are standards of integrity.

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182-A-2 Comment noted.

Phase 1 Draft EIS Hearing - February 25, 2016

6

1 Researchers are accountable for what they report.  
2 This EIS is essentially a research document. In  
3 my view its purpose is to serve as an organized  
4 consolidation of factual information related to  
5 the environmental impact of this proposal.

6 Now, although the standards of integrity are  
7 much lower for the EIS than you find in the  
8 science community, it's still important that the  
9 EIS be reasonably factual because this EIS  
10 doesn't just affect Bellevue. It affects all the  
11 cities in the region. A very broad 18-mile  
12 region.

13 So what I'd like to request is that all  
14 unsupported opinions and unsupported summary  
15 conclusions be removed from the document. There  
16 are many in the document that there's no basis  
17 for the statements to be made.

18 I ask that those either be qualified as  
19 someone's opinions or removed from the document.  
20 Washington Administrative Code 197.11.400 states,  
21 "An EIS shall provide impartial discussion of  
22 significant environmental impacts and shall  
23 inform decision makers and the public of  
24 reasonable alternatives including mitigation  
25 measures that would avoid or minimize adverse

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I78-A -1 See response for Key Theme EIS-2.

I78-A-1

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1 impacts or enhance environmental quality."  
2 Those aren't just words in a document. You  
3 need to really internalize that message there.  
4 The process should comply with the spirit,  
5 intent, and the letter of the WAC.  
6 Cities and residents of Redmond, Kirkland,  
7 New Castle, and Renton depend on Bellevue as a  
8 lead agency to make sure that that document has  
9 the integrity, the transparency, the objectivity,  
10 and the thoroughnesses that is just basic respect  
11 for these cities.  
12 SEPA handbook section 3.3 states the lead  
13 agency is responsible for the content of the EIS,  
14 and goes on. The message is you are responsible  
15 for the content of the EIS regardless of its  
16 source. Every word, every sentence, every  
17 paragraph, every diagram, every figure, every  
18 table in the EIS is owned by Bellevue.  
19 If you put it in the EIS, you own it.  
20 Ownership implies a trust that the declarations  
21 of fact are accurate and complete. So, again, I  
22 say please eliminate all the unsupported opinions  
23 and unsupported summary conclusions.  
24 If you want to identify a source and their  
25 opinion, that's fine, but when you state it as a

178-A-1

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I78-A-1

1 fact, that's where that line of integrity is  
2 crossed.

3 MS. WAGONER: If you can wrap up your  
4 comments or come back.

5 MR. ELWORTH: I'll come back.

6 MS. BRADFIELD: I'm going to read the  
7 next three names. We have Barb Braun. And  
8 again, I apologize if I mispronounce anyone's  
9 name. Curtis Allred, and Ricardo Garmendia.

10 MS. BRAUN: Hi, I'm Barbara Braun, I  
11 live at 13609 Southeast 43rd place in Bellevue,  
12 and do not live adjacent to power lines, but I am  
13 an extremely concerned citizen. I concur with  
14 many of the comments tonight that the need for  
15 this project is really not established.

I19-N-1

16 The EIS ignores this as we discussed and it  
17 really is an oversight in the process that needs  
18 to be revisited. Earlier in the year the, quote,  
19 unquote, independent determination of need by  
20 Stantec did not include load flow studies and  
21 merely basically said that PSE conducted their  
22 study in accordance with industry standards. I  
23 don't think the City Council of Bellevue had any  
24 idea whether or not Stantec had an independent  
25 and legitimate conclusion.

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I19-N -1 See response for Key Theme OBJ-2.





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1 So as also was stated before the load flow  
2 analysis by Lauckhart and Schiffman calls into  
3 question in a very big way the need for this  
4 project. And so I think that basically the  
5 cities need to come together and revisit the need  
6 via an independent and auditable assessment.

7 And that any conclusions that are drawn need  
8 to be audited by people, experts that actually  
9 know what we're talking about.

10 Further, the assumption that basically we  
11 need to be shipping 1500 megawatts of power to  
12 Canada during a temporary power shortage seems  
13 like an assumption that is downright dishonest.  
14 If we actually experience a scenario like that,  
15 it seems like we would temporarily decrease the  
16 flow of power to Canada through the power  
17 shortage, and that that would obviate the need  
18 for the project.

19 So again, the EIS does not clearly establish  
20 the need for the project. I think the EIS should  
21 assume that the do nothing alternative is the  
22 right and preferred alternative and prove beyond  
23 a shadow of a doubt with facts and data available  
24 to all interested parties that this is not the  
25 case.

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I19-N-2 See response for Key Theme OBJ-2.

I19-N-3 See response for Key Theme OBJ-1.

I19-N-2

I19-N-3

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1           Assuming there is a need for the project,  
 2           and if we pursue Alternative I as PSE wishes, I  
 3           think the cost to the communities and our  
 4           environment outweighs any benefit that we would  
 5           get out of a project like this. So we need  
 6           really a cost/benefit analysis so we don't spend  
 7           millions and millions and billions of dollars for  
 8           some very minute and incremental benefit.

9           Some of the costs that we would experience  
 10          are astronomical increase in the risk of power  
 11          line explosions, accidents, and even deaths.  
 12          We're going to have to condemn a lot of homes and  
 13          basically put more industrial blight in our area.  
 14          You can look out here and see thousands of power  
 15          lines. It's very ugly and very blightful.

16          We have a huge climatic impact by cutting  
 17          down thousands of trees, and will proliferate a  
 18          carbon based electricity solution for another 50  
 19          to 65 years.

20          MS. WAGONER: If you could wrap up your  
 21          comments.

22          MS. BRAUN: Okay, and then I'll come  
 23          back. Then lastly, basically I don't think the  
 24          benefit is to anybody but PSE, and I do not think  
 25          the citizens really can afford this project. And

I19-N-4

I19-N -4 See response for Key Theme EIS-3.



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1 basically I don't think the state or the country  
2 can afford it either from an environmental point  
3 of view. I'll come back.

4 MR. ALLRED: My name is Curtis Allred.  
5 I'm at 13609 Southeast 43rd Place in Bellevue.  
6 And thank you for this opportunity to speak in  
7 public about this project. I'll just make three  
8 points. I think I can get through them in three  
9 minutes. First of all, I have a big problem  
10 charging ahead on EIS for a massive expensive  
11 project without being convinced of the need.

12 What we know is that PSE really wants to  
13 build this power line. And they claimed they've  
14 done an analysis that proves we need it, but it  
15 looks suspicious. They assumed a much higher  
16 growth rate than other regional planners are  
17 using. They're sending three times more power to  
18 Canada than the normal WECC base case. And we  
19 turned off six local power generation stations to  
20 create this need.

21 So an independent power expert which was  
22 referred to earlier, Rich Lauckhart, and his  
23 friend ran his own analysis using the same  
24 software and initial data and found that there is  
25 no need for extra capacity in at least the next

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180-A-1 See responses for Key Themes OBJ-2 and OBJ-3.

180-A-1

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180-A-1

1 30 years. Of course PSE refutes this study, but  
2 they will not share their data so it can be  
3 independently verified. Essentially they're  
4 saying we're the experts. Trust us.

180-A-2

5 So that brings us to the EIS which is being  
6 conducted assuming the need is there, which much  
7 of the community does not believe. So a second  
8 point is, brings us into the EIS and the EIS  
9 itself is also misleading. It leads us to  
10 believe there are alternatives being considered.  
11 And the best alternative will be chosen based on  
12 the outcome of the EIS.

180-A-3

13 And I recently learned that's not true.  
14 It's actually PSE who makes the choice. And they  
15 have already made their choice clear. It's the  
16 230 volt above ground power lines running along  
17 the existing corridor. So I have to ask, what is  
18 the point of evaluating these alternatives when  
19 PSE has already dismissed them?

20 I believe at this point the no alternative  
21 option is the only logical choice, but that won't  
22 be the alternative chosen by PSE. If it turns  
23 out there is need for some solution, it will  
24 certainly be less drastic than PSE wants us to  
25 believe. Alternative II suggests modern grid

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180-A -2 See response for Key Theme EIS-2.  
180-A -3 See response for Key Theme ALT-1.



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180-A-3

1 technologies, conservation, alternative energy  
2 sources to fill the gap. PSE dismissed this as  
3 unfeasible based on outdated information. This  
4 alternative needs to be reevaluated using updated  
5 information and by experts in modern grid  
6 techniques, not PSE. PSE is saying it's an  
7 economic issue, not environmental.

180-A-4

8 So how is this going to be addressed and  
9 mitigated? Some say this the NIMBY issue, but  
10 there's a big backyard that's going to be  
11 impacted by these power lines. They'll tower  
12 over the tree lines, be visible for many miles  
13 for many yards and neighborhood streets.

14 For people on or near the right of way,  
15 values will likely be impacted by 10 to  
16 20 percent. Could result in the loss of tens to  
17 hundreds of millions of dollars in home value and  
18 loss of property tax revenue as well. So how  
19 will this be mitigated? Thank you.

20 MR. GARMENDIA: My name is Ricardo  
21 Garmendia. My address is 10205 126 Avenue  
22 Southeast in Renton. I live in the, close to the  
23 Honey Creek area and I would like to, first of  
24 all, thank everyone who has been here, been very  
25 eloquent in their presentations and their

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180-A -4 See response for Key Theme ECON-1.

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1 testimony and I concur with everyone at this  
2 point.

3 This is my first time at one of these  
4 meetings. I have not read the 700-page document.  
5 And in part because probably the main thing I  
6 would like to comment is on perhaps we need more  
7 information and for you guys to communicate with  
8 people that are impacted by this.

9 I live -- right behind me is the power line  
10 from you guys, PSE, and not very happy that  
11 information had not been very well communicated  
12 to us. I'm not sure how these small groups are  
13 representative of everyone in the community at  
14 this point. So more participation will be  
15 encouraged by better communication.

16 I have a question that has not been  
17 answered. When I approached some of the folks in  
18 here, the engineers or whoever they are, and it  
19 has to do with the service that was performed  
20 behind my house. And when I asked the person  
21 that was performing the survey they referred me  
22 to a gentleman I believe Heidi, you replaced. I  
23 don't remember.

24 And so I still don't have an answer to what  
25 type of survey that was being formed. They

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183-A -1 See response for Key Theme EIS-2.

183-A-1

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183-A-1

1 cleared some blackberry bushes behind my house  
2 and they have some stakes and little things they  
3 did. I don't have an answer yet, so I'm not sure  
4 where I can get that answer. And will be reading  
5 the report and attending the New Castle meeting.  
6 Thank you.

7 MS. BRADFIELD: We have two more people  
8 who are signed up to speak. Darius Richards and  
9 I might mispronounce this one, Victoria Kapitan.

10 MR. RICHARDS: Good evening. My name  
11 is Darius Richards. I reside at 3605 Lake  
12 Washington Boulevard North in the Kennydale  
13 neighborhood in the north end of Renton. I've  
14 lived there since 1974. I want to also give my  
15 thanks to the folks that took the time to come  
16 out here tonight. And for the hard work you  
17 folks did as far as putting together the EIS.

18 I'm an ex-environmental safety and health  
19 engineer and electrical engineer and I understand  
20 the amount of work it takes to do something like  
21 that. Throughout 2014 I was on the PSE community  
22 advisory board, and as a result of what I saw  
23 happening at that, I felt uncomfortable with the  
24 quality and integrity of some of the information  
25 that was being presented to us by PSE and chose

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1 to become a member of CENSE at that time, the  
2 Coalition of Eastside Neighbors for Sensible  
3 Energy so that there would be a credible  
4 alternate voice.

5 Due to that experience on CAG and my  
6 evaluation of the project alternatives offered in  
7 the draft EIS, I strongly believe that  
8 Alternative II, if anything -- if this project in  
9 deed moves forwards, I think that Alternative II  
10 is clearly the best choice.

I81-A-1

11 I think it's the only alternative that  
12 provides a way of dragging PSE kicking and  
13 screaming into the 21st century and avoiding all  
14 the negatives that go along with Alternative 1A  
15 such as safety challenges increased charges to  
16 the eastside rate payers, decreased quality of  
17 life due to visual pollution, spoiling our  
18 environment, devalue of neighborhoods and more.

I81-A-2

19 The study that was done by Richard Lauckhart  
20 and Richard Schiffman has been referred to  
21 previously, and I think I saw the presentation on  
22 that. It is a real eye opener in terms of  
23 providing what I see as a credible alternative to  
24 the PSE's eastside customer demand forecast which  
25 we recognized in 2014 just didn't make sense.

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I81-A -1 See response for Key Theme ALT-1.

I81-A -2 See response for Key Theme OBJ-3.



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1 I am very hopeful that you folks will take  
 2 the opportunity to read the report, read that  
 3 report in its entirety. I do have a couple of  
 4 copies of the executive summary of that report,  
 5 and the full report is available on the CENSE  
 6 website at CENSE.organization. If you would be  
 7 interested, I can give you a couple of copies  
 8 right now. Thank you very much for this  
 9 opportunity to speak.

10 MS. KAPITAN: Good evening, I'm  
 11 Victoria Kapitan. I live at 1209 North 38th  
 12 Street in Renton, the Cahill neighborhood. Thank  
 13 you for the opportunity to speak to you. I am  
 14 very concerned about Puget Sound Energy's  
 15 Energize Eastside project which proposes to build  
 16 18 miles of high voltage transmission lines  
 17 through our neighborhoods.

184-A-1

18 This is known as the Alternative I which I  
 19 oppose. I want the flaws and unanswered  
 20 questions in the DEIS addressed regarding safety,  
 21 environment, economic, neighborhood character  
 22 impacts. Most importantly I am not convinced  
 23 this project is even needed.

184-A-2

24 PSE tries to justify the need for the  
 25 project using an impossible scenario that would

184-A -1 Comment noted.

184-A -2 See responses for Key Theme OBJ-3 and Key Theme ALT-1.



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184-A-2

1 actually cause regional blackouts according to  
 2 the Lauckhart/Schiffman load flow study. The  
 3 solutions described in the DEIS were not  
 4 developed or reviewed by independent experts that  
 5 have suitable experience with modern electrical  
 6 grid technology including demand side management  
 7 and distributed energy resources. The cost and  
 8 capabilities are based on inaccurate and obsolete  
 9 studies.

184-A-3

10 I would ask that you support Alternative II,  
 11 the integrated resource's approach which is a  
 12 safer and less costly alternative. Rate payers  
 13 are asked to spend more than a billion dollars  
 14 over the lifetime of PSE's transmission line  
 15 proposal. The draft EIS must answer these flaws  
 16 and unanswered questions in order to convince  
 17 residents that we are getting the best possible  
 18 plan for our energy future. Thank you.

184-A-4

19 MS. WAGONER: We are through the  
 20 speakers who signed up so far. So if you'd like  
 21 to continue your presentation.

178-B-1

22 MR. ELWORTH: Again, I am Brian  
 23 Elworth. I live at 8605 129th Court Southeast in  
 24 New Castle. I was talking about research  
 25 integrity. Like to continue on that. On Page

184-A -3 See response for Key Theme ALT-1.  
 184-A -4 See response for Key Theme ECON-4.

178-B -1 Comment noted.

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178-B-1

1 1-5 of the EIS, it states, "This EIS will not be  
2 used to reject or validate the need for the  
3 proposal." But stating assertions as facts  
4 implies validation. And in several sections --  
5 places in that section it talks about, This  
6 deficiency is expected to arise or the existing  
7 transmission system could -- found that the power  
8 grid was at risk of outages. They're statements  
9 that sound like statements of truth when they're  
10 merely opinions from, I presume, PSE.

178-B-2

11 Opinions don't belong in here. If you want  
12 to refer to something as an opinion, that's fine.  
13 But don't state it as a fact, please. There's  
14 another section that says in the same area, Page  
15 1-5 Stantec prepared a memorandum evaluating the  
16 stated need for the project and confirmed that  
17 PSE's Eastside Needs Assessment was conducted in  
18 accordance with industry standards for utility  
19 planning. You heard that referenced earlier. It  
20 points to Appendix A. Appendix A has nothing to  
21 do with industry standards, so that's a  
22 misreference.

178-B-3

23 But those forecasts are built to industry  
24 standards, so let's look at that. Let's look at  
25 what the CAG was presented by PSE back in the

178-B-2 See response for Key Theme OBJ-5.

178-B-3 See response for Key Theme OBJ-2.

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1 early CAG period. They forecasted -- I'll leave  
2 this with you -- but they forecasted a need of  
3 660 megawatts in 2014. They missed it by 75  
4 megawatts. The problem we're talking about  
5 solving here is 74 megawatts. They didn't even  
6 get the measure right. If you look at these two  
7 curves all built to the same industry standards,  
8 you've got to see that there's something wrong.

9 If your stock broker gave you this upper  
10 picture and then said this is industry standards  
11 and I had people validate I did it right, and  
12 then they give you this curve, you'd run out of  
13 the office. You wouldn't give them a penny. You  
14 wouldn't trust them. Yet you state it as a fact  
15 that this is truth. This is not truth. It's  
16 just -- it's a ouija board is what it is.

17 So what I'm saying is there's reasonable  
18 doubt in those statements. And to post those as  
19 assertions is just plain old incorrect. So back  
20 to my original integrity question. My question  
21 is, what training and mentoring on the proper  
22 conduct of research is being provided to the  
23 individuals who are responsible for the content  
24 of the EIS?

25 If no formal training or mentoring is in

178-B-3

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1 place, what is the plan to rectify this process  
2 deficiency and provide product for public review  
3 that is compliant with basic research standards?  
4 If the concepts are not well understood or you  
5 don't really understand the process, I went and  
6 did a little homework for you and I found a  
7 couple books. They're from the National  
8 Academies Press.

178-B-3

9 One is called On Being a Scientist, a Guide  
10 to Responsible Conduct in Research, third edition  
11 2009. Found another book, Responsible Science,  
12 Volume I, Ensuring the Integrity of the Research  
13 Process 1992, National Academies Press. You can  
14 go to the website. I didn't include the website,  
15 but you can find it on line. You can get the  
16 books for free. I ask that you read those books  
17 and evaluate your production against those  
18 standards. Thank you.

119-O-1

19 MS. BRAUN: This is Barbara Braun  
20 again, and I was talking about if there were any  
21 alternatives justified other than do nothing, I  
22 was saying that Alternative I has high, very high  
23 costs to the community and there's no

119-O-2

24 justification for it. Alternative II, the  
25 integrated resources study, which would be a

119-O -1 See response for Key Theme OBJ-1.

119-O -2 See response for Key Theme ALT-1.

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I19-O-2

1 preferred alternative if we have to have one is  
2 not scoped and assessed properly.

I19-O-3

3 The appropriate need assumptions are not  
4 correct and they're not using the latest  
5 technology as others here have said. And we know  
6 there are some emerging technologies that could  
7 really drive down the cost of various aspects of  
8 this like battery storage, et cetera, that would  
9 bring Alternative II in at a lower cost than  
10 Alternative I. So we really need to assess that  
11 and do it independently with people that have  
12 expertise and not PSE.

I19-O-4

13 And then I think in terms alternatives, the  
14 cities need to have an independent audit if we're  
15 taking data from PSE, an independent audit of the  
16 EIS makes sure that our facts are correct. And  
17 then in any alternative, even in the do nothing  
18 alternative, one of the things that I think we  
19 need to really look at is the safety issues of  
20 co-locating power lines with a hazardous  
21 materials pipeline.

22 And we face a very high risk today as  
23 demonstrated in the article, Criteria for  
24 pipelines coexisting with electrical power lines  
25 done by DNVGL October 2015. That basically says

I19-O -3 See responses for Key Theme OBJ-2 and Key Themes ALT-1 and  
I19-O -4 See response for Key Theme PLS-3.

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1 that our current power lines located next the  
 2 Olympic Pipeline is a very high risk solution,  
 3 and that we have major safety concerns, issues  
 4 right now.

5 So any PSE plan should include permanently  
 6 removing all power lines from the pipeline  
 7 corridor. And this should be a base requirement  
 8 that all cities require and we should pass  
 9 ordinances that improve the safety regulations  
 10 around the pipeline since we just signed a  
 11 ten-year lease or whatever it was for the pipe  
 12 line, and make sure that we take the power out of  
 13 there permanently all together. End of story.

14 So that's it. And I have written comments,  
 15 not that you don't already have enough from me.

16 MS. WAGONER: Is there anyone else that  
 17 would like to speak? I believe we're through our  
 18 signed up speakers.

19 MR. MARSH: My name is Don Marsh. I  
 20 live at 4411 137th Avenue Southeast in Bellevue.  
 21 I'm the president of CENSE and I'll be speaking  
 22 on behalf of CENSE tonight, the Coalition of  
 23 Eastside Neighborhoods for Sensible Energy.

24 One of the things that -- during the last  
 25 meeting I spoke of our confusion about the

I19-O-4

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1 increase of power to Canada. I'm not going to  
2 reprise that, but there's other things about the  
3 purpose of this project that confuse us. So as  
4 we know, this project isn't about overall  
5 capacity or -- we've got plenty of power, PSE  
6 tells us that. It's just about reliability in a  
7 certain circumstance, happens when we have peak  
8 loads here in the Northwest, which would be on a  
9 day that's below 23 degrees. That doesn't happen  
10 very often, but maybe a couple times a year.

11 Maybe in a real cold snap, you could have a  
12 week worth of that weather. It really doesn't  
13 happen that often. That's good. We think the  
14 electrical reliability should be studied in that  
15 circumstance because we don't want to be losing  
16 our power when the thermometer drops.

17 In addition to that, PSE says that they need  
18 to study a situation when during that peak load  
19 situation we lose two critical pieces of  
20 infrastructure. In this case it's one 230  
21 kilovolt to 115 kilovolt transformer in the north  
22 side of eastside and one in the south.

23 So if both of those go at the same time we  
24 are experiencing peak loads, that's what they  
25 want to study. And again, we have no problem

O1-D-1

O1-D -1 See response for Key Theme OBJ-3.

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1 with that. That is a federal standard to make  
2 sure your system can handle peak loads with two  
3 failures. That's a good thing and we like that  
4 level of reliability.

5 But then PSE adds some additional criteria  
6 on things. And even before I get to there, what  
7 happens when we have that situation? PSE says  
8 that they might have some overloads in the  
9 system, but they have something called a  
10 corrective action plan which is allowed under  
11 NERC reliability standards that can do some  
12 things to reconfigure the network that stop the  
13 overloads, no outages. And we're going great.

O1-D-1

14 That sounds like an appropriate response.  
15 But they say if they do that, there are some  
16 neighborhoods, some parts of other communities  
17 that would be served only by one transmission  
18 line. So they say what would happen if we lost  
19 that transmission line under all those  
20 circumstances, then we would have power outage.

21 But we say, hey, wait a minute, is that a  
22 NERC reliability standard that you've lost two  
23 critical pieces of infrastructure and then you  
24 lose a third one. What level of reliability are  
25 we trying to serve here? So that seems a little

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1 suspicious to us, but then they've added these  
2 two other assumptions that we don't know where it  
3 comes from.

4 One is the Canadian -- the increase in  
5 Canadian power. And the other one is they've got  
6 nine local generation plants that help produce  
7 power especially in this particular circumstance.  
8 And they say six of those aren't going to be  
9 producing any power in this particular scenario  
10 they're studying. And we're wondering why not.  
11 Why -- those plants are there to serve power in  
12 this particular peak load situation. What  
13 justifies taking those off line?

O1-D-1

14 And so there's a table in the Eastside Needs  
15 Assessment that shows the capability of all the  
16 generators in our area and then what PSE is  
17 studying them. And there's a whole bunch of  
18 zeros in that table and other places where the  
19 ratings have been reduced, or it's not producing  
20 up to its full capacity.

21 So they have taken off 1800 megawatts of  
22 power in that table. We've got 1800 megawatts  
23 less available in our area than we should have.  
24 And that requires a whole bunch more electricity  
25 to be pumped in over the Cascades to serve that

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O1-D-1

1 need. 1800 megawatts, that is two and a half  
2 times the amount of power that the eastside uses  
3 at its peak load according to PSE. They're  
4 saying it's somewhere around 700 megawatts. 1800  
5 megawatts is two and a half times -- it's kind of  
6 like two and a half eastsides just disappeared,  
7 or you could say depending on which side of the  
8 equation you look at, like two and a half times  
9 more electricity that's being required to be  
10 served.

11 PSE says that doesn't really have any impact  
12 on the study. But we know that's actually false  
13 because we ran -- Rich Lauckhart and Roger  
14 Schiffman ran a study that shows taking off that  
15 much capacity in our area causes a whole bunch of  
16 regional issues. So we'd like to get really  
17 clear on what the federal reliability standards  
18 are and whether PSE is really -- if Energize  
19 Eastside is the solution for this reliability  
20 criteria. Thank you very much.

21 MS. WAGONER: Any other speakers  
22 tonight?

23 (No response.)

24 MS. WAGONER: Thank you for your  
25 comments tonight, and, Carol, would you like the

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floor?

MS. HELLAND: Sure. I'd like to say thank you. I'm sure Jennifer would like to say the same thing. We really appreciate you coming out. It was a nice evening. Your participation ensures that the process is robust. So thank you. Jennifer?

MS. HENNING: Thank you so much for coming tonight to the city of Renton for this meeting and we look forward for your continued involvement. And you'll see some of us from the cities that come to more of these meetings. So please do engage us, say hello and we welcome your comments in every step of the process. Thank you.

(Meeting Adjourned 7:34 p.m)

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ENERGIZE EASTSIDE  
PHASE 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT  
PUBLIC HEARING/PUBLIC TESTIMONY

2:00 p.m.  
Saturday, February 27, 2016

Newcastle Elementary School  
8400 136th Avenue Southeast  
Newcastle, Washington

KIMBERLY MIFFLIN, CCR, CSR  
NORTHWEST COURT REPORTERS  
1415 Second Avenue, Suite 1107  
Seattle, WA 98101  
(206) 623-6136  
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PANEL MEMBERS

CAROL HELLAND - SEPA Responsible Official, City of Bellevue  
HEIDI BEDWELL - EIS Program Manager  
TIM McHARG - Director of Community Development, City of  
Newcastle  
CLAIRE HOFFMAN - ESA

MEETING FACILITATORS

MARCIA WAGONER - Facilitator, Three Square Blocks  
CASEY BRADFIELD - Timekeeper

PUBLIC SPEAKERS

ANTHONY SUTEY  
BRIAN ELWORTH  
RICK KANER  
TODD ANDERSEN  
KATHIE OSSENKOP  
JOHN MERRILL  
BOB MULFORD  
MEL ZOERB  
DON MARSH  
MIKE YOUNG  
JEANNE DEMUND  
SUE STRONK  
WARREN HALVERSON  
GARY CLIFF  
LARRY JOHNSON  
RAJ KURAMKOTE  
STEVE KASNER  
JYOTSNA KURAMKOTE  
LINDA YOUNG  
MICHAEL BOYCE  
A.J. SUTEY  
JEFF PREVETTE  
LORETTA LOPEZ

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3

1 DR. SUTEY: Thank you. I'm Dr. Anthony Sutey.  
 2 I'm a retired engineer. I live in Olympus in Newcastle.  
 3 My recommendations are reject Alternative 1, accept  
 4 Alternative 2.

193-B-1

193-B-2

5 The basis for rejection of Alternative 1. Recently  
 6 two deal breakers associated with Eastside power demands  
 7 have come to light which justify rejection of Alternative  
 8 1. One, the Northwest Power and Conservation Council  
 9 20-year plan. By investing in energy efficiency we'll be  
 10 able to go without an aggressive program to build new  
 11 power generation resources and keep Northwest electricity  
 12 rates low. Since 1995, annual energy loans grew at a  
 13 rate of only 0.4 percent. Therefore, why does PSE need  
 14 to construct major new 230 kV power lines which are used  
 15 for bulk transmission and affect our residential areas  
 16 and impact our homes and environment.

193-B-3

17 Secondly, the Lauckhart-Schiffman load flow study  
 18 sponsored by CENSE. Existing distribution using critical  
 19 transformers operating at only 85 percent of winter  
 20 emergency rating provide enough capacity for Eastside  
 21 growth for the next 20 to 40 years. Analysis used the  
 22 power growth rate of 0.5 percent per year, which is the  
 23 number provided by PSE to WECC and is consistent with the  
 24 0.4 projection of the Northwest Power and Conservation  
 25 Council. Contrast this with the 2.4 percent growth per

- 193-B -1 Comment noted.
- 193-B -2 Comment noted.
- 193-B -3 See response for Key Theme OBJ-3.



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4

1 year used by PSE to justify Alternative 1.

2 Further analysis. PSE assumes all new power demands

3 are electrical only and refuses to consider natural gas

4 to supply more efficiently a major portion of energy for

5 home and commercial heating, especially in the winter,

6 and air conditioning in the summer without the need for

7 additional high voltage electric power lines.

8 PSE demands study conclusions overstates demand by

9 five times inconsistent with Northwest Power and Planning

10 Council and Lauckhart-Schiffman studies, under values

11 existing power grid components, triples power

12 transmission to Canada from 500 megawatts to 1500

13 megawatts to justify needs, inconsistent with the

14 Northwest Power Planning Council and Lauckhart-Schiffman

15 studies, fails to improve the role of natural gas to meet

16 power demand at a lifetime cost of \$1.4 to \$2 billion.

17 This is not rocket science. This can be understood

18 by all. The power demands needs analysis by PSE is

19 irresponsible. Power demands do not justify Alternative

20 1. PSE has provided bogus and inflated analysis to

21 justify a \$1.4 to \$2 billion capitalization project which

22 will result in a 9.8 percent windfall profit allowed by

23 the WUTC for offshore owners paid by the PSE rate payer.

24 No. 3, Alternative 1 will cost major environmental

25 loss of home value impacts. I won't go through the size

193-B-3

193-B-4

193-B -4 See response for Key Theme ECON-1.





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5

193-B-4

1 of the power lines and increased size of the transmission  
 2 areas and the widening of the power lines and so on and  
 3 so forth. We all know that it's going to de-value our  
 4 homes and businesses along the 18-mile route from Renton  
 5 to Bellevue, and it's going to directly affect our home  
 6 and probably we're going to see at least 20 percent, at  
 7 least, and possibly more, if the homes along the eastside  
 8 of 128th Avenue are removed.

9 MS. WAGONER: If you could wrap up your  
 10 comments, I would appreciate it.

11 DR. SUTEY: Pardon me?

12 MS. WAGONER: If you could wrap up your  
 13 comments. Your time is up.

193-B-5

14 DR. SUTEY: The EIS does not address the effect  
 15 of doubling the voltage over the pipeline. Safety of the  
 16 pipeline and power lines are evaluated separately.  
 17 Analysis is required to evaluate scenarios concerned.  
 18 The combined hazards associated with the simultaneous  
 19 structure of the dual pipeline and the power lines in the  
 20 event of an earthquake along the Seattle fault.

193-B-6

21 Conclusions. Why should we as citizens and rate  
 22 payers be asked to pay for the environmental impact and  
 23 the de-valuation loss of our homes and communities for  
 24 Alternative Option 1 that is not needed and has not been  
 25 justified. Alternative Options B, C, and D are also

193-B -5 See response for Key Theme EIS-1 and Key Theme EARTH-1.

193-B -6 See responses for Key Themes ECON-4 and ECON-1, and Topic OBJ.



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6

193-B-6

1 rejected since they are not needed.

2 So reject Alternative 1.

3 Basis for the acceptance of Alternative 2.

4 MS. WAGONER: Could you wrap up. I can take  
5 your comments and see that they're included.

193-B-7

6 DR. SUTEY: This approach cost effectively  
7 meets future power needs of Eastside with low  
8 environmental impact and minimum loss of home and  
9 community values.

10 Reject Alternative 1 and accept Alternative 2.  
11 Thank you.

12 MS. WAGONER: Thank you. Would you like me to  
13 keep your comments?

14 DR. SUTEY: It's all yours.

15 MS. WAGONER: All right. Thank you.

16 We ask that you hold your clapping, please. You can  
17 use your hand wave, but we appreciate you not clapping.  
18 Thank you.

19 AUDIENCE MEMBER: Why not? Why can't we clap?

20 MS. WAGONER: Because it's good to hear  
21 everyone and the clapping disrupts that.

22 AUDIENCE MEMBER: When they are not speaking,  
23 can we clap?

24 MS. WAGONER: I would appreciate if you would  
25 stick to -- your hand wave is great. Thank you.

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193-B-7 See response for Key Theme ALT-1.

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7

1 MR. ELWORTH: Hello, my name is Brian Elworth.  
2 I live at 8605 129th Court Southeast in Newcastle. I  
3 represent the Olympus Homeowners Association.

4 I've lived in the area since 1963. I've lived at my  
5 current address since 1988. Newcastle is my city,  
6 Olympus is my neighborhood. This is my home. Regardless  
7 of any outcome of this process, it must be safe. It must  
8 be safe. So I'm going to talk about safety and  
9 community.

10 Safety has been an uphill battle for the residents  
11 ever since the start of the CAG process. It did not get  
12 fair recognition. Safety even in the DEIS is not really  
13 being taken very seriously. The DEIS states, Risk to the  
14 public is not likely from constructing or operating the  
15 project near pipelines due to extensive safety policies  
16 and regulations, Page 1-32. That kind of rings hollow  
17 with me.

18 If you go to the U.S. Department of Transportation  
19 Pipeline Hazardous Materials Safety Administration,  
20 hazardous liquid pipeline incidents, if you look at their  
21 report, you'll see electrical arc from other equipment  
22 and facilities, \$68 million. Third party excavation  
23 damage, \$144 million. Unspecified corrosion, \$6 million.  
24 Miscellaneous, \$160 million. Bellingham was  
25 miscellaneous, by the way, that's why I mention that.

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O13-A -1 See response for Key Theme PLS-2.

O13-A-1



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8

1 Injuries and fatalities, 23 injuries, 29 deaths.  
2 All of those incidents were accomplished by  
3 employing best management practices and extensive safety  
4 policies and regulations. So, again, those words rang  
5 rather hollow with me.

O13-A-1

6 PSE selected a corridor end, and it's much too  
7 narrow to safely co-locate 230 kV transmission metal  
8 towers and have to reset the pipeline. Other sections of  
9 the corridor are equally high risk. PSE has been told  
10 routinely of this safety issue. PSE asserts that  
11 co-location is a good thing. In fact, they went in front  
12 of the Newcastle City Council and Planning Commission and  
13 said that quite often these utilities are co-located for  
14 safety. I'll give you the transcript of that. It's  
15 unbelievable. It's ludicrous. But I'll give you the  
16 transcript. That is their position.

O13-A-2

17 BPA, Chevron, ARCO, MACE, BNGF and many more experts  
18 realize significant safety hazards in co-location. A  
19 high energy ignition source next to a highly flammable  
20 material is not a good thing. Induced AC corrosion in a  
21 hazardous liquid pipeline is not a good thing. You need  
22 50 or better foot separation between the towers support  
23 grounding structures and underground pipelines and other  
24 pipe utilities along that corridor. The existing end  
25 corridor is not wide enough.

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O13-A -2 See response for Key Theme PLS-3.

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9

1 So why is PSE's position so radically different from  
 2 the rest of the industry? I'll tell you why. It's  
 3 because they're wrong. It is not safe. Why is this  
 4 being ignored in the DEIS? I feel as if it is sort of  
 5 getting whitewashed.

O13-A-2

6 The DEIS says the process of -- the process includes  
 7 an objective understanding in order to identify feasible  
 8 and reasonable private alternatives for consideration in  
 9 the DEIS. So you have a choice to make. Either reject  
 10 Alternative 1 since it is not technically feasible nor  
 11 reasonable due to extreme safety risks or address the  
 12 impact of the mitigation to make it safe. Pick one or  
 13 the other. Don't fail to step up to this critical  
 14 choice. Right now the DEIS looks like a bit of a  
 15 whitewash. Again, this project should not impose safety  
 16 risks to residents.

O13-A-3

O13-A-4

17 Let's talk about community. So let's say you do  
 18 step up and you say, okay, we are going to address  
 19 mitigation risks. The corridor end would then turn into  
 20 mega end to provide for the necessary risk for safety  
 21 margins. Many homes would be condemned and destroyed in  
 22 Olympus. Up to 51 homes will be gone if they center  
 23 their corridor along the existing right-of-way in  
 24 widening for the safety margin.

O13-A-5

25 Now, these aren't -- these homes are not just

- O13-A-3 Comment noted.
- O13-A-4 Comment noted.
- O13-A-5 See response for Key Theme LU-1.



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10

1 concrete two-by-four and drywall structures. These are  
 2 homes with families, homes with places where children --

3 MS. WAGONER: You have one minute.

4 MR. ELWORTH: Homes where neighbors have been  
 5 neighbors for over a quarter of a century, homes where  
 6 families enjoy life, homes of hard community. In Olympus  
 7 20 percent of a well-established community would be wiped  
 8 out by this mitigation.

9 So how is this being addressed in the EIS? It  
 10 appears to be ignored. What's the visual character of a  
 11 former neighborhood with metal towers replacing destroyed  
 12 homes? It's the face of a neighborhood with a bunch of  
 13 teeth knocked out.

14 So to repeat, you have a choice to make. Either  
 15 reject Alternative 1 since it is not technically feasible  
 16 nor reasonable to the extreme safety risk or address the  
 17 impact of mitigation required to make it safe. Choose  
 18 one.

19 Thank you.

20 MR. KANER: My name is Rick Kaner. I have  
 21 lived on the Eastside since 1963. I live at 6025  
 22 Hazelwood Lane Southeast. I would like to address  
 23 neighborhood character.

24 I can't overemphasize the impact on neighbors that  
 25 Alternative 1A represents. In Chapter 10.7.3.1.2 you

O13-A -6 See response for Key Theme VR-5.

O13-A -7 Comment noted.

I90-D -1 See responses for Key Themes VR-3 and VR-5, and Key Theme GHG-1.

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O13-A-5

O13-A-6

O13-A-7

I90-D-1

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11

I90-D-1

1 discuss the widening of the corridor. Eight thousand  
2 trees will go. On average, that's about 440 trees per  
3 mile. There is going to be significant impact on the  
4 beauty of the neighborhoods, the territorial views in  
5 addition to the sound barrier. It's also going to  
6 increase our carbon footprint, which seems to be a topic  
7 of the governor lately.

8 In addition, it's going to invoke eminent domain.  
9 That's the destruction of existing homes, and I don't  
10 believe numbers were actually provided in the DEIS.  
11 Those are our neighbors.

I90-D-2

12 New homes that currently are not on the corridor  
13 will become bordering homes on the corridor. That means  
14 those homes will depreciate in value. That's the  
15 depreciation that the argument has been made is already  
16 calculated into the values of homes on the corridor. It  
17 is not calculated into homes further away from the  
18 corridor that will now be bordering.

19 You're looking at at least six percent up to 15 to  
20 20 percent depreciation in value for residents whose  
21 homes are their single greatest investment. In addition,  
22 taking homes off the books and putting new homes on the  
23 corridor with depreciation is going to reduce your tax  
24 revenues. That's going to impact every city and  
25 indirectly it's going to come right back to us with

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I90-D -2 See response for Key Theme ECON-1.

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12

1 reduced city services due to lack of funding.

2 Chapter 11.6.3.5.1 addresses the clearing of 327

3 acres. I think for a lot of the same reasons as

4 discussed with the trees as well as the eminent domain,

5 this is a huge impact.

6 Chapter 11.6.3.5.3 discusses increased pole size.

7 Going from 65-foot poles to 85- to 135-foot poles is

8 going to go above the tree canopy in many areas. This is

9 going to create new view impacts including some of the

10 new highrises going in in downtown Bellevue. It's going

11 to create difficulties for homeowners to sell their homes

12 because HFA financing significantly shies away from homes

13 within the fall zone of a pole. That's going lead to

14 further home depreciation.

15 MS. WAGONER: If you can wrap up your comments.

16 MR. KANER: Okay. I think that throughout the

17 document the verbiage minimizes or neglects the impact of

18 Energize Eastside, the Alternative 1A. The impacts in

19 Alternative 2 on all of these points remains negligible.

20 MS. WAGONER: Thank you. Next speaker.

21 MR. ANDERSEN: Hi, I'm Todd Andersen from

22 Bellevue. My address is a matter of public record.

23 First, I would like to request that there's more

24 time to comment on this EIS. The current EIS is over 700

25 pages and PSE has changed over 2,000 pages of underlying

I90-D-2

I90-D-3

I179-A-1

I90-D -3 See response for Key Theme EIS-1.

I179-A -1 See response for Key Theme EIS-2.





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13

I179-A-1

1

documents which the EIS relies on.

2

I would like to thank my first speakers because they keyed it up beautifully.

3

4

Alternative 2 is the only choice, and that's assuming you continue with PSE's fraudulent assumption of having to ship 1.5 gigawatts of power up to Canada during the middle of winter and that they shut off all power generation north of Renton essentially.

I179-A-2

9

When you get to Alternative 2, they have 42 megawatts over there on their little poster over there, and they are in the document, EIS document, they're using land based area. Well, the energy density of Energize Eastside is an order of magnitude greater than all of PSE's area. So they said, Energize Eastside, 14 percent of the land area, so we'll just take the entire conservation for the entire PSE's territory and assume it is 14 percent, which is totally fraudulent. So the list goes on and on.

I179-A-3

19

One example is LED's. PSE has a classified program that they put in the footnotes of one of your building inserts two years ago where they'll give you 20 free LED light bulbs. Just look up home print. But if you use NEEA -- NEEA is Northwest Energy Efficiency Association, it's made up of 140 utilities which PSE is a part of -- PSE pays 19 percent of NEEA's budget.

I179-A-2 See response for Key Theme ALT-1.

I179-A-3 See response for Key Theme ALT-1.

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14

1 If you use NEEA's numbers -- and NEEA is made up of  
 2 Oregon, Montana, Idaho and Washington -- just using their  
 3 numbers, there are 600 megawatts of existing incandescent  
 4 light bulbs remaining. And if you convert those and just  
 5 assume one-third of them are on, that's 200 megawatts.  
 6 All of that is at the peak power load. And that's more  
 7 than enough to run Bellevue 80 percent of the time of the  
 8 year in terms of savings.

I179-A-3

9 The bigger one is NEEA also documents how PSE's  
 10 rates are 28 percent higher than all 137 publicly-run  
 11 utilities. So there's only three for-profit utilities in  
 12 the entire four-state area. PSE is 28 percent higher.  
 13 It's about time you take PSE and turn it into a public  
 14 utility because they are corrupt at the core.

15 MS. WAGONER: Thank you. Next speaker.

16 MS. OSSENKOP: I'm Kathie Ossenkop. I live in  
 17 the Renton Highlands. My address is 3316 Northeast 12th  
 18 Street, Renton, and I have lived there since 1966.

I174-A-1

19 I am excited to come to this gathering to learn that  
 20 actually there is another alternative, Alternative 2,  
 21 compared to the alternative that I saw at the other  
 22 meetings I attended where the end line -- where I'm  
 23 deeply affected by the end line along Monroe Avenue.  
 24 Monroe Avenue transits Renton Vocational Technical  
 25 School. Along Monroe Avenue there is a childcare

I174-A -1 See response for Key Theme ALT-1.

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15

I174-A-1

1 facility, and there are several churches all within one  
 2 mile. And the power lines are right in people's  
 3 driveways along that avenue.

I174-A-2

4 I am here because I'm concerned about the pipeline  
 5 fault during the construction process that could severely  
 6 impact the salmon spawning in the Cedar River. The Cedar  
 7 River goes through the city of Renton and exits to Lake  
 8 Washington. I have stood on the bridge over the Cedar  
 9 River at the library and counted 44 salmon spawning  
 10 within a four-minute period in October.

I174-A-3

11 I'm here because of the corona issues that I have  
 12 been told about in association with these type of lines,  
 13 the buzz, the hum. It changes with the weather. And I'm  
 14 here because of the interference with home electronics,  
 15 home appliances, a television that doesn't have a cable  
 16 and a cell phone. What is the city of Renton going to do  
 17 with all of those cell phone towers that are being

I174-A-4

18 attached to the water tower on 12th Avenue North? City  
 19 of Renton plans a great deal of activity around that  
 20 water tower. That's their big water reserve area.

21 There is an EIS involved with that big construction  
 22 project that's going to last a couple of years.

23 So for these reasons I do support Alternative 2.

24 Thank you to the EIS people who came up with it.

25 MS. WAGONER: Thank you.

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- I174-A-2 See response for Key Theme P&A-3.
- I174-A-3 See response for Key Theme NOI-1.
- I174-A-4 See response for Key Theme UTL-1.



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16

1 MR. MERRILL: I'm John Merrill and I'm a board  
 2 member of CENSE. But Don is going to take our five  
 3 minutes and I'll try to limit my comments to three.

4 First of all, I want to thank the EIS for outing the  
 5 fact that PSE, if Alternative 1A were to be implemented,  
 6 would have to widen the right-of-way by at least 50 feet,  
 7 and they never told us before. They've selectively  
 8 released information when it's the most convenient for  
 9 them. I'm just wondering based on this what they are  
 10 going to drop on us next. What is it that we do not know  
 11 yet about what they're proposing. They have not  
 12 submitted a permit application. We do not know what they  
 13 really have in store for us.

14 One of the things that I've been made aware of  
 15 recently is that PSE will build the new and intend to  
 16 build the new 230 kV line over the top of the existing  
 17 115 kV line, and they will not remove the existing 115 kV  
 18 line. So we will a veritable spider web of 12, 12 very,  
 19 very large conductors going through our communities with  
 20 all the associated downside and impact.

21 And I saw -- I haven't read all 700 pages of the EIS  
 22 word for word yet -- but I saw nothing reflected in the  
 23 DEIS of the increased impacts from leaving the existing  
 24 lines in place. So to me that is a major hole in the  
 25 analysis.

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I158-B -1 See response for Key Theme EIS-2.

I158-B-1



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17

1 Let me start out with some common ground. CENSE  
2 agrees with PSE that our communities must have a reliable  
3 and ample supply of electricity. On this there is no  
4 argument. Our differences are about how to provide this  
5 service in the context of our communities' best  
6 interests. And CENSE has hired industry insiders who are  
7 definitive experts in the 21st century technologies and  
8 programs that are shown in the DEIS as Alternative 2.

9 However, the DEIS analysis of these low impact  
10 solutions is inadequate for several reasons. No. 1,  
11 Alternative 2 mischaracterizes unreliable,  
12 unimplementable and generally treated in a skeptical  
13 dismissive manner that smacks of bias and a clear lack of  
14 expertise and ability to provide an objective analysis  
15 based on current information about this fast moving  
16 branch of the electrical utility industry.

17 Second, Alternative 2 is arbitrarily burdened with  
18 unsubstantiated requirements. Section 2.3.3.1 states  
19 that distributed generation must provide up to 400  
20 megawatts of peak power, although elsewhere the need is  
21 to make that 200 megawatts.

22 MS. WAGONER: Sir, if you could wrap up your  
23 comments. Your time is up.

24 MR. MERRILL: No. 3, the DEIS Alternative 2  
25 conveniently ignores the fact that the existing Eastside

I158-B -2 See response for Key Theme OBJ-1.

I158-B-2

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18

I158-B-2

1 115 kV system could relatively easily and inexpensively  
 2 be upgraded with additional transformers, conductors and  
 3 other equipment, if needed, and that that's a burden on  
 4 Alternative 2 that could very, very easily be made much  
 5 less than the 200 megawatts that is characterized in the  
 6 EIS. Thank you.

7 MS. WAGONER: Thank you.

8 MR. MULFORD: Thank you for the opportunity to  
 9 speak. My name is Bob Mulford and I live in Newcastle in  
 10 the Vineyards at 12733 Southeast 86th Place. This is  
 11 just adjacent to the Olympus neighborhood.

I149-A-1

12 And I want to echo the concerns that have been  
 13 expressed by prior speakers on the effect that this  
 14 project would have on the character of the neighborhood,  
 15 the loss of trees, the widening of the corridor and the  
 16 safety concerns, both with the construction of the  
 17 pipeline, and these are not imagined concerns. We'll all  
 18 familiar with an accident that happened in Bellingham  
 19 involving a pipeline and construction.

I149-A-2

20 And I'm concerned that the justification for this  
 21 project depends on a load flow study done by PSE that has  
 22 a number of dubious assumptions, again, mentioned by  
 23 previous speakers. In particular, the assumption that we  
 24 would be sending 1500 megawatts of electricity to Canada.  
 25 We would not have a need to do that if there was truly an

I149-A-3

- I149-A -1 See responses for Key Themes VR-3, VR-4, and VR-5.
- I149-A -2 See response for Key Theme PLS-2.
- I149-A -3 See responses for Key Themes OBJ-1 and OBJ-2.



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1 emergency in the winter.

I149-A-3

2 And so I urge you to consider these concerns, look  
3 at the need for the project and look at the very, very  
4 real possibility of satisfying our needs for power by  
5 simpler -- simpler methods that would have a less impact  
6 on our community and on our environment, approaches that  
I149-A-4 7 have been recommended by other utility organizations  
8 including distributed generation of electricity,  
9 conservation. There are ways to meet our needs without  
10 doing this very, very destructive project. Thank you.

11 MS. WAGONER: Thank you.

12 MR. ZOERB: My name is Mel Zoerb. I live at  
13 8408 129th Avenue Southeast in Newcastle in the Olympus  
14 area, about a block from the right-of-way.

15 And the first thing I want to say is express my  
16 thanks to the EIS team. It's obvious from the document  
17 that that was a big effort. And we may not all agree  
18 with all the points in there, but nonetheless, it's  
19 pretty obvious that there was a lot of manhours put into  
20 that thing.

I175-A-1

21 I think the thing that is bothering a lot of us is  
22 that we're in one of these situations where in a sense  
23 the horse is before the cart. We're forced into this  
24 situation, I guess, by regulatory demands and that sort  
25 of thing. And many of us feel like we're asked to

I149-A -4 See responses for Key Theme ALT-1.

I175-A -1 See response for Key Theme EIS-2.

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I175-A-1

1 comment on the EIS without having adequate information.

2 So I think for today what I would like to do is just  
3 emphasize two things. One, if this line is going to be  
4 built, we have to make sure that the construction effort  
5 in particular is safe. There is too many houses  
6 involved, there is too much chance of an accident.

I175-A-2

7 Accidents happen all the time. You pick up the newspaper  
8 and you can see this crane falling over and whatever. I  
9 know a crane doesn't apply in this case, but I'm just  
10 using that as a simple example. So we have to make sure  
11 that everything possible, if it goes to the point where  
12 we see that this line is going to become reality, it has  
13 to be accompanied with a tremendous safety effort.

I175-A-3

14 And from my perspective and I think a lot of the  
15 homeowners that are along this right-of-way line, we  
16 feel, I feel at least, that we should have a situation  
17 where we're assured that there isn't going to be any  
18 property condemned to put this type of system through our  
19 area. That's the No. 1 thing that I think should be a  
20 ground rule. And whether that is a literal part of an  
21 EIS effort or not, I can't say. But nonetheless, that's  
22 the most important thing that I see that many of us are  
23 very concerned about.

I175-A-4

24 We want -- if there is going to be an effort, we  
25 want it to be super safe, and we want a chance to audit

- I175-A -2 See response for Key Theme PLS-4.
- I175-A -3 See response for Key Theme LU-2.
- I175-A -4 See response for Key Theme PLS-1.

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1 the type of equipment that's going to be used, the  
2 procedures. We've got a number of engineers, I know some  
3 of them right in the back behind me here, that can do  
4 this sort of thing. I'm a retired engineer myself.

5 MS. WAGONER: If you could wrap it up.

6 MR. ZOERB: They would be glad to do that. And  
7 we just want to make sure that the effort is an  
8 appropriate one.

9 I want to make sure that we --

10 MS. WAGONER: You are out of time.

11 MR. ZOERB: I'm out of time. I'm sorry.

12 MS. WAGONER: I would be happy to take your  
13 comments if you would like.

14 MR. ZOERB: That's okay. I didn't hear your  
15 warning.

16 MS. WAGONER: Thank you.

17 MS. HELLAND: I just wanted to acknowledge for  
18 the record that I did receive a letter from Mel, and I  
19 have that in my possession.

20 MR. MARSH: My name is Don Marsh. I'm the  
21 president of CENSE, the Coalition of Eastside  
22 Neighborhoods for Sensible Energy, and I'll be speaking  
23 for that organization.

24 In past meetings I've questioned the need and  
25 purpose of the Energize Eastside project, and those are

I175-A-4

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1 important questions. But perhaps nowhere along the  
 2 18-mile route is the issue of safety more relevant than  
 3 here in Newcastle where the utility corridor is only 100  
 4 feet wide as it passes through parts of the Olympus  
 5 neighborhood.

6 PSE is proposing to squeeze a lot of infrastructure  
 7 into that corridor. Two existing high-pressure pipelines  
 8 that deliver over 13 million gallons per day of jet fuel  
 9 and gasoline to the Seattle and Portland airports, two  
 10 existing 115 kilovolt lines and new transmission line  
 11 operating at 230 kilovolts. It is currently not clear if  
 12 or when the 115 kilovolt lines will be removed.

O1-H-1

13 There are three kinds of risks that relate to  
 14 pipeline safety, construction risk, corrosion risk and  
 15 arcing risk. I will elaborate on each of these.

16 The risk of an accident during construction is a  
 17 real concern. Crews will be digging deep holes for the  
 18 pole foundations within feet of these 40-, 50-year old  
 19 pipelines. One slip could cause a disaster in the same  
 20 way it happened in Bellingham in 1999. In that case,  
 21 construction equipment nicked the pipeline and caused a  
 22 leak that wasn't discovered until three boys accidentally  
 23 ignited the escaping fluid and lost their lives as a  
 24 result.

O1-H-2

25 Electrical engineers in Newcastle and other

O1-H -1 See response for Key Theme ALT-1.

O1-H -2 See responses for Key Themes PLS-1, PLS-2, and PLS-3.

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1 communities raised the issue of corrosion risk soon after  
2 the project was announced. I called the Olympic Pipeline  
3 Company and mentioned these concerns. The engineer I  
4 talked to admitted it was a known problem, but the  
5 company mitigates the risk by running a DC current  
6 through the pipeline to provide cathodic protection. I  
7 was satisfied that it wasn't as worrisome as I first  
8 thought.

9 But then I found a paper on the Internet called  
10 "Criteria for Pipelines Co-existing with Electric Power  
11 Lines" authored by the respected risk analyst DNG VL in  
12 October 2015. This paper contains a survey of up-to-date  
13 science on the risks and mitigations of co-locating this  
14 kind of infrastructure. We were dismayed to find that --  
15 let's see, oh, I'm sorry.

16 The executive summary contains five tables that  
17 contain the most important criteria for evaluating risk.  
18 We were dismayed to find that the corridor through  
19 Newcastle presents the highest risk level for four out of  
20 five of these criteria, and we would have to measure the  
21 soil resistivity to judge the final criterion.

22 We called the author of this paper to see if we  
23 could get a detailed analysis of our situation. He  
24 agreed that our description of the situation warranted a  
25 careful study, but his firm does a lot of work for PSE so

O1-H-2

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1 he couldn't get directly involved. His office is in  
2 Texas, just to give you an idea of PSE's sphere of  
3 influence.

4 Fortunately, we found and engaged Dr. Frank Cheng, a  
5 professor in Canada, research chair in pipeline  
6 engineering to give us an initial opinion. Dr. Cheng  
7 says, quote, It is generally acknowledged that buried  
8 pipelines can be corroded at an accelerated rate in the  
9 presence of AC interference. Recently there has been  
10 mounting evidences of AC-induced corrosion of pipelines  
11 and their failures, end quote.

12 He questions the effectiveness of Olympic Pipeline's  
13 cathodic protection policy and says, quote, A  
14 comprehensive study program should be developed prior to  
15 the construction of these power lines, end quote.

16 Dr. Cheng is not an expert on arcing danger but this  
17 is mentioned in safety guidelines published by the  
18 Bonneville Power Administration. On the topic of a  
19 downed power line, the paper from DNG VL says a direct  
20 arc of electric current, quote, can result in coating  
21 damage up to the point of burn through. Even if an arc  
22 is not sustained long enough to cause burn through, a  
23 short duration elevated current can cause molten pits on  
24 the pipe surface that may lead to crack development as  
25 the pipe cools, end quote.

O1-H-2

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1 The danger of a pipeline accident is summarized in  
 2 this quote from the Bellevue Fire Department's report  
 3 entitled "Standards of Response Coverage." Quote, Given  
 4 that the pipeline incidents continue to occur in this  
 5 country, and many for undetermined reasons, the community  
 6 is still at risk. The combination of a highly flammable  
 7 liquid in large quantities --

8 MS. WAGONER: One minute.

9 MR. MARSH: -- and in urban environment  
 10 translates into a significant consequential risk that  
 11 approaches the catastrophic level, end quote.

12 The fire department goes on to state that it does  
 13 not have sufficient response and mitigation abilities to  
 14 extinguish a pipeline fire. With houses located closer  
 15 than 50 feet to the pipeline, the potential for death and  
 16 destruction without warning is of great concern to our  
 17 community.

18 MS. WAGONER: If you can wrap it up.

19 MR. MARSH: One more sentence.

20 That is especially true where the pipeline and power  
 21 lines pass close to schools such as Tyee Middle School  
 22 and Rose Hill Middle School. We aren't prepared to risk  
 23 our children for this project.

24 Thank you very much.

25 MS. WAGONER: Thank you. Our next speaker.

O1-H-2

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1 MR. YOUNG: I'm Mike Young. Julie and I have  
 2 lived on the Eastside since '82 and we currently live at  
 3 5031 Lakehurst Lane Southeast. We're long-time customers  
 4 of Puget Sound Energy and we're grateful that our kids  
 5 and grandkids now live in the area and they are too.

6 Because of that, two things are really important to  
 7 us. One is that Puget be able to maintain the power  
 8 service that they're providing to all of us. And the  
 9 second is that our local governments be wise and  
 10 responsible in their decisions so they don't harm the  
 11 environment or our community and so they don't waste our  
 12 community's resources with projects and rate increases  
 13 that aren't essential. We think those are compatible  
 14 objectives frankly, and we think your EIS process, the  
 15 unbelievable resource you put together, is part of the  
 16 way to get there.

17 From my limited study of the Draft EIS, I want to  
 18 share the conclusions it leads me to and just a few  
 19 reasons for those conclusions and one objection to the  
 20 process.

21 My conclusions: I could support the no action  
 22 alternative, which may be shocking, or Alternative 2, the  
 23 integrated resource approach. In saying I could support  
 24 no action, I don't mean no action forever. I just mean  
 25 no action right now. One of the many strengths, frankly,

I177-B-1

I177-B-2

I177-B-1 Comment noted.

I177-B-2 See response for Key Theme ALT-1.



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1177-B-2

1 I think of the no action alternative or of Alternative 2  
2 are the flexibilities that both of them provide for the  
3 community, and for PSE frankly, to benefit from  
4 developing technology and to benefit from more accurate  
5 assessments of needs, both the structural needs and the  
6 timing of the needs.

7 MS. WAGONER: You have one minute.

8 MR. YOUNG: Thank you.

1177-B-3

9 Your charts at the other end of the room, which are  
10 in the EIS, I thought were fantastic in terms of looking  
11 at the various factors and showing what differences there  
12 are in impacts. Chapters 4, 5, 6, 10, 11 and 12 I think  
13 are pretty clear in differentiating and in showing that  
14 the impacts from Alternative 2 would be considerably less  
15 than 1 or 3.

16 So my objection is based on, let's say a car  
17 analogy. It's not hypothetical. Julie and I just went  
18 through this. Your car breaks down or you get a recall  
19 notice. You go to the shop. They give you a list of  
20 things that are wrong and say it will be \$3,500 to fix  
21 them. Well, in our case, our car is a dozen years old  
22 and so we've got to think and ask ourselves, do we want  
23 to buy a new car. But we go out shopping. We identify  
24 three cars that will fit the bill and we compare them.  
25 Then we think, well, there is a shop that did a great job

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1177-B-3 Comment noted.

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1 for us before, let's get a second opinion.

2 MS. WAGONER: If you can wrap up, please.

3 MR. YOUNG: We get the second opinion, and they

4 say, oh, here's why you don't need to do A, B and C, you

5 do need to do D, E and F and it will be \$1,200. We don't

6 need to buy a new car.

7 And I just think that you are driving the process,

8 whether you're in government or whether you are one of

9 the consultants, you have a responsibility to do

10 something the EIS, Draft EIS says you won't do, and that

11 is revisit the need whenever you get credible information

12 about meaningful mistakes in assumptions or facts that

13 were used in supposedly proving the need. I don't know

14 how you do it procedurally, but I ask you to try. Thank

15 you.

16 MS. WAGONER: Thank you.

17 MS. DEMUND: Hi, my name is Jeanne Demund. I

18 live at 2811 Mountain View Avenue North in Renton. I

19 appreciate the opportunity to come in front of the EIS.

20 I live along one of the routes that was considered

21 but not selected for the Energize Eastside project. And

22 I've been trying to get my neighbors to come out and

23 comment as well. One of them asked me if I could tell

24 her which citizen groups were supporting this project so

25 that she could do some research on the other side. I

I177-B-4

I40-B-1

I177-B -4 See response for Key Theme OBJ-1.

I40-B -1 See response for Key Theme OBJ-3.





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I40-B-1

1 couldn't come up with one for her. Her response was,  
 2 well, that kind of says it all, doesn't it.  
 3 Anyway, this project is not needed for electric  
 4 system capacity or reliability. The assumptions  
 5 underlying PSE's load flow analysis are critically flawed  
 6 as detailed in the Lauckhart-Schiffman report which is  
 7 available on cense.org.

I40-B-2

8 But the main focus of my comments today is safety.  
 9 I was very surprised that there wasn't a heading for this  
 10 topic on your online comment form. We've heard a lot  
 11 about potential for damage to the Olympic pipeline and  
 12 the risk through increased corrosion. The Olympic  
 13 pipeline runs very close to the surface and it carries  
 14 flammable and hazardous materials.

15 What everyone may not know is that the Olympic  
 16 Pipeline Company is currently under a final order to  
 17 comply with the standards of the Federal Office of  
 18 Pipeline Safety, part of the Department of  
 19 Transportation. The problems relate to corrosion  
 20 control.

21 And the order states that the Olympic Pipeline, and  
 22 I quote, Failed to correct identified deficiencies in its  
 23 corrosion control system that could adversely affect the  
 24 safe operation of the pipeline. This is under normal  
 25 operations without the additional stresses of heavy

I40-B -2 See response for Key Theme PLS-5.



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1 construction near the pipeline.

2 Now, in case you think the federal government will  
3 get the Olympic Pipeline Company to take care of this  
4 quickly, let me tell you that the inspection took place  
5 in August of 2014. The final order was issued in January  
6 of this year. The problems have gone uncorrected that  
7 entire time, and the pipeline has a further 18 months to  
8 complete corrective action. PSE wants a green light for  
9 construction right next to this pipeline before the  
10 pipeline is repaired, wants to increase the potential for  
11 corrosion going forward and wants us to believe that  
12 these risks are theoretical.

I40-B-2

13 These two corporate citizens might deserve each  
14 other as neighbors, but we do not. I submit to you that  
15 risking lives, property and the environment in this way  
16 for a project that is not needed is irresponsible,  
17 unacceptable and should not be condoned.

18 An integrated resource planning approach in line  
19 with the recommendations of the Northwest Power and  
20 Conservation Planning Council different from the  
21 alternative authored by PSE should be developed.

I40-B-3

22 Thank you for this opportunity.

23 MS. WAGONER: Thank you.

24 MS. STRONK: That's a hard act to follow.

25 Hello, my name is Sue Stronk and I live at 12917

I40-B -3 See response for Key Theme OBJ-2.

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1 Southeast 86th Place in Newcastle, and I live along --  
2 I've lived along the pipeline for 28 years.

3 The DEIS states the need for the project is already  
4 determined. The Lauckhart-Schiffman load flow study  
5 disagrees. This process should be halted now and  
6 reviewed by a hearing examiner to determine the need  
7 before proceeding. No need, no problem, no project.

194-E-1

8 When the story changes, so does the need. PSE said  
9 1500 megawatts of power was needed to Canada. Don Polk  
10 said this project is not about Canadian power. That  
11 would be sent outside this area. The USE study said  
12 without power to Canada there may be a shortage of 74  
13 megawatts. Alternatives can supply this minimal power  
14 safely without condemning homes, destroying neighborhoods  
15 and degrading home values.

194-E-2

16 Technical expertise in evaluating alternatives is  
17 lacking in this DEIS. Hiring PSE contractors to make  
18 this document is a conflict of interest. PSE footprints  
19 are all over the 715-page document. PSE's favorite route  
20 through Olympus is rated significant impact in many  
21 categories. However, with a few tiny words, all is  
22 dismissed, such as safety risk along the gas pipeline is  
23 minimized by saying safe practices will be employed. The  
24 Olympus corridor is most significantly affected by home  
25 acquisition, yet mitigation says PSE will assist in

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194-E -1 See response for Key Theme OBJ-3.

194-E -2 See responses for Key Themes EIS-2 and EIS-1.



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1 relocation. Experts on electromagnetic pipe corrosion  
2 was discussed by Don, so I'm not going to go into that.

194-E-3 3 But if EMF corrodes pipes, there has to be EMF  
4 damage to humans. What are safe distances from wires to  
5 homes especially now that holes are lowered to 85 feet?

194-E-4 6 It is obvious already the document is biased, that  
7 Alternative 1 Option A will be the DEIS favorite to  
194-E-5 8 proceed for construction. Define the need first before  
9 you fast forward to a solution.

194-E-6 10 An overscaled, overpriced, unnecessary project paid  
11 for by rate payers is nothing short of consumer fraud.

12 MS. WAGONER: Thank you. Next speaker.

13 MR. HALVERSON: Good afternoon. My name is  
14 Warren Halverson. I reside at 13701 Northeast 32nd  
15 Place. I'm a member of the Colition of Eastside  
16 Neighborhoods for Sensible Energy. I'd like to address  
17 the EIS process in my comments.

18 My purpose is to share with you three major concerns  
19 that I have with the EIS process. I know you will think,  
20 well, maybe there's a lot more than three, but I only  
21 have three minutes. My intent is to be constructive.

192-D-1 22 First, the current DEIS does not meaningfully  
23 consider those substantive comments which were provided  
24 in the Draft 1 EIS scoping summary and final alternative  
25 to the City of Seattle 2015. See item 2, page 115, DEIS

194-E -3 See responses for Key Theme EMF-1 and Key Theme PLS-3.  
194-E -4 See responses for Key Themes EIS-1 and EIS-2.  
194-E -5 See response for Key Theme OBJ-1.  
194-E -6 See responses for Key Theme ECON-4 and Topic OBJ.

192-D -1 See responses for Key Themes EIS-1 and EIS-2.

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1 introduction summary. For example, in the scoping  
 2 documents, citizens identified 10 key community issues to  
 3 help guide the DEIS. Four are not considered and the  
 4 other six are lightly covered and buried in the 715-page  
 5 document.

192-D-1

6 Furthermore, if you read the introduction to the  
 7 scoping document, it concludes, and I quote, In general,  
 8 most comments express concern or opposition to PSE's  
 9 proposal. Then on pages 73 through 77, the majority of  
 10 comments indicated a lack of support for Alternative 1.  
 11 Many supported Alternative 2 or some aspect of it.

12 As I read the 715 pages, these issues and  
 13 conclusions are not at all evident. This is  
 14 contradictory to your DEIS introductory statements  
 15 referenced in 1.6 and 1.7. Frankly, if you're not going  
 16 to fully consider the community testimony or even your  
 17 own conclusions about alternatives, the DEIS methodology  
 18 appears biased and flawed.

192-D-2

19 Second, while the community did recommend several  
 20 alternatives, particularly Alternative 2, the definitions  
 21 are lacking in the DEIS. In addition, the integrated  
 22 resources alternative is scalable and provides unique  
 23 opportunities to combine solutions. The DEIS provides no  
 24 insight into combinations of these solutions.

192-D-3

25 Finally, in evaluating alternatives against the

192-D-4

- 192-D -2 See response for Key Theme ALT-1.
- 192-D -3 See response for Key Theme ALT-1.
- 192-D -4 See responses for Key Theme ALT-1, and Key Themes EIS-2 and EIS-3.



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1 elements -- alternatives against the elements -- the DEIS  
2 uses categories of minor, moderate and significant.

3 MS. WAGONER: You have a minute.

4 MR. HALVERSON: This provides a very broad  
5 basis of evaluation. The assessment then incorporates  
6 laws, regulatory environment, all sorts of litigation,  
7 particularly related to Alternative 1, and even positive  
8 coordination of work groups.

9 In my opinion, rather than clarifying alternatives,  
10 this skews all readings towards minor, thus skews the  
11 evaluations towards Alternative 1. It certainly appears  
12 then that alternatives are not being analyzed at a proper  
13 level of detail or in a comparable manner.

14 Finally, mindful of these considerations and the  
15 importance of this DEIS, my third comment is actually a  
16 suggestion. The EIS team should initiate a review  
17 process by the public or an unbiased hearing examiner  
18 once the EIS team has incorporated public input. The  
19 fact that you now take our input and move to the next  
20 stage is not transparent, it's not fair.

21 MS. WAGONER: Thank you. Next speaker.

22 MR. CLIFF: Hello, my name is Gary Cliff. I've  
23 lived at 8435 128th Avenue Southeast in the Olympus  
24 subdivision of Newcastle for 18 years. I retired two  
25 years ago after working 38 years in the IT industry. I

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I92-D -5 See response for Key Theme EIS-2.

I92-D-4

I92-D-5



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1 want to thank you in advance for giving me the  
 2 opportunity to express my concerns.  
 3 I have many concerns regarding the Energize Eastside  
 4 project, but due to the time constraints, I will only  
 5 focus on two.  
 6 My first concern is very fundamental and  
 7 straightforward. Is Energize Eastside really needed?  
 8 PSE conducted a load flow study which is a definitive  
 9 study for justifying the need for this project. Such  
 10 critical data must be scrutinized and challenged when  
 11 necessary. They should not be taken at face value as  
 12 factual since it's teamed with nationally recognized  
 13 power and transmission experts with specific knowledge of  
 14 the Northwest power grid to conduct a load flow study to  
 15 validate the PSE's study findings. The results of this  
 16 study contradicts many of PSE's assumptions and  
 17 conclusions regarding need.  
 18 CENSE has submitted this document for your review,  
 19 and I'm asking that Ms. Bedwell/Helland and team provide  
 20 a written response to our citizens detailing your areas  
 21 of agreement or disagreement regarding the CENSE study.  
 22 I'm also concerned with the safety of this project  
 23 regarding the insulation and removal of poles and other  
 24 construction activities so close to a pipeline. I know  
 25 PSE states they have done this before and not to worry.

I91-B-1

I91-B-2

I91-B -1 See response for Key Theme OBJ-3.  
 I91-B -2 See responses for Key Themes PLS-1 and PLS-2.



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I91-B-2

1 My guess is that the citizens of Bellingham were also  
 2 told not to worry, and we know how that turned out. I  
 3 have no idea of the probability of a catastrophic event  
 4 similar to Bellingham's, but even if it is a fraction of  
 5 one percent, it is too high a risk to take with our lives  
 6 and our property.

7 My concluding remarks are directed towards the  
 8 decision-makers in this process, city councils and  
 9 various other administrators representing us.

10 MS. WAGONER: One minute.

I91-B-3

11 MR. CLIFF: Very few people in their careers  
 12 have the opportunity and responsibility to make a  
 13 decision that is truly meaningful and impactful. Whether  
 14 you want to or not, the choices you make this year will  
 15 leave a lasting legacy. It will either be a positive  
 16 legacy that we will be proud of in the years to come  
 17 because you stood up against a large corporation that did  
 18 not have the best interests of its customers at heart, or  
 19 you will leave a negative legacy of 18 miles of huge  
 20 poles and wires that were not needed.

21 How will you explain to your children and  
 22 grandchildren that you did not make the tough decisions  
 23 when so many people rely on you? And please remember  
 24 that the citizens of the Eastside expect you to do your  
 25 duty. Thank you.

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I91-B-3 Comment noted.





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1 MS. WAGONER: Thank you. Next speaker.

2 MR. JOHNSON: My name is Larry Johnson. I live

3 at 8505 129th Avenue Southeast in Newcastle. I am a

4 designated speaker and president of Citizens for Sane

5 Eastside Energy. I understand that gives me five

6 minutes.

7 I'm a lawyer also, and on behalf of CENSE and CSEE,

8 Citizens for Sane Eastside Energy, I filed a complaint

9 with the Federal Energy Regulatory Commission on behalf

10 of CSEE and CENSE against this project that PSE is

11 pushing. Let's remember. The only reason we're here is

12 because they want this project; nobody else really does.

13 But FERC, F-E-R-C, dismissed that complaint saying

14 this is a local project only in the PSE service area.

15 They don't have jurisdiction. So what Bellevue does,

16 what the City of Newcastle does is where the buck stops.

17 And on that point, I wish to commend our mayor, Rich

18 Crispo, who is sitting back there. He is our true hero.

19 He was here on his own capacity the last time we were in

20 this room, and he said I'm speaking on my behalf. This

21 looks like we energize Bellevue. Where is the benefit to

22 Newcastle? All we get is an atom bombing of our

23 corridors, so that the rich fat cats in Bellevue can

24 build their big projects and we get no benefit out of it.

25 I've gotten a lot of public records requests from

O14-A-1 Comment noted.

O14-A-2 Comment noted.

O14-A-1

O14-A-2

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O14-A-2

1 City of Bellevue, from Seattle City Light, from the  
2 Bonneville Administration in preparation for this  
3 complaint. I've been working on this essentially for two  
4 years. One of the things that I got is your calendar,  
5 Carol Helland, and it shows that you meet weekly  
6 Thursdays with PSE every week with three or four people.  
7 Why aren't the community people represented in those  
8 meetings? Why don't we get to talk to you for more than  
9 for three or five minutes once a year and you talk to  
10 them every week? You know, this whole process looks like  
11 it's all PSE-oriented. You're right across the street  
12 from PSE. It's all so cozy. And we don't -- and the  
13 rest of the communities, even though you are the lead  
14 agency, we're neglected. Fortunately, we have such a  
15 talented man as Tim McHarg watching for our interests.

O14-A-3

16 So this whole project is a PSE used car. It's not  
17 even a new car that we're looking at, it's a used car.  
18 My research showed that eight years ago PSE questioned  
19 this project as the Sammamish Lakeside Talbot project,  
20 and it was to relieve the congestion that was perceived  
21 in power going to Canada. That's where this 1500 bogus  
22 megawatts of power to Canada comes from. And this  
23 assumed a local project.

24 And if you look at load flow studies, the only way  
25 they can jimmy up some kind of need for this fake project

O14-A-3 See response for Key Theme OBJ-3.

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O14-A-3

1 is to say, well, we've got to provide 1500 megawatts in  
 2 peak times to Canada. That's the only way you can look  
 3 at their flow studies, and our flow studies showed it's  
 4 totally bogus and unnecessary.

O14-A-4

5 So we're here discussing the environmental impact of  
 6 a project that shouldn't exist. And talk about safety,  
 7 it wasn't even a criterion when we were here a year ago.  
 8 And I had to remind you, Carol, the statute says the  
 9 environmental impact statement has to look at safety.  
 10 Oh, wow. And you should know this, you're a lawyer. And  
 11 now with a project, you know, this DEIS just kind of  
 12 whitewashes that.

O14-A-5

13 PSE says, well, trust us, trust us. You know, we  
 14 worked with Olympic Pipeline all along. What they will  
 15 never tell you is that in 2008 the Washington Utilities  
 16 Transportation division fined them the highest fine they  
 17 ever got, \$1.2 million, for falsifying gas safety  
 18 inspection records for four years. We're to trust this  
 19 company that is so hungry for money it will bogus up  
 20 fraudulent documents and pay a \$1.2 million fine. They  
 21 should have been disenfranchised, they should have been  
 22 sent to jail. And this is the same utility that the EJ  
 23 went after last year for overcharging its customers.

O14-A-6

24 MS. WAGONER: You have one minute.  
 25 MR. JOHNSON: You cannot trust these people.

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- O14-A -4 See response for Key Theme EIS-1.
- O14-A -5 See responses for Key Themes PLS-5 and PLS-6.
- O14-A -6 Comment noted. Also see response for Key Theme UTL-3.

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1 Now, Rick Aramburu is one of the lawyers for CENSE.  
 2 He sent you letters saying this whole EIS process is  
 3 fake. You should have done this after permit application  
 4 so we know what project it is. You're participating in  
 5 PSE's bidding.

O14-A-7

6 And also, there should be a public hearing after  
 7 this first phase is done, and you're not doing that  
 8 either. You have been told this will be a lawsuit. I  
 9 can tell you right now I did this pro bono for our  
 10 communities, and I will gladly sue on behalf of the 51  
 11 families whose homes that you want to tear down just to  
 12 accommodate PSE's greed. And that will not happen.

O14-A-8

13 Now, you've got a choice between A, a project that  
 14 will kill people, and B and C and D that won't. How hard  
 15 is that? What kind of rocket science does it take to  
 16 say, do I do this project if it kills people, or here's  
 17 another one that's okay and it won't kill people. How  
 18 hard is that? Do the right thing.

19 MR. KURAMKOTE: Hello everyone. I'm Raj  
 20 Kuramkote. I live at 8613 129th Court Southeast in  
 21 Newcastle. And this is with reference to proposed PSE  
 22 transmission line project Alternative 1A, pages 221  
 23 through 225, 18 miles of new 230 kV transmission lines  
 24 plus new transformer.

25 We have a fault line running by our house, so we are

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O14-A -7 See response for Key Theme EIS-2.  
 O14-A -8 See response for Topic PLS.

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1 likely impacted. And we are living in the house for the  
 2 last 18 years. And I work for Intel Corporation and I'm  
 3 stationed in my campus in Redmond, so I have a good  
 4 visibility into how all these pillars of technology are  
 5 handling the movement towards green energy.

6 At Microsoft campus, they started experimenting with  
 7 powering the streetlights with both solar panel and  
 8 little green turbines, both on the same pole that houses  
 9 the land, and so this is a great self-forward approach to  
 10 making -- helping out with environment.

11 I think, though, in the Oregon campus they installed  
 12 microturbines on top of a building along with solar  
 13 panels that generates 65 kilowatt hours of power, and  
 14 that's being used to provide electricity to the  
 15 conference center there.

16 So there are a number of such attributes all over  
 17 the world, and Intel is being recognized by the United  
 18 States EPA agency for seven years in a row for other  
 19 green energy attributes. And these are just two examples  
 20 of many more that forward-looking corporations are  
 21 making.

22 And we are concerned about losing our home if we go  
 23 with the type 1A project. And our home is in a perfect  
 24 setting in terms of proximity to Seattle and Bellevue,  
 25 and at the same time, it's in a green neighborhood, and

I71-B-1

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I71-B-1 See response for Key Theme LU-1.



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I71-B-1 | 1 it would be hard to find other existing property. And  
 I71-B-2 | 2 we're concerned about safety impacts of the proposed plan  
 I71-B-2 | 3 for folks living in proximity to the power lines.

I71-B-3 | 4 So we're concerned that if the plan goes through,  
 I71-B-3 | 5 there's no turning back, and our neighborhood would be  
 I71-B-3 | 6 forever changed. So I strongly urge PSE and cities of  
 I71-B-3 | 7 the King County to stop Eastside Energy from backward  
 I71-B-3 | 8 looking and start working with both corporations, city  
 I71-B-3 | 9 governments and residential customers to move towards  
 I71-B-3 | 10 green energy solutions in our fast growing cities and set  
 I71-B-3 | 11 an example for other areas operations across the U.S.

I71-B-4 | 12 So I reject Alternative 1A, and what I'm talking  
 I71-B-5 | 13 about here kind of aligns with Alternative 2A. So thanks  
 I71-B-5 | 14 for allowing me to present my case. Thank you.

MS. WAGONER: Thank you.

16 MR. KASNER: Good afternoon. My name is Steve  
 17 Kasner, and I reside at 1015 145th Place Southeast in  
 18 Lake Hills, Bellevue, Washington, and I've lived in  
 19 Bellevue for over 25 years. It's nice to be in Newcastle  
 20 and see old friends Carol and Heidi and new friends, Tim  
 21 and Claire.

22 I come here today because I'm very concerned about  
 23 how this process has come together. The community has  
 24 very much organized to ask for the information that would  
 25 allow them to understand what is best for them in the

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I71-B -2 See response for Key Theme PLS-2.  
 I71-B -3 Comment noted.  
 I71-B -4 Comment noted.  
 I71-B -5 Comment noted.



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1 future. So my crystal ball is kind of fuzzy. I can't  
 2 tell you what's going to happen five years, 10 years, 20  
 3 years from now. What I can tell you after the  
 4 Lauckhart-Schiffman study where Mr. Lauckhart was a power  
 5 planner for PSE -- forget about future demand. They  
 6 can't even agree on what winter capacity is. I mean, if  
 7 you set the winter capacity at the Lauckhart-Schiffman  
 8 level of 900 megawatts, the 2018 shortfall doesn't occur  
 9 until 2058.

10 Now, I care about my kids and grandkids. In 2058  
 11 it's not going to really matter to me because I'm not  
 12 going to be here.

13 But I want to put on something that is really  
 14 accurate, and that is my historical lens. I'm a teacher.  
 15 History teaches us something. When I got out of law  
 16 school in the 80's, my first job was as an attorney  
 17 working on the WPPSS litigation, Washington Public Power  
 18 Supply System case against the power companies that tried  
 19 to build five nuclear power plants because they claimed  
 20 by the year 2000 we'd need 20 of them. One actually got  
 21 built.

22 In the PSE load information, I've heard 1.7, I've  
 23 heard 2.4. The industry standard is less than half of a  
 24 percent, .4 percent. So we have a capacity issue which  
 25 can be positively adjudicated. What is the N minus one

I178-A -1 See response for Key Theme OBJ-3.

I178-A-1



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1 minus one capacity of the system as it sits with no  
2 action today. When we see that number, then we can run  
3 all sorts of demand curves as to what we need.  
4 But what's unfortunate about this -- and I have a  
5 little bit of experience with PSE on the project totally  
6 separate from this one -- is how can we reach a common  
7 understanding of what we have in the present to then make  
8 decisions in the future.  
9 And as I've talked to the City of Bellevue at the  
10 city manager level, is Bellevue's role to facilitate  
11 permits that are submitted which we don't have yet or is  
12 it to be a guardian of the people to decide what is  
13 needed, how it's needed and how that works. I have not  
14 gotten that answer on any project during a permit.  
15 I understand that after the permit is filed, there  
16 are restrictions legally what can be done and not done.  
17 We have the opportunity to do something really special  
18 for our community. I've lived in Bellevue for 25 years,  
19 I love Bellevue. The other cities around it are  
20 important. But if the capacity that is set up in the EIS  
21 is incorrect, then all of the assumptions are incorrect.  
22 And the fact that the no action is listed as the  
23 baseline, not as an alternative, I believe that it is a  
24 very viable option based on how the science plays out.  
25 I do not claim to be an engineer. But I've listened

I178-A-1

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1 to enough engineers that you can find anyone to support  
2 the position that a particular person or a corporation  
3 wants. The fact that thousands of people have mobilized  
4 to get answers to protect their community, houses being  
5 condemned, pipelines possibly exploding, you know, power  
6 lines falling or failing, we are talking about  
7 potentially catastrophic situations which we have not yet  
8 decided or proved to the satisfaction of almost anyone  
9 that we need this project.

1178-A-1

10 I suspect I may reappear at some point in the  
11 future. But, please, this is the document that will  
12 control the process moving forward, and the Phase 1,  
13 Phase 2, I think we need to reach some decisions right  
14 now before we talk about how we continue, because we do  
15 not have agreement on what the current situation is.

16 I very much appreciate everybody took time out on  
17 their Saturday to work on this monumentally changing  
18 proposal for all of the Eastside cities. Thank you very  
19 much for your time.

20 MS. WAGONER: Thank you.

21 MS. KURAMKOTE: Hi, everyone, my name is  
22 Jyotsna Kuramkote, and I live with my parents at 8613  
23 129th Court Southeast in Newcastle. I'm a student at  
24 Liberty High School and I actually did my elementary  
25 schooling here in this very school we are currently

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1 gathered at. I have lived my entire life in the state of  
2 Washington. More importantly, I have lived my entire  
3 life in the same house, a house that is located directly  
4 in front of the potential construction area of the  
5 Energize Eastside project.

6 Home has always symbolized security and constance in  
7 my life. It's been the one thing that I have counted on  
8 to remain the same forever. The Energize Eastside  
9 project threatens the stability of not only my home but  
10 my life with a project that could potentially be  
11 hazardous. Here are several reasons from the Draft EIS  
12 of why this project poses serious risk to my family and  
13 others.

14 No. 1, the tower footings are 25 feet to 50 feet  
15 underground in close proximity to the gas lines.

16 No. 2, holes can be created in the pipeline by  
17 electrical arcing from down lines leading to leaks and  
18 explosions.

19 No. 3, lightening strikes could send current to  
20 anything metal in the area and create holes in the  
21 pipeline as well.

22 And No. 4, we live along the Seattle fault zone, a  
23 seismically active area. An earthquake during the life  
24 of the project, according to the Draft EIS, can cause  
25 substantial damage and even death.

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I229-A -1 See responses for Key Themes PLS-1, PLS-2, and EARTH-2.

I229-A-1

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I229-A-1

1 I'm tired of living in a society where big  
 2 corporations snuff out individual voices. I want PSE to  
 3 listen to me and understand the personal impact of its  
 4 potential actions. This project can jeopardize the lives  
 5 of the people who are wholeheartedly against its  
 6 contentions. And if PSE chooses to ignore our concerns,  
 7 it will be an injustice against everyone in this  
 8 community.

9 Thank you for listening.

10 MS. YOUNG: Linda Young, 12813 Southeast 80th  
 11 Way, Newcastle. I am an Olympus development Newcastle  
 12 homeowner. Puget Sound Energy's plans to build 130-foot  
 13 metal structures with 230 voltage through the  
 14 neighborhood are total insanity. They plan to build  
 15 these structures over the Olympic pipeline, the same  
 16 ancient Olympic pipeline installed over 50 years ago. I  
 17 repeat, over 50 years ago.

I47-B-1

18 Olympic Pipeline does not like anyone to even drive  
 19 a small truck over this land. Heaven help us when heavy  
 20 equipment drills down and down to accommodate these tall  
 21 structures.

22 Olympic Pipeline is well aware of their disastrous  
 23 gas explosion in Bellingham in 1999, a gas explosion that  
 24 took the lives of three young boys. Others may have put  
 25 this explosion out of their equation, but rest assured,

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I47-B -1 See responses for Key Themes PLS-1 and PLS-2.

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I47-B-1

1 the parents and families of the burnt to death young boys  
2 have never forgotten.

I47-B-2

3 Newcastle has excellent fire, police and EMT  
4 personnel, but a gas explosion of like magnitude would be  
5 beyond their resources.

I47-B-3

6 Now in the 700-page document homes would have to be  
7 bulldozed to create enough footage from the huge metal  
8 structures carrying 230 voltage. Homeowners have Puget  
9 Sound Energy's totally frightening plans hanging over  
10 their heads. For people close to the Olympic pipeline,  
11 how can they sell their homes? In the area where Puget  
12 Sound Energy wants to build we have families with babies,  
13 young children, children in school, retired couples, and  
14 then we have those with serious medical problems. We  
15 have a care home taking care of dementia and Alzheimer's  
16 patients, people who are unable to leave their homes due  
17 to serious medical conditions, non ambulatory people.  
18 The list goes on and on. How could you get those people  
19 out in time?

20 MS. WAGONER: You have one minute.

21 MS. YOUNG: We have people needing 24/7 care  
22 very soon, and how can they sell their homes to pay for  
23 this ongoing care. They are being held hostage. And  
24 when I have spoken to them, it is obvious they are living  
25 under enormous stress.

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I47-B -2 See responses for Key Themes SVC-1 and SVC-3, and Key Theme LU-1.

I47-B -3 See response for Key Theme ECON-1.

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1 Puget Sound Energy, stop playing with people's lives  
 2 and just support the high interest rate being paid to  
 3 your foreign national owners in Australia. There are  
 4 proven alternatives to Puget Sound Energy plans. Stop  
 5 being the bully and think in the 21st century.

I47-B-4

6 MS. WAGONER: Thank you.

7 MR. BOYCE: Hello, thank you for allowing me to  
 8 speak. Thank you for all the work done on this EIS. It  
 9 looks like a lot of work, but unfortunately, there are a  
 10 lot of problems. My name is Michael Boyce. I live at  
 11 4932 131st Place Southeast. And I've lived there about  
 12 35 years.

13 And I want to say that I'm having a very difficult  
 14 time understanding why this project is even being  
 15 considered, this so-called Energize Eastside, because I  
 16 think it is very, very dangerous. I want to say that  
 17 again. It is very, very dangerous. Think about pipeline  
 18 leaks, think about fires and explosions, landslides,  
 19 earthquakes. The list goes on and on. You just don't  
 20 put power lines next to an aging pipeline in the way  
 21 that's proposed.

I176-A-1

22 So the project in my opinion is not needed at all.  
 23 And if you need evidence of that, just look at the  
 24 Lauckhart-Schiffman study, which is very clear. It shows  
 25 that the demand forecasts that have been done by PSE are

I176-A-2

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I47-B -4 See response for Key Theme OBJ-1.

I176-A -1 See responses for Key Themes PLS-1 and PLS-2, and Key Theme EARTH-1.

I176-A -2 See response for Key Theme OBJ-3.



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I176-A-2

1 basically bogus. They have exaggerated the need for this  
 2 power about by about five times. We have enough power  
 3 with what we have right now probably for many, many  
 4 years.

I176-A-3

5 Now, Alternative 2 I could support because it takes  
 6 less land, it doesn't have the housing impacts, it has  
 7 lower costs, and it's much safer. But even there I don't  
 8 think we need the power that's forecasted.

I176-A-4

9 It's very, very important to realize that it's not a  
 10 question of will this -- will this pipeline power  
 11 transmission project --

12 MS. WAGONER: You have one minute.

13 MR. BOYCE: -- will it fail in the future. We  
 14 know it will fail. It's just a question of when. And  
 15 when it does, look out.

16 In fact, I can't understand why PSE wants this  
 17 project, because if they're honest with their  
 18 stockholders, they would tell them that when this thing  
 19 fails it could bankrupt PSE. The lawsuits are  
 20 unimaginable. Hundreds of millions of dollars, lost  
 21 lives, and there will be an investigation to see how this  
 22 thing was approved in the first place. Was it known that  
 23 this thing was so dangerous that the community speak up?

I176-A-5

24 And I'm saying now, we are speaking up, and there is  
 25 an alternative that is a lot better, Alternative 2. I

- I176-A -3 See response for Key Theme ALT-1.
- I176-A -4 The comment does not provide sufficient detail about a concern with the EIS to allow a response.
- I176-A -5 Comment noted.



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I176-A-5 | 1 ask that you consider Alternative 2 and slow down this  
 I176-A-6 | 2 process so we can get on with progress and safety.

3 Thank you.

4 MS. WAGONER: Thank you.

5 MS. SUTEY: My name is A.J. Sutey. I'm at 8117  
 6 128th Avenue Southeast. My husband and I purchased our  
 7 home in Newcastle's Olympus neighborhood over 20 years  
 8 ago. We love our views of Cougar Mountain and Cascade  
 9 foothills and sometimes Mount Rainier. Our neighborhood  
 10 is a wonderful mix of cultures and people. It's  
 11 peaceful, it's warm, it's a pretty place. We've worked  
 12 very hard to make our home and our yard and our garden a  
 13 retreat. It's a haven where we can grow very, very old.

I97-B-1 | 14 Energize Eastside Alternative 1A will change a great  
 15 deal of all that we love about our retreat and our  
 16 neighborhood character. Our home is directly across the  
 17 street from the houses whose backyards face the Olympic  
 18 pipeline with current 115 kV transmission lines. In  
 19 addition to the sadness of losing the entire row of  
 20 neighbors on that side of our street due to the required  
 21 Alternative 1A home buyouts, we will be forced to look on  
 22 a bleak void, a long linear scar, a permanent clear zone  
 23 occupied by very high pressure liquid fuel pipelines and  
 24 towering 230 kilovolt transmission lines.

I97-B-2 | 25 Safety will be an even higher concern and not one

I176-A -6 See response for Key Theme EIS-2.

I97-B -1 See response for Key Theme VR-5.

I97-B -2 See responses for Key Themes EARTH-1 and PLS-2.

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1 fully addressed in the Phase 1 Draft EIS. And by safety,  
 2 I mean the combination of the high pressure, the dual  
 3 fuel pipeline, the Alternative 1 230 kilovolt  
 4 transmission line and the very real threat of the Seattle  
 5 fault earthquake potential along the route PSE has chosen  
 6 for Alternative 1A.

197-B-2

7 Although there's been mention of the seismic hazards  
 8 in the EIS, the work done about this in the document is  
 9 either -- and I'm not sure -- poor or deliberately  
 10 misleading. I am providing details about some of this in  
 11 my written document, but I'm going to be brief here in my  
 12 feedback.

13 MS. WAGONER: You've got one minute.

14 MS. SUTEY: The most glaring fault is in the  
 15 map, which is Figure 2-3. This map I'm holding up here,  
 16 this is referring to seismic areas, seismic hazards. And  
 17 it's labeled seismic hazards. It shows green shading,  
 18 all of the green shading, and the keys label this as  
 19 seismic hazard area. It's actually liquefaction area.  
 20 Soil liquefaction area has nothing to do with the seismic  
 21 hazard area.

197-B-3

22 Right here I have a corresponding map, and this  
 23 comes from the American Society of Civil Engineers. It  
 24 corresponds with this, coordinates perfectly, but to the  
 25 mislabeled EIS liquefaction map.

197-B -3 See response for Key Theme EIS-4 and Key Theme EARTH-6.



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1 MS. WAGONER: If you can wrap up.  
 2 MS. SUTEY: But it completely leaves out the  
 3 seismic hazard area.  
 4 This is an important factor to be considered in the  
 5 safety of the combination of dual high pressure fuel  
 6 pipeline, the transmission lines and the earthquake of  
 7 the Seattle fault. This is something we need to take  
 8 seriously, the Seattle fault zone. Look at the scenario  
 9 for the magnitude 6.7 earthquake of the Seattle fault on  
 10 the Website of the Earthquake Engineering Institute  
 11 Website.  
 12 MS. WAGONER: Wrap up your comments.  
 13 MS. SUTEY: Because of this and the lights that  
 14 have come to recently about why is this project even  
 15 needed, do we really have to take these safety risks, I'm  
 16 recommending critical thinking here, recommending that we  
 17 do not go with Alternative 1 and select Alternative 2.  
 18 MS. WAGONER: Wrap it up. Now, would you like  
 19 to submit these as well, the maps?  
 20 MS. SUTEY: Yes. I have the maps, yes.  
 21 MS. WAGONER: Okay. Thank you very much.  
 22 MR. PREVETTE: My name is Jeff Prevette. I  
 23 live at 8114 128th Avenue Southeast. I'm on the corridor  
 24 that the proposed monstrous power lines are going in.  
 25 I've lived there for 23 years. My wife and I have raised

197-B-3

197-B-4

197-B-5

197-B -4 Comment noted.  
 197-B -5 See response for Key Theme ALT-1.

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1 two children there. We had concerns when we bought the  
2 house because there were power lines there, but because  
3 of the low voltage and everything, we decided it wasn't a  
4 real issue.

5 I think that PSE has done a fantastic job of  
6 attempting to pull the wool over the faces of people that  
7 don't have the education that the people that represent  
8 PSE have. I suppose if I was a shareholder in PSE I  
9 would be all about this process beings as how they have  
10 guaranteed a 9.8 percent return on the money investigated  
11 with them. That's quite a motivator for building a  
12 project like this. I feel sometimes like I'm trapped in  
13 an old Disney movie where large corporations can take  
14 over small towns.

I173-A-1

15 I'm affected directly and in fear of the proposed  
16 power poles being put in next to the pipeline that runs  
17 basically right behind my back fence. I'm invested in my  
18 community. I've got really, really good neighbors. I  
19 really don't want to move. I really don't want my house  
20 bought up and destroyed by a company. A lot of thought  
21 went into making this purchase when we moved into this  
22 neighborhood.

23 I think that if there was a legitimate need, you  
24 know, maybe my opinions would be a little bit different.  
25 I'm all about supporting what is best for the masses.

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I173-A -1 See response for Key Theme OBJ-1.

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1 This isn't better for anybody but PSE shareholders.

2 MS. WAGONER: Wrap it up.

3 MR. PREVETTE: PSE is owned by an investment

4 bank in Australia. It's not connected with our community

5 in any way, shape or form. What do you got to lose?

6 Well, a lot of lives potentially.

7 So this is it. I can't elaborate. All of the

8 intelligent people have made all of their -- used all

9 their facts, and it's all great. I'm right behind that.

10 I'm very thankful for intelligent people.

11 But you know what? This is a potential destroyer of

12 families, of properties, of communities, and I think it

13 sucks.

14 MS. BRADFIELD: So our final speaker is Sam

15 Esaylan.

16 MR. ESAYLAN: I'll pass.

17 MS. LOPEZ: I would like to speak.

18 MS. WAGONER: All right. You can come up.

19 MS. LOPEZ: My name is Loretta Lopez. I

20 represent the Bridle Trails Community Club. You all have

21 heard me speak before. We continue to object to the

22 entire basis of this project and we object that there is

23 no need for this project.

24 In the DEIS Section 1.3, the statement is PSE has

25 determined there is a need to construct a new

I173-A-1

O3-D-1

O3-D-2

O3-D-1 Comment noted.

O3-D-2 See response for Key Theme EIS-2.



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1 transmission line. The DEIS goes on to state, To better  
2 understand PSE's private proposal, the EIS consultant  
3 team has obtained clearance and reviewed the information.  
4 It further goes on to state that this information is  
5 confidential, and therefore, cannot be reviewed, blah,  
6 blah, blah.

O3-D-2

7 It is unacceptable, as I've stated before, for the  
8 public to be unable to review the information. And  
9 here's my suggestion. There are clearly ways to have  
10 confidential information disclosed and allow parties --  
11 this happens in litigation often -- to review the  
12 information. And I request that the City of Bellevue  
13 provide a mechanism for the citizens to review that  
14 information.

O3-D-3

15 Further, on 1.5 the statement is, The EIS will not  
16 be used to reject or validate a need for proposal. The  
17 DEIS further goes on to state on page 1.56, The purpose  
18 of this EIS is not to determine whether the project is  
19 needed but to confirm that the methods used to define a  
20 need are consistent with industry standards and  
21 generally-accepted methods.

22 My request is that each city representative  
23 personally sign a statement that they have reviewed the  
24 information and they state, they certify in their opinion  
25 and take responsibility that the methods used to define

O3-D -3 See response for Key Theme EIS-1.

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1 the need are consistent with the industry standards and  
2 generally-accepted methods. I think that is essential  
3 before we go on. Someone has to take responsibility for  
4 this project instead of constantly telling the community  
5 that we way not ask the questions, we may not review the  
6 information, we may not question PSE.

7 On Monday night at the Bellevue City Council meeting  
8 in response to the question, can we review the project, I  
9 believe it was Nicholas Matts who stated, no, this is a  
10 private project. And therefore what? Therefore we can't  
11 review it? It is our community. It is our safety. It  
12 is unacceptable and we will not accept this. We will  
13 continue to object to this. Thank you.

14 MS. HELLAND: That represents our last speaker  
15 this afternoon. We do appreciate you all coming out, and  
16 thank you so much for your comments. Have a nice  
17 weekend.

18 (Meeting adjourned at 4:17 p.m.)  
19  
20  
21  
22  
23  
24  
25

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ENERGIZE EASTSIDE  
PHASE 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT  
PUBLIC HEARING/PUBLIC TESTIMONY

6:00 p.m.  
February 29, 2016  
15670 NE 85th Street  
Redmond, Washington

LISA R. MICHAUD, CCR  
NORTHWEST COURT REPORTERS  
1415 Second Avenue, Suite 1107  
Seattle, Washington 98101  
(206) 623-6136  
[www.northwestcourtreporters.com](http://www.northwestcourtreporters.com)

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1 PANEL MEMBERS  
2 CLAIRE HOFFMAN - ESA  
3 CAROL HELLAND - CITY OF BELLEVUE  
4 HEIDI BEDWELL - CITY OF BELLEVUE  
5 CATHY BEAM - CITY OF REDMOND

6  
7 ALSO PRESENT:  
8 MARCIA WAGONER - FACILITATOR - 3SB  
9 CASEY BRADFIELD - TIME KEEPER - 3SB

10  
11 PUBLIC SPEAKERS  
12 NORM HANSEN  
13 BRIAN ELWORTH  
14 DON MARSH  
15 LORI ELWORTH  
16 CHRISTINA ARON-SYEZ  
17 RON BROMWELL

18  
19  
20  
21  
22  
23  
24  
25

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1 MR. HANSEN: My name is Norm Hansen. I  
 2 live at 3851 136th Avenue Northeast in Bellevue,  
 3 and we've lived there for 43 years. I've been  
 4 involved in this project. I was a member of the  
 5 CAG which was the earlier group that PSE put  
 6 together. And I have a copy of the EIS. And I  
 7 still have some thoughts that I don't completely  
 8 understand the need.

185-A-1

9 And I know that when you look at the EIS  
 10 document 1-5, it says make sure you understand  
 11 the need and requirements before you comment on  
 12 this. Well, recently a load flow study was done  
 13 by another national expert which really conflicts  
 14 with the ones that had been done previously based  
 15 primarily on some, what we feel, are erroneous  
 16 assumptions.

185-A-2

17 And so I feel before you continue to Phase  
 18 II that you would issue a final Phase I EIS to  
 19 settle this controversy to define what the need  
 20 really is, because if we have no need, there's no  
 21 need to charge 1.1 million rate payors to  
 22 continue on with this activity.

185-A-3

23 Now, that need may be stretched out 10, 20  
 24 years or more, and so that's my -- it would be  
 25 common sense, I believe, to figure out how we're

- 185-A -1 See response for Key Themes OBJ-1 and OBJ-3.
- 185-A -2 See response for Key Theme EIS-2.
- 185-A -3 See response for Key Theme EIS-1.





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1 going to do an objective review because what  
 2 happens is that some of the consultants, they  
 3 work in the industry and they're looking -- they  
 4 need to work and think about their next job.

5 And so we're not sure that that influences  
 6 some of the criteria that they use. And so --  
 7 and I know that the city doesn't have any  
 8 particular technical competence in this  
 9 particular area. We've encouraged them in the  
 10 past to obtain that so they would have something  
 11 on their staff.

12 The electrical reliability study that was  
 13 done several years ago also recommends that that  
 14 be done. And I know the City Council now finally  
 15 has put in their new budget \$150,000 to maybe  
 16 pursue some type of activity.

17 And so I think it would benefit the whole  
 18 community, the whole eastside to take a real  
 19 common sense approach. So thank you.

20 MR. ELWORTH: My name is Brian Elworth.  
 21 I live at 8605 129th Court Southeast in New  
 22 Castle. I'm going to go over a few topics that  
 23 I've already touched on previously. So I want to  
 24 revisit a few topics that I've talked about  
 25 mostly in the form of questions.

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185-A-3



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1 One of the basic ones, is this EIS about a  
 2 PSE need or customer needs? Because that's kind  
 3 of confusing. It's kind of muddled together and  
 4 I'd really like you to make that decision. The  
 5 SEPA handbook section 3.3.1 it says, "Agencies  
 6 are encouraged to describe a proposal as an  
 7 objective", not just as a solution, which is what  
 8 PSE says, here's a solution. Love it.

9 It's supposed to be stated as an objective.  
 10 What are we trying to achieve here. So if it's  
 11 about cities and residents, the whole EIS  
 12 objective must be recast in the context of  
 13 something like identify and address energy needs  
 14 for the region in the next decade.

15 This opens up a wide spectrum of opportunity  
 16 for a viable energy future. If it's about PSE,  
 17 please delete all the irrelevant and erroneous  
 18 statements regarding need. Just state PSE wants  
 19 230 kilovolt power lines.

20 I want to talk about what looks like  
 21 apparent bias, maybe unintentional, obviously  
 22 unintentional, but the DEIS seems to carry some  
 23 biases and I want to maybe clarify why that is  
 24 and there's probably good explanations.

25 WAC 197-11-960, the environmental checklist,

178-E-1

178-E-2

178-E-3

- 178-E -1 See response for Key Theme EIS-1.
- 178-E -2 Comment noted.
- 178-E -3 See response for Key Theme GHG-4.



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1 air, Section A, "What type of emissions to the  
 2 air would result from the proposal during  
 3 construction, operation, and maintenance when the  
 4 project is completed? If any, generally describe  
 5 and give approximate quantifies if known."

6 B is, "Are there any offsite sources or  
 7 omissions or odors that may affect your proposal,  
 8 if so, generally describe." And then in WAC  
 9 197-11-444 elements of the environment, air  
 10 quality is mentioned there. So air quality seems  
 11 to be a subject we're supposed to talk about.

12 So what exempts the DEIS from including  
 13 mercury and toxic standards, the MATS standards,  
 14 controlled air pollutants from consideration?  
 15 Just one-seventieth of a teaspoon of mercury  
 16 deposited on a 25-acre lake makes the fish unsafe  
 17 to eat. So that's from the Union of Concerned  
 18 Scientists if you want to look up that quote.

19 The EPA ranks coal strip power among the  
 20 worst in the nation for mercury. That's a 2011  
 21 statement. And also ground water, they're also a  
 22 major pollutant of ground water due to coal ash.  
 23 Should that not be considered?

24 Alternative I is about using power from coal  
 25 stip. And Alternate I increases both the

I78-E-3

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178-E-3

1 greenhouse gas, which you do identify, but it  
2 also increases all these toxic pollutants. So  
3 why is this distinction ignored? I'd kind of  
4 like -- I think that ought to be documented in  
5 the DEIS.

178-E-4

6 Alternative II is a huge environmental  
7 benefit 24/7 365 days a year. Not just during  
8 the conditions that PSE states is the problem  
9 area. It's working for you all the time. Off  
10 peak wind and solar generation along with battery  
11 storage help mitigate peak load generation, coal  
12 strip demand every day, not just the couple days  
13 a year where PSE says we have a problem.

14 So it's like your Prius battery. It's  
15 always working for you, not just when you're  
16 climbing the big hills, all the time it's  
17 moderating the flow to reduce the demand on the  
18 engine. It's working for you full time on that.

19 Alternative II is exactly that same way.  
20 It's working for you. It's a good thing to do  
21 even if this whole thing goes away. So it's  
22 not -- I don't think it's given proper credit for  
23 the environmental benefits that Alternative II  
24 provides.

25 So I'm asking why do those get ignored? To

178-E -4 See response for Key Theme ALT-2

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8

178-E-4

1 me they're important. It's an important part of  
 2 what that alternative is about. It's an  
 3 important discriminator between Alternative II  
 4 and Alternative I. So it kind of looks like it's  
 5 being sandbagged. I don't know what the SEPA  
 6 process is, but if it's in somebody else's  
 7 backyard, you get to ignore it.

178-E-5

8 This is all happening in Montana and you  
 9 might say, well, that's not a Washington State  
 10 thing, I don't care about it. If that's a  
 11 reason, maybe it would be helpful to state that.

12 Another subject, GMA and destruction of  
 13 housing. The environmental checklist talks  
 14 about -- I'll come back.

15 MR. MARSH: My name is Don Marsh, I'm  
 16 the president of CENSE, the Coalition of Eastside  
 17 Neighborhoods for Sensible Energy. And I live at  
 18 4411 137th Avenue Southeast in Bellevue. And I'd  
 19 actually like to continue the discussion of  
 20 Alternative II. As you probably can tell  
 21 residents really like the idea of making some  
 22 progress on our environmental goals and lots of  
 23 other advantages that Alternative II seems to  
 24 provide.

25 And so I was really ready to read about

178-E -5 Comment noted.



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1 Alternative II in the DEIS, and so I started at  
2 section 2.3.1 which talks about energy efficiency  
3 and that's says, "The potential for additional  
4 energy efficiency on the eastside is not  
5 currently known and would require additional  
6 evaluation."

7 That was a little disappointing. I was  
8 hoping I would find out something about energy  
9 efficiency. But then it says, "The additional  
10 energy efficiency assumed for Alternative II  
11 would be triple the amount that PSE estimated as  
12 achievable after 2024, and that additional energy  
13 efficiency would have to be accomplished before  
14 2024." Is this even possible? It sounds crazy.

15 Maybe energy efficiency isn't really going  
16 to work for us. So I have, well, maybe demand  
17 response. Demand response is a big topic in the  
18 northwest, the seventh northwest power plan from  
19 the Northwest Power and Conservation Council. So  
20 demand response is recognized as going to make a  
21 big difference in the northwest.

22 And the DEIS says, "For the Phase I draft  
23 EIS, it is assumed that an additional 32  
24 megawatts of demand reduction would need to be  
25 accomplished in the eastside by 2024." This

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1 would triple the expected rate of adoption of  
2 demand response in PSE's integrated resource  
3 plan.

4 Wow, do we have to do something three times  
5 again what PSE is saying we can do? That sounds  
6 pretty hard. Well, maybe batteries, so 2.3.3.4  
7 deals with energy storage. And it says, "An  
8 energy storage system with power and energy  
9 storage ratings large enough to reduce normal  
10 overloads has not yet been installed anywhere in  
11 the world."

12 We will be building the biggest battery  
13 ever. Is that practical? Citizens are really  
14 worried. This sounds like a fantasy. Okay,  
15 let's go on to peak generation plants 2.3.3.1.  
16 "Most of the substations on the eastside are in  
17 residential areas and these types of generators  
18 produce a high noise level that would be  
19 incompatible with those surroundings. For this  
20 reason PSE has eliminated this option from  
21 consideration."

22 Man, Alternative II just sounds terrible to  
23 me. I don't think we can build something that's  
24 this crazy. Well, actually we thought we better  
25 get a second opinion on that to make sure. So we

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1 hired an industry analyst named EQL Energy. You  
2 might have heard of them before. They helped us  
3 with alternatives during the prior scoping round  
4 for the EIS.

5 And EQL Energy looked at this proposal and  
6 he said, boy, there is a lot of inaccuracy in  
7 this, obsolete data, downright errors in this.  
8 Looks like PSE has -- seems PSE is driving this  
9 whole description of Alternative II from what he  
10 could see.

11 So, for example, so we said what would be a  
12 reasonable plan? And he described energy  
13 efficiency at 30 megawatts, which is about a  
14 third less than the DEIS. And that's achievable  
15 because the DEIS is using obsolete and incorrect  
16 data regarding energy efficiency. And makes it  
17 look a lot less feasible than it actually is.

18 In demand response he actually identified  
19 one-third higher capability than DEIS estimate,  
20 but that's based on conservative estimates and he  
21 breaks it into two different parts. A day ahead  
22 strategy and a ten minutes strategy of demand  
23 response that gives you a potential that's higher  
24 than what's in the DEIS.

25 What really interested me was his analysis

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O1-E -1 See response for Key Theme ALT-1.

O1-E-1



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O1-E-1

1 of energy storage. He said we could get by with  
2 15 megawatts which is about one-eighth of the  
3 size that's prescribed in the DEIS. So that's  
4 much more economical and feasible and it's also  
5 much more economical because the DEIS analysis  
6 doesn't included the cost avoided transmission in  
7 its energy cost. So it's much more attractive  
8 than what the DEIS and the stratagem report might  
9 have you think.

10 In addition to these he identified 19  
11 megawatts of distribution efficiency that could  
12 be gathered. Combined heat and power, you could  
13 get 30 megawatts. And it's a great time to be  
14 thinking about that because with all the building  
15 in downtown Bellevue in the Spring district it's  
16 very, very feasible.

17 19 megawatts of dispatchable standby  
18 generation. Anyway, we will be putting in a  
19 detailed description of all these things into the  
20 DEIS. I will submit that report tomorrow night.  
21 Very excited to really grasp the future of our  
22 eastside energy. Thank you.

23 MS. ELWORTH: My name is Lori Elworth.  
24 I live at 8605 129th Court Southeast in New  
25 Castle. Thank you for the opportunity for my

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1 comments. My comments tonight are directed  
 2 mainly at Alternative I, Option A. I live with  
 3 my husband and our two kids just a few miles from  
 4 where we grew up in Newport Hills where our  
 5 parents still live.

6 The PSE Olympic Pipeline corridor allows us  
 7 to easily walk and bike over to their houses  
 8 while avoiding the busy streets and traffic along  
 9 Coal Creek Parkway. My 90-year-old mother takes  
 10 advantage of the corridor to go on four-mile  
 11 round trip walks to the New Castle Safeway.

12 She has been doing this daily for the last  
 13 25 years and it has helped her remain in  
 14 excellent health, but we are not the only people  
 15 who enjoy the use of the corridor. Countless  
 16 other families; bikers, dog walkers and even some  
 17 horse riders all can be found out about getting  
 18 their exercise along the pipeline at all times of  
 19 the day.

20 The utility corridor is a significant part  
 21 of the New Castle trial system. Every resident  
 22 that enjoys making use of it will be negatively  
 23 impacted by any restrictions of access that the  
 24 Energize Eastside project will cause.

25 The DEIS fails to adequately or reasonably

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179-C-1 See response for Key Theme REC-1.

179-C-1



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179-C-1

1 address how much this project will adversely  
 2 affect these people. We live in a hilly area  
 3 that sees more and more traffic every day. The  
 4 flat sheltered trail that is the corridor is a  
 5 blessing for senior citizens, people with young  
 6 children or strollers. I know this firsthand. I  
 7 have lived there my entire life.

179-C-2

8 Nevermind all the beautiful trees that will  
 9 be destroyed and many houses that will need to be  
 10 condemned to ensure that power lines are  
 11 installed at a safe distance from the gas  
 12 pipeline.

13 This unnecessary project will destroy some  
 14 of the neighborhood character that makes this  
 15 area a great place to live. Thank you. I want  
 16 to submit this for the public record.

17 MS. ARON-SYEZ: Good evening, my name  
 18 is Christina Aron-Syez and I own my home at 13725  
 19 Northeast 34th Place in Bellevue. I'm speaking  
 20 this evening on behalf of the Shadow Wood Lane  
 21 Homeowners Association of which I am the  
 22 president. I am also a board member of CENSE.

23 I have been heavily involved in  
 24 understanding PSE's proposed Energize Eastside  
 25 project for over a year and a half since my

179-C-2 See responses for Key Theme VR-5 and Key Theme OBJ-1.



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1 neighbor invited me to someone's house to learn  
2 more about it. Until that moment I had not heard  
3 of the project. I was stunned when I learned  
4 what PSE is attempting to build through the heart  
5 of the eastside. The proposed route does not go  
6 through my property, but it does affect two of  
7 the 13 homes in our association.

O2-A-1

8 However, I want to be clear, I would still  
9 put in the dozens of hours a week that I do to  
10 oppose this project no matter where on the  
11 eastside it might be sited. I care too much  
12 about my wonderful community and the health and  
13 welfare of its residents, especially the  
14 children, to let this go.

O2-A-2

15 This project has such fatal flaws in its  
16 foundation and its proposed execution that to  
17 construct it would be a failure of due diligence  
18 by the authorities including you, Ms. Helland,  
19 who are charged with the responsibilities of  
20 being the SEPA officer. For example, this DEIS  
21 does not identify all interdependent pieces of  
22 the project under Washington Administrative Code  
23 197-11-0603. Allow me to explain.

24 Section 2.2 of the DEIS described in detail  
25 what PSE's objectives are for building Energize

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O2-A -1 See response for Key Theme EMF-3.

O2-A -2 See response for Key Theme EIS-1.

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1 Eastside. It then lists 15 electrical and four  
2 non-electrical criteria that the project or any  
3 alternative must meet. These criteria were  
4 written by PSE themselves and there is no  
5 discussion whatsoever in the DEIS of whether  
6 these 19 collective criteria each have merit or  
7 are even reasonable.

8 The only basis for accepting them is that  
9 PSE must meet, quote, applicable transmission  
10 planning standards and guidance, end quote.  
11 These 19 points are the material backbone to the  
12 rest of a 711-page document. Every alternative  
13 is vetted against these 19 points. Yet there is  
14 zero analysis for their basis other than the NERC  
15 and WECC standards listed in the Criteria I.

16 For example, items 7, 9, and 11 have no  
17 basis in either the NERC or WECC documents listed  
18 in number one. What is happening? PSE has  
19 essentially created a list of things it wants as  
20 criteria. Yet these things are not actually in  
21 line with the NERC and WECC requirements listed  
22 here or in other regional requirements which you  
23 will hear more about tomorrow night from Don  
24 Marsh.

25 Why would PSE do this? To ensure that only

O2-A-2

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1 their project gets built. I will submit my  
2 detailed and technical analysis before March 15,  
3 however, in summary, PSE is not building Energize  
4 Eastside to satisfy any federal reliability  
5 requirement. How do I know this? I have  
6 technical experts on my side. Experts such as  
7 Rich Lauckhart. I am sure you've heard of him by  
8 now.

9 This brings me to my next point. What  
10 technical experts such as someone like Rich  
11 Lauckhart does the lead agency for \$1.4 billion  
12 project have on their side to guide them through  
13 this intensely complex project? As far as I can  
14 see there are none comparable.

15 Bellevue has failed to comply with the  
16 recommendation from their own consultant,  
17 Exponent in 2012 to hire an electrical expert to  
18 the city staff. This is a serious shortfall in  
19 the technical ability of the city staff and DEIS  
20 staff to adequately comprehend what is being  
21 proposed by PSE and to separate the wheat from  
22 the chaff when it comes to what PSE wants and  
23 what PSE is actually required to do. In closing,  
24 I leave you with this:

25 What if a business came to you and said we

O2-A-2

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O2-A-2

1 need to build a 100-story skyscraper in downtown  
 2 Bellevue. Let's also assume that this particular  
 3 business has a lot of money, clout, and power to  
 4 make this project happen. From the specs they  
 5 gave you, this building appears to be very  
 6 unsafe, doesn't appear to truly need to be 100  
 7 floors because only two of them will be occupied,  
 8 and will cost area residents \$1.4 billion.

9 Do you think you would hire an architect, a  
 10 financial analyst, a whole bevy of other experts?  
 11 You surely would. So why in the case of Energize  
 12 Eastside is the DEIS staff using a no questions  
 13 asked approach when the safety of thousands of  
 14 residents are in their hands?

15 We deserve better and we will not relent.  
 16 Thank you.

17 MR. BROMWELL: My name is Ron Bromwell.  
 18 I live in Bellevue, 13650 Northeast 34th Place in  
 19 Bellevue. I have the joy of having seven large  
 20 wires going through my backyard as well as two  
 21 gasoline pipes. So that's why I'm here. It  
 22 seems to me that we're hearing very, very little  
 23 about the safety of the pipeline. Not the power  
 24 line, the pipeline because these electrical lines  
 25 are going to be within a very, very short

I113-A-1

I113-A -1 See responses for Key Themes PLS-2 and PLS-3, and Key Theme EARTH-1..



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19

1 distance from two large pipes up to 20 inches in  
2 diameter which are filled with gasoline. And  
3 they're full all day because they feed the SeaTac  
4 airport.

5 I have been in communication with the  
6 president of Olympic Pipeline, and he has advised  
7 me that they do not have a say in this which  
8 amazes me because they are the subtenant of the  
9 easement. The easement is 100-feet wide and the  
10 power line has 85 feet and the pipeline has  
11 15 feet.

12 Now in 85 feet, these new poles are going to  
13 go in and presumably they're going to be in the  
14 middle of the 85 feet which means they will be  
15 within 50 feet meaning about 40 feet of these  
16 gasoline pipes, which is contrary to the  
17 Bonneville Power Association.

18 They say a minimum of 50 feet should be the  
19 safety zone for anything coming near to power  
20 line structure. So these are important issues.  
21 Because the pipeline cannot say anything about  
22 this, they are the subtenant of the easement and  
23 the only alternative is for them to move the  
24 pipeline, which you can imagine doesn't thrill  
25 them very much.

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I113-A-1



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1 But at the same time, the thought of putting  
2 in concrete posts to a foundation for up to 72  
3 poles, which is what would happen over the  
4 18-mile stretch, this would obviously create a  
5 great deal of construction activity within just a  
6 few feet of these two gasolene pipelines.

7 Now, in the literature that the pipeline  
8 puts out, it tells you that pipelines are very  
9 sensitive to vibration. And even putting a fence  
10 post in, a fence post goes down two feet as  
11 opposed to a foundation for a 120-foot power line  
12 pole, there's going to be substantial activities  
13 and vibration.

14 So that's just in the structure, but even on  
15 into the future you've got significant problems  
16 because you've got lightening strikes -- if I can  
17 just quickly finish -- you have a grounding  
18 system where the wire comes from the high tension  
19 electricity down the pole, but then it has to go  
20 several hundred feet in the ground alongside the  
21 gasolene pipes in order to earth them.

22 And so it's just a terrifying prospect  
23 particularly because now we've been identified as  
24 an earthquake zone. As you may know, the Pacific  
25 Northwest is registered as the most significant

I113-A-1

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I113-A-1

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earthquake zone in North American.

I have that all documented from this testimony I gave to Bellevue a week or two ago, so I'd be happy to send you each a copy if I could get your names and mailing addresses.

MS. BEDWELL: You can send it to the general info line we have for you or I can give you my business card and you send it to me directly.

MR. BROMWELL: I'd like to do that, please.

MR. ELWORTH: Brian Elworth returning to complete my presentation here. Growth Management Act and destruction of housing, I want to touch on what you talked about in New Castle. This project destroys my neighborhood. I think the DEIS was a bit light on that subject.

WAC 197-11-960, "Environmental checklist land and shoreline use, what is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

"Will any structure be demolished? If so, what? What is the current zoning classification of the site? What is the current comprehensive

I78-F-1 See response for Key Theme LU-1.

I78-F-1

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22

1 plan designation of the site, proposed measures  
2 to ensure that the proposal is compatible with  
3 existing project and land uses and plans, if  
4 any"?

5 So it touches a little bit lightly on that.  
6 It does address some of these very lightly, but  
7 basically corridor M, the right of way is not  
8 wide enough. And I spoke to that on Saturday.  
9 It is not wide enough.

10 So why are none of these issues being  
11 addressed at least qualitatively in the DEIS.  
12 There's a light touch on them, but you can at  
13 least list the neighborhoods that are going to be  
14 destroyed by this proposed solution.

15 Just list out the neighborhoods, list out  
16 the impacts, maybe you don't have to say  
17 50 percent of the neighborhood or huge  
18 destruction, you can just say these ones are  
19 impacted. At least list those things and do a  
20 little bit more thorough job of the qualitative  
21 nature of the impact of Alternative I. Thank  
22 you.

23 MS. WAGONER: Was there anyone else  
24 that would like to speak?

25 (No response.)

178-F-1

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23

1 MS. WAGONER: I'm going to turn the  
2 meeting back to Carol.

3 MS. HELLAND: I just want to say thank  
4 you so much for coming tonight. Many of you we  
5 have seen before, but there are some new faces  
6 and we appreciate every one of the continuing  
7 comments. Every one has been very thoughtful  
8 about bringing new issues to the microphone every  
9 time they come up to speak.

10 That's very appreciated and with essentially  
11 identifying questions and concerns that they have  
12 with the draft EIS. They will all be taken into  
13 account and it makes -- your feedback to us makes  
14 the process more robust and thorough.

15 So thank you for taking your time this  
16 evening. And tomorrow night the next meeting is  
17 at the City of Bellevue if any of you are  
18 attending that. And as Claire noted, any  
19 comments in writing can then be submitted until  
20 March 14. So thank you and have a nice evening.

21 (Meeting adjourned 7:20 p.m.)

22 ////

23 ////

24

25

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ENERGIZE EASTSIDE  
PHASE 1 DRAFT ENVIRONMENTAL IMPACT STATEMENT  
PUBLIC HEARING/PUBLIC TESTIMONY

6:00 p.m.  
March 1, 2016  
450 110th Avenue NE  
Bellevue, Washington

LISA R. MICHAUD, CCR  
NORTHWEST COURT REPORTERS  
1415 Second Avenue, Suite 1107  
Seattle, Washington 98101  
(206) 623-6136  
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PANEL MEMBERS

CLAIRE HOFFMAN - ESA

CAROL HELLAND - CITY OF BELLEVUE

HEIDI BEDWELL - CITY OF BELLEVUE

ALSO PRESENT:

MARCIA WAGONER - FACILITATOR - 3SB

CASEY BRADFIELD - TIME KEEPER - 3SB

PUBLIC SPEAKERS

|                  |                    |
|------------------|--------------------|
| WARREN HALVERSON | LISA MERRILL       |
| NORM HANSEN      | JD YU              |
| PATRICIA HANSEN  | JAMES BLOOMFIELD   |
| TODD ANDERSEN    | SANGEETHA RAJENDVA |
| DON MARSH        | RICHARD KANER      |
| LINDY BRUCE      | JANIS MEDLEY       |
| BRIAN ELWORTH    | BRIAN GRUNKEMEYER  |
| DON MILLER       | HU DONG            |
| JOHN MERRILL     | JAN KELLER         |
| KATHLEEN SHERMAN | MARIA VLACHOPOULOU |
| CELINA CALADO    | BARRY ZIMMERMAN    |
| SUZANNE MESTIN   | MARLENE MEYER      |
| JAMES ADCOCK     | STEVE WAGONER      |
| ALICE WANG       | LORI ELWORTH       |
| SUE STRONK       | JAMIE BROWN        |
| LYNNE PREVETTE   | STEVE O'DONNELL    |
| DAVE HERBIG      | KELLY BACH         |
| KATHERINE MA     | PAMELA JOHNSON     |

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1 MR. HALVERSON: My name is Warren  
 2 Halverson. I reside at 13701 Northeast 32nd  
 3 Place. Tonight I am representing the Canter  
 4 Greens Homeowner's Association. Let me begin by  
 5 asking a question. Would you purchase a product  
 6 if you don't know why you need it or what it  
 7 would cost?

8 Would you purchase a product if you didn't  
 9 know why you needed it or what it would cost?  
 10 Welcome to the world of Puget Sound Energy and  
 11 the product Energize Eastside. My purpose  
 12 tonight is to talk about the economics and the  
 13 cost of this project. As noted in the scoping  
 14 process, this is a major concern of the community  
 15 as an environmental factor unto itself and  
 16 impactful to other elements of the environment  
 17 considered in the DEIS.

18 While DEIS does not compare alternatives  
 19 based upon costs, the cost of these alternatives  
 20 are dramatically different. For example,  
 21 Alternative 1A is estimated to cost \$250 million  
 22 with a lifetime cost of nearly \$1.4 billion.

23 No other alternative comes close to this  
 24 cost. Yet, we are going to have to pay for this.  
 25 This is shocking enough, but a truly thorough

O5-B-1

O5-B -1 See responses for Key Themes ECON-3 and ECON-4, Key Theme VR-3, and Key Theme VR-5.

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1 analysis would not stop there. In examining  
2 alternatives, Alternative 1A is the most  
3 mitigated, and while mitigation supposedly  
4 reduces the environmental impacts, there is no  
5 mention of those costs. Throughout the DEIS  
6 there are mitigation activities, but these costs  
7 are not mentioned. Among those are replacement  
8 of vegetation and trees, more poles anticipated  
9 due to narrow corridors, widening corridors to  
10 150 feet, clearing and grading for clearing zones  
11 and access roads, and even the use of eminent  
12 domain to buy houses.

O5-B-1

13 Then there are the costs associated with gas  
14 emissions, air quality, storm water control, and  
15 such. Don't be surprised then if you have to pay  
16 a lot more than what you are being told.

17 Alternative 1A has excessive mediation and will  
18 cost more. Alternative II has little mediation.  
19 Nevertheless, all this should be priced out.

20 Let's call this a great omission because we  
21 really cannot compare alternatives unless you  
22 have equal detail. Let me turn now to two costs  
23 identified in the DEIS. First, property values  
24 tucked away under views and visual resources and  
25 land use and housing chapters. And secondly, tax

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O5-B-1

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base.

Quoting national studies in the DEIS there's basically two major conclusions about the impacts of pole lines and property values. First, within the chapter on views and visual resources, and I quote, it is reasonable to assume that some existing properties would have lower property values.

The second conclusion is, quote, the effects of transmission lines on sales prices of properties diminish over time and all but disappear in five years. So on a million dollar house that loses \$60,000 to \$100,000, appreciation will catch up in five years. What about the \$200,000 that you lost initially? These statements seemed to be really an underestimation of the values of the impacts on properties.

There are several other quotes in there having to do with one to 20 percent reduction, average 6.2 percent. There's one that quotes the value that's reduced is three to six percent which dissipates after 200 and 350 feet away from the property line. For those that have views, the interesting quote is this:

O5-B-2

O5-B -2 See responses for Key Themes ECON-1 and ECON-2.

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1 "Data were inclusive as to whether the  
2 reason parcels were valued differently because of  
3 use restrictions within a power line easement  
4 because of use visual impacts or for some other  
5 reason. I think visuals were really discounted  
6 here. That has to do with property values.

7 Regarding property tax revenues, the second  
8 big aspect that's brought up in the EIS, the  
9 impact of Alternative 1A on Bellevue's 35 -- the  
10 major conclusion is the impact of Alternative 1A  
11 on Bellevue's \$35 million budget is small and  
12 would not affect the city's ability to adequately  
13 fund public services. Basically this is fuzzy  
14 math. I won't go through with it, but the actual  
15 amount is not 9800 bucks, it's more like \$100,000  
16 to \$200,000. And that certainly is an impact for  
17 Alternative 2A, not in -- or 1A not in 2A.

18 In summary the DEIS property value  
19 assessment is all based on carefully selected  
20 national studies, one of which is by the public  
21 utilities industry. Since the impact of property  
22 values and taxes only relates primarily to 1A and  
23 not to 2A it is troublesome that these impacts  
24 are minimized to such a degree and seems to set  
25 in bias the complete evaluation.

O5-B-2

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1 My final comment then is about opportunity  
 2 costs. What do we forgo to spending \$1.4  
 3 billion? We forgo a lot. We forgo that by  
 4 putting into a major transmission like this which  
 5 incidentally the investors earn .2 percent,  
 6 you're going to forgo a lot of innovation.

7 You're going to forgo a lot of different  
 8 offerings like energy efficiency components,  
 9 demand response, distributed generation, energy  
 10 storage, peak power generation, and who knows  
 11 what else in the next few years. The cost of old  
 12 technology in substations will certainly reduce  
 13 those opportunities for the future.

14 In conclusion, the current DEIS needs to  
 15 account for all costs and risks of this project  
 16 so that all alternatives can be fully compared.  
 17 This should be done in an unbiased local  
 18 resources focused on Bellevue. Thank you.

19 MR. HANSEN: My name is Norm Hansen. I  
 20 live at 3851 136th Avenue Northeast, Bellevue.  
 21 And I'm speaking on behalf of the Bridle Trails  
 22 Community Club. I'd like to speak on two  
 23 sections of the EIS. One is the EIS reference  
 24 page 1-5 introduction and summary. In one of the  
 25 paragraphs it states that, "The EIS will not be

O5-B-3

O5-B -3 See responses for Key Themes ECON-3 and ECON-4.

O15-A -1 See response for Key Theme OBJ-3.

O15-A-1

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1 used to reject or validate the need for this  
2 project." I was surprised at that. Since the  
3 EIS draft was issued, CENSE, The Coalition of  
4 Eastside Neighborhoods for Sensible Energy has  
5 received a load flow modeling study by nationally  
6 recognized experts on transmission load analysis.  
7 This report uses PSE methods and software and  
8 conclude that the need is not imminent over many  
9 years.

10 Probably more then a decade. It points out  
11 PSE has apparent erroneous assumptions in this  
12 criteria to supply 1500 megawatts of power to  
13 Canada during peak power usage in Bellevue. The  
14 results of this study show that PSE's system can  
15 avoid overloads even when two critical  
16 transformers have failed during winter peak  
17 usage.

18 The result of the study states that there is  
19 sufficient capacity to deliver power for  
20 anticipated growth for at least two decades.  
21 This report needs full vetting in the EIS to  
22 determine the need issue for Energize Eastside.  
23 This is new information and is contrary to PSE's  
24 earlier studies which might be biased. If no  
25 need over the next few years, the new

O15-A-1

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O15-A-1

1 transmission line -- for a new transmission line,  
2 then there is no need for Phase II EIS, and we as  
3 rate payers don't feel -- we end up kind of with  
4 the same.

O15-A-2

5 The other item is on land use and housing  
6 impact Chapter 10. Alternative 10 undergrounding  
7 of the transmission line if and when additional  
8 power capacity is needed, then the EIS states  
9 that undergrounding has a minor impact on land  
10 use and housing and it uses much less land than  
11 an overhead line.

O15-A-3

12 An overhead line requires a 100-foot wide  
13 easement, but the undergrounding line for a 230  
14 line only requires a six-foot wide trench  
15 four-feet deep. The EIS should further analyze a  
16 preferred underground route which they didn't do,  
17 also to determine what regulations need to be  
18 changed to have a reasonable economic plan for  
19 accomplishment.

O15-A-4

20 Overhead in Bellevue continues to encumber  
21 nine million square feet of land that could be  
22 utilized for other purposes. Overhead is no  
23 longer efficient use of land when building a  
24 modern city. Thank you.

25 MS. HANSEN: Patricia Hansen 3851 136th

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- O15-A -2 See response for Key Theme LU-2.
- O15-A -3 See response for Key Theme ALT-1.
- O15-A -4 See response for Key Theme LU-4.



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1 Avenue Northwest in Bellevue. For the record I'm  
2 a member of CENSE and also Bridle Trails  
3 Community Club. I kind of speak for myself. My  
4 comments apply to the EIS Chapter 8,  
5 environmental health; Chapter 10, land use and  
6 housing; and Chapter 11, views and visual  
7 resources. We have had testimony regarding the  
8 technical aspects of project Energize Eastside.  
9 I would like to share with you a more emotional  
10 or relationship side of this project.

11 During the CAG process, it was easy to  
12 figure out where PSE planned to put these new  
13 lines. The pictures they showed were very  
14 telling. They pictured neighborhoods encumbered  
15 by wires in front of homes, the before and after.  
16 Then they showed how it would look in Bridle  
17 Trails area where there's more land and open  
18 space, looked less encumbered.

19 Telling it like it really is for the  
20 property owner with PSE line encumbrance plus BP  
21 high pressure gasoline lines too. It certainly  
22 is a burden because we cannot use our property in  
23 a way others nearby can. They have maintenance  
24 crews for both easements at will. PSE seems at  
25 any time to be able to add things to this

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I101-B-1 See responses for Key Themes PLS-1 and PLS-2.

I101-B-1

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11

1 easement such as communication lines. They give  
2 permission for certain cell tower use and needed  
3 equipment. Also potentially petroleum lines.

4 These electrical lines at times give way and  
5 fall to the ground. I know of two such  
6 incidents, one involving our property. Both in  
7 Bridle Trails. Imagine if you were someone else  
8 who was under that line and fell or an animal or  
9 pet. Could this ignite the high pressure  
10 gasoline line? Will this take legal action for  
11 property rights and resolve if we survive?

12 I might mention there are others directly  
13 affected by these easements. Those who live  
14 adjacent to those of us with these easements.  
15 When speaking about necessity, it is being proved  
16 that the need now is not present and won't be for  
17 a number of years, if then. There are so many  
18 advancements in technology that might not require  
19 these imposingly tall structures. Should those  
20 of us who have been carrying this burden of use  
21 and safety, property devaluation and so forth be  
22 the ones to continue carrying this burden for all  
23 for the next 90 years or more?

24 The easement was granted in 1929 when it was  
25 county and undeveloped land. Just so you know,

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I101-B-2 See response for Key Theme OBJ-1.

I101-B-1

I101-B-2

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1 PSE and BP do not compensate the property owner's  
 2 burden. And yet they are allowed to control so  
 3 much and enjoy financial gain to their Australia  
 4 Canadian hedge fund. Adding lines is one major  
 5 way they increase their profit. When we  
 6 mentioned the possibility of undergrounding in  
 7 this work is needed in the future, they remind us  
 8 that we would then be responsible for the  
 9 exorbitant charges for the work. Do they show  
 10 appreciation to those of us who have been  
 11 providing the land they need?

12 Personally I believe the city of Bellevue  
 13 and their the staff should be looking out for the  
 14 safety and welfare of all Bellevue communities,  
 15 not just the growing downtown business and condo  
 16 community where electrical services are  
 17 underground substations are --

18 MS. WAGONER: If you can wrap up your  
 19 comments.

20 MS. HANSEN: -- and then there is the  
 21 spring district. When Bellevue brings in new  
 22 areas requiring new and updated service, Bellevue  
 23 should require those new area developments to  
 24 provide the additional needed service rather than  
 25 look to existing communities. Thank you for your

I101-B-3

I101-B -3 See responses for Key Theme OBJ-1, and Key Themes ECON-4 and ECON-3.





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1 time this evening. I would ask that you think  
 2 about and consider the testimony you hear  
 3 throughout the EIS process. That you think out  
 4 of the box on ways to solve this problem. In my  
 5 opinion a 100-foot plus poles in residential  
 6 areas is not beautiful, not park like and does  
 7 not fit a city in a park theme like Bellevue  
 8 stringing up --

9 MS. WAGONER: If you can wrap up your  
 10 comments.

11 MS. HANSEN: -- bellevue should be  
 12 against the law.

13 MR. ANDERSON: Todd Anderson 4419 138th  
 14 Avenue, Bellevue. The comments that I'm going to  
 15 make are going to be abbreviated but I want to  
 16 cover two topics. LED lights and windows. And  
 17 first with the LED lights, you look above just in  
 18 Bellevue City Hall there's 20 kilowatts of  
 19 incandescent lights, which if that was converted  
 20 to LED lights which have the exact same color as  
 21 you're seeing here 2700 degrees Kelvin, you would  
 22 save 87 percent of that energy.

23 PSE has a program, so everybody in the  
 24 audience get your pens and papers out, PSE has a  
 25 program where they'll give you 20 free LED

I101-B -4 See response for Key Theme VR-4.

I179-B -1 See response for Key Theme EIS-3.

I101-B-3

I101-B-4

I179-B-1

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1 lights. It's called PSE Home Print, Google it.  
2 They don't want you to know about it. They only  
3 advertised it once two years ago in one of the  
4 mailing inserts at the bottom in the fine print.  
5 I who was fighting PSE even threw it away, woke  
6 up at 4:00 in the morning, pulled it out of the  
7 trash and said holy cow.

8 So that will save you \$300 a year in energy  
9 savings. If you add that all up just in PSE's  
10 territory alone, that's 600 megawatts. And if  
11 you assume only one-third of those bulbs are on  
12 during the peak load, that's 200 megawatts.

13 My next is windows, and this is also for the  
14 audience so get your pens out. The only windows  
15 that are sold in the entire northern region of  
16 the United States are hot climate windows. That  
17 is an artifact of a mistake that the EPA has  
18 made. The Department of Energy in testimony to  
19 the EPA, which is on their website, has fully  
20 documented this.

21 And even the EPA admitted they are going to  
22 explain to the northern states the difference  
23 between hot climate windows and cold climate  
24 windows. And so if you just look at the  
25 residential area, the residential windows alone

I179-B-1

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1 if the State of Washington, we have added 400  
2 megawatts annual megawatts. What an annual  
3 megawatt is if I left 400 megawatts on 7/24 24  
4 hours a day for the entire year, that's 400  
5 megawatts. And you don't have to take my word  
6 for it. This is Lawrence Livermore National  
7 Labs. I'll be giving you guys details on this.  
8 And the reason for this is the EPA had  
9 fumbled how they were going to do the southern  
10 climate windows, and so they just punted when it  
11 came to the northern regions. The Department of  
12 Energy has documented the current waste per year  
13 which is additive, because after you install  
14 these windows, they're there for 30 years, 1.5  
15 trillion BTUs per year.  
16 And so when you want to go buy a window, you  
17 have to know a lot to go get a cold climate  
18 window. The cold climate windows are cheaper.  
19 The difference between a cold climate window and  
20 a hot climate window is simply a hot climate  
21 window puts a couple layers of sliver on it,  
22 makes the window about \$5 more expensive, and  
23 it's a great window for San Diego. It's a  
24 disaster here.  
25 England which has the exact same heating and

I179-B-1

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1 cooling requirements as the Puget Sound area, so  
2 they're cooling degree days is exactly the same  
3 as ours as their heating degree days. And they  
4 have a requirement that your window has to let in  
5 63 percent of the sun's energy. And the  
6 Department of Energy in managing the whole window  
7 stuff has bungled the ball multiple times. And  
8 the National Penetration Rating Council which has  
9 the responsibility for rating windows, they  
10 ranked the responsibility away from them as of  
11 last year, just started a thing that should have  
12 been done ten years ago.

13 It's called the attachment rating group.  
14 And that is a fancy way of saying they're going  
15 to start --

16 MS. WAGONER: You have one minute.

17 MR. ANDERSON: -- energy rating shades.  
18 And if you were to just do that appropriately,  
19 you would save another 200 megawatts. That's  
20 going to be probably outside of the scope of the  
21 EIS, but the other ones are fully documented, and  
22 if you have hired the technical talent with the  
23 necessary skills, it should be quite trivial for  
24 them to document this. And this would be  
25 independent of what PSE has put together. Thank

I179-B-1

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you.

MR. MARSH: My name is Don Marsh, I am the president of CENSE, The Coalition of Eastside Neighborhoods for Sensible Energy. I live at 4411 137th Avenue Southeast in Bellevue. On behalf of CENSE I am submitting documents supporting our concerns about the Energize Eastside project. Tonight we focus on four topics; the need and purpose that motivate the purpose, pipeline safety concerns, feasibility of Alternative II, and a petition signed by members of the community.

To address the need and purpose of the project, we submit the Lauckhart Schiffman load flow study by Richard Lauckhart the former VP of transmission planning for PSE, and Roger Schiffman a transmission analyst with a long career in this field.

Their conclusion is that the conditions PSE stipulates to overload transformers in Redmond and Renton would in fact risk wide spread blackouts throughout the Puget Sound region. Grid operators would never allow the system to run in this irresponsible manner. Using reasonable assumptions the study shows that we

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O1-I-1 See response for Key Theme OBJ-3.

O1-I-1



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18

1 have plenty of capacity to serve eastside growth  
2 for more than a decade.

3 PSE does not contest any fact in this study,  
4 but says the Lauckhart Schiffman report does not  
5 comply with federal reliability standards.  
6 However, this Columbia grid 2013 system  
7 assessment describes a theoretical study which  
8 exports 1500 megawatts to Canada and turns off  
9 local generation plants.

10 These are the same assumptions PSE uses to  
11 establish the need for Energize Eastside.  
12 Columbia grid states this case is being studied  
13 for information purposes. It goes beyond what is  
14 required in the NERC reliability standards.  
15 These two documents unequivocally contradict  
16 PSE's rationale for building Energize Eastside.

17 That is why CENSE is requesting that the EIS  
18 process stop at Phase I and be judged by a  
19 hearing examiner to resolve these fundamental  
20 questions about need and reliability. Answers  
21 are needed now to avoid costly legal challenges  
22 in the future.

23 Next we submit two documents that address  
24 the safety of collocating the pipeline and  
25 transmission lines. The first document lists

O1-I-1

O1-I-2

O1-I-2 See responses for Key Themes PLS-3 and PLS-5.



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1 five criteria that determine the risk of  
2 accelerated corrosion when pipelines and  
3 transmission lines are located in close  
4 proximity. When the Olympic Pipeline is paired  
5 with PSE's proposed transmission line, at least  
6 four of the five risk criteria are raised to the  
7 highest level of risk.

8 The second document includes analysis by  
9 Dr. Frank Chang, an internationally recognized  
10 pipeline safety expert. He questions Olympic  
11 Pipeline's cathodic protection program, and his  
12 concerns are reinforced by the Office of Pipeline  
13 Safety which only six weeks ago determined that  
14 the Olympic Pipeline is violating federal safety  
15 standards and failing to adequately protect the  
16 public from electrically induced corrosion of  
17 their pipelines. When one considers the fact  
18 that these pipelines passed close by the Tyee and  
19 Rose Hill middle schools, the coverage of safety  
20 issues in the draft EIS is woefully inadequate.

21 The next document entitled The Best  
22 Alternative examines draft EIS Alternative II.  
23 Industry consultant EQL Energy identifies many  
24 errors and obsolete data that make Alternative II  
25 appear unattractive in terms of risk, reliability

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O1-I-3 See response for Key Theme ALT-1.

O1-I-2

O1-I-3

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1 and cost.  
2  
3 However, Alternative II was not developed or  
4 reviewed by experts who are experienced with  
5 distributed energy resources. EQL presents  
6 feasible and cost efficient alternatives that  
7 would have minimal impact on our communities and  
8 environment. For the EIS these proposals should  
9 be carefully analyzed by consultants like EQL who  
10 have a proven track record in smart grid  
11 solutions.

O1-I-3

12 Finally, we submit a simple form letter with  
13 names and addresses of 372 residents who wish to  
14 comment on the draft EIS, but felt they did not  
15 have the time or expertise to scrutinize the  
16 715-page document. Some of these residents  
17 submitted brief comments along with their  
18 signatures, but all of them wanted to help save  
19 their communities from a dangerous, expensive,  
20 unnecessary project. We ask that each be entered  
21 as an individual participant in the comment  
22 process entitled to a response. Thank you.

O1-I-4

23 MS. BRUCE: Thank you, Carol, for this  
24 opportunity to speak this evening. I am Lindy  
25 Bruce, 13624 Southeast 18th Street, Bellevue  
98005 speaking tonight on behalf of the Sunset

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O1-I-4 Comment noted.



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1 Community Association which has six neighborhoods  
 2 that border PSE's right of way in central  
 3 Bellevue.

4 I was an alternate to PSE's CAG and  
 5 currently serve on the board of CENSE. I  
 6 wholeheartedly endorse the comments and  
 7 recommendations of CENSE president Don Marsh.  
 8 While PSE consistently disallowed the CAG and the  
 9 DEIS to consider need, we now have studies and  
 10 comments suggesting fundamental questions of  
 11 need, reliability, and appropriate solutions that  
 12 have not been adequately addressed.

O4-B-1

13 More specifically, I would like you to  
 14 address some of the construction issues that will  
 15 affect our neighborhoods if PSE's preferred  
 16 Alternative 1A were to proceed. Here are a few  
 17 facts for segment E which runs through our  
 18 neighborhoods.

O4-B-2

19 The City of Bellevue critical hazards map  
 20 show the right of way from Southeast 24th Street  
 21 north to Southeast 2nd Street has a very severe  
 22 soil erosion hazard. We already know that the  
 23 neighborhoods lowest downhill deal with under  
 24 ground streams that percolate down College Hill  
 25 towards Richard's Creek.

O4-B-3

- O4-B-1 See responses for Key Theme EIS-1 and Key Theme OBJ-1. Additional information on construction impacts is included in the Phase 2 Draft EIS (Chapter 4) and Final EIS (Chapter 5).
- O4-B-2 See response for Key Theme EARTH-4.
- O4-B-3 See response for Key Theme WTR-1.



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O4-B-3

1 These streams produced huge quantities of  
 2 mud when Parkland Estates was built a few years  
 3 ago. The right of way is already occupied by  
 4 Olympic Pipelines 20- and 16-inch pipes that  
 5 carry millions of gallons of jet and gasoline  
 6 fuels per day to Seattle and Portland airports.  
 7 There's also a natural gas line there.

O4-B-4

8 Olympic Pipeline is currently under a final  
 9 order to rectify deficiencies in their corrosion  
 10 control program. And I point out that PSE's 230  
 11 kilovolt lines produce EMFs that accelerate  
 12 corrosion. When PSE rolled out Energize

13 Eastside, they first told us that two sets of H  
 14 poles in our neighborhood would be replaced by a  
 15 single monopole.

16 Much later they admitted one set of H poles  
 17 might be retained. Later yet at a neighborhood  
 18 meeting PSE's expert from Power Rangers, utility  
 19 consultants, told us that wherever the pipeline  
 20 is in the middle of the right of way, they would  
 21 need a tandem set of the tall monopoles. The  
 22 pipeline is in the middle of much of the right of  
 23 way, BPA recommends poles should be at least  
 24 50 feet from pipelines.

25 During construction PSE must retain both

O4-B -4 See responses for Key Themes PLS-1, PLS-2, and PLS-3.

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1 sets of H poles to continue distributing  
2 electricity in Bellevue. So we will have four  
3 65-foot wooden poles, two 85- to 135-foot steel  
4 poles and excavating equipment building cement  
5 support bases for those poles, all this in an  
6 area with an aging corroding pipeline and sodden  
7 soils as well as homes and our neighborhood park.

8 We don't yet know where they will stage all  
9 the materials and vehicles, but there's limited  
10 street access to the right of way. For safety  
11 reasons some parts of the entire right of way  
12 will have to be expanded by as much as 50 feet.  
13 Some homeowners have already been advised that  
14 their houses may be condemned or parts of their  
15 property will have to be added to the right of  
16 way. Uses on property near the 230 kilovolt  
17 lines can be restricted again for safety reasons.

18 The cause of the 1999 Olympic Pipeline  
19 explosion in Bellingham was traced to a one  
20 millimeter chip out of the pipe that occurred  
21 when a maintenance truck hit the pipe five years  
22 before the explosion. Our corridor will be  
23 crowded with poles, excavating machinery,  
24 construction equipment and pipelines. How long  
25 will we have to wait before we feel safe?

O4-B-4

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1 MS. WAGONER: One minute.

2 MS. BRUCE: Energize Eastside is a  
3 massive infrastructure project with enormous  
4 impacts through its 18-mile length. Even good  
5 intensions, careful engineering, and adherence to  
6 code haven't prevented Breakwater, Bertha, or  
7 even Sound Transit's tunnel digger, Pamela from  
8 causing soil subsidence, gapping sink holes and  
9 huge delays.

O4-B-5

10 Are we really ready for those possibilities  
11 when our new information suggests that  
12 Alternative II can provide electrical reliability  
13 for less cost, has almost no adverse impacts on  
14 land use, housing, tree canopy, parks and  
15 schools, and has no new safety risks. I would  
16 like to see a specific study of all construction  
17 related issues and any precedent for  
18 overburdening the right of way in a dense urban  
19 corridor as Alternative 1A would most certainly  
20 do. Thank you.

O4-B-6

21 MR. ELWORTH: Hello, my name is Brian  
22 Elworth. I live at 8605 129th Court Southeast in  
23 New Castle. And there's an article called High  
24 Voltage Taller Power Lines Spark Debate. An  
25 interesting quote, you'll recognize it, "As the

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- O4-B -5 See responses for Key Themes ALT-1 and ALT-3.
- O4-B -6 Additional information on construction impacts is included in the Phase 2 Draft EIS (Chapter 4) and Final EIS (Chapter 5).



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1 area has grown the load and demand for  
2 electricity has grown. Our dual concerns are  
3 that we have power necessary where the power is  
4 needed and the impact of the projects are  
5 appropriately mitigated."

6 Carol Helland, thank you for that statement.  
7 So Seattle Times December 23 had an Op-Ed article  
8 titled Now is the Time to Plan for Future Energy  
9 Needs. Their's wasn't so much on extension cords  
10 running through neighborhoods. They were  
11 wondering where does the power come from?

12 So they said, you know, based on current  
13 projections, loads and power generation, and  
14 depending on climate, we might need a few nuclear  
15 generation plants, but maybe it will work. But  
16 we need to get off coal and we may need to step  
17 up to maybe some nuclear power.

18 Well, at PSE's projected demand growth rate  
19 for Bellevue, that will outstrip that available  
20 generation capacity. So what does Bellevue think  
21 PSE is going to plug their big new extension cord  
22 into? That's Alternative I, by the way. And  
23 that's the one that runs through my backyard.

24 So Bellevue needs to start a serious power  
25 diet. Alternative II is a good start in that

I78-I-1

I78-I-1 See response for Key Theme EGY-2.

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178-I-1

1 direction, but it isn't actually enough.  
2 Alternative I is a major fail for an energy  
3 future. \$200 million dollars wasted instead of  
4 being applied to this problem is \$200 million  
5 away from where you need to be.

178-I-2

6 You are not ever going to get where you need  
7 to be with PSE. So if this is all about consumer  
8 needs, then I have an option which I offered last  
9 time and it didn't even get noticed. The one  
10 true forward looking alternative is a PUD.

11 PSE is responsible to its owners. A PUD is  
12 only responsible to its customers. The  
13 consequential difference, PSE's objective is to  
14 squeeze the maximum allowable profit from its  
15 customers. A PUD's objective is to provide the  
16 best service and value to its customers. That's  
17 the difference between Seattle City Light being  
18 the greenest electrical utility and the  
19 neighboring PSE being the dirtiest.

20 PSE's objective is profit. PUD's objective,  
21 better forecasting, better management, better  
22 service, better efficiency, better environmental  
23 stewardship, better value, better security. The  
24 Energize Eastside project would never come into  
25 existence under PUD control.

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178-I-2 See response for Key Theme EIS-1.

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178-I-2

1 The DEIS states that Phase I draft EIS  
 2 broadly evaluates the general impacts and  
 3 implications associated with feasible and  
 4 reasonable options available as Page 1-4, a PUD  
 5 is a feasible and reasonable option. Thank you.

6 MR. MILLER: Hello, my name is Don  
 7 Miller. And I am a resident of Bellevue for  
 8 25-plus years at 5205 Laker's Lane. Thank you  
 9 for this opportunity to speak before the panel.  
 10 I wear this orange hat in solidarity with the  
 11 people from CENSE, a volunteer organization that  
 12 is not for profit. A volunteer organization that  
 13 has put their blood, sweat, and tears into  
 14 bringing forward alternatives and alternative  
 15 studies to consider in this process.

I59-B-1

16 I'm bothered. I'm bothered that PSE has  
 17 gone to great lengths to discredit every  
 18 alternative or piece of information that's been  
 19 brought forward as a part of the Energize  
 20 Eastside project. I'm bothered by this quote  
 21 from the Bellevue Reporter from Gretchen  
 22 Aliabadi, the communications initiative manager  
 23 for Energize Eastside that said, quote, We see  
 24 concerns about more generation. That's not the  
 25 issue. There are more than enough electrons to

I59-B -1 See response for Key Theme OBJ-2.



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1 power our customers. The problem we are facing  
2 is delivery.

3 In your opening comments, Ms. Helland, you  
4 stated alternatives that involve generating more  
5 power. So there's a disconnect between the  
6 statements PSE is making and our own  
7 understanding of what this project is for. I'm  
8 bothered by the fact that the Lauckhart Schiffman  
9 study brought forward differences in the data  
10 that PSE used to justify the Energize Eastside  
11 project and the data that PSE has supplied to the  
12 Western Electricity Coordinating Council.

13 I can't understand why those differences are  
14 there and PSE has never answered why there's a  
15 difference in the forecast they provide to the  
16 regional grid operators and the justification for  
17 the Energize Eastside project.

18 Now, I want to direct some comments to the  
19 actual draft EIS. I'm bothered by section  
20 10.7.1.14, property values. The DEIS chose to  
21 use a study prepared for the Electric Power  
22 Research Institute.

23 The Electric Power Research Institute stands  
24 for electricity generation, electricity  
25 transmission, and electricity use. What they

I59-B-1

I59-B-2

I59-B -2 See response for Key Theme ECON-1.



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1 don't do is evaluate real estate values. They  
2 don't evaluate real estate prices. They don't  
3 evaluate the selling times of real estate. I  
4 don't understand -- excuse me. I'm bothered that  
5 the DEIS doesn't look at what the professional  
6 realtors or professional appraisers have prepared  
7 in regard to the impacts of transmission lines on  
8 property values.

9 Further, this particular study is a  
10 consolidation of 50 independent studies and  
11 without statistical validation, it's merely an  
12 opinion. It's not a statistical valuable source  
13 of research. But you guys pulled some points in  
14 DEIS out. You claim that land use analysis in  
15 this Phase I draft EIS considered effects on  
16 property values but found them to be  
17 inconclusive.

18 And then you go on to cite 12 different  
19 conclusions from the EPRI study, and over half  
20 these conclusions point to decreased property  
21 values, increased selling times, negative opinion  
22 and other facts negatively impacting property  
23 values.

24 The evidence from your select -- excuse me.  
25 The evidence from your selected and flawed study

I59-B-2

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I59-B-2

1 doesn't even support the claim you made in the  
2 DEIS. I think in this regard the City of  
3 Bellevue has failed to obtain an independent  
4 analysis --

5 MS. WAGONER: One minute.

6 MR. MILLER: -- as the lead agency for  
7 the DEIS. I'll close with this: And I submitted  
8 these comments to the DEIS comment website.

9 Section 6.1 refers to unavoidable environmental  
10 impacts. The DEIS states, "Pursuing the Energize  
11 Eastside project with overhead lines will create,  
12 quote, significant unavoidable adverse impacts to  
13 plants and animals."

I59-B-3

14 This is probably the most important  
15 statement in the DEIS. While the City of  
16 Bellevue has gone to great lengths to ensure that  
17 we are a park within a city, the simple  
18 environmental analysis conducted by PSE while the  
19 CAG evaluated routes showed that over 8000 mature  
20 trees would be cut down if PSE builds overhead  
21 lines.

22 The final project EIS will show permanent  
23 damage to dozens of streams, hundreds of  
24 wetlands, untold wildlife, foliage, and trees.

25 MS. WAGONER: Your time is up if you

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I59-B -3 See response for Key Theme P&A-2.

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1 can wrap up, please.

2 MR. MILLER: Thank you for the  
3 opportunity.

4 MR. MERRILL: I am John Merrill, 4800  
5 134th Place in Bellevue where I've lived for  
6 about 25 years. I want to speak tonight a little  
7 bit about the basic premise by which the DEIS  
8 seems to justify need. Section 1.3 is all about  
9 the DEIS team reviewing PSE's load flow studies  
10 and saying that they studied the process and have  
11 established that PSE's assessment was conducted  
12 in accordance with industry standards for utility  
13 planning.

14 And I take great exception to that  
15 statement. The process seems to focus on whether  
16 or not they use the right computer models. And I  
17 don't think anybody suggests they're not using  
18 the right computer models. In fact, Lauckhart  
19 Schiffman used the same computer model. Nobody  
20 is disputing that.

21 What is not industry standard about what PSE  
22 did is they did not use industry standard inputs.  
23 Lauckhart and Schiffman believe that the industry  
24 standard is established by NERC, the North  
25 American Reliability Corporation. And it sets up

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I158-C-1 See response for Key Theme OBJ-2.

I158-C-1

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1 a very rigorous test for whether or not a future  
2 grid will be reliable.

3 And everybody, virtually every utility in  
4 the industry uses that standard. However, PSE  
5 did not. It went well beyond that standard  
6 deciding apparently arbitrarily that we needed a  
7 grid that is many, many, many times more reliable  
8 than NERC requires. Therefore, it is not  
9 industry standard.

10 MS. WAGONER: One minute.

11 MR. MERRILL: So let me give you an  
12 example, an analogy. What if PSE decided that  
13 four plug prongs were more reliable than our  
14 industry standard prongs and required us to buy  
15 those as rate payers. It wouldn't make any sense  
16 whatsoever. That's the same sort of arbitrary  
17 decision that PSE has made in using nonstandard  
18 input into its computer models.

19 In conclusion, it's not to say that we  
20 should not be using best practices to plan far in  
21 advance for growth in smart ways. The Lauckhart  
22 Schiffman study which was performed using NERC  
23 minimum industry standards shows we do not have  
24 to rush headlong into an unwise decision, but  
25 have time to thoughtfully and collaboratively

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1158-C-1



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I158-C-1

1 plan smart ways to power growth on the eastside.  
 2 Thank you.

I157-B-1

3 MS. SHERMAN: Hello, my name is  
 4 Kathleen Sherman and my address is 4741 132nd  
 5 Avenue Southeast, Bellevue and I have several  
 6 comments. One is there's not enough information  
 7 for the residents of Bellevue to evaluate this  
 8 project because they do not have a detailed map.  
 9 They either need to put out a -- get a building  
 10 permit or detailed maps of the different power,  
 11 different choices.

I157-B-2

12 And then in the lobby before this meeting,  
 13 before this part of the meeting, just before we  
 14 started, a representative of PSE said the cost of  
 15 this project comes out of the regular capital  
 16 budget which is used for things like repairing  
 17 leaky gas lines. They stated the total capital  
 18 budget was \$4 million and this project would \$3  
 19 million.

20 The single project will be 75 percent of the  
 21 total capital budget. And if 75 percent of that  
 22 budget is to be used on this Energize Eastside  
 23 project, what projects and repair will not get  
 24 done or where will the money come from if the  
 25 capital budget is exceeded?

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I157-B -1 See the Phase 2 Draft EIS and Final EIS for project-level analysis of alternatives.

I157-B -2 See responses for Key Themes ECON-3 and ECON-4.



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1 And also I think the City of Bellevue  
 2 respectfully needs to look at the most rigorous  
 3 evaluation of this project. And it may not be  
 4 evaluated by the City of Bellevue. It might be a  
 5 state or federal entity that evaluates it.

I157-B-3

6 And then why should customers of PSE pay for  
 7 a transmission line that sends energy to Canada  
 8 to fulfill an international treaty between the  
 9 U.S. and Canada. And why is the City of Bellevue  
 10 evaluating that? And why does PSE take that upon  
 11 itself when it's a national treaty? That's all.  
 12 Thank you.

I157-B-4

13 MS. CALADO: Hello, my name is Celina  
 14 Calado, and I reside at 13508 Northeast 29th  
 15 place. And I'd like to be on the record as to  
 16 how this project impacts my family and myself  
 17 personally. We have been involved in coming to  
 18 these meetings and going to our neighborhood  
 19 groups. And my family lives directly under the  
 20 power lines. And my small amount of conclusion  
 21 here is that they're expensive, they are  
 22 irreversible, there is unproven return of  
 23 investment to our rate holders including us.

I182-A-1

24 There has not at all been proven a need for  
 25 this project. It will damage our property

I182-A-2

I182-A-3

I157-B -3 See response for Key Theme EIS-2.

I157-B -4 See responses for Key Theme OBJ-1 and Key Theme ECON-4.

I182-A -1 See responses for Key Theme ECON-4 and Key Theme OBJ-1.

I182-A -2 See response for Key Theme OBJ-2.

I182-A -3 See response for Key Theme ECON-1.

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1 values. I'm personally concerned about the  
 2 health impact of having these high voltage lines  
 3 not just directly over our house, we're talking  
 4 about houses that are 300 and 400 yards away  
 5 three and four houses in.

6 And Puget Sound Energy has a terrible track  
 7 record for helping out people who have had their  
 8 property damaged from falling transmission lines.  
 9 You combine that with a natural gas pipeline  
 10 going through our property, and what are they  
 11 going to say, it blows up our property and hurts  
 12 people likely. And they'll not accept  
 13 responsibility. I have no faith in that.

14 So I just want to be on the record, my  
 15 concerns on the record. And I do plan to submit  
 16 these in writing as well. Thank you.

17 MS. MESTIN: My name is Suzanne Mestin  
 18 and I live at 13800 Northeast 40th Street. I've  
 19 lived in Bellevue, the Bridle Trails area in  
 20 particular all my life and I love this area of  
 21 Bellevue. It's rural and kind of horsey with  
 22 walking trails and parks throughout. But yet  
 23 it's minutes from major shopping areas and office  
 24 complexes.

25 As I watch what's happening with the

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I182-A -4 See responses for Key Theme EMF-1, and Key Themes PLS-2 and PLS-5.

I182-A-4



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1 Energize Eastside debate, I felt compelled today  
 2 to come down and share my thoughts on the draft  
 3 EIS plans particularly as it relates to Chapter  
 4 2, Project Alternatives.

5 So, and I've said this before,  
 6 professionally I lead a team of 100 engineers  
 7 whose sole purpose is new architect and design  
 8 and implementation of new technology into our  
 9 network. Relevant to the Energize Eastside  
 10 debate is that as you can imagine, we found that  
 11 it is not economically viable to build whole new  
 12 infrastructure as a network to meet forecasted  
 13 demand or reliability.

14 It's simply not affordable. And I liken  
 15 that to adding new transmission lines.  
 16 Technology is changing so fast. Companies need  
 17 scalable approaches like PSE's approach to using  
 18 peaker plants for peak loads. And that's a  
 19 solution. But there are even more modern proven  
 20 technologies that contemporary companies are  
 21 using today.

22 In terms of integrating technologies and  
 23 development and developing network reliable  
 24 solutions, PSE statements of concern about  
 25 reliability is in Chapter 16, utilities pages 634

I193-A-1

I193-A-2

I193-A -1 See response for Key Theme ECON-4.

I193-A -2 See responses for Key Themes OBJ-1, OBJ-2, and OBJ-3.





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1 through 36 are extremely exaggerated.

2 I know this because I work directly with

3 researchers and vendors and our network people

4 and we do this every day. Capacity forecasting,

5 looking at triggers and exhausts, opportunities

6 to be creative and what we need to do to stay

7 competitive and do what's best for our company

8 and its customers.

9 It's an exciting time. Technology

10 advancements are occurring at such a rapid pace.

11 I've heard it said that trialing or adopting new

12 technology is too risky, and it can be if not

13 evaluated or assessed appropriately.

14 MS. WAGONER: One minute.

15 MS. MESTIN: Obviously product testing,

16 system testimony, beta testing, it is critical as

17 you launch new projects and features into a

18 network. But we shouldn't be misled by any

19 excuses that new technologies may be risky or

20 unreliable.

21 Ultimately my last and final point is that

22 PSE and this EIS team need to further evaluate

23 and study the combination of these solutions.

24 This needs to be done by experts, truly qualified

25 professionals who are educated and experts in

I193-A-2

I193-A-3

I193-A -3 See response for Key Theme EIS-3.



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1 these technologies to fully compare the  
2 alternatives.

I193-A-3

3 The current definitions and assessment of  
4 alternatives is simply inadequate. In closing,  
5 there's no question that it's important to all of  
6 us that we have reliable power in the future.  
7 But to provide that with old technology that's  
8 going to devastate and cause irreparable  
9 destruction to the community at an outrageous  
10 cost to customers and us as taxpayers is not the  
11 best approach, especially when the primary need  
12 is to meet peak demand for a 911 scenario. And  
13 I'm told this is like an N6 which has less than  
14 two-tenths of a probability of happening.

I193-A-4

15 Alternative 1A is simply overkill. Thank you.

I193-A-5

16 MR. ADCOCK: This is James Adcock and  
17 I'm an electrical engineer, graduate of MIT.  
18 Address, 5005 155th Place Southwest, Bellevue,  
19 Washington. I have examined PSE's claims for the  
20 needs of additional generation and transmission  
21 for many years as part of the public process of  
22 integrated resource planning.

I111-B-1

23 I have asked PSE at their stated CEII  
24 address in writing and receiving back a return  
25 receipt proof of delivery for access to the same

I193-A -4 See response for Key Theme OBJ-2.

I193-A -5 Comment noted.

I111-B -1 See response for Key Theme OBJ-1.

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1 documents that the City of Bellevue, hereafter  
 2 city's, so called independent consultants.  
 3 PSE has been totally not responsive. Again,  
 4 I believe it is inappropriate for city and PSE  
 5 not to allow me the same access to supposed  
 6 evidence that the city references by their  
 7 consultants. EIS is supposed to be a fair and  
 8 open public process. What we have here instead  
 9 is a sham process where city consultants pretend  
 10 to be independent while merely regurgitating  
 11 wholesale data and costs which PSE has provided  
 12 with them while not giving public access to the  
 13 same data, not even by appropriate CEII process.  
 14 I have read in comparison to PSE and city's  
 15 claim the Laukhart Schiffman analysis which I  
 16 found credible. I do not find PSE and city's  
 17 claims to be credible. I also find the fossil  
 18 fuel pipeline corrosion effects to be a credible  
 19 concern. What I see in agreement with Laukhart  
 20 Schiffman is a consistent pattern of PSE over  
 21 claiming needs to build additional transmission  
 22 and generation.  
 23 Currently PSE simultaneously in front of UTC  
 24 is claiming that they need additional natural gas  
 25 peaker plants, that they cannot meet winter needs

I111-B-1

I111-B-2

I111-B -2 See responses for Key Themes OBJ-1 and OBJ-3.

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1 without additional generation with all generation  
2 plants running simultaneously and then some.

3 While at the same time in front of city to  
4 meet the same winter peak needs, PSE is claiming  
5 they need additional transmission capacity so  
6 they can run at the same moment of time with only  
7 less than half of their total generation running.  
8 These two claims cannot be true simultaneously.

I111-B-2

9 Either you need more peak generation or more  
10 transmission, but not both, or in reality you  
11 need neither.

12 You are simply trying to overbuild in order  
13 to overcharge the rate paying customers in order  
14 to apply, quote, unquote, apply lipstick to a pig  
15 to apply, quote, window dressing to the company  
16 before your owners, a frivolous dirty company,  
17 McCrory flips the company to new buyers.

18 MS. WAGONER: One minute.

I111-B-3

19 MR. ADCOCK: Ala Bing Capital. Now, in  
20 the DEIS the other shoe begins to drop. PSE  
21 admits that the two KV line doesn't fit into the  
22 proposed routes. Houses will have to be torn  
23 down in New Castle. I believe more homes will  
24 have to be torn down in Somerset. Homeowners  
25 will be restricted from using their own

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I111-B -3 See response for Key Theme LU-1.

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1 properties, their own backyard. You will not be  
2 allowed to sit in your own backyard drinking cold  
3 drinks sitting in a lawn chair.

4 Some homeowners will not be allowed to park  
5 cars on their own property. Getting into their  
6 cars others will experience nuisance shock.  
7 There is no such thing as a nuisance shock. Any  
8 shock can kill. The higher the transmission  
9 imposed voltage, the more likely the shock can  
10 kill.

11 MS. WAGONER: If you can wrap up your  
12 comments, please.

13 MR. ADCOCK: Anyway, I'll skip forward.  
14 Puget Sound Energy does not have to rebuild the  
15 current lines at 230 KV. They have the option of  
16 rebuilding an existing corridor at 115 KV  
17 doubling the existing capacity. I've asked them  
18 to consider that.

19 MS. WAGONER: If you can hold your  
20 clapping.

21 MR. ADCOCK: They've made excuses why  
22 they cannot do that. There's no logical and  
23 electrical engineering reason why they cannot  
24 rebuild higher capacity at 115 KV.

25 MS. WANG: Good evening officers, my

I111-B -4 See response for Key Theme OBJ-1.

I111-B-3

I111-B-4

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1 name is Alice Wang. I live at 14521 Southeast  
2 60th Street in Bellevue. I have two -- three  
3 children and we are -- I have come here to  
4 represent the Chinese community who are new  
5 immigrants. I've been living here for -- in  
6 Bellevue for six years. Not as some of our  
7 neighbors who've been here for 20, 25 years.

8 My house has no views, not expensive, not  
9 too -- not close to full power line at all. But  
10 we -- I feel I'm compelled to speak here because  
11 I feel for my neighbors and for my children too.  
12 My two children are in Somerset. They will go to  
13 Tyee and Newport High. So either one of the  
14 routes that PSE is proposing will be on one  
15 either of the schools.

134-B-1 16 So there's way for us to hide. We put all  
17 our life savings and half million of debt into  
18 this house hopefully because they are in a good  
19 school district. But with so much risk at stake  
20 we're losing our property values. I cannot stop  
21 but ask why? Why do we have to do this? I  
22 understand that you guys are not here to vet the  
134-B-2 23 need. I just learned this today.

24 Basically meaning to understand, justify the  
25 cause. But I call your attention to see this

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134-B -1 See response for Key Theme ECON-1.

134-B -2 Comment noted.

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1 whole picture. I'm a business analyst for work.  
 2 And I have -- for every project I do, I have to  
 3 look at the what first and why first before  
 4 understanding the how. Now we're analyzing the  
 5 how without thinking of the why and what.

6 So I'm going to give a little Chinese twist  
 7 to this. We have an idiom that says for a shop  
 8 the sell something they don't really sell, we say  
 9 hanging a sheep's head but selling dog, meat.  
 10 So, but understanding more and more, we feel that  
 11 what's truly driving this? Like PSE they are  
 12 experts. They should understand what it means  
 13 to -- for every alternative they're choosing.

14 So they're not going with Alternative II or  
 15 their push for Alternative I is because they're  
 16 not truly energizing eastside. They're truly  
 17 energizing their revenue and profits. So ask  
 18 yourself, is it fair? I just feel that as  
 19 residents here, always bigger corporates have  
 20 bigger voice than our regular residents and this  
 21 is not fair. That's why I'm speaking up for  
 22 social injustice. Thank you.

23 MS. STRONK: Hello, my name is Sue  
 24 Stronk and I live at 12917 Southeast 86th Place  
 25 in New Castle. My neighbors are here tonight,

134-B-2

194-G-1

194-G-1 See responses for Key Theme OBJ-1 and Key Theme LU-1.

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1 the Elworths. We live 100 feet apart adjacent to  
2 the Olympic Pipeline corridor and have been  
3 neighbors for the past 28 years. If PSE has  
4 their way, one of us will stay and one will go.

5 I have watched Lori and her husband Brian  
6 raise their two kids, Daniel and Mary, from  
7 infants through high school and college  
8 graduation. That is a generation. We have been  
9 there for each other over the years and worked  
10 together on the Olympus homeowners board.

11 We reestablished block watch and put on the  
12 annual neighborhood garage sale. We share  
13 outdoor movies and evenings around the camp fire  
14 in the backyard or camping on Hood Canal. We  
15 host neighbors for the national night out event  
16 on our front lawns as well as drink wine together  
17 at the annual wine women and white elephant party  
18 at Christmas.

19 We are friends. This is neighborhood  
20 character that PSE will shatter. PSE's favored  
21 route along the corridor will take one our homes  
22 and probably another 25 to accomplish an unneeded  
23 project. It is the duty of the DEIS and  
24 Bellevue's obligation to halt this process and  
25 have Rich Lauckhart meet with PSE experts before

I94-G-1

I94-G-2

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I94-G-2 See response for Key Theme OBJ-1.





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1 the Washington State EFSEC to settle the need of  
2 this project once and for all.

194-G-2

3 You cannot accept blindly that PSE speaks  
4 the truth when this is evidence to the contrary.  
5 Be accountable now or face this in court.

194-G-3

6 Neighborhood destruction rates significant in  
7 your impact rating. Unacceptable is our  
8 response. PSEs favored route is the most  
9 dangerous and most destructive of all the plans

194-G-4

10 by placing the project along the pipelines,  
11 mixing tall towers and deep footings underground  
12 in an earthquake fault zone. Insane is the word.

194-G-5

13 If rate payers are charged for an over  
14 scaled, over priced unnecessary project, it is  
15 nothing short of consumer fraud.

16 MS. WAGONER: One minute.

17 MS. STRONK: Lori and I sign birthday  
18 and holiday cards as your neighbor for life and  
19 we intend to remain that way.

20 MS. PREVETTE: My name is Lynne  
21 Prevette and I live at 8114 120th Avenue  
22 Southeast in New Castle and I have for 23 years.  
23 I have been a former resident of Bellevue  
24 starting in 1963. Energize Eastside is a  
25 marketing label and it's used to increase the

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- 194-G -3 See response for Key Theme LU-1.
- 194-G -4 See responses for Topic PLS and Key Theme EARTH-1.
- 194-G -5 See responses for Key Theme ECON-4 and Topic OBJ.



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1 capacity of electricity on the eastside as you  
2 know.

3 PSE presented to the EIS two documents to  
4 prove the eastside need assessment.  
5 Unfortunately there were no arguments to prove it  
6 otherwise. This same thinking we have run into  
7 in the CAG meetings, which are of a couple of  
8 years ago I think, 2014. They invited the public  
9 in to comment on their proposal, however, their  
10 capacity to hear us was very small and our  
11 questions were not answered.

12 We have felt no sanity since this marketing  
13 ploy has been foisted upon us. We have felt  
14 belittled by those who thought they knew more  
15 than us. Pushed aside by engineers and planners  
16 all with something to gain from PSE's  
17 installation.

18 We have felt no sanity until now. There's  
19 something flawed in Puget Sound Energy's load  
20 flow study that isn't being assessed or  
21 documented, otherwise looked at. No one has the  
22 tools or the credibility for the computer  
23 simulation. And PSE is not giving us that  
24 information, and we've asked.

25 The clearance was granted to former Puget

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I190-A -1 See responses for Key Themes OBJ-2 and OBJ-3.

I190-A-1

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I190-A-1

1 Sound Power VP Richard Lauckhart along with  
 2 electrical engineer Richard Schiffman to produce  
 3 the now famous Lauckhart Schiffman load flow  
 4 study. Their conclusion, and I quote, there is  
 5 enough reserve capacity to deliver reliable power  
 6 to the eastside for at least a couple of decades.

I190-A-2

7 As one of those homes that will be literally  
 8 torn down by Energize Eastside, I find this  
 9 oversight unforgivable. Our homes are our  
 10 biggest investment. Our health our most prized  
 11 commodity, and safety priority number one. I  
 12 encourage the EIS to look more thoroughly for  
 13 things that are going to affect us personally.  
 14 Thank you.

15 MR. HERBIG: Hello, I'm Dave Herbig, I  
 16 live at 4911 Somerset Drive Southeast in  
 17 Bellevue. I've lived in Bellevue for over 35  
 18 years. Thanks for the opportunity to speak with  
 19 you tonight. I wouldn't ordinarily be speaking,  
 20 but this so important I felt I had to. I have a  
 21 list of 15 different things here I wanted to  
 22 discuss, but they've already been revealed by the  
 23 CENSE study and the other comments that have gone  
 24 on.

I154-B-1

25 I just want to add I've known Rich Lauckhart

I190-A -2 See response for Key Theme EIS-1.

I154-B -1 See response for Key Theme OBJ-1.



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1 since I was in high school with him. His father  
 2 worked for the Grays Harbor County PUD and his  
 3 grandfather was in the same capacity. He knows  
 4 what he's doing. He worked here when PSE was  
 5 owned by local people who cared about us.

I154-B-1

6 Now it's owned by a company whose stated  
 7 intent was to use a leverage buyout, increase the  
 8 revenue, and sell it off in ten years.

9 What they're proposing is immediate and  
 10 permanent and it does not serve the residents of  
 11 Bellevue. I bought a house because I wanted a  
 12 view. I took some pictures of what a 130-foot  
 13 tower would look like in front of my house and my  
 14 neighbors, and I'd like to submit those.

I154-B-2

15 Again, every one who's spoken tonight has  
 16 very good points. The safety of our community is  
 17 at risk. The economics are at risk. Every one  
 18 in King County will pay if that value of my house  
 19 drops by \$100,000. It's going to happen with the  
 20 plan 1A. Thank you.

I154-B-3

I154-B-4

21 MS. MA: Good evening everyone, my name  
 22 is Katherine Ma, and I live at 13912 Southeast  
 23 44th Street, Bellevue, with my family. We have  
 24 two kids. One is 11 years old in middle school  
 25 and the other one will turn five this month. We

- I154-B-2 See response for Key Theme VR-2.
- I154-B-3 Comment noted.
- I154-B-4 See response for Key Theme ECON-1.



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1 moved here from Chicago in the summer of 2014.  
2 We decided to settle down in Bellevue because of  
3 its excellent education system, diverse  
4 communities, lots of trees, flowers, and  
5 beautiful views. Tonight I am here to oppose  
6 PSE's Energize Eastside plan from my own  
7 experience and from the safety of our children.

8 The first time I learned about the high  
9 voltage power lines was last summer when I took  
10 my son to King County Aquatic Center in Federal  
11 Way. While waiting for his swimming practice, I  
12 took a jog on the trail next to the Aquatic  
13 Center.

14 There were high voltage power lines above  
15 the trail. I felt scared because I heard lots of  
16 buzzing and saw sparks from the power lines above  
17 the trail.

18 It seems like the dry grass underneath the  
19 power lines could catch fire at any moment.  
20 There were no trees, no houses under the power  
21 lines. It is such an absurd idea to build high  
22 voltage power lines through residential areas.  
23 No one, even the National Cancer Institute can  
24 say high voltage power lines are safe to humans  
25 especially to one of your kids.

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I188-A -1 See response for Key Theme EMF-3.

I188-A-1

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1 Professionals from electron magnetic field  
 2 suggest that safety distance from high voltage  
 3 power line is 1000 feet and above. Somerset  
 4 Elementary School, Tyee Middle and New Port High  
 5 have more than 3000 students, yet these three  
 6 schools are either on or next to PSE's proposed  
 7 routes. As a mom I plead, please do not  
 8 sacrifice our children's safety and health for  
 9 money when we have other choices.

10 Tonight now my son's school has a concert  
 11 and he's second chair in violin. It should be a  
 12 night for mom to be proud of and to enjoy the  
 13 music. I hate to miss it. I said to my son  
 14 mommy is really, really sorry to miss your  
 15 concert, but mommy have to stand up to protect  
 16 our communities, to protect you and your friends.

17 My son totally supports me. Please help a  
 18 mom do something for our next generations. Stand  
 19 up with me to oppose PSE's Energize Eastside  
 20 plan. Thank you.

21 MS. MERRILL: Thank you. My name is  
 22 Lisa Merrill. I live at 4800 134th Place  
 23 Southeast in Bellevue. And I have been a proud  
 24 resident of this city for 25 years, small  
 25 business owner, community volunteer as well as a

1188-A-1

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1 mother of two teenagers. And your son who just  
 2 spoke, he made a big sacrifice, but he should be  
 3 proud to have a mom speak so eloquently. I am  
 4 not the most detailed reviewer of the EIS and I  
 5 thank the other volunteers here tonight who did  
 6 go into it. I will just kind of add my  
 7 perspective to what's been said in terms of why I  
 8 really beseech you to delay moving into Stage II,  
 9 to slow down and really at this point engage in  
 10 thoughtful, collaborative problem solving.

I189-A-1

11 This is a high stakes issue. Very  
 12 emotionally charged issue as we've heard. It  
 13 seems to me it is unnecessary as scoped by PSE.  
 14 I thank Don Marsh. I sat through Richard  
 15 Lauckhart's detailed presentation a few weeks  
 16 ago. I've talked with my husband John about this  
 17 for more hours than anyone could imagine, and I  
 18 feel finally compelled to share my own  
 19 perspective.

I189-A-2

20 I believe enough significant doubts have  
 21 been raised on the fundamental assumptions of  
 22 need that it needs to be looked at closely. I  
 23 also believe, and I don't think anyone would  
 24 disagree with me, that is it terribly unsightly  
 25 as predicted, especially Alternative I.

I189-A-3

I189-A-1 See response for Key Theme EIS-2.  
 I189-A-2 Comment noted.  
 I189-A-3 See response for Key Theme VR-4.

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1 It is ludicrous to me that we're standing  
 2 here thinking and frightening about putting 18  
 3 miles of industrial blight, 100-foot towers  
 4 through schools, through parks in the midst of a  
 5 city that prides itself on city in a park, that  
 6 is planning a huge new bike/pedestrian corridor  
 7 less than a half a mile away from these towers.

I189-A-3

8 That really stresses values and priorities  
 9 that I applaud with all of my being of how civic  
 10 amenities and living and collaboration in the  
 11 process. I just completed a course called  
 12 Bellevue Essentials that encouraged people like  
 13 me to share my voice and get involved in the  
 14 city.

I189-A-4

15 I believe in my heart, I don't have proof  
 16 that it's unsafe as projected. The stuff I've  
 17 read about electrically induced corrosion, the  
 18 existence of high voltage power lines above, it  
 19 just seems unnecessary, last resort,

I189-A-5

20 unnecessarily expensive. I now understand how  
 21 PSE makes their money, the incentives we've set  
 22 up as a country for utilities to invest in  
 23 infrastructure are opposed to what were at hand  
 24 here.

I189-A-6

25 I finally think it's uninnovative. I

I189-A-4 Comment noted.

I189-A-5 See responses for Key Theme OBJ-1 and Key Theme ECON-4.

I189-A-6 Comment noted.



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I189-A-6

1 applaud you to think about what this region can  
2 do for conservation, for alternative suggestions  
3 to produce a smart plan for energy to power us.  
4 We can do this like no other city. But I don't  
5 hear that positiveness amongst some elements and  
6 I think we have a chance to get it right by  
7 slowing down. Thank you.

I187-A-1

8 MR. YU: Good evening, madams, and  
9 everyone. My name is JD Yu. I live in 5401  
10 138th Avenue Southeast of Bellevue. I want to  
11 talk about the social and economic impact by the  
12 Energize Eastside project. But first I would  
13 like to share with you a story. Just right  
14 before the school meet winter break, my wife  
15 write me to arrange something for two kids in the  
16 break. So I determine a need that they should go  
17 to the Disney World in Orlando to have a good  
18 time. And booked flights which cost almost \$800  
19 per person plus hotel and rental car.

20 And that evening I want to surprise my  
21 ten-years-old boy and seven-years-old girl. Hey  
22 guys, I will energize you next week by taking you  
23 the Disney world. Disney World. And they look  
24 at me, I don't want to go. And the other said, I  
25 don't like the long flight. What? I spent the

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I187-A -1 See response for Key Theme ALT-1.

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1 whole day to set this up and you don't like it?  
2 Tell me what would you want to do in the  
3 break I asked them. And they said maybe we could  
4 just go to the Great Wolf Lodge, that would be  
5 fun. And then we end up having a wonderful time  
6 at the Great Wolf Lodge. I determine the wrong  
7 need for my kids, but I correct it, and we end up  
8 having happy ending.

9 Now, for this Energize Eastside project, PSE  
10 has determined there is a need to construct a new  
11 high voltage transmission line on the Eastside,  
12 which will cost \$300 million on residents. But  
13 according to the industrial experts, Lauckhart  
14 Schiffman load flow study, this is enough  
15 capacity margin to serve growth on the eastside  
16 for 20 to 40 years.

17 So it's so obvious to me what makes sense  
18 and what doesn't make sense. If I force my kids  
19 to go to Orlando they will not be happy. And  
20 it's not worth the money spent. So tonight I'm  
21 here to support the Alternative II proposed by  
22 CENSE and the EQL with the proven technologies.  
23 No new transmission line, no hidden agenda.  
24 Thank you.

25 MR. BLOOMFIELD: My name is James

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I187-A-1



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1 Bloomfield. I live at 14000 Southeast 14th  
 2 Court, Bellevue. Been there for 36 years. When  
 3 you boil all the arguments down here, it comes to  
 4 a technical issue as to do we need it; do we not  
 5 need it. The consultants being used by the  
 6 writer of the EIS who is depended on by the City  
 7 of Bellevue is dependent on a further  
 8 subcontractor, I think the name is Stantec, is  
 9 that the correct?

10 Stantec has not had an opportunity to come  
 11 forward and tell us is there value in the  
 12 Lauckhart Schiffman, or is there value in the PSE  
 13 analysis. I urge the EIS group that's writing  
 14 and overseeing this activity to bring Stantec  
 15 forward and present their analysis fairly on each  
 16 side, and let's get beyond the point where  
 17 Lauckhart Schiffman stands tall. PSE stands low.

18 I'm an electrical engineer and I believe in  
 19 putting all the arguments forward. I think this  
 20 issue is fundamental to the whole process. If  
 21 you don't need it, why spend the money? If you  
 22 need it, then let's do it in the most efficient  
 23 way. So let's see Stantec in front of this group  
 24 and let it be open, transparent, and understood.  
 25 Thank you.

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I184-A-1 See responses for Key Theme EIS-1 and Key Theme OBJ-3.

I184-A-1



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1 MS. RAJENDVA: My name is Sangeetha  
 2 Rajendva. I live in 86131 29th Court Southeast  
 3 New Castle, Washington. I'm here to focus on two  
 4 things. The first is safety and the second one  
 5 disrupting of the neighborhood. Recently we  
 6 heard about the explosion in a house in Port  
 7 Orchard that caused the house to become  
 8 completely reduced to rubble. We all saw it in  
 9 the news.

10 The explosion was so severe that it exerted  
 11 a seismic wave across Puget Sound. A propane  
 12 tank was suspected. Just a little propane tank.  
 13 Why I'm bringing this event here today is to  
 14 bring the attention to danger of bringing gas in  
 15 proximity to electricity which is what we're  
 16 doing here by increasing the electrical power  
 17 being transmitted.

18 It's a deadly combination. There is no  
 19 telling what kind of dangerous explosions are a  
 20 possibility. What is certain is that what causes  
 21 such an explosion if we were unfortunate enough  
 22 to experience it, it would be disastrous.

23 The second thing is disruption of  
 24 neighborhoods. They so easily say they will tear  
 25 down the houses, but for them it's a house. For

I191-A-1

I191-A-2

I191-A -1 See response for Key Theme PLS-2.  
 I191-A -2 See response for Key Theme LU-1.



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1 us it's a home where we have memories. We have  
 2 put in our sweat and blood to our house. And for  
 3 us to move on, we planned this house so that we  
 4 could move on to the next stage in our house, me  
 5 and my husband, and paying towards my daughter's  
 6 college tuition. Now we fear to lose the house.  
 7 We have to go back to the stage where we were  
 8 before. Find a new house, find a neighborhood.  
 9 And I'm sure we'll never find a neighborhood like  
 10 where we're living.

I191-A-2

11 Before making any decision, this has to be  
 12 thought properly, how much of an impact it will  
 13 do with such a big community. So please think  
 14 about it.

15 MR. KANER: Hi, Dr. Richard Kaner, I'm  
 16 a member of CENSE. I've lived on the eastside  
 17 for 52 years. I live currently at 6025 Hazelwood  
 18 Lane Southeast. In Chapter 1.3 of the DEIS, PSE  
 19 determines that quote, there is need to construct  
 20 a new 230 KV volt electrical transmission line,  
 21 unquote.

22 Despite their assertions, it is not a  
 23 foregone conclusion that this project is needed.  
 24 PSE states they ran thousands of scenarios. They  
 25 have had independent analysis that shows they

I90-E-1

I90-E -1 See response for Key Theme OBJ-3.



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1 used the correct variable, and they did.  
2 However, the data they used in those  
3 variable slots was not reviewed and is in fact  
4 incorrect. The Lauckhart Schiffman load flow  
5 study that you have provided to you tonight  
6 highlights multiple flaws. One, PSE submitted to  
7 the Western Electrical Coordinating Council,  
8 that's the WECC, a rate of growth and electrical  
9 demand of .5 percent per year.  
10 Yet in their justification for the project  
11 they used 2.4 percent per year. This is almost  
12 five times greater than what they submitted to  
13 federal agencies. Second, transformer capacity  
14 is limited by overheating. The amount of  
15 electricity a transformer can handle is  
16 significantly less in the summer than it is in  
17 the colder winter months.  
18 PSE for this winter emergency used summer  
19 normal load numbers which limit the electrical  
20 load to 700 megawatts. By contrast if the winter  
21 emergency loads are used, the peak load increases  
22 30 percent to 930 megawatts.  
23 Third, it should be noted that during this  
24 winter emergency PSE has none of its six local  
25 generation plants in service. The 1400 megawatts

I190-E-1

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1 of energy that generates is more than enough to  
2 cover any shortage.

3 Lastly, PSE had included sending 1500  
4 megawatts north to Canada --

5 MS. WAGONER: One minute.

6 MR. KANER: -- during this emergency  
7 scenario. This is an untenable assumption on  
8 many fronts. Most models use 500 megawatts and  
9 there's no federal mandate that requires this  
10 exaggerated amount during an N11 emergency.

11 But most absurd is the scenario sending this  
12 much energy north during an emergent situation  
13 would cause blackouts in the entire Puget Sound  
14 region. Not just the eastside. The WECC would  
15 never allow this to happen.

16 As Lauckhart Schiffman illustrates, when the  
17 proper data is plugged into the variable slots,  
18 there is no shortage until 2058. Energize  
19 Eastside is the wrong project and is aimed at the  
20 wrong issue. The only way it makes sense is if  
21 the primary goals are profit and the transmission  
22 of energy south to north, perhaps that gives  
23 better understanding to these documents.

24 The first is the memo dated 2/21/13 from the  
25 Columbia Grid to WECC.

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I190-E-1

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1 MS. WAGONER: If you can wrap up,  
2 please.

3 MR. KANER: -- okay. Stating the  
4 project purpose is, quote, to improve south to  
5 north transfer capability between Northwest and  
6 British Columbia. The second is PSE's 2013  
7 annual report to WECC where they reference the  
8 2011 report on transmission expansion to support  
9 winter south to north transfer. Suddenly the no  
10 build option seems to be the most sensible.

11 MR. MEDLEY: My name is Janis Medley.  
12 I live at 4609 Somerset Drive in Bellevue. My  
13 comments relate to the chapter on environmental  
14 health, section 8.9. It reads, quote, there is a  
15 risk of damage and subsequent explosion whenever  
16 construction or operations of maintenance occur  
17 near buried natural gas lines or the Olympic  
18 Pipeline.

19 And I think we all agree with that. It  
20 concludes by saying, quote, however, that risk is  
21 not considered an unavoidable significant impact  
22 because the probability of damage occurring is  
23 minimized by conformance with industry standards,  
24 regulatory requirements, and construction and  
25 operational procedures that address pipeline

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1 safety, unquote.

2 I think that's saying the likelihood of

3 anything really bad happening will be minimized

4 by conformance to all the rules and regulations

5 that are listed in Appendix M. So let's look at

6 how well OPL is conforming to regulations. OPL's

7 conformance to pipeline safety is monitored by

8 the Washington Utilities and Transportation and

9 Committee and the Federal Pipeline and Hazardous

10 material Safety Administration.

11 On numerous occasions OPL has been cited

12 for, and I quote again, failing to correct

13 identified deficiencies in its corrosion control

14 system within a reasonable period of time and to

15 take prompt action to address all anomalous

16 conditions, unquote.

17 I have several letters between the pipeline

18 and Hazardous Materials Safety Administration and

19 OPL, which I will submit. And just for the

20 record in 2008, PSE the self-described pipeline

21 expert was fined \$1.25 million for fraudulent gas

22 pipeline inspection records. OPL's conformance

23 to responding to spills is regulated by

24 Washington Department of Ecology.

25 MS. WAGONER: You have one minute.

198-C-1

198-C-1 See response for Key Theme PLS-5.

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1 MR. MEDLEY: Okay. The best spill  
2 response takes a minimum of 15 minutes. That's a  
3 long time when flaming jet fuel is approaching  
4 your home and family. OPL knows a little about  
5 this. In 2004 an employee at OPL pumping and  
6 control station in Renton heard an explosion,  
7 looked out his office window and saw flames that  
8 were 20-feet high shooting into the air.

9 This explosion was caused by a leak in a  
10 test line connected to the pipeline. How safe  
11 should we feel if OPL can't prevent an explosion  
12 at its own headquarters?

13 The construction and operations impact on  
14 environmental health were rated as negligible or  
15 minor. Of course that might be true in a perfect  
16 world where OPL and PSE conformed to all the  
17 regulatory requirements.

18 But in the real world, ignoring their  
19 history of non-compliance is irresponsible and  
20 dangerously simplistic. Section 8.9 as written  
21 is unacceptable.

22 MR. GRUNKEMEYER: Hello, my name is  
23 Brian Grunkemeyer. I live at 16527 Northeast  
24 46th Street in Redmond. I've also been involved  
25 with Puget Sound Energy's integrated resource

198-C-1

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1 plan for the last seven years. There's something  
2 very, very simple that's confusing me about the  
3 need for this project.

4 The integrated resource plan shows that the  
5 winter peak load is not going to grow for the  
6 next ten years. It's flat. And yet PSE's  
7 assumption about building this transmission line  
8 simply shows it has 2.5 percent growth in load  
9 every year. That is completely inconsistent.  
10 That right there gives you some, just a small dip  
11 of your toes into the mess here.

I181-A-1

12 The existing study on the transmission load  
13 flow study by Lauckhart and company was very,  
14 very compelling. This project should not be  
15 built. I understand that for you this is all  
16 about reviewing the EIS. So what you need to do  
17 is you need to go slower on approving this.

18 Additionally, make absolutely sure that any  
19 require -- that all the right requirements are in  
20 place to ensure that if we do build this, then  
21 there is at least a 50-foot separation between  
22 the transmission lines and the pipeline.

I181-A-2

23 We have -- we understand the risks of  
24 potential explosions, but certainly corrosion and  
25 possibly in emergencies arcing that could damage

I181-A -1 See responses for Key Themes OBJ-2 and OBJ-3.

I181-A -2 See response for Key Theme PLS-3.



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I181-A-2

1 the pipeline. We shouldn't build this project,  
 2 but in terms how you guys should act tonight is  
 3 by putting in extremely high requirements in the  
 4 EIS on these issues. Thank you very much.

5 MR. DONG: Good evening. My name is Hu  
 6 Dong. I live in 13106 Southeast 47th Street in  
 7 Bellevue. Thank you very much for this  
 8 opportunity to allow me to comment on this  
 9 Energize Eastside project. The proposal  
 10 Alternative I is based on a very flawed  
 11 assumptions.

I183-A-1

12 PSE assumes two transformers fail, six local  
 13 power plants off the grid, a significant high  
 14 amount of power, 1500 megawatts delivered to  
 15 Canada, and record high amount of power  
 16 consumption, that all happen -- that would all  
 17 happen simultaneously. The analogy, this  
 18 assumption is as if two major freeways was shut  
 19 down, traffic signals on the local street were  
 20 blacked out, and every one wants to get on the  
 21 road at the same time.

22 This is the worst of the worst scenario that  
 23 has never happened before and will likely will  
 24 not happen in our lifetime. Even with PSE  
 25 acknowledge its chance is extremely rare. In

I183-A -1 See response for Key Theme OBJ-3.



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1 addition, PSE also used annual gross rate  
2 2.4 percent as the rate of future demand.

3 The comparison WECC baseline shows only 0.5  
4 percent annual growth rate for the whole  
5 eastside. According to an independent study by  
6 Rich Lauckhart, Energize Eastside is actually not  
7 needed to provide reliable power for many years  
8 to come. Energize Eastside is a project that is  
9 not necessarily reliable, definitely more harmful  
10 to eastside and the environment.

11 Very expensive with little benefits to the  
12 local --

13 MS. WAGONER: One minute.

14 MR. DONG: -- without justification for  
15 all the assumptions, without the subtle analysis  
16 on the cost benefits to the local rate payers.

17 Without a complete exploration on the latest  
18 technology that make the amount of response and  
19 the electrical efficiency, my wife, my father, my  
20 mother, my son, my whole family can only support  
21 no action for the short term and the modified  
22 Alternative II, the integrated resource approach  
23 for the long term. Thank you very much for your  
24 attention.

25 MS. KELLER: Hello, my name is Jan

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I183-A-2 See response for Key Theme EIS-3.  
I183-A-3 Comment noted.

I183-A-1

I183-A-2

I183-A-3



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1 Keller. I live at 115 146th Avenue Southeast in  
2 Lake Hills. And thank you very much for the  
3 opportunity to testify. First, I want to fully  
4 endorse the comments of CENSE president Don  
5 Marsh. Next, it's abundantly clear that in these  
6 times whenever we're considering building energy  
7 infrastructure, we must consider climate impacts.  
8 We owe it to ourselves, to the young people of  
9 today, and to future generations. Climate  
10 impacts are real.

11 We're already experiencing like last -- the  
12 serious summer drought last summer here in  
13 western Washington. Very different from what we  
14 used to see in past years. Climate impacts also  
15 extend to the sound and the ocean, oyster beds,  
16 the food webs that support our salmon and Orcas.  
17 With too much carbon dioxide, all of this and  
18 much is at risk.

19 When considering building energy  
20 infrastructure, we must take climate impacts  
21 seriously. So what does this mean for the DEIS?  
22 The DEIS should look very closely at whether this  
23 projection is aimed at the things we need most  
24 now.

25 We really need energy efficiency, a smart

I186-A -1 See response for Key Theme GHG-3.

I186-A -2 Comment noted.

I186-A-1

I186-A-2

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I186-A-2

1 grid, roof top solar, small scale wind turbines,  
 2 and the fantastic batteries that even now are  
 3 becoming more useful and affordable. Alternative  
 4 1A is clearly backwards in this respect. It's  
 5 time to stop investing in the old kinds of  
 6 infrastructure such as extended high voltage  
 7 lines and instead turn to the new. Alternative  
 8 II is far better in this respect.

I186-A-3

9 Right now we need a huge number of living  
 10 trees. James Hansen, the climate scientist, has  
 11 emphasized that what's necessary now is not just  
 12 a transformation of our energy infrastructure, we  
 13 also need to take care of the forests we have and  
 14 wetlands and farm land which can also absorb CO2.  
 15 Expand them quickly planting trees by the  
 16 billions. Alternative 1A as described in  
 17 6.6.3.1.1 would likely result in serious loss of  
 18 canopy cover, that is trees.

I186-A-4

19 The draft EIS describes a loss of a minimum  
 20 of 43 acres of trees possibly up to a loss of 131  
 21 acres of trees, which is massive inside of a  
 22 place like where we live. And that's a huge  
 23 number of established trees and important  
 24 wildlife corridors and near our parks.

I186-A-5

25 Cutting these trees means going the wrong

- I186-A-3 See response for Key Theme ALT-1.
- I186-A-4 See response for Key Theme GHG-2.
- I186-A-5 See responses for Key Themes P&A-1 and P&A-2.



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I186-A-6

1 direction completely. We might think cut a tree,  
2 plant a tree, it doesn't matter. But a large  
3 healthy tree makes a layer of wood all over that  
4 big trunk and big branches every year and  
5 captures much more CO2. Smaller trees do not  
6 compare. Cutting these trees is backwards idea.

7 So I urge that we take seriously the reality  
8 of the situation we're in today in relation to  
9 greenhouse gasses and climate. That means  
10 emphasizing Alternative II or similar approaches  
11 and proceeding in a way that focuses the majority  
12 of attention on that kind of alternative.

I186-A-7

13 That approach is very different from  
14 spending large amounts of money studying  
15 Alternative I. Our goal should be to secure a  
16 better energy future for our community and for  
17 our children. Thank you.

18 MR. VLACHOPOULOU: Hi, my name is Maria  
19 Vlachopoulou, and I live in Bellevue, 14708  
20 Southeast 15th Place. Thank you for giving us  
21 the opportunity to express our concerns about the  
22 Energize Eastside project. A quick summary about  
23 my background. I'm an electrical and computer  
24 engineer who worked at the Pacific Northwest  
25 National Lab here in Washington State.

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I186-A -6 See response for Key Theme GHG-2.

I186-A -7 See response for Key Theme ALT-2.



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1 While at the lab I worked as an energy  
 2 researcher on various projects including energy  
 3 forecasting. My team worked with various  
 4 utilities like BPA in Washington State, Pacific  
 5 Gas and Electric in northern California and  
 6 central California, et cetera. I moved to  
 7 Bellevue two years ago and PSE's Energize  
 8 Eastside project immediately caught my attention.

9 I have followed PSE's, Quanta's, U.S.C's,  
 10 Stantec's and CENSE'S postings and comments on  
 11 the project. I have real concerns about the  
 12 methodology PSE has followed to justify the  
 13 necessity of this project, an at least  
 14 \$250 million project that we the citizens will  
 15 have to pay for.

16 To start I would like to point out that  
 17 PSE's simulation is for extreme weather condition  
 18 scenario over a very cold winter day, 23  
 19 Fahrenheit, and peak electricity load conditions.  
 20 The scenario projects for years 2017 and 2018  
 21 where it is expected for utilities to simulate  
 22 extreme weather scenarios, PSE simultaneously  
 23 simulates pushing 1500 megawatts of energy to  
 24 Canada.

25 Usually under such conditions, utility

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I100-C-1 See response for Key Theme OBJ-3.

I100-C-1



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1 operators significantly reduce additional energy  
2 outflows to secondary areas. PSE has not done  
3 that on their simulation. Why do we even  
4 simulate 1500 megawatts flow to Canada in the  
5 first place?

6 Additional, PSE simulated six global  
7 generation plants from out of service. I don't  
8 see and how and why those generators would not be  
9 functional. Even more concerning, it has been  
10 pointed out that PSE runs simulation using summer  
11 normal conditions for the transformers, but would  
12 drastically change the results of the simulation  
13 and it would just be flat out wrong.

14 I ask PSE to give us access to the input  
15 data they used to run their simulation. The  
16 Federal Energy Regulatory Commission has already  
17 determined we have a legitimate need to access  
18 the data PSE used to set up the simulation since  
19 we pose no security threat to them or to the  
20 community.

21 Finally, why is PSE using 2.4 percent energy  
22 demand growth for the eastside? They could use  
23 their own estimate of 02.5 percent energy demand  
24 growth for their entire eight county area. The  
25 power is interconnected so large energy demands

I100-C-1

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I100-C-1

1 with one side of the grid usually do get  
2 compensated by other parts of the grid. We do  
3 not need this project.

4 MR. ZIMMERMAN: Hi, I'm Barry  
5 Zimmerman. I live at 5007 Somerset Drive  
6 Southeast in Bellevue. I've been a resident and  
7 homeowner in Bellevue since 1977 where I raised  
8 my family and developed my business. And I  
9 greatly appreciated the qualitative of life  
10 brought to our citizens by a caring, capable, and  
11 effective City Council and Land Use Commission.

12 It's, therefore, disturbing to see that such  
13 a destructive regional international transmission  
14 proposal to build 14-story towers through nine  
15 miles of our city in a park has even made it this  
16 far.

I180-A-1

17 But give than it has, I got to jump on the  
18 theme that's been very prevalent in tonight's  
19 speakers in making one key point. PSE has not  
20 credibly or adequately defined this expensive and  
21 destructive Alternative 1A that we're being asked  
22 to review as a team, city and citizens alike to  
23 review alternatives.

I180-A-2

24 There's a distinct lack of data and you  
25 heard about this throughout the evening for both

I180-A-1 Comment noted.

I180-A-2 See responses for Key Themes OBJ-2 and OBJ-3.

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1 cost between the alternatives and growth  
2 projections. There are four different values  
3 presented in four different written documentation  
4 submitted by PSE to different agencies over the  
5 last 18 months.

6 And I'm here to say that we are -- one  
7 solution that's on the table that's never really  
8 been addressed properly is we're not looking at  
9 any empirical data. The city has gone through in  
10 the last 25 years a major growth phase. And yet,  
11 PSE refuses to provide the load data growth curve  
12 that we could use to say, so how did it grow the  
13 last 25 years? And then we can see, is this a  
14 hockey stick, an artificial hockey stick, this  
15 2.4 percent number, or is it not?

16 Carol Helland was quoted in today's Seattle  
17 Times saying, "As the area has grown, load demand  
18 for electricity has also grown." Carol, I  
19 respectively ask, how do you know? Where is the  
20 data? Let me do my best Tom Cruise. "Show me  
21 the data".

22 MS. WAGONER: One minute.

23 MR. ZIMMERMAN: PSE continues to cower  
24 behind the CEII requirements. And we've had  
25 several people apply for them. And we're asking

I180-A-2

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1 that you do something here to get this off the  
2 dime so that we can get the data we need to work  
3 together as a team to properly evaluate the need  
4 for the project, to define the project as either  
5 a local need for Energize Eastside or what it  
6 clearly is, a regional international need to send  
7 power to Canada.

8 Nobody can value the alternatives  
9 effectively without the historical load growth  
10 data and load flow modeling data that PSE  
11 actually used. They're just trying to dismiss  
12 the Lauckhart study now, but they're hiding  
13 something.

14 MS. WAGONER: If you could wrap up your  
15 comments, please. You're out of time.

16 MR. ZIMMERMAN: Okay. So until this  
17 data is available, the lead agency cannot  
18 accomplish the SEPA process. You can't do your  
19 job. You can't finish this job. So we're asking  
20 like everybody else has been asking, you delay  
21 this movement to Phase II and take New Castle's  
22 lead in applying a moratorium until we can answer  
23 these questions.

24 MS. MEYER: Thank you. Good evening,  
25 your patience in staying here all night to listen

I180-A-2

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1 to all of our concerned citizens. Citizens that  
2 have had outstanding remarks that I think are  
3 very, very important for you to take into  
4 consideration. I come to you to talk about two  
5 areas that I have somewhat heard about and yet  
6 not.

7 And one has to do with something mentioned  
8 in the DEIS regarding energy alternatives. The  
9 other has to do with the environmental  
10 considerations and the detriment to our wildlife.

11 For the energy alternative considerations,  
12 it was mentioned that the alternatives were going  
13 to be considered by PSE, but it seems that in the  
14 DEIS, they almost dismiss other alternatives in a  
15 way such as the wind power was mentioned in these  
16 pages in Section 2 that it couldn't supply  
17 enough. Okay.

18 We know wind power won't supply everything,  
19 but it has been shown by several states including  
20 in the United States and in other countries.  
21 Iowa is running at 20 percent wind power right  
22 now. Other countries like Denmark are running,  
23 getting up to almost 50 percent. They have made  
24 a statement that they will absolutely be at  
25 50 percent wind penetration in 2025.

I165-B-1

I165-B-1 See response for Key Theme EIS-3.

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1 We, in 2007 George W. Bush, U.S. Department  
2 of Energy came out with a plan called 20 percent  
3 wind energy by 2030. He set that into place  
4 because he knew that we could establish that in  
5 the next 20 years.

6 We have a company right here in this area  
7 called Siemens. They're located in the Puget  
8 Sound area. They're a German company.

9 MS. WAGONER: One minute.

10 MS. MEYER: And they have established  
11 really good systems for wind power. Let's look  
12 at some of these alternatives before saying we  
13 must only have these high power to supply all of  
14 are our energy.

15 The second point that I want to make real  
16 quick is that we haven't even studied, there is  
17 nothing in the report about the effects up high  
18 of our other wild life. As an Audubon board  
19 member, I don't represent, but I speak for the  
20 birds and the flying wildlife up there that can  
21 be affected by high voltage, running into poles,  
22 situations that can actually come back to us as  
23 human beings in affecting our property.

24 MS. WAGONER: If you can wrap up.

25 MS. MEYER: So I thank you and please

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I165-B -2 See response for Key Theme P&A-4.

I165-B-1

I165-B-2

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1 consider. My neighbors have said to me there's  
2 nothing we can do. PSE will get what they want.  
3 Please listen to us tonight and prove them  
4 differently.

5 MR. WAGONER: My name is Steve Wagoner.  
6 I live at 13440 Northeast 45th Street in  
7 Bellevue. I think I've heard that the city wants  
8 this process to be transparent. Unfortunately  
9 there is nothing transparent about this EIS  
10 document. Document is 716 pages long. Barely  
11 manageable as a PDF in Acrobat and ridiculous as  
12 a paper copy.

13 I am primarily interested in or was  
14 primarily interested in the summary and  
15 conclusions of the document. To get to them I  
16 flipped through four pages of cover page, eight  
17 pages of fact sheet and came to the table of  
18 contents.

19 The table of contents is 22 pages long, but  
20 since the document is not globally page numbered,  
21 it can't be used to find anything. I'd expect a  
22 PDF like this would have built in links, but it  
23 does not and there's no index.

24 I had to flip through 22 more pages of  
25 acronyms and glossary before I came upon Chapter

I192-A -1 See response for Key Theme EIS-3.

I192-A-1

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1 one Introduction and Summary. Chapter one is  
2 57-pages long. So that at the point I decided to  
3 search for a conclusion first. The only match  
4 pertinent to an overall conclusion was this from  
5 Page 116, Item 6, quote, PSE was provided and  
6 reviewed sections of Chapter one and Chapter two  
7 that did not contain analysis or conclusions of  
8 the analysis, unquote.

9 So this EIS has no conclusions. Next I  
10 wanted a summary. The summary of impact starts  
11 at the bottom of Page 18 of Chapter one and  
12 continues for 39 pages. The EIS is divided into  
13 14 findings chapters, each of these is treated  
14 separately in the 39 summary pages.

15 In the summary pages each findings area is  
16 given two pretty pictures, a listing of  
17 environments affected and verbiage about the  
18 impact of each project alternative on these  
19 environments.

20 Then tables are presented comparing  
21 alternatives impact during construction and  
22 thereafter. You saw these tables in the workshop  
23 prior. I don't want to dwell on these summary  
24 pages because I'm not fond of them.

25 For instance, they each have a section

I192-A-1

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1 entitled Summary of Impacts to all Alternatives,  
2 even though by definition a no action alternative  
3 does not have impacts. In fact, strangely the no  
4 action alternative impact is sometimes graded as  
5 minor or moderate to significant when compared to  
6 other alternatives in various categories.

7 Worse, the impact grading is often  
8 illogical, counterintuitive, contradictory, or  
9 ambiguous when compared to the discussions in the  
10 main text. For instance, why would Alternative  
11 II's energy efficiency component impact be graded  
12 as moderate to significant? Why would  
13 Alternative 1A's construction impact on land use  
14 and housing be negligible? You have looked at  
15 these summary grading tables yourself and can  
16 perhaps make more sense of them than I can.

17 I judge them not useful for decision making.  
18 Chapter one concludes with a two-page section.  
19 What are the areas of significant controversy?

20 MS. WAGONER: If you can wrap up,  
21 please.

22 MR. WAGONER: This is most instructive.  
23 We learned that the EIS has not been written to  
24 justify need. We also learned that concerns  
25 about visual impacts and potential for conflicts

I192-A -2 See response for Key Theme OBJ-2.

I192-A-1

I192-A-2

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1 between electrical and flammable liquid  
 2 pipelines, fear of these and other impacts led to  
 3 concerns in the community. Unfortunately these  
 4 areas of controversy are extremely difficult to  
 5 find in the summary information or in the  
 6 document's body.

I192-A-2

7 So the draft document does not address need.  
 8 It never mentions cost. And it misses the  
 9 opportunity to directly address the primary  
 10 project controversies despite a clear awareness  
 11 of them. The draft EIS is a monumental waste of  
 12 time and money. The logical conclusion is to  
 13 favor the no action alternative.

I192-A-3

I192-A-4

14 The most insightful paragraph in the EIS is  
 15 at the last page of Chapter two, and I won't read  
 16 it because I'm over time, but delaying this  
 17 project is the best thing we can do.

I192-A-5

18 MS. ELWORTH: My name is Lori Elworth,  
 19 I live at 8605 129th Court Southeast, New Castle,  
 20 Washington. I want to thank you for this  
 21 opportunity to speak. And I want to thank Steve  
 22 Wagoner for his explanation of the DEIS. I know  
 23 he's read quite a few. This is the first one  
 24 I've ever read, 716 pages, I'm not sure. But  
 25 I'll go into my comments.

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I192-A-3 See response for Key Theme ECON-4.  
 I192-A-4 See response for Key Theme EIS-1.  
 I192-A-5 Comment noted.

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1 I am bothered by the DEIS claims that the  
 2 need for the project has already been determined.  
 3 How have the City Councils established that this  
 4 project is necessary? Have they done an  
 5 independent load flow study to confirm the  
 6 voracity of PSE's claims?

179-F-1

7 CENSE performed their own load flow study  
 8 despite PSE's refusal to share their data  
 9 regarding the project. They found that the  
 10 assumptions put forth by PSE are at best faulty  
 11 and possibly even fraudulent. If PSE fails to  
 12 provide new information to explain themselves or  
 13 if an independent study done by the cities does  
 14 not corroborate with PSE's claims that this  
 15 project must be paused immediately.

179-F-2

16 PSE's preferred route, Alternative I has  
 17 significant impact for my neighborhood, Olympus  
 18 in New Castle. I'm grateful to the city of New  
 19 Castle, issuing a moratorium two weeks ago on  
 20 permit applications for new transmission lines in  
 21 our city, and to give New Castle Planning  
 22 Commission time to review its utility posed.

23 This demonstrates that the New Castle City  
 24 Council is listening to the people. I live in  
 25 one of the 51 homes long the 100-foot corridor in

179-F -1 See response for Key Theme OBJ-2.

179-F -2 See responses for Key Themes LU-2 and LU-5.

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1 Olympus next to the existing high pressure jet  
 2 fuel pipeline. PSE's preferred plan would be to  
 3 install the 230 kilovolt lines on 85- to 100-foot  
 4 metal poles essentially lightening rods along the  
 5 aging pipeline. I'm bothered by the DEIS Chapter  
 6 10.7.1.

7 MS. WAGONER: One minute.

8 MS. ELWORTH: Alternative I, Option A  
 9 will have significant adverse land use effects  
 10 and housing impacts. Chapter 10.73.1 Alternative  
 11 I, it will have minor to significant depending  
 12 the location. Chapter 10.7.3.1.2 Alternative I,  
 13 Option A using an existing corridor may require  
 14 widening to accommodate the new utility. Up to  
 15 50 feet of additional clear zone would be needed  
 16 through the corridor.

17 This would require removal of some  
 18 structures. Those are houses. High consequent  
 19 land use if located in the vicinity of a high  
 20 hazardous liquid pipeline would be present --

21 MS. WAGONER: If you could wrap up your  
22 comments.

23 MS. ELWORTH: How will this process be  
 24 mitigated? When I lose my home, when my  
 25 neighbors lose their home, we will be leaving

179-F-2

179-F-3

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179-F -3 See response for Key Theme LU-1.

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1 behind our neighborhood. We have been active  
 2 engaged neighbors in a community much like that  
 3 of a family. We have invested time with our  
 4 neighbors, community, our family. How is this  
 5 addressed in the DEIS? This is what some of us  
 6 will face.

179-F-3

7 We will be displaced and no longer have our  
 8 homes. Depression; impacts related to  
 9 relocation, trying to find a home where housing  
 10 is already limited. How do we find a place where  
 11 we can have the community and support that has  
 12 taken us 28 years create? How will we be  
 13 compensated for this loss? Shouldn't this be  
 14 addressed in the DEIS? Thank you for your time.

15 MS. BROWN: My name is Jamie Brown. I  
 16 live at 5007 Westlake Sammamish Parkway Northeast  
 17 in Redmond, Washington. I appreciate the  
 18 opportunity to speak on behalf of this plan.  
 19 I've lived on the eastside my whole life. It's a  
 20 beautiful area, one that I might not be able to  
 21 afford in the future.

1185-A-1

22 Somerset while it's not my neighborhood, I  
 23 have been at homes of friends there. It's an  
 24 absolutely breathtaking view like many of our  
 25 Puget Sound views. I don't see how anyone could

1185-A -1 See response for Key Theme VR-4.



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1 replicated it. But I can certainly say I would  
2 feel that this would help destroy it.

I185-A-1

3 I don't feel like I typically have a say if  
4 the state, city, or even my neighbor wants to cut  
5 down a tree, be it for new construction, to aid  
6 in keeping their roof clean, or opening up a  
7 view.

I185-A-2

8 To me the trees are a large part of the  
9 beautiful view. I don't know about you  
10 personally, but I like to breathe. Those mature  
11 trees PSE wants to cut down hold on to a lot  
12 carbon we've created. Furthermore, I'm deeply  
13 saddened that such large companies continue to  
14 have such a firm grip controlling consumers.

I185-A-3

15 Large companies similar to oil companies  
16 continue to steer the ship while we all sit back  
17 and take it. Often feeling like we don't have a  
18 choice because they provide something we need.

19 While I appreciate that PSE provides  
20 something I do need and have come to rely on in  
21 my life, they've also made money. More money  
22 every day than I could ever dream of even seeing,  
23 money from me and everyone else consuming their  
24 goods.

25 That being said, we live in a time of

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I185-A-2 Comment noted.

I185-A-3 See response for Key Theme ECON-4.

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I185-A-3 1 enormous excess and we're often very wasteful.  
 2 Now, while I may not be as educated on this  
 I185-A-4 3 subject as some of our other speakers tonight, my  
 4 hope would be that rather than building enormous  
 I185-A-5 5 and dangerous eyesores that endanger the  
 6 beautiful landscape that we've been blessed to  
 7 have here on top of the health and well-being and  
 I185-A-6 8 the homes of our neighbors, that PSE would  
 9 encourage some kind of solar power package with  
 I185-A-7 10 discounts to install and then could benefit from  
 11 our excess in solar power and sell it to whoever  
 I185-A-8 12 they want.  
 13 If it's really about generating more power  
 I185-A-6 14 for somewhere else, then please go ruin their  
 15 landscape instead. I rather enjoy mine.  
 16 MS. WAGONER: One minute.  
 I185-A-7 17 MS. BROWN: And no matter how many  
 18 studies are done, I don't feel like one can  
 I185-A-7 19 really even begin to imagine the environmental  
 20 impact, which would begin with cutting down the  
 I185-A-8 21 trees that are home to countless birds and other  
 22 critters while helping to combat our CO2 issues.  
 23 It doesn't stop there.  
 I185-A-8 24 Personally I don't feel that living under or  
 25 close to a power line is very safe, and certainly

I185-A-4 See response for Key Theme VR-5.  
 I185-A-5 See response for Key Theme EIS-3.  
 I185-A-6 See response for Key Theme VR-5.  
 I185-A-7 See responses for Key Theme P&A-2 and Key Theme GHG-2.  
 I185-A-8 See response for Key Theme PLS-3.



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I185-A-8

1 not in addition to a pipeline. You cannot deny

I185-A-9

2 the loss of a home's value in such areas.

3 I urge you to reconsider this idea and focus  
4 on a bigger picture. We need to preserve what we  
5 can, not exploit it. Putting in these giant  
6 power lines isn't solving any problems. It's  
7 putting a Band-aid on it. And encouraging greed  
8 and waste.

I185-A-10

9 MR. O'DONNELL: Jamie, you did a great  
10 job. First thing I think I checked the wrong box  
11 so I'm representing Somerset. My name is Steve  
12 O'Donnell. I'm past president of the Somerset  
13 Community Association and current board member.  
14 I've lived in Somerset for 40 years. And I'm  
15 also the past president and cofounder along with  
16 Don Marsh of CENSE, and on the executive board.

17 First thing I want to do is thank everybody  
18 in orange and all of you that support CENSE that  
19 didn't necessarily wear orange, but I want to  
20 thank Don Miller and Lori Elworth for the caps.

21 Thank you very much. And an extra shout out  
22 to our four new neighbors, friends, board  
23 members, our new Chinese members and especially  
24 to Katherine Ma and JD Yu. So thank you very  
25 much. Appreciate having them on the board.

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I185-A-9 See response for Key Theme ECON-1.

I185-A-10 Comment noted.

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1 I want to extend and expand my remarks on  
 2 just two points. One on Lindy Bruce's comments  
 3 about the dual structure of the poles and the  
 4 lines. PSE has really dodged making a definitive  
 5 statement regarding whether or not it will remove  
 6 the existing lines that are on the 40- to 60-foot  
 7 wooden poles.

8 Richard Lauckhart formally of Puget Power  
 9 for well over 20 years is our consultant, and he  
 10 tells us that the existing lines must stay while  
 11 the new lines are built, and PSE has incentive in  
 12 fact to leave them afterward. This is  
 13 unacceptable. And this is a deficiency that I  
 14 find in PSE's analysis in the DEIS.

15 You have not studied the impacts of these  
 16 dual lines and a definitive statement needs to  
 17 come from PSE that the other lines would be  
 18 removed regardless if the J route through  
 19 Somerset was selected.

20 Secondly, I want to turn to the pipeline  
 21 issue and pipeline safety. There have been many  
 22 pipeline accidents. There was one in June of  
 23 2010 in Dallas, Texas. A huge fuel pipeline  
 24 explosion, and this was in Johnson County in  
 25 Dallas, Texas. I would urge the EIS consultants

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- O16-A -1 As noted in Chapter 2 of the Phase 1 Draft EIS (page 2-23), the existing 115 kV poles would be removed if a new 230 kV line was replacing them. See the Phase 2 Draft EIS and Final EIS for project-level description of alternatives.
- O16-A -2 See responses for Key Themes PLS-2 and PLS-3.

O16-A-1

O16-A-2



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1 to look at those pipeline accidents and give them  
2 great weight or consideration.

3 This fortunately was in a rural area, but  
4 still destroyed property. And it killed three  
5 workers. The heat from the inferno was so  
6 intense that no one could get close to the  
7 explosion a half a mile. Now, a half a mile in  
8 Bridle Trails or Somerset or Olympus, or any one  
9 of the other 40 neighborhoods along the 18 miles  
10 would incinerated these neighborhoods. Would  
11 incinerate the neighborhoods.

12 The loss of property, and more importantly  
13 the loss of life would be devastating. There are  
14 approximately 1500 homes in Bridle Trails and  
15 over 1500 in Somerset and hundreds in Olympus.  
16 The idea that a small leak could be caused by an  
17 arcing power line coming down in a storm or from  
18 construction and cause an explosion that could  
19 destroy hundreds and hundreds of homes and kill  
20 hundreds of people is absurd. Just ridiculous on  
21 its face.

22 I'm not going to have time to read this  
23 letter, but it will be submitted into the record  
24 from Kim West, who's an engineer of Britain  
25 Petroleum Olympic Pipeline.

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O16-A-2

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MS. WAGONER: One minute.

MR. O'DONNELL: That is the company that supplies the logistics for the Northwest, they're in Renton. Their motto is no accidents, no harm to people, no damage to the environment. Right here in her letter. But her letter addressed the concerns of the pipelines being collocated with these power lines.

PSE ignores this. PSE says we're experts in pipelines. These PSE people don't have a clue. They bought a pipeline company, gas company. So if -- depending on the route selection and collocation of these lines with the pipeline couldn't be a bigger mistake. And I know I'm going to run out of time.

So I endorse the City of New Castle and their moratorium. Thank you so much for everybody in New Castle and thank you for the opportunity.

MS. BACH: Good evening, my name is Kelly Bach. I live at 12519 Northeast 29th Street. I'm a second generation Bellevue Bridle Trails resident who loves this city and cherishes the character of the neighborhood that I live in.

My husband and I, although we both work in

O16-A-2

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1 Seattle, intentionally chose to live on the  
 2 eastside and raise our three children here.  
 3 Energize Eastside's Alternative 1A's clearcutting  
 4 of approximately 400 acres of vegetation is  
 5 devastating. These trees are not replaceable.  
 6 Visibly it will change the landscape of our city  
 7 not to mention the 85 to 100-foot poles that will  
 8 be replacing them.

9 Our already fragile ecosystem will also be  
 10 impacted. Animals will lose their homes, storm  
 11 water will no longer be absorbed by the earth,  
 12 and the air quality we decrease without the  
 13 natural purifier that trees offer. Bellevue  
 14 prides itself on the image of a city in a park.  
 15 By agreeing to this proposed plan by PSE, we are  
 16 compromising value and character of our city for  
 17 the financial gain of this company.

18 I believe each and every one of you are very  
 19 intelligent people. So I'm not going to spend a  
 20 lot of time on the fact that their proposed lines  
 21 will be on top of two major petroleum gas lines.  
 22 That's just a no brainer that this is really a  
 23 terrible idea.

24 It is obvious to me you cannot mitigate all  
 25 of the neighborhood concerns that are related to

199-B-1

199-B-2

199-B-3

199-B-4

199-B-5

199-B-6

199-B-7

- 199-B -1 See response for Key Theme VR-3.
- 199-B -2 See response for Key Theme P&A-1.
- 199-B -3 See response for Key Theme WTR-2.
- 199-B -4 See response for Key Theme GHG-1.
- 199-B -5 See response for Key Theme VR-4.
- 199-B -6 See response for Key Theme PLS-3.
- 199-B -7 Comment noted.



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1 the Alternative 1A. On previous occasions I have  
2 shared with you my background as a pediatric  
3 nurse. I have also shared with my concerns of  
4 the impact on the health of our citizens due to  
5 the increased EMF by the proposed 230 KV lines.

6 On multiple occasions I have read and heard  
7 the DEIS downplay this impact on citizen health.  
8 However, much as this disappoints me to read  
9 these unsubstantiated findings, it doesn't  
10 surprise me. These people have a vested  
11 financial interest in this project. I do not.  
12 For me a professional success is not determined  
13 by paycheck or closing of a deal. It's for  
14 caring for and curing those who seek medical  
15 care.

16 Here's the hard thing about cancer, cardiac  
17 conditions, seizures, and other health problems,  
18 although our scientists work hard, we don't have  
19 all the answers. The answers come after decades  
20 of work in identifying a common thread in the  
21 patients and sometimes this doesn't identify  
22 itself. It impacts subsequent generations.

23 What I ask of you is to not downplay the  
24 health impact of these lines. It is real. Take  
25 a quiet moment and look at yourself in the

199-B-8

199-B -8 See response for Key Theme EMF-1.

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1 mirror. Ask yourself this question: Is the  
2 financial gain of this deal worth the health and  
3 wellbeing of the citizens who make up this city?

4 If your parent, you spouse, your child is  
5 looking back at you in that mirror, is their  
6 health and wellbeing worth that risk? A few  
7 nights ago I was at work. I hugged a mom as she  
8 cried after learning her cancer diagnosis of her  
9 only child.

10 For a multitude of reasons I am so mad at  
11 the thought of PSE coming at Bellevue with such  
12 force on this issue. What is the value of a  
13 life? Paying off a hedge fund? These people  
14 aren't part of your community and show no regard  
15 to those who are in it.

16 What is the value of health? What is the  
17 value of you not being that mom or dad, that  
18 grandma or grandpa, that sibling or patient who I  
19 will take in my arms as you learn of that life  
20 altering medical diagnosis? Just ask you to  
21 think about it.

22 MS. WAGONER: We have completed all  
23 speakers who have signed up, so I believe that  
24 concludes our evening unless there is someone  
25 else. All right, you get the last three minutes.

199-B-8

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1 And if you could please state your name very  
2 clearly because we won't have it written.

3 MS. JOHNSTON: Pamela Johnston,  
4 J-O-H-N-S-T-O-N, 3741 122nd Avenue Northeast  
5 Bellevue, Washington. There's a few things that  
6 I think that for the community did not come up in  
7 this meeting so far. First, PSE waged a campaign  
8 that focused on public outreach on the location  
9 of lines rather than the need for the project.  
10 This confused people into thinking that once the  
11 route was chosen, that the project had no other  
12 options than the transmission lines.

I63-B-1

13 Second, splitting the EIS process into Phase  
14 I draft final and Phase II has further caused  
15 confusion. This is not in the spirit of  
16 transparency for the public to truly participate.

17 Third, PSE has waged a marketing campaign to  
18 say that this is needed to address reliability  
19 concerns on the eastside. That makes no sense  
20 given the reliability feedback to the city in the  
21 2015 reliability workshop final -- there's a PDF  
22 on it I have on here, 150805 PN.PDF. It's called  
23 the 2014 Bellevue Reliability Overview.

I63-B-2

24 It said that 95 distribution circuits  
25 serving Bellevue, 70 circuits -- 74 percent had

I63-B -1 See response for Key Theme EIS-2.  
I63-B -2 See response for Key Theme OBJ-2.





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1 performance better than the system wide average.  
2 24 percent circuits experienced no planned  
3 outages. And 25 percent circuits had --  
4 exceeding the system wide figures distribution  
5 system serving Bellevue in 2014.

6 Basically why in this document are they  
7 saying they're doing a fine job right now, and  
8 yet they need this other project if Bellevue's  
9 performance continues to be very good they said.  
10 It doesn't make sense.

11 Fourth, PSE proposed reliability project  
12 should be implemented before a system is as  
13 extensive as Energize Eastside. In the  
14 reliability studies, there's a whole list of  
15 number of reliability features that need to be  
16 filled. Why don't they do this before something  
17 as big and huge as Energize Eastside. Thank you.

18 MS. WAGONER: And with that I will turn  
19 the meeting back to Carol.

20 MS. HELLAND: Thank you everyone. Your  
21 comments are very much appreciated. We  
22 appreciate you hanging in there and staying  
23 tonight. Thank you so much and have a good  
24 evening.

25 (Meeting adjourned 8:57 p.m.)

163-B-2

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CENSE PETITION

COMMENT

RESPONSE

Heidi Bedwell, Energize Eastside EIS Program Manager,

892 people have signed a petition on Action Network telling you to Correct flaws in the Energize Eastside Draft EIS.

Here is the petition they signed:

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

O1-L-1 | PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

O1-L-2 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

O1-L-3 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

O1-L-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

O1-L-5 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

You can view each petition signer and the comments they left you below.

Thank you,

Don Marsh

I232-A-1 | **1. Limei Xie** (zip code: 98006)

I233-A-1 | **2. Susan Smith** (zip code: 98006)  
The safety of residents living near the natural gas pipelines should be of the utmost concern. Building

O1-L-1 | See response to Key Theme OBJ-3.

O1-L-2 | See response to Key Themes PLS-1 and PLS-3.

O1-L-3 | See response to Key Theme ALT-1.

O1-L-4 | See Topic ALT.

O1-L-5 | See response to Key Theme ECON-4.

I233-A -1 | See response for Key Theme PLS-3.



CENSE PETITION

COMMENT

RESPONSE

I233-A-1 | high voltage transmission lines on top of aging pipelines puts my family and my neighbors at risk. Please reconsider the necessity and safety of "Energize Eastside" proposal.

I234-A-1 | **3. Richard Morris** (zip code: 98005)  
Haste makes Waste. if you do not need it forget about it, until the possibility of a future time!!

I235-A-1 | **4. li\_qin xie** (zip code: 98006)  
negative impacts on environments; safety issues to our communities;

I236-A-1 | **5. Dr. Arkady Retik** (zip code: 98005)

I237-A-1 | **6. Aaron Peloquin** (zip code: 98056)

I238-A-1 | **7. Larry Holcomb** (zip code: 98006)  
NO BIG TOWERS! Old Technology, not necessary, too much money, RUINS the eastside - not an upgrade!

I239-A-1 | **8. Albert Paige** (zip code: 98005)  
I strongly oppose the current program to increase eastside energy. It favors the stock holders and would deface our properties and reduce their values.

I240-A-1 | **9. Aditi Jain** (zip code: 98034)

I241-A-1 | **10. Alice Prince** (zip code: 98033)  
Would be too close to our house and gas line. Worried about gas line damage and explosion as well as health hazard. We don't need all this extra energy.

I242-A-1 | **11. Jenny Choi** (zip code: 98006)

I118-B-1 | **12. Anne Watkins** (zip code: 98006)

I243-A-1 | **13. meifang zhou** (zip code: 98006)  
It is a disaster, too dangerous to control if happening accident

I244-A-1 | **14. Aileen Wu** (zip code: 98006)  
Please do not sacrifice the environment for us and our future generations so PSE can make big profit by selling power to Canada!

I172-C-1 | **15. Gary Albert** (zip code: 98006)  
The experts (USE, Stantec, etc.) who have reviewed the PSE Energize Eastside project did not complete an independent "load flow" analysis to determine the actual "need." They said the procedures PSE used were standard for the industry. That's garbage in garbage out without an independent load study. If you set up the criteria for the load flow to tilt heavily in favor of PSE, as PSE has done with energy directed to Canada and not utilizing peaking power, then there has never truly been an independent review. PSE said numerous times they would allow a citizen review of their

I234-A -1 | See response for Key Theme OBJ-1.

I235-A -1 | Comment noted.

I238-A -1 | Comment noted.

I239-A -1 | Comment noted.

I241-A -1 | See responses for Key Theme EMF-1 and Key Theme PLS-1.

I243-A -1 | Comment noted.

I244-A -1 | See response for Key Theme OBJ-1.

I172-C -1 | See responses for Key Theme EIS-1 and Key Theme OBJ-2.



CENSE PETITION

COMMENT

RESPONSE

- I172-C-1 | load flow study, i.e. someone from CENSE, if they could get the appropriate security clearances. When CENSE located a retired PSE manager willing to help answer this question and able to get the appropriate security clearances needed, PSE changed their position and said EE had already been independently verified by several other experts and CENSE therefore did not have a need to know. What are they afraid of, a little sunlight on their boondoggle to pad the bottom line with unnecessary infrastructure building while sticking unsightly power poles dangerously close to fuel petroleum lines. Time for a real review by picked by someone not influenced by the city or PSE.
- I245-A-1 | **16. Annie Everett** (zip code: 98927)  
I am definitely opposed to the new PSE power lines!
- I246-A-1 | **17. Alexis Smith** (zip code: 98034)  
Don't compromise our home because you want to move power to California!
- I34-C-1 | **18. Alice wang** (zip code: 98006)  
Please stop PSE from using "energize Eastside" as its excuse to expand their international business to push up revenue at the expense of forcing local residents to lose their property value, beautiful environment, school and street safety, neighborhood lift style. PSE will benefit financially while local residents will suffer the consequences and pay the high price for PSE's corporate gain!!! If PSE truly want to energize Eastside, not their corporate wallet, they should go with alternative 2!!!
- I247-A-1 | **19. Aileen Leo** (zip code: 98006)
- I248-A-1 | **20. Eng Teck Po** (zip code: 98006)
- I249-A-1 | **21. Anna Coy** (zip code: 98005)  
From everything I have seen or heard, we do not need to have this huge power line gouged through Bellevue!
- I93-C-1 | **22. Anthony Sutey** (zip code: 98056)  
Reject Alternative 1A
- I93-C-2 | Accept Alternative 2
- I250-A-1 | **23. Amy Lee** (zip code: 98008)
- I251-A-1 | **24. Amy Powell** (zip code: 98004)
- I252-A-1 | **25. Stuart Anderson** (zip code: 98056-9101)
- I253-A-1 | **26. Yan Zhen** (zip code: 98006)
- I254-A-1 | **27. Andrea Gilchrist** (zip code: 98056)  
Please seek other means of expanding the corridor for our safety and our neighborhood
- I255-A-1 | **28. Andrea Borgmann** (zip code: 98005)

- I245-A -1 | Comment noted.
- I246-A -1 | See response for Key Theme OBJ-1.
- I34-C -1 | See responses for Key Theme ALT-1 and Key Theme OBJ-1.
- I249-A -1 | Comment noted.
- I93-C -1 | Comment noted.
- I93-C -2 | Comment noted.
- I254-A -1 | See response for Key Theme LU-2.



CENSE PETITION

COMMENT

RESPONSE

- I255-A-1 | Despite PSE's alarmist statements about the imminent threat of blackouts starting in less than two years (2018!), PSE has not validated the need for this project. PSE's report "validating" the need assume significant transfer to Canada during peak load times (1,500 MW) and turning off local gas generation plants. These assumptions are not defensible or reasonable as fundamental assumptions in assessing local electrical needs.
- I255-A-1 | The EIS process must seriously assess the question of need in order to assess reasonable alternatives. The City's role is not simply to take at face value the utility's assertions.
- I255-A-1 | The proposed project will come at significant cost to ALL PSE ratepayers due to the WUTC's allowance of billing for capital projects for 40 years with a 10% rate of return. There are simply more cost effective, more appropriately scaled projects to meet the Eastside's electrical needs over the coming years.
- I256-A-1 | **29. Andy L.** (zip code: 98006)
- I257-A-1 | **30. Angela Byers** (zip code: 98006)
- I258-A-1 | **31. angela hsu** (zip code: 98006)  
Please extend the incentivized purchases of power from individual solar providers, thanks so much!
- I259-A-1 | **32. Anna Ceberio** (zip code: 98027)
- I260-A-1 | **33. Ann Brown da Cruz** (zip code: 98006)
- I261-A-1 | **34. Anne Kim** (zip code: 98006)
- I262-A-1 | **35. Annette Jung** (zip code: 98005)
- I263-A-1 | **36. Antoine Faisandier** (zip code: 98004)
- I264-A-1 | **37. Andrew Mechling** (zip code: 98059)
- I265-A-1 | **38. WEI TUNG** (zip code: 98006)  
GAS pipeline underneath the proposed route is a major safety issue during construction and future operation.
- I265-A-2 | Also need to consider underground line option, at least for the residential area.
- I266-A-1 | **39. April Tan** (zip code: 98006)
- I267-A-1 | **40. Allen Rauschendorfer** (zip code: 98056)  
PSE has not established a need to expand the existing grid. Generating and transferring power through my Olympus neighborhood so PSE can sell power to Canada is an unacceptable situation. The on going health risks, property devaluations, and making an already high risk proximity of a gas line to high voltage power lines situation even worse is not only unacceptable but unfathomable. PSE

- I258-A -1 | Comment noted.
- I265-A -1 | See response for Key Theme PLS-1.
- I265-A -2 | See response for Key Theme ALT-1.
- I267-A -1 | See response for Key Theme OBJ-1.



CENSE PETITION

COMMENT

RESPONSE

I267-A-1 | is taking profits over public safety and we cannot stand and watch them do it!

I9-B-1 | **41. Alice Evans (zip code: 98005)**  
I do not want this power line to go through as PSE plans. I am appalled at the different ways this project has been misrepresented to us, the citizens of the Eastside. One example, WHO lists exposure to EMF as a category 2B--a possible carcinogen. PSE sent a card out saying WHO's position is that EMF exposure posed no threat to humans.

I268-A-1 | **42. archana verma (zip code: 98006)**  
We believe that Energize Eastside is a misguided project driven only by a motivation for corporate profits. It will sacrifice the well being of families living close to the proposed power towers. Plus independent studies have shown that the claims made by PSE to the effect that Energize Eastside is needed for future customer demands are false and misleading. We strongly oppose Energize Eastside and we believe that PSE has not proven at all the need and validity for going ahead with this project. Please stop PSE.

I269-A-1 | **43. Lydia Aldredge (zip code: 98006)**

I270-A-1 | **44. arden hyatt (zip code: 98006)**  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: [Your Name]

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I9-B -1 See response for Key Theme EMF-1.

I268-A -1 See response for Key Theme OBJ-2.



CENSE PETITION

COMMENT

RESPONSE

- I271-A-1 | **45. Arian Balkan** (zip code: 98005)  
Please consider utilizing more green energy
- I223-B-1 | **46. Christina Aron-Sycz** (zip code: 98005)  
I agree with CENSE's research and positions!!
- I273-A-1 | **47. Arun Desai** (zip code: 98006)
- I274-A-1 | **48. Asha Desai** (zip code: 98006)
- I228-B-1 | **49. Ann Osterberg** (zip code: 980043611)
- I275-A-1 | **50. Astrid Zuppinger** (zip code: 98005)  
PSE is attempting to build an unnecessary project in one of the most educated areas in the world. This will harm the Puget Sound with huge transmission poles and wires and we will be targeted to have more health issues. If you love the beautiful Northwest, then allow the intelligent Engineers in this area to come up with a better solution then doing a quick wiring up that will effect the world around us.
- I276-A-1 | **51. Any Tappen** (zip code: 98008)
- I277-A-1 | **52. Bill Jacobs** (zip code: 98056)
- I196-B-1 | **53. Paul Gibbons** (zip code: 98006)  
This power line installation better not happen on the Eastside Recreational Trail either!!! It is NOT needed. We want you to provide more opportunities to SOLARIZE BELLEVUE!
- I278-A-1 | **54. Peiqi Shen** (zip code: 98006)  
Devastating impact to environment and people's health ! Put cables underground.
- I279-A-1 | **55. Elya Baches** (zip code: 98006)
- I280-A-1 | **56. Fran Kutoff** (zip code: 98006)  
Please take the time (there is NO hurry) and study the safest and most community-friendly and environmental-friendly solution to this issue. Bellevue is a beautiful city; let's not muck it up with huge power poles!
- I281-A-1 | **57. barbara gordon** (zip code: 98005)
- I282-A-1 | **58. Melissa McConnel** (zip code: 98006)
- I283-A-1 | **59. Beibei Chen** (zip code: 98006)
- I19-T-1 | **60. Barbara Braun** (zip code: 98006)  
The CAG and EIS process have not adequately established the need for this project. The public has

- I271-A -1 | Comment noted.
- I223-B -1 | Comment noted.
- I275-A -1 | Comment noted.
- I196-B -1 | See response for Key Theme REC-3.
- I278-A -1 | See responses for Key Themes ALT-1 and ALT-3.
- I280-A -1 | Comment noted.
- I19-T -1 | See responses for Key Theme EIS-1 and Key Theme OBJ-2.
- I19-T -2 | See response for Key Theme ALT-1.
- I19-T -3 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

I19-T-1 | voiced concern about this since the beginning of this process and they have spent their own money and time to retain independent industry experts to conduct independent studies that have brought a more realistic assessment of need and viability of the alternatives because the city agencies leading this process have not done so. The current process is so flawed and biased in favor of the VERY costly and VERY dangerous Alternative 1A PSE wants that it should be thrown out and restarted with a new and independently verified assessment of need that is aligned with state and regional authorizes using a new publically transparent Load Flow Study. Alternative 1 needs to be reassessed using more complete assessment of impact and cost, as well as adherence to contemporary safety requirements for collocating transmission lines and gas pipelines. Also a new, more contemporary Alternative 2 should be formulated in a new DEIS that is independently assessed by renewable/alternative energy industry experts and not by PSE. Last, Bellevue City Council and the other City Councils involved need to update their land use zoning and safety laws to reflect contemporary safety requirements for collocating transmission lines and gas pipelines prior to any permitting of a project with this level of risk to the public's safety. Further laws and oversight processes need to be put on place to insure PSE and BP Olympic Pipeline comply with this laws and requirements. Otherwise, Bellevue City Council Council and other City Councils would seem to be grossly negligent in their duty to project the public's safety.

I19-T-2

I19-T-3

I284-A-1 | **61. Rebecca Peck** (zip code: 98006)  
We don't need Energize Eastside. Please read the honest, unbiased Lauckhart-Schiffman load study.

I284-B-1 | **62. Rebecca Peck** (zip code: 98006)  
Let's conserve energy instead of building unsightly towers which would be hazardous if placed near the Olympic pipeline.

I285-A-1 | **63. Beth Billington** (zip code: 98004)

I286-A-1 | **64. Binchi Zhang** (zip code: 98006)

I287-A-1 | **65. R. Debbie Bier** (zip code: 98006-29224705 125th Ave SE)

I288-A-1 | **66. William Weston** (zip code: 98005-3154)  
Poles and lines as high as 15 story buildings should be avoided if humanly possible.

I289-A-1 | **67. Becky Lamonte** (zip code: 98006)  
Stop PSE

I290-A-1 | **68. Joane Filler-Varty** (zip code: 98006)

I291-A-1 | **69. Bruce Zimmerman** (zip code: 98056)  
Take a closer look at PSE's proposal especially in terms of the safety of placing 230kv lines so close to two aged petroleum pipelines.

I50-D-1 | **70. W. Robert Moore** (zip code: 98006)  
Demand forecast not credible, project does not analyze alternative sources of energy, and public safety is at risk.

I19-T -2 | See response for Key Theme ALT-1.

I19-T -3 | Comment noted.

I284-A -1 | See response for Key Theme OBJ-3.

I284-B -1 | Comment noted.

I288-A -1 | Comment noted.

I289-A -1 | Comment noted.

I291-A -1 | See responses for Topic PLS.

I50-D -1 | See response for Key Theme ALT-1.





CENSE PETITION

COMMENT

RESPONSE

I292-A-1 | **71. Barbara LaFayette** (zip code: 98005)  
Stop the greed

I293-A-1 | **72. Cindy Williams** (zip code: 98006)  
Consider this me signing this petition. I agree with Russell.

I294-A-1 | **73. Robert Sloan** (zip code: 98056)  
PSE has not been honest about the reasons they want to do this project. Please, please, don't let them blight our neighborhoods just so they will make more money.

I295-A-1 | **74. Robert Wiley** (zip code: 98006)  
This project is unnecessary and must not go forward.

I296-A-1 | **75. Robert Dugoni** (zip code: 98033)

I297-A-1 | **76. Barbara Currie-Brooks** (zip code: 98006)

I298-A-1 | **77. Robert Koshi** (zip code: 98056)

I299-A-1 | **78. Robert Marcus** (zip code: 98006)

I300-A-1 | **79. Diana Bofferding** (zip code: 98006)  
I believe that Energise Eastside has manipulated the numbers showing projected energy needs and has failed to take into account other energy options that would make changing our neighborhoods and city with dangerous high voltage wires unnecessary. I do not want to pay for others to profit from selling energy!

I301-A-1 | **80. Bonnie Kurata** (zip code: 98006)

I302-A-1 | **81. Bonnie Lau** (zip code: 98006)  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I303-A-1 | **82. Alannah McKeehan** (zip code: 98005)

I176-B-1 | **83. Michael Boyce** (zip code: 98006)  
Energize Eastside is DUMB:  
D-Dangerous  
U-Unnecessary  
M-Misguided  
B-Boondoggle

I292-A -1 | Comment noted.

I293-A -1 | Comment noted.

I294-A -1 | See response for Key Theme OBJ-1.

I295-A -1 | See response for Key Theme OBJ-1.

I300-A -1 | See responses for Key Themes OBJ-1 and OBJ-2.

I302-A -1 | Comment noted.

I176-B -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- I304-A-1 | **84. Bozhong Lin** (zip code: 98006)  
We need to reexamine project carefully to avoid unnecessary environment impact!
- I197-B-1 | **85. Bill Picatti** (zip code: 98006)
- I305-A-1 | **86. Brittany Plumb** (zip code: 98033)
- I306-A-1 | **87. Brett Fidler** (zip code: 98005)  
We do not need more towers and lines. Let's use a smarter grid and new alternative energy sources.
- I307-A-1 | **88. Brian Schmidt** (zip code: 98006)  
Please do not rely on the estimates provided by EES/PSE on this project. There is an obvious incentive to create outcomes which are in line with PSE's financial and business objectives, thus rendering the analysis non-objective.  
  
While I have not read the entire 700+ page report, I trust some of those who have and have questioned its findings.  
  
The solutions looks to be a 20th century solution, based on trying to get one last big chunk of power transmission revenue before a disruptive technology (battery, local transmission, micro-grid, etc) takes hold and seriously cripples PSE's transmission business.  
  
This is especially suspect because of the model's shading of facts relating to 'worst case' power sales outside the area.
- I307-A-2 | Please consider "no alternative"  
Thank you
- I308-A-1 | **89. Bridget Wakely** (zip code: 98034)  
Please reconsider putting high voltage electricity lines through our neighborhood. My husband is a Naturopathic Doctor and the health ramifications to those who live close to these are staggering. Please do the right thing for us all, not what is best for your companies pocket. Thank you
- I309-A-1 | **90. Brittany** (zip code: 98056)
- I310-A-1 | **91. Laura Brownlow** (zip code: 98006)  
As a long time resident of Bellevue in the Newport Hills neighborhood, I am opposed to PSE's Energize Eastside project because it does not fulfill the requirements of the Draft EIS to show residents that "we are getting the best possible plan for our energy future." There are too many unanswered questions remaining.
- I311-A-1 | **92. Michele Brown-Ruegg** (zip code: 98006)  
I do not support your proposal to build new high-voltage power lines across the eastside and through family neighborhoods
- I312-A-1 | **93. Bryant Fong** (zip code: 98006)

- I304-A -1 | See response for Key Theme EIS-1.
- I306-A -1 | Comment noted.
- I307-A -1 | See response for Key Theme OBJ-1.
- I307-A -2 | Comment noted.
- I308-A -1 | See response for Key Theme EMF-1.
- I310-A -1 | Comment noted.
- I311-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- I313-A-1 | **94. Brian Schafer** (zip code: 98006)
- I48-B-1 | **95. ellen kerr** (zip code: 98005)
- I314-A-1 | **96. Craig Kairis** (zip code: 98006)
- I315-A-1 | **97. Claude Colson** (zip code: 98006)
- I316-A-1 | **98. C.A. Mansfield** (zip code: 98006)
- I58-B-1 | **99. Thomas Campbell** (zip code: 98006)  
This PSE progression is not currently needed in the timeframe PSE predicts and alternatives are less intrusive in the future which will not require big towers but sharing of energy
- I317-A-1 | **100. Sheng XU** (zip code: 98006)
- I318-A-1 | **101. Hengyu Xu** (zip code: 98006)  
It will bring lots of negative impacts on environments and safety issues to our communities.
- I319-A-1 | **102. Carlos Ramos** (zip code: 98056)  
Stop PSE
- I320-A-1 | **103. Carol Eckersley** (zip code: 98006)
- I321-A-1 | **104. Carol Xiang** (zip code: 98006)  
Effect health of the Newport high school students.
- I322-A-1 | **105. Carol Almero** (zip code: 98008)  
Stop PSE from this scare tactic to capitalize on outdated technology.
- I323-A-1 | **106. Carol Janssen** (zip code: 98005)  
Please hold PSE accountable for making the right decisions for our city and environment! This is a BAD decision to move forward on their plans.
- I324-A-1 | **107. Cheryl Shannon** (zip code: 98033)  
It is time for you, our elected representatives, to protect our citizens and our environment and our health; it is time to create new methods and systems for our energy!We elected you to speak for us, not against us!
- I325-A-1 | **108. Catharine Simon** (zip code: 98006)  
This is a hugely unnecessary, unsafe, and ill-conceived project that threatens our environment, our community's safety, and the future well-being of Eastside residents, especially our children.
- I326-A-1 | **109. Carolyn Evered** (zip code: 98006)  
This project has NOT proven to be necessary!

- I58-B -1 | See response for Key Theme OBJ-1.
- I318-A -1 | Comment noted.
- I319-A -1 | Comment noted.
- I321-A -1 | See response for Key Theme EMF-3.
- I322-A -1 | Comment noted.
- I323-A -1 | Comment noted.
- I324-A -1 | See response for Key Theme EIS-2.
- I325-A -1 | See response for Key Theme EMF-3.
- I326-A -1 | See response for Key Theme OBJ-1.



CENSE PETITION

COMMENT

RESPONSE

I327-A-1 | **110. Cherie Carchano** (zip code: 98008)

I328-A-1 | **111. Claudia Mansfield** (zip code: 98006)  
No new transmission lines!

I329-A-1 | **112. Carin Chatterton** (zip code: 98056)  
Use the proper data for this study. New lines ARE NOT NEEDED!

I330-A-1 | **113. David Anderson** (zip code: 98056)

I331-A-1 | **114. Lauren Ulatoski-Root** (zip code: 98008)  
This plan has been appalling from the start.

I332-A-1 | **115. Tyler Armstrong** (zip code: 98007)

I333-A-1 | **116. Chris Helms** (zip code: 98006)  
I support CENSE in the need for transparency, accuracy and community inclusion in reconsidering the requirements of Energize Eastside.

I334-A-1 | **117. Hong chang** (zip code: 98006)  
Negative impacts on the environment; not safety to our community.

I335-A-1 | **118. Charles Bofferding** (zip code: 98006)

I336-A-1 | **119. Chen Zhao** (zip code: 98006)

I337-A-1 | **120. Mei Chen** (zip code: 98006)

I66-B-1 | **121. Lin Gong** (zip code: 98006)  
We do not need a new PSE transmission line.

I338-A-1 | **122. Richard Guttu** (zip code: 98006)  
We oppose the intrusion this would cause.

I339-A-1 | **123. Chris Breske** (zip code: 98006)

I340-A-1 | **124. Chris Burges** (zip code: 98005)  
EIS is a project of greed, not of necessity. Why would EIS tell the City Councils and the public a much higher percentage growth (7%) rather than .5% that it tells WECC? There are so many problems with the information they put out. Switching to LEDs had greatly decreased load at many homes and businesses. There is no mention of this, or of so many other factors in what energy is needed. Building these huge transmission lines won't create more electricity. It will just allow PSE to sell more electricity to Canada - which should not be a cost that PSE citizens will have to bear. Greed. PSE greed.

I328-A -1 | Comment noted.

I329-A -1 | See response for Key Theme OBJ-2.

I331-A -1 | Comment noted.

I333-A -1 | Comment noted.

I334-A -1 | Comment noted.

I66-B -1 | Comment noted.

I338-A -1 | Comment noted.

I340-A -1 | See responses for Key Themes OBJ-1 and OBJ-2.



CENSE PETITION

COMMENT

RESPONSE

- I341-A-1 | **125. Chris Liang** (zip code: 98006)
- I342-A-1 | **126. Chris Lonowski** (zip code: 98005)  
Don't build towers if they impact current neighborhood views or proximity to homes.
- I343-A-1 | **127. Christy Rice** (zip code: 98005)
- I344-A-1 | **128. Christy Bear** (zip code: 98005)  
We don't need "Energize Eastside"! Puget Power is trying to pull one over on everyone -- we need to stand strong and just say, "No thanks to this unnecessary project!!"
- I345-A-1 | **129. Christine Smith** (zip code: 98006)
- I346-A-1 | **130. Susanna Chung** (zip code: 98006)
- I347-A-1 | **131. Cindy Spain** (zip code: 98040)  
No more senseless bulldozing of PSE projects please!
- I348-A-1 | **132. Cindy Fang** (zip code: 98006)
- I73-B-1 | **133. Xue Song** (zip code: 98006)
- I198-B-1 | **134. Conald Kucera** (zip code: 98056)  
My name is Conald Kucera. My home, which I live at is 8300 128th Lane SE in Newcastle, WA in the Olympus subdivision community. I have lived there for over 27 years. My email address is cjkucera@hotmail.com. My West property line abuts onto the PSE electrical powerline easement. I am greatly concerned with the proposed construction of the 230 KVA transmission powerlines and the transmission towers along the powerline easement corridor which also contains two hazardous underground gasoline and aviation fuel distribution pipelines and their impact on me and my neighbors and residents along the PSE powerline easement, our health, safety and our very lives; as well as everyone else who lives along the proposed PSE transmission line route.  
  
Alternative 1-option A—is PSE's favored route. This route through Newcastle currently has wooden H-poles along with the Olympic gas pipelines. These proposed steel monopole towers will be 85'-100' tall! This is almost twice as tall as the existing wood poles. The power will increase from 115KVA to 320KVA, doubled!  
  
#1 concern is safety of construction, heavy equipment, tower footings 25'-50' underground, in close proximity to the gas pipelines. See Chapter 2-page 23 of the Phase 1 Draft EIS 715 page document. Under PSE current proposal 1/2 of the transmission towers through Olympus will be in residential backyards. The steel monopole tower bases will be 36" to 42" in diameter and the concrete footings will be around 5 to 6 feet in diameter. This will destroy people's backyards: trees and landscaping and gardens destroyed, patios and decks removed, and accessory structures (ie. storage sheds, gazebos, greenhouses, etc.) demolished.
- I198-B-2 | #2 concern is they will buy homes to accomplish this as they will need to widen the right of way 20'-50'. See Chapter 2-page 23. And Chapter 10-page 20. DEIS says impact to housing is "significant" in

- I342-A -1 | Comment noted.
- I344-A - | Comment noted.
- I347-A -1 | Comment noted.
- I198-B -1 | See responses for Key Theme PLS-1 and Key Theme LU-1.
- I198-B -2 | See response for Key Theme LU-2.



CENSE PETITION

COMMENT

RESPONSE

- I198-B-2 | Olympus. See Chapter 10 page 21. PSE needs to respond to their plans for what becomes for those properties that are needed to place their power towers. If the properties are condemned and the houses are torn down what happens to the lot. Who maintains the grounds? PSE does next to nothing to maintain the existing powerline easement. Who wants to live next to a vacant trash filled lot. This will even further destroy the character of the neighborhood. Removal of homes will further reduce remaining property values, see item #3.
- I198-B-3 | #3 concern is destroying our neighborhood character and affecting home values—they admit up to 20% home value depreciation. See Chapter 11-page 29.
- I198-B-4 | #4 Major safety concern when I spoke to PHSMA-Pipeline & Hazardous Material Safety Admin.—Western Regional office in Colorado. and is also outlined in the DEIS—Chapter 16-page 14. "Electromagnetic interference"—consequence of high voltage where power lines and petroleum pipelines run parallel for a distance sharing the same corridor causes pipe corrosion over time. Corrosion accounts for 23% of the significant pipeline failures!  
A chart done by industry expert DMV-GL says danger is off the charts at 5,000 feet in this scenario running parallel together —Energize Eastside will run about 16 miles under this condition. This could result in a catastrophic gas explosion like which occurred on June 10, 1999 in Bellingham, WA on the same pipeline, only we live in a more densely populated area.  
#5 concern—is the EMF—electro-magnetic field corrodes pipes above—it cannot be safe for humans!! Increasing the existing 115 KVA to 320 KVA doubles our EMF exposure!  
#6 DEIS states this corridor will be wired now for both lines to carry 230kV power in the future—with a flip of the switch in the future! The communications wire will also be there as well as a lightening wire. So is that 8 wires now or 9?—I can't keep up!!  
#7 We are along the Seattle Fault Zone for earthquakes—described as seismically "active" area. See chapter 3-page 8. Seismic activity is likely to occur during life of the project and could be substantial damage or death—quoted in DEIS.  
#8 Holes can be created in pipelines by "electrical arcing" from downed lines leading to leaks and explosions. See chapter 8-page 24.  
#9 Lightening Strikes could send current to anything metal in area—and can create holes in pipeline.  
#10 Views will be impacted—we have great Mt. Rainier views from many homes. Rated "significant"—views will be affected for 750' in neighborhoods. See Chapter 11-page 32. and poles will create contrast in the sky.
- I198-B-5 | #11 This project will require removal of 8000 trees in the 18 miles and "significant" requirement of 327 acres of vegetation destroyed. See Chapter 11-page 32. Where the steel monopoles and their footings are in peoples backyards will destroy their trees and landscaping and gardens, patios and decks removed, and accessory structures (ie. storage sheds) demolished.
- I198-B-6 | #12 "Significant" impact on loss of habitat for animals—and will negatively affect enjoyment of the area. See Chapter 12 pages 13 and 14.
- I198-B-7 | #13 Along gas pipelines—concern of heavy machinery and angering (drilling). —pipe disturbances (home damage?). See Chapter 16-page 21.
- I198-B-8 | #14 Aviation fuel—which the underground pipelines carry—is a flammable liquid and vapor —it ignites

- I198-B -3 | See response for Key Theme ECON-1.
- I198-B -4 | See responses for Key Themes PLS-2 and PLS-3 and Key Theme EARTH-1.
- I198-B -5 | See responses for Key Themes VR-1 and VR-3.
- I198-B -6 | See response for Key Theme P&A-1.
- I198-B -7 | See responses for Topic PLS.
- I198-B -8 | See responses for Key Theme PLS-4 and Key Theme LU-1.



CENSE PETITION

COMMENT

RESPONSE

I198-B-8 | by many sources—static electricity, cell phones—vapors travel considerable distances to a source of ignition, ignite, flash back or explode. See Chapter 8—page 10. Exactly what happened in the Bellingham disaster—cloud of smoke to 30,000 feet —visible from Canada!! Same Olympic Pipeline running through Olympus and other neighborhoods. Nothing is more important that safety!!

I198-B-8 | #15 Vineyards residents/other neighborhoods near—Seattle City Light Corridor (ERECTOR SET TOWERS) defined as Alternative 1-Option B in the DEIS. SEE CHAPTER 2-PAGE 25. This corridor could be used if they get SCL permission. The ROW distance is would not have to be widened, homes would not have to be purchased. They may be forced to go here as FERC order 1000 requires companies to work together in a region as one utility. But a big safety issue —they say they would leave those towers powered up during construction!

I198-B-8 | This solution has been off the radar and appeared in the DEIS to our surprise. Beware-- since this is the only public comment time for this DEIS—they could be slipping this in without residents aware, pick this solution as a cheaper alternative to widening the PSE existing corridor and purchasing homes—and all those along this corridor.

I198-B-9 | The Lauckhart-Schiffman Load Flow Study shows this PSE powerline transmission project as proposed not needed. This is a for profit scheme by PSE to make money for their shareholders and we the PSE ratepayers get to pay for it!! In my own words—it will be consumer fraud—if they proceed at the scale they desire!

I198-B-10 | There are new technologies PSE can utilize in addition to keeping the existing 115 KVA power transmission lines to offset those times of winter peak power usage which occurs a few times a year, such as storage batteries, fuel cells power plants, trash to energy power generation at the Factoria waste transfer station, and utilizing other localized power generation facility technologies. These options are far more economical and provide power directly to areas of use rather than traveling hundreds of miles from PSE's power production facilities. There is always a power loss over long transmission distances that have to be compensated.

I198-B-10 | I wholeheartedly agree and endorse CENSE, position and their finding, solutions, and their documents submitted as my own.

I198-B-10 | Sincerely,  
Conald Kucera

I198-B-10 | 8300 128th Lane SE  
Newcastle, Washington  
cjkucera@hotmail.com

I349-A-1 | **135. Carol Kunde** (zip code: 98052)  
I don't not understand why people living in established communities have to be subjected to huge structures in their neighborhoods without a vote of the residents. For some of my neighbors, the proposed power lines will be placed, literally) in their back yards.

I350-A-1 | **136. Kathy Jones** (zip code: 98006)

I351-A-1 | **137. Qing Ye** (zip code: 98006)  
For better environment and community!

I352-A-1 | **138. Erika Clancy** (zip code: 98006)

I198-B -9 | See responses for Key Themes OBJ-1 and OBJ-3.

I198-B -10 | See response for Key Theme ALT-1.

I349-A -1 | See response for Key Theme VR-5.

I351-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

I352-A-1 | I am Against the new power lines

I353-A-1 | **139. Kathleen Clancy** (zip code: 98006)  
It does not sound like we need energize eastside.

I354-A-1 | **140. David & Claudia Lee** (zip code: 98005)  
We are Woodridge residents, and are opposed to the Energize Eastside project which proposes to build 18 miles of high voltage transmission lines. As proud residents of our community, these high voltage transmission lines would devalue our property as well as deface the community.

I355-A-1 | **141. Claudia Kilbreath** (zip code: 98006)

I356-A-1 | **142. Catherine Mikhlin** (zip code: 98033)

I357-A-1 | **143. carol jones** (zip code: 98027)

I358-A-1 | **144. Chris Mantell** (zip code: 98007)  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: Chris Mantell

Dear Ms. Bedwell,

I am extremely concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

Thank you for your consideration,  
Chris Mantell

I352-A -1 | Comment noted.

I353-A -1 | Comment noted.

I354-A -1 | Comment noted.





CENSE PETITION

COMMENT

RESPONSE

I359-A-1 | **145. Corinne Deal** (zip code: 98056)  
I am concerned about the destruction of our trees and the impact it will have on our wildlife not to mention the cost to build such a system.

I360-A-1 | **146. Tammy Grant** (zip code: 98033)

I361-A-1 | **147. Corrin Ponte** (zip code: 98006)  
Stop the lies! Save our homes and our trees!

I362-A-1 | **148. Craig Schaff** (zip code: 98006)

I363-A-1 | **149. Cristopher Cable** (zip code: 98005)

I364-A-1 | **150. Cristina Dugoni** (zip code: 98033)  
I do not believe this 18 mile expansion through a heavily populated urban city is necessary or warranted. This seems to be a guise by PSE to simply pull hydroelectric power from Canada. PSE does not care about our neighborhoods; has not looked at alternatives such as underground (which they do around the world) or other options. I do not want double the height and capacity line in my back yard or along one of the largest pipe lines in this region.

I365-A-1 | **151. Cheryl Tada** (zip code: 98006)  
Stop wasting our taxpayer dollars on something that is totally unnecessary and a danger to our neighborhoods and their property values.

I365-A-1 | **152. Curtis Allred** (zip code: 98006)  
  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: Curtis Allred  
  
Dear Ms. Bedwell,  
  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
I80-H-1 | PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.  
  
Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed

I359-A -1 | See responses for Key Themes P&A-1 and P&A-2.

I361-A -1 | Comment noted.

I364-A -1 | See response for Key Theme OBJ-1.

I365-A -1 | See response for Key Theme EIS-2.



CENSE PETITION

COMMENT

RESPONSE

180-H-1 | plan would easily beat alternative 1A in cost, safety, and support for the environment.  
 The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
 Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

1366-A-1 | **153. C. V. & Chiyeko Chung** (zip code: 98006)  
 PSE load forecasts are not consistent with the official population and job forecasts on the Eastside issued by the Puget Sound Regional Council. PSE load projections are considerably higher to prove the need for the new lines and substation before it is needed.  
 PSE had previously submitted plans to the Western Electricity Coordinating Council to install a 230 kV transformer at Lake Tradition to serve load growth. The new PSE plan is to install a transformer at Lakeside instead of Lake Tradition. It is costlier option requiring new 230 kV lines along an existing 18-mile right-of-way. The new lines are detrimental to the people living along the 18-mile line from Redmond to Renton.  
 PSE refuses to revisit the older plan because the older plan does not require the expense of building 18-mile double circuit 230 kV lines through 5 cities. This proposed new construction would result in all ratepayers served by PSE in Washington State to pay for a very expensive rebuild.  
 PSE participated in the joint study with ColumbiaGrid. The organization ColumbiaGrid generally addresses regional transmission issues. The study also states that the proposed PSE construction increases the Total Transfer Capability to British Columbia of the Puget Sound Area Northern Intertie. The selection of conductor and the construction of the 18-mile double circuit 230 kV lines along the route are to increase the flow to Canada. Any Bonneville Power Administration contribution and co-participation with PSE's project is to address regional transmission issues. It is regrettable that these facts have not been taken into consideration. PSE has cloaked a transmission project as a local load service project.  
 PSE does not install more than 2 large 230-115 kV transformers in any of PSE's substations. Each transformer's capacity is 325 MVA. That is PSE standard size transformer in a 230-115 kV substation. To support 2 transformers of 325 MVA each, the capacity of 1272 AAC conductors for 230 kV line is more than adequate yet PSE selected 2 circuits of 1590 ACSR which is considerably greater than PSE load service needs.  
 PSE has the right to write an official letter to Seattle City Light (SCL) requesting for "interconnection studies" for connecting PSE substation to existing SCL lines. PSE has not written such a letter. It is a deliberate effort on PSE's part to build its own lines instead of interconnecting to existing SCL 230 kV transmission lines that are within 8 to 10 blocks from vacant PSE substation properties.

1367-A-1 | **154. Wei Wei Chen** (zip code: 98006)  
 Negative impacts on environments; safety issues to our communities.

1368-A-1 | **155. An anonymous signer** (zip code: 98056)

1369-A-1 | **156. Cynthia Hemphill** (zip code: 98006)

I366-A -1 | See response for Key Theme OBJ-2.

I367-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

I369-A-1 | I support Alternative 2 in the Energize Eastside EIS.

I370-A-1 | **157. Cynthia Thomas Reher** (zip code: 98006)

I371-A-1 | **158. Lynda Fox** (zip code: 98056)

I372-A-1 | **159. Dan Wu** (zip code: 98059)  
Please correct.

I373-A-1 | **160. Dana Luhr** (zip code: 98058)

I374-A-1 | **161. Dana Vana** (zip code: 98006)  
I am concerned about the power lines that may be going through our neighborhoods.

I375-A-1 | **162. Dana Young** (zip code: 98006)

I376-A-1 | **163. Dan Dixon** (zip code: 98006)  
The impacts of the proposed project are not warranted - especially given options available to understand and address the base issue.

I377-A-1 | **164. Daniel Kaner** (zip code: 98011)

I378-A-1 | **165. Danielle Ramos** (zip code: 98056)

I379-A-1 | **166. Daniel Sperry** (zip code: 98005)  
I am totally against this project! Go underground if you want to improve the system.

I380-A-1 | **167. Dave Visser** (zip code: 98052)  
Please don't do this - it is not necessary. Thanks!

I381-A-1 | **168. David Johnston** (zip code: 98005)

I382-A-1 | **169. Dave. Mickelson** (zip code: 98006)  
Energy Eastside is not needed. Please stop the second phase of the EIS

I383-A-1 | **170. David Schwartz** (zip code: 98033)  
Let's move forward, listening to the concerns of residents.

I384-A-1 | **171. David R Taylor** (zip code: 98056)  
My neighbors are important to me, and our Cul-de-sac would be devastated by the destruction of the houses across the street. This project must be defeated. Just having everyone switch to LED lights over the next few years will save a good portion of the added energy they say we will need.

I385-A-1 | **172. David Luk** (zip code: 98006)

I369-A -1 | See response for Key Theme ALT-1.

I372-A -1 | Comment noted.

I374-A -1 | Comment noted.

I376-A -1 | Comment noted.

I379-A -1 | See response for Key Theme ALT-1.

I380-A -1 | Comment noted.

I382-A -1 | Comment noted.

I383-A -1 | See response for Key Theme EIS-2.

I384-A -1 | See response for Key Theme LU-1.



CENSE PETITION

COMMENT

RESPONSE

I386-A-1 | **173. Dawn Black** (zip code: 98006)

I387-A-1 | **174. Dawn Dufford** (zip code: 98006)

I388-A-1 | **175. Dan Duryea** (zip code: 98007)

I389-A-1 | **176. Debbie Dimmer** (zip code: 98005)  
PSE proposed overhead power line will destroy the look of our neighborhood. They need to bury their power lines..if the power line is even needed.

I390-A-1 | **177. Deb Engevik** (zip code: 98005)

I391-A-1 | **178. Debra Burges** (zip code: 98005)  
Energize Eastside is unnecessary for the energy needs of the eastside until 2058. PSE has been unwilling to be honest in where their predictions come from. They have not used available resources to generate extra power when it is needed. They have dismantled an emergency power plant without authority of regional energy planning boards, and now want to reap more profit building unnecessary, ugly, dangerous power lines. Digging to build 230 watt lines over gas lines is crazy. Taking trees down in our "City in a Park" in areas where they help clean the air from incessant traffic is environmental terrorism. The only reason this is needed is to make money for the Australian investors that don't care at all about our region. Trying to block the legal authority of East Bellevue Community Council to block this removal of 300 trees is incredibly troublesome. EIS will require removal of 8,000 trees. We cannot even remove a diseased tree that threatens our home without City permits, but a corporation can bully their way into devastating our environment. It is not necessary. It is ugly. It is unethical. It is dishonest. It is pure greed.  
Encourage energy preservation. Encourage CLEAN energy. Value our environment. Value property values. Do not blindly do what a corporation wants without considering what is best for the people of the region.

I392-A-1 | **179. DeEtta Simmons** (zip code: 98006)

I393-A-1 | **180. Joe Michaels** (zip code: 98005)

I394-A-1 | **181. Don Prince** (zip code: 98033)  
The PSE easement for this project is across the street from our house - approx 150 feet away - and within 100 feet of the pipeline. We are vert worried about the impact this project will have on our health as well as property value.

I395-A-1 | **182. David Scott** (zip code: 9800)  
We have lived with the Olympic Pipe line on the uphill side of our street,this is stressful enough without adding to the concern by increasing the potential for a catastrophic event by increasing the power line nigh and supply.

I154-C-1 | **183. David Herbig** (zip code: 98006)  
There is no need for this project at this time. PSE is only doing this to increase revenues to PSE and is ignoring the impact on rate payers.

I389-A -1 | See responses for Key Themes ALT-1 and ALT-3.

I391-A -1 | See responses for Key Themes OBJ-1 and OBJ-2.

I394-A -1 | Comment noted.

I395-A -1 | See response for Key Theme EMF-1.

I154-C -1 | See response for Key Theme OBJ-1.



CENSE PETITION

COMMENT

RESPONSE

I396-A-1 | **184. Diana Melman** (zip code: 98006)  
 Please put the powerlines in the ground, why is it that Newcastle looks like a modern nice town and we in Bellevue (at least by our house) we look like third-world. I think about this on a daily basis not even mentioning all the power outages we've had. Please, pretty please

I397-A-1 | **185. Diane Fern** (zip code: 98006)

I398-A-1 | **186. Diane Romero** (zip code: 98006)

I399-A-1 | **187. Denise Dice** (zip code: 98006)

I400-A-1 | **188. Alison Dildine** (zip code: 98056)  
 I am totally against Energize Eastside. Please listen to CENSE's criticism of this proposed project and find an alternative solution. If you don't many neighborhoods will be decimated of their beauty, houses will be destroyed, and the health of its people will be further endangered. I will then believe that big corporations like PSE are just bullies, want bigger profits and don't care about the "little" guy!

I401-A-1 | **189. Jason Hong** (zip code: )

I402-A-1 | **190. Lei Ding** (zip code: 98005)  
 To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Lei Ding

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I396-A -1 | See response for Key Theme ALT-1.

I400-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- I403-A-1 | **191. Dionne Gallagher** (zip code: 98005)  
Bellevue is a beautiful city! Please do not degrade it's beauty and destroy our trees with ugly high power electric lines when alternative options are available that maintain our safety and serene views.
- I404-A-1 | **192. David Xie** (zip code: 98006)
- I405-A-1 | **193. David Klatt** (zip code: 98056)  
There are alternative options to this power expansion plan that PSE has not considered. Surely, there are better options than removing dozens of homes and threatening the safety of others by constructing immediately on top of a jet fuel pipeline. I also question whether future energy needs are as high as PSE claims.
- I406-A-1 | **194. Kelli Komendat** (zip code: 98056)  
We live in a democracy! You MUST listen to what the people want NOT BIG business!
- I407-A-1 | **195. Debbie McIntyre** (zip code: 98007)
- I29-B-1 | **196. Bruce Williams** (zip code: 98056)
- I408-A-1 | **197. Dominick Marini** (zip code: 98006)
- I59-C-1 | **198. Don Miller** (zip code: 98006)  
The City of Bellevue is failing to fulfill their responsibilities as the Lead Agency on this EIS process. Action by concerned and informed citizens has been repeatedly rejected in favor of the deceptive and profit motivated actions of this foreign owned company. You can take steps now to avoid the permanent burden on all Puget Sound rate payers but you have to accept that the work done by citizens in our community is driven neither by profit nor deception. Do the job you are expected to do.
- I183-B-1 | **199. Hu Dong** (zip code: 98006)
- I409-A-1 | **200. yan dong** (zip code: 98006)  
Eastside does not need to be energized for PSE's profit.
- I410-A-1 | **201. Donald Lionetti** (zip code: 98005)
- O1-O-1 | **202. Don Marsh** (zip code: 98006)
- I411-A-1 | **203. Donald Ray** (zip code: 98005)  
A 100 year old problem with the same 100 year old solution.  
1. A fully independent and fair analysis still has not been accomplished. Most who works on this study are still attached in some way to the conclusions.  
2. Variable "time-of-day-rates" is too quickly dismissed when peak power, not total demand, is the reason for this huge capital and old school solution. 3. We need a solution that is geared to a

- I403-A -1 | Comment noted.
- I405-A -1 | Comment noted.
- I406-A -1 | See response for Key Theme EIS-2.
- I59-C -1 | See responses for Key Theme EIS-1 and Key Theme ECON-4.
- I409-A -1 | See response for Key Theme OBJ-1.
- I411-A -1 | See response for Key Theme ALT-1.



CENSE PETITION

COMMENT

RESPONSE

I411-A-1 | managed approach. I would even pay more to get a future system in line with greater energy management and not just charge me for an increase in capacity.  
Can't we manage our peak power differently today? Please verify what century we live in.

I412-A-1 | **204. Devon Shannon** (zip code: 98033)

I413-A-1 | **205. Cindy Ludwig** (zip code: 98005)  
I support CENSE and their findings 100%!! Without their dedication to reveal the facts, we would have been blindsided by PSE's actions and skewed reports which, frankly, are feeling a lot like fraud. Our Eastside communities deserve a safe environment now and in the future. Today's natural gas explosion in Greenwood made me shudder to think that we could face an even worse tragedy with the Olympic pipeline and the proposed power lines. Thank you CENSE!!

I414-A-1 | **206. Jessie Xu** (zip code: 98006)

I415-A-1 | **207. Richard Rand** (zip code: 98005)  
This plan is wrong for all the reasons described.

I416-A-1 | **208. Susanna Kanther-Raz** (zip code: 98005 )

I417-A-1 | **209. Christine Wilford** (zip code: 98005)

I418-A-1 | **210. tong wu** (zip code: 98006)  
Make it underground and don't impact our neighborhood

I419-A-1 | **211. Daniel Wells** (zip code: 98006)  
Please don't destroy our neighborhood by increasing height and strength of power lines

I420-A-1 | **212. Donna Von Bargaen, Ph.D.** (zip code: 98059-9033)  
This is a bad plan. Please stop it and make a better one.

I421-A-1 | **213. David Versteeg** (zip code: 98006)  
I am against Energize Eastside.

I422-A-1 | **214. Eva Downs** (zip code: 98056)  
Not only is this project dangerous, disruptive and damaging to neighborhoods and families, there is no need to build these huge transmission poles.

I423-A-1 | **215. Allison Flash** (zip code: 98059)

I424-A-1 | **216. Eric Burkholder** (zip code: 98005)  
I support this petition and question both the need and proposed solution.

I425-A-1 | **217. Edward Chung** (zip code: 98006)  
I oppose the Puget Sound Energy project to install new transmission towers, and also reject the

I413-A -1 | Comment noted.

I415-A -1 | Comment noted.

I418-A -1 | See response for Key Theme ALT-1.

I419-A -1 | Comment noted.

I420-A -1 | Comment noted.

I421-A -1 | Comment noted.

I422-A - | Comment noted.

I424-A -1 | Comment noted.

I425-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

I425-A-1 | veracity of the EIS study.

I426-A-1 | **218. Edward Flash** (zip code: 98059)

I427-A-1 | **219. Beverly Edwards** (zip code: 98006)  
This EIS project is wrong.

I206-B-1 | **220. Eldon Graham** (zip code: 98005)  
I am sending separately my comments concerning the Energize Eastside proposal.

I428-A-1 | **221. Elif Arkan** (zip code: 98007)

I429-A-1 | **222. Elizabeth Minkin** (zip code: 98006)  
I am very concerned about the safety of placing new high voltage lines too close to aging petroleum pipelines and the possible risks and damage to proximate residential properties.

I430-A-1 | **223. Ellen Kurek** (zip code: 98059)  
Boo to Alternative 1A. Yay to Alternative 2 and DSM. Better safe than sorry; don't turn Newcastle into another Greenlake! BOOM!

I431-A-1 | **224. Qinghui Liu** (zip code: 98006)  
My family and I would love the keep the view of our community as it is, not with the huge power poles. We don't want to live under those poles either.

I68-B-1 | **225. Edward Huang** (zip code: 98006)  
We don't need new PSE transmission line!!!

I432-A-1 | **226. Emilie Castle** (zip code: 98006)

I433-A-1 | **227. S Ekelmann** (zip code: 98007)

I434-A-1 | **228. Kenneth Vasilik** (zip code: 98006)

I435-A-1 | **229. Erica Johnson** (zip code: 98006)

I436-A-1 | **230. Eric Bidstrup** (zip code: 98006)

I437-A-1 | **231. Ericka Marini** (zip code: 98006)

I438-A-1 | **232. Erin Gregov** (zip code: 98006)  
I am against Energize Eastside as it is currently planned. I believe as it is currently set up, it will:  
\* degrade our city,  
\* harm the environment (thousands of trees will be destroyed),  
\* bulldoze dozens of homes in Newcastle,  
\* increase risk of catastrophic pipeline fires,

I427-A -1 | Comment noted.

I206-B-1 | Comment Noted.

I429-A -1 | See response for Key Theme PLS-3.

I430-A -1 | Comment noted.

I431-A -1 | See response for Key Theme VR-5.

I68-B-1 | Comment noted.

I438-A -1 | Comment noted.





CENSE PETITION

COMMENT

RESPONSE

- I438-A-1 \* raise our electricity rates for decades.  
There are better solutions to the Eastside's energy future that will deliver better reliability for less cost.
  
- I439-A-1 **233. Erin Kenway** (zip code: 98005)  
We recently moved to the Woodridge community because of the gorgeous views, great location, strong community and quality of schools. These amenities are what bring up the value of our homes and keeps our community strong. This project would have an extremely negative effect on home values in a community that is consistently ranked among the top in the nation.
  
- I440-A-1 **234. Wenchun Lo** (zip code: 98006)
  
- I441-A-1 **235. teresa allwardt** (zip code: 98056)  
this project would do nothing but harm to our city
  
- I442-A-1 **236. Esther Moloney** (zip code: 98006)  
Destroying 8000 trees, putting our homes at risk, destroying this residential area, and even driving some residents out of their homes as well as putting our residents, especially children at risk from EMFs is deplorable and anyone with a conscience and with the authority should keep PSE's plan from moving forward.
  
- I443-A-1 **237. Elizabeth Sokratov** (zip code: 98006)
  
- I444-A-1 **238. Eveline Piersma** (zip code: 98005)  
Please put the will of the people of Bellevue ahead of the profits of an Australian investment company!
  
- I445-A-1 **239. Erika Popejoy** (zip code: 98005)
  
- I76-B-1 **240. Jamie Moy** (zip code: 98006)
  
- I446-A-1 **241. faye niyama** (zip code: 98006)  
I don't believe the project is necessary. I heard about Lauckhart-Schiffman load study. I support CENSE!
  
- I447-A-1 **242. Dena Fantle** (zip code: 98006)  
Dear Council members, please represent myself and all the other the residents of our wonderful city and ensure a thorough due diligence is done on PSE's Energize Eastside project, including a full review of the concrete findings in the CENSE report proving the project is absolutely not necessary (& possibly motivated by the greed of this privately held utility). In addition please implement a 6-12 month moratorium prior to moving forward with a phase 2 EIS for this unnecessary project. Thank you
  
- I448-A-1 **243. Frank Bosone** (zip code: 98006)
  
- I449-A-1 **244. feifei zhang** (zip code: 98006)  
I am very concerned about Puget Sound Energy's power lines project.

- I439-A -1 See response for Key Theme ECON-1.
  
- I441-A -1 See response for Key Theme OBJ-1.
  
- I442-A -1 See responses for Key Theme LU-1 and Key Theme EMF-3.
  
- I444-A -1 See response for Key Theme OBJ-1.
  
- I446-A -1 Comment noted.
  
- I447-A -1 See responses for Key Theme ALT-1 and Key Theme OBJ-3.
  
- I449-A -1 Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- I450-A-1 | **245. Frank Herrgoss** (zip code: 98006)
  
- I451-A-1 | **246. Gary Beerman** (zip code: 98056)  
This will run right through my yard, and right over the jet fuel pipeline. 3 people died from a previous pipeline rupture. Also who is going to compensate us for our loss of home value, or potential loss of home.
  
- I452-A-1 | **247. Lynn Kaner** (zip code: 98006)
  
- I453-A-1 | **248. Phyllis Flood** (zip code: 98006,)
  
- I454-A-1 | **249. Ying Zhao** (zip code: 98006)  
Oppose the PSE project
  
- I455-A-1 | **250. Frances Lee** (zip code: 98006)  
Another point in favor of curtailing this project is the squelched but scientifically fact of adverse health consequences to houses near the voltage.
  
- I456-A-1 | **251. Steven Fricke** (zip code: 98007)
  
- I457-A-1 | **252. Wray Featherstone** (zip code: 98033)  
I live THREE houses away from this rather self serving project. Remember Bellingham and recently the California debacle. I didn't see where a single PSE executive lost a home or a life. Who or what entity would gain most from this project?
  
- I458-A-1 | **253. Gloria Thompson** (zip code: 98006)  
Stop PSE from over charging for lines not needed - as demonstrated by CENSE's load flow study.
  
- I459-A-1 | **254. Guanghai Zhang** (zip code: 98006)
  
- I460-A-1 | **255. Gang Zhai** (zip code: 98006)  
We think the high voltage power line should not be close to schools and residential community because
  1. it's dangerous for kids
  - 2.the high voltage power tower and power lines cause health issues.
  3. the high voltage power tower and line will hurt the real estate value.

thanks
  
- I461-A-1 | **256. Gabriele Neighbors** (zip code: 98004-8610)
  
- I462-A-1 | **257. Amy George** (zip code: 98056)

- I451-A -1 | See responses for Topic PLS.
  
- I454-A -1 | See responses for Key Theme EMF-3 and Key Theme OBJ-3.
  
- I455-A -1 | See response for Key Theme EMF-1.
  
- I457-A -1 | See responses for Key Theme PSL-2 and Key Theme OBJ-1.
  
- I458-A -1 | See response for Key Theme OBJ-1.
  
- I460-A -1 | See responses for Key Theme EMF-3 and Key Theme ECON-1.



CENSE PETITION

COMMENT

RESPONSE

- I463-A-1 | **258. George Joy** (zip code: 98033)  
I think Cense has done a pretty thorough analysis of the requirements behind the PSE "Energize Eastside" project. I support their analysis. I separately want to state that as a home-owner immediately adjacent to the power line the livability and resale value of our home is going to be affected by the number and diameter of the cables and the poles. I request that neighborhood considerations be taken into account and the visual impact of the proposed lines be limited to what is already present.
- I464-A-1 | **259. Dee Mulford** (zip code: 12302)
- I465-A-1 | **260. Georgia Steenis** (zip code: 98056)  
PSE energize eastside project is unsafe for those of us who live next to the pipeline.
- I466-A-1 | **261. Virginia Gannon** (zip code: 98059)
- I467-A-1 | **262. Gerald Kvinge** (zip code: 98006)
- I468-A-1 | **263. Gazelle Lacenski** (zip code: 98006)
- I469-A-1 | **264. Glenna White** (zip code: 98056)
- I470-A-1 | **265. Glenn Gregory** (zip code: 98006)
- I471-A-1 | **266. Stephen Lee** (zip code: 98006)  
Against power line in Somerset neighborhood
- I472-A-1 | **267. Peter Wong** (zip code: 98005)
- I10-B-1 | **268. Margaret Niendorff** (zip code: 98004)  
Please review PSE's assumptions - they appear overblown and unnecessary. And "Energize Eastside" harms our City in a Park.
- I473-A-1 | **269. Margot Smith** (zip code: 98006)  
PSE's Energize Eastside proposal and in particular, its preferred 1A alternative are deeply flawed on many counts. I am among many Bellevue residents opposing Alternative 1A and urging that the Integrated Resources Approach (Alternative 2) be given comprehensive consideration. The EIS under consideration does not include reliable and complete information by independent experts qualified in these technologies.
- I474-A-1 | **270. Kathleen McGinnis** (zip code: 98006)
- I475-A-1 | **271. Melvin Levine** (zip code: 98005)  
I am against new large transmission lines going through the area where I live
- I476-A-1 | **272. Grace Li** (zip code: 98006)

- I463-A -1 | See response for Key Theme ECON-1.
- I465-A -1 | Comment noted.
- I471-A -1 | Comment noted.
- I10-B -1 | See responses for Key Themes OBJ-1 and OBJ-2.
- I473-A -1 | See responses for Key Theme ALT-1 and Key Theme EIS-1.
- I475-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

I477-A-1 | **273. Grant Keeney** (zip code: 98006)

I478-A-1 | **274. Julie Chen** (zip code: 98006)  
We don't want this project in our neighborhood for many reasons, which are probably already addressed by many residents.

I just wanted to say this project is going backward from the trend--- while other countries and cities are going underground, PSE is doing the opposite.

I479-A-1 | **275. Patricia and Bruce Brown** (zip code: 98006)

I480-A-1 | **276. Gregg Smith** (zip code: 98006)

I481-A-1 | **277. Gregory Shank** (zip code: 98006)  
Alternative 2A is the way to go.

I482-A-1 | **278. Gretchan Lindsey** (zip code: 98006)  
As a rate payer and citizen, I expect your data, scenarios and options to be up- to- date using current data and methods, accurate and not misleading.

I483-A-1 | **279. Gretchen Wingard** (zip code: 98005)

**280. Roy Grinnell** (zip code: 98006)  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: Roy Grinnell, P.E.

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario with improper and flawed assumptions that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I484-A-1 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. Pipeline corrosion along this line is already a problem. This risk is not adequately addressed in the EIS.

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I478-A -1 | See response for Key Theme ALT-1.

I481-A -1 | See response for Key Theme ALT-1.

I482-A -1 | See response for Key Theme EIS-1.



CENSE PETITION

COMMENT

RESPONSE

- I484-A-1 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.
- I485-A-1 | **281. Gary Kretzschmsr** (zip code: 98005)
- 282. Grace Drone** (zip code: 98006)  
Dear Ms. Bedwell,  
  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.
- I486-A-1 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.  
  
The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
  
Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.
- I487-A-1 | **283. Gary Trus** (zip code: 98056-2005)
- I488-A-1 | **284. haili sun** (zip code: 98006)
- I489-A-1 | **285. Haraldur Haraldsson** (zip code: 98056)
- I490-A-1 | **286. Hanna Gil** (zip code: 98052)
- I491-A-1 | **287. Hannah Ge** (zip code: 98006)  
I'm very concerned about this project. My suggestions: first, let's evaluate if this project is indeed needed and have no alternative solutions e.g. green energy or other lower energy consumption

I491-A -1 Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- I491-A-1 | approach for households or commercial estates in Bellevue, second, let's find out if the project can go through a less invasive route than have to cut through residential areas including schools and busy shopping areas.
- I85-B-1 | **288. Norm Hansen** (zip code: 98005)  
Phase 1 EIS needs a final report since the line may not be needed. See new load flow studies by CENSE. Phase 2 would be a waste to rate payers if not needed.
- I492-A-1 | **289. Harvey Ries** (zip code: 98005)  
Not in the best interest of the community, with expensive and potentially dangerous results ( pipeline explosion, erosion of property value ) with no need or value to Bellevue or other affected communities. I agree totally with the letter to Ms. Bedwell.  
Harvey Ries
- I493-A-1 | **290. Peggy Hausmann** (zip code: 98005)  
against this!!
- I494-A-1 | **291. heidi benz-merritt** (zip code: 98005)  
Thank you CENSE for being a voice of reason. There is no basis for adding another line of power lines to serve ratepayers.
- I495-A-1 | **292. Helen Si** (zip code: 98006)
- I496-A-1 | **293. Helen Tian** (zip code: 98006)
- I497-A-1 | **294. Li Han** (zip code: 98006)
- I498-A-1 | **295. David Herman** (zip code: 98056)
- I499-A-1 | **296. Barbara Bromwell** (zip code: 98005)  
NO on Energize Eastside
- I500-A-1 | **297. Kenneth Jones** (zip code: 98056)
- I501-A-1 | **298. Harlan Kammin** (zip code: 98056)
- I502-A-1 | **299. Joe Bush** (zip code: 98056)
- I503-A-1 | **300. Angela Allison** (zip code: 98006)
- I504-A-1 | **301. Richard Howell** (zip code: 98056)  
PSE needs to listen to us. This project is not needed nor welcome. This is simply a corporate profit grab at the expense of the rate payers and eastside residents.
- I505-A-1 | **302. Cheryl Huang** (zip code: 98006)

- I85-B -1 | See responses for Key Themes OBJ-1 and OBJ-3.
- I492-A -1 | Comment noted.
- I493-A -1 | Comment noted.
- I494-A -1 | See response for Key Theme OBJ-1.
- I499-A -1 | Comment noted.
- I504-A -1 | See response for Key Theme EIS-2.



CENSE PETITION

COMMENT

RESPONSE

I505-A-1 | **302. Cheryl Huang** (zip code: 98006)  
Endanger to health, Voltage too high . Electric noisy too loud,  
Bad & ugly electric tower. loss Property value , loss beautiful view.

I506-A-1 | **303. Jingyuan Huang** (zip code: 98006)

I507-A-1 | **304. Stanley Huang** (zip code: Wa 98006)  
Degrade the neighborhood, ugly view, degrade the environment, no justification,  
Big corporation arrogant, noisy during raining day,  
Lose property value,  
Health hazard due to high electric magnetic field.  
Will vote against the city manager.

I508-A-1 | **305. Huatong Sun** (zip code: 98006)

I509-A-1 | **306. Hui Lu** (zip code: 98006)  
Against Energize Eastside project!

I510-A-1 | **307. Huiying Ye** (zip code: 98006)

I511-A-1 | **308. Hui-yu Yang** (zip code: 98005)

I512-A-1 | **309. Dana Tillson** (zip code: 98005)  
No need for new transmission lines

I513-A-1 | **310. Chuanzhong Nie** (zip code: 98006)

I514-A-1 | **311. Larry Rosenthal** (zip code: 98005)  
The Draft EIS must answer these basic questions in order to convince residents that we are getting  
the best possible plan for our energy future.

I515-A-1 | **312. Kevin Iden** (zip code: 98056)  
I am very concerned about Puget Sound Energy's "Energize Eastside"!!!

I516-A-1 | **313. Irene Kearns** (zip code: 98005)

I517-A-1 | **314. ilona larson** (zip code: 98005)

I518-A-1 | **315. Sonia Tanielian** (zip code: 98006)

I519-A-1 | **316. LU ZHANG** (zip code: 98006)

I520-A-1 | **317. Test Cense** (zip code: 98006)  
A little comment

I505-A -1 | See responses for Key Theme EMF-1, Key Theme NOI-1, Key Theme VR-4, and Key Theme ECON-1.

I507-A -1 | See responses for Key Theme EMF-1, Key Theme OBJ-1, Key Theme VR-4, and Key Theme ECON-1.

I509-A -1 | Comment noted.

I512-A -1 | Comment noted.

I514-A -1 | See response for Key Theme EIS-2.

I515-A -1 | Comment noted.

I520-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- I521-A-1 | **318. Jennifer Pinkowski** (zip code: 98006)
- I522-A-1 | **319. Julie Huang** (zip code: 98005)
- I523-A-1 | **320. jack crowley** (zip code: 98006)  
put it underground!!!
- I524-A-1 | **321. Jack Hirsch** (zip code: 98005)  
This is an unnecessary big company profit project
- I525-A-1 | **322. Jacqueline Becker** (zip code: 98006)
- I526-A-1 | **323. Jacob Holcomb** (zip code: 98006)
- I527-A-1 | **324. james cowan** (zip code: 98056)  
Correct them!!!
- I44-B-1 | **325. jamie kim** (zip code: 98005)  
I am very opposed to this project because it appears independent evidence contradicts the need for this project.
- I528-A-1 | **326. Geri Martinsen** (zip code: 98006)  
We live close to the school with the pipeline. Do not want increased electricity line nearby. Oh, and then there is the size of the power poles!! Should any horrific accident take place because of their close proximity, tell me who and where anyone wants to be should an accident be reality.
- I529-A-1 | **327. Jing chang** (zip code: 98052)
- I530-A-1 | **328. Barbara Bobbitt** (zip code: 98007)
- I531-A-1 | **329. Jane Kim** (zip code: 98006)  
NO HIGH POLE AND WIRE TOWERS in our neighborhood. There is eminent danger of hitting the gas pipeline. Higher transmission wires and poles create sound and health dangers to people as well.
- I532-A-1 | **330. Janet Kusakabe** (zip code: 98007)  
I oppose the high-voltage transmission lines.
- I533-A-1 | **331. Jan Rea** (zip code: 98007)
- I534-A-1 | **332. Jay Bruce** (zip code: 98005)  
I support the CENSE position.
- I535-A-1 | **333. Jayme Barry** (zip code: 98006)

- I523-A -1 | See response for Key Theme ALT-1.
- I524-A -1 | See response for Key Theme OBJ-1.
- I527-A -1 | Comment noted.
- I44-B -1 | Comment noted.
- I528-A -1 | See response for Key Theme EMF-3.
- I531-A -1 | See responses for Key Theme EMF-1 and EMF-2, and Key Theme PLS-1.
- I532-A -1 | Comment noted.
- I534-A -1 | Comment noted.





CENSE PETITION

COMMENT

RESPONSE

I60-C-1 | **334. Joanne Bromwell** (zip code: 98005)  
NO on Energize Eastside

I536-A-1 | **335. JC McCabe** (zip code: 98006)

I537-A-1 | **336. Barbara JEAN Field** (zip code: 98005)

I538-A-1 | **337. Judy Mock** (zip code: 98006)  
Thank you for your time and concern with this important issue.

I539-A-1 | **338. Jeff Allen** (zip code: 98033)  
As a home owner I do not support the power line enhancement project, it's unnecessary as proposed and will negatively impact our community and property values.

I24-B-1 | **339. Jeffrey Byers** (zip code: 98006)

I540-A-1 | **340. Jennifer Xu** (zip code: 98006)  
No PSEG high voltage power line

I201-B-1 | **341. Jennifer Wilson** (zip code: 98006)

I541-A-1 | **342. Jennifer Palmer** (zip code: 98006)  
Stop your plans PSE, and listen to your customers!

I542-A-1 | **343. Jerron Marshall** (zip code: 98006)

I543-A-1 | **344. Gerald Lorch** (zip code: 98006)  
I have reviewed the data from PSE as well as from Lauckhart and Schiffman. The PSE Energize Eastside proposal appears unnecessary and should be stopped. I now completely support the CENSE approach.

I544-A-1 | **345. Jessie Chow** (zip code: 98034)  
We need to find a better solution for the future of our children and the environment, not for the short term Corp profits.

I51-B-1 | **346. Jeff Felix** (zip code: 98005)  
Based on all of the analysis that I've seen, we don't need this project.

I545-A-1 | **347. Jian Chen** (zip code: 98006)

I546-A-1 | **348. Helen Liang** (zip code: 98006)

I547-A-1 | **349. Jill Lakin** (zip code: 98006)  
No high wires needed in our rail corridor. We are being scammed.

I60-C -1 | Comment noted.

I538-A -1 | Comment noted.

I539-A -1 | See response for Key Theme ECON-1.

I540-A -1 | Comment noted.

I541-A -1 | Comment noted.

I543-A -1 | See response for Key Theme OBJ-3.

I544-A -1 | Comment noted.

I51-B -1 | Comment noted.

I547-A -1 | See response for Key Theme OBJ-1.



CENSE PETITION

COMMENT

RESPONSE

I548-A-1 | **350. Beatrice Butler** (zip code: 98006)  
I dearly hope that this proposal is cancelled. It is not needed.

I549-A-1 | **351. NAN ZHU** (zip code: 98006)  
STOP PSE PROFITIBG AT LOCAL'S COST

I550-A-1 | **352. Jim Peterson** (zip code: 98006)

I187-B-1 | **353. JD Yu** (zip code: 98006)  
I fully support CENSE.

I551-A-1 | **354. John Kotalik** (zip code: 98034)  
No PSE pipeline in our backyard!!!

I552-A-1 | **355. Jennifer King** (zip code: 98006)

I553-A-1 | **356. John Laughlin** (zip code: 98006)  
I'm concerned about safety with respect to the pipeline and neighborhood character.

I554-A-1 | **357. Linda Galluzzo** (zip code: 98056)

I555-A-1 | **358. Julie Lionetti** (zip code: 98005)

I556-A-1 | **359. Jamtell Mantell** (zip code: 98007)  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: James Mantell

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed

I548-A -1 | Comment noted.

I549-A -1 | See response for Key Theme ECON-4.

I187-B -1 | Comment noted.

I551-A -1 | Comment noted.

I553-A -1 | See responses for Key Theme PLS-4 and Key Theme LU-1.



CENSE PETITION

COMMENT

RESPONSE

I556-A-1 | plan would easily beat alternative 1A in cost, safety, and support for the environment.  
 The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
 Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I557-A-1 | **360. John Hancock** (zip code: 98006)

I558-A-1 | **361. Joan Hatfield** (zip code: 98056)  
 I am a 20 year resident of Olympus in Newcastle. The financial impact of this project due to loss of house value will be devastating to me as I near retirement and the dangerous risk for explosion of the pipeline frightens me greatly. This proposed project has caused much anxiety and distress for me at a time in my life when I should be able to relax and enjoy my community and home.

I559-A-1 | **362. Joan Nolan** (zip code: 98006)

I560-A-1 | **363. Jodi Gable** (zip code: 98006)

I561-A-1 | **364. jodis zhu** (zip code: 98006)  
 this is not good for our living environment

I562-A-1 | **365. Joe pham** (zip code: 98006)  
 I too am very concerned how Energize Eastside will effect the Eastside neighborhoods.

I563-A-1 | **366. Joe Tassia** (zip code: 98056)  
 A foreign company wants to destroy homes/property values of hundreds and hundreds of families who want to live out their days in their homes, further putting at risk additional lives due to aging gaslines, for needless infrastrucutre .... when will local leaders finally put health/families before profit/big business??

I564-A-1 | **367. Joe DeGennaro** (zip code: 98056)  
 To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Joe & Cathy DeGennaro  
 Dear Ms. Bedwell,  
 I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
 PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
 Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham

I558-A -1 | See responses for Key Theme ECON-1 and Key Theme PLS-2.

I561-A -1 | Comment noted.

I562-A -1 | Comment noted.

I563-A -1 | See responses for Key Theme ALT-3 and Key Theme ECON-4.



CENSE PETITION

COMMENT

RESPONSE

- I564-A-1 residents in 1999. This risk is not adequately addressed in the EIS.  
  
Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.  
  
The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
  
Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.
- I565-A-1 | **368. John Davis** (zip code: 98006)
- I566-A-1 | **369. John Ford** (zip code: 98006)
- I158-E-1 | **370. John Merrill** (zip code: 98006)
- I567-A-1 | **371. Jolene Marshall** (zip code: 98006)
- I105-B-1 | **372. Robert Jones** (zip code: 98056)  
Why are we wasting time on Puget Sound Energy's proposal when it is not needed, not safe, a blight on the communities involved, and its only purpose is to make money for their investors?
- I568-A-1 | **373. Jon Fleming** (zip code: 98006)
- I569-A-1 | **374. Jonathan Kurz** (zip code: 98006)  
Let's use data we can trust.
- I570-A-1 | **375. norene scott** (zip code: 98005-1860)  
We do not need these new high power lines & do not want them
- I571-A-1 | **376. Joshua Holcomb** (zip code: 98006)
- I572-A-1 | **377. Jane Lee** (zip code: 98006)
- I573-A-1 | **378. Mike Florian** (zip code: 98056)  
Future needs data is seriously flawed and needs an credible and independant re-review by someone that is acceptable to both sides. Until this happens we are still at square one.
- I574-A-1 | **379. joy paltiel** (zip code: 98006)  
I am signing this petition instead of writing my own letter simply because I share the concern of others

- I105-B -1 See response for Key Theme EIS-1.
- I569-A -1 See response for Key Theme EIS-1.
- I570-A -1 Comment noted.
- I573-A -1 See response for Key Theme EIS-1.
- I574-A -1 Comment noted.



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I574-A-1 | and don't need to rewrite the message in any other way in order for you to get it. There are so many reasons to stop this disaster from happening. I trust you will recognize that this because the transmission lines need to be stop... for all the right reasons. Thank you for your attention.

I161-B-1 | **380. Joy Phelps** (zip code: 98006)  
This unnecessary project exposes the greed of PSE, which puts the 9.8% ROI it will gain ahead of public safety.

I575-A-1 | **381. John Bader** (zip code: 98006)

I576-A-1 | **382. John Plut** (zip code: 98006)

I98-D-1 | **383. Janis Medley** (zip code: 98006)  
Let's use 21st century technologies to provide energy for the Eastside. PSE's Energize Eastside creates a vulnerable huge transmission line. Potential damage to the Olympic Pipeline, which shares the same right of way with the transmission line construction, exposes many neighborhoods and schools to unnecessary risk. Our communities can do better than this.

I577-A-1 | **384. Jeff Rea** (zip code: 98007)

I578-A-1 | **385. Yanping Liu** (zip code: 98006)

I579-A-1 | **386. Judy Reavell** (zip code: 98005)

I580-A-1 | **387. Janet Berg** (zip code: 98006)

I581-A-1 | **388. Jeff Shaffer** (zip code: 98006)

I582-A-1 | **389. Judy Sinclair** (zip code: 98034)  
No PSE pipeline in our backyard!!!

I583-A-1 | **390. JoAnne Strom** (zip code: 98006)  
Stop PSE from cutting down trees and building huge towers running through our neighborhoods. They are not looking out for the best interest of the citizenry. They are only looking out for themselves.

I584-A-1 | **391. Angela Juan** (zip code: 98006)  
I live right by the side of the trail along with the tall power line and Olympic Petroleum pipeline in Newport Hills Bellevue. It is scary enough already for us to live by those thing every day.  
  
We definitely don't want Pugen Sound Energy to build even more taller, bigger, and stronger power line by our house. These tall power lines will threaten our lives in the future if there's something wrong with it and it will cause the explosion with the petroleum pipeline and burn us into ashes in one second!  
  
If there's an seismic gigantic earthquake which is expecting, happen in the future in our or our children lifetime, these tall power lines will cause even more damage such as fire and burn down all

I161-B -1 | See response for Key Theme OBJ-1.

I98-D -1 | See response for Key Theme ALT-1.

I582-A -1 | Comment noted.

I583-A -1 | Comment noted.

I584-A -1 | See responses for Key Theme PLS-2, Key Theme EMF-1, and Key Theme EARTH-2.



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I584-A-1 | the houses and all the people when they fall from the earthquake because they are so Huge! We don't need More Tragedy on top of the catastrophe! We PREVENT it!!!  
 We got way enough radiation already everyday live by these tall power lines, we Don't want those huge tall power lines to NUKE us even more everyday in our life. We want to live healthy and Not to get life threatening Cancer from those Huge power lines in our life.

I584-A-2 | We work hard in our life and finally we could afford to buy the house we live in now with 30 years of mortgage. We Can't afford to lose our house value dropped by 20% or more because of those Huge power lines!  
 Eastside is a very nice neighborhood here and we Don't want PSE to build those Huge Gigantic power line to destroy and to threaten our lives, our health, our peace of mind, our property, and the beauty of the nature where we live! So NO Giant Power Lines in Eastside!!! Seriously!!! Please and Thank You!

I585-A-1 | **392. Judith Mercer** (zip code: 98006)  
 Please reject the PSE's Energize Eastside. It is unnecessary, expensive and dangerous.

I586-A-1 | **393. Julia Chan** (zip code: 98006)  
 No new energize project at somerset

I587-A-1 | **394. Julie High** (zip code: 98006)

I588-A-1 | **395. Jim Nelson** (zip code: 98006)  
 Among many of the Great Things that make Bellevue a Great Place to live is the Green Spaces, Parks and the View from the Somerset and Lakemont Neighborhoods. From what I can gather, it appears that the Plans for PSE have the potential to significantly alter some of these aspects of living in Bellevue. ALSO, it has become apparent that there may also be "room for improvement" in endeavors such as Energy Saving and better local energy generating ability as more of the community is beginning to invest in Solar and other Alternative Energy Sources. It is for these reasons , as well as others, that I am in opposition to the Plans to Place New High Voltage Transmission Lines in the Proposed Neighborhoods between Lake Hills- Somerset and Eastgate.  
 Thanks.  
 Jim Nelson

I589-A-1 | **396. Ellen Lamb** (zip code: 98006)  
 I am concerned about the cost and feasibility of this plan. We need to consider other alternatives.

I590-A-1 | **397. kenn gennari** (zip code: 98006)

I591-A-1 | **398. Kalai Socha-Leialoha** (zip code: 98005)  
 We live in Bridle Trails. I agree with CENSE that what PSE wants to do is unnecessary on many levels. I would not like to see their current plan go through if at all possible.  
 ~ thank you,  
 Kalai Socha-Leialoha

I584-A -2 | See response for Key Theme ECON-1.

I585-A -1 | Comment noted.

I586-A -1 | Comment noted.

I588-A -1 | Comment noted.

I589-A -1 | See response for Key Theme ECON-3.

I591-A -1 | See response for Key Theme OBJ-1.



CENSE PETITION

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|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                              |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| I592-A-1 | <p><b>399. Tamra Kammin</b> (<i>zip code: 98056</i>)<br/>This is an unnecessary project which will have a devastating effect on our community. It will endanger residents, decrease property values, and provide absolutely no benefit to any Washington residents.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | I592-A -1 See responses for Topic PLS and Topic EMF, and Key Theme ECON-1                                    |
| I593-A-1 | <p><b>400. robert kapela</b> (<i>zip code: 98005</i>)<br/>1. The owners of the transmissions lines are non- national and if TPP is made law..will have the dispute resolution provisions on their side to insure the new lines go through.<br/>2. we have two sets north-south . the eastern one for which the current action pertains runs through multiple private properties in the Redmond/Bellevue region. The western north / south line runs primarily through a 500 state park. This is the one to enhance, not the one that runs primarily through private residential home sites.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | I593-A -1 See responses for Key Theme OBJ-1, Topic PLS and Topic EMF, Key Theme VR-5, and Key Theme ECON-4 . |
| I594-A-1 | <p><b>401. Anis and Julie Karam</b> (<i>zip code: 98005</i>)<br/>This project will not benefit anyone energy or health wise.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | I594-A -1 Comment noted.                                                                                     |
| I595-A-1 | <p><b>402. Karen Xu</b> (<i>zip code: 98006</i>)<br/>Building high voltage power line at residential area and schools are huge potential hazard to local community.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | I595-A -1 See responses for Key Themes EMF-1 and EMF-3.                                                      |
| I596-A-1 | <p><b>403. Karen Lorch</b> (<i>zip code: 98006</i>)<br/>I have reviewed the studies and do not believe Energize Eastside is necessary. I support CENSE.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | I596-A -1 Comment noted.                                                                                     |
| I597-A-1 | <p><b>404. karla kasick</b> (<i>zip code: 98056</i>)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | I368-B -1 Comment noted.                                                                                     |
| I368-B-1 | <p><b>405. An anonymous signer</b> (<i>zip code: 98005</i>)<br/>As a homeowner I am Opposed the the proposed towers in Woodbridge; look beyond these residential neighborhoods!</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                              |
| I598-A-1 | <p><b>406. kate burch</b> (<i>zip code: 98006</i>)<br/>I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).<br/><br/>PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.<br/><br/>Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.<br/><br/>Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.<br/><br/>The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.</p> |                                                                                                              |



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I598-A-1 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I188-B-1 | **407. Katherine ma** (zip code: 98006)

I157-R-1 | **408. Kathleen Sherman** (zip code: 98006)

I171-B-1 | **409. Kathy Judkins** (zip code: 98006)  
Alternative 1A could cause my over a million dollar home to be demolished due to the 50 foot clearance required from the pipeline. Also during construction I would have no access to my garage or street on the easement. I will fight this plan until I die.

I599-A-1 | **410. Kathleen Millen** (zip code: 98059)

I600-A-1 | **411. Kathy Woodman** (zip code: 98005)

I601-A-1 | **412. katie moran** (zip code: 98005)

I602-A-1 | **413. Kausik Kayal** (zip code: 98056)

I603-A-1 | **414. kay owen** (zip code: 98006)

I604-A-1 | **415. Kevin Barry** (zip code: 98006)  
I wish to preserve my home value and view as well as my families health by not having this power line erected and heightened.

I605-A-1 | **416. Keith Collins** (zip code: 98005)  
The whole process was flawed from the start. City hall seems to be in the pocket of PSE. Stop this nonsense now!

I606-A-1 | **417. Kim Smallwood** (zip code: 98006)

I607-A-1 | **418. Keith Woodcox** (zip code: 98006)

I608-A-1 | **419. Grace Zhang** (zip code: 98006)

I609-A-1 | **420. Hilja Kelley** (zip code: 98056)  
I do not favor higher voltage lines, no matter how it is planned. We need to use other ways to generate and use energy.

I610-A-1 | **421. Kelli Arbey** (zip code: 98005)

I171-B -1 | See response for Key Theme LU-2.

I604-A -1 | See responses for Key Theme ECON-1 and Key Theme EMF-1.

I605-A -1 | Comment noted.

I609-A -1 | Comment noted.





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I611-A-1 | **422. Kelly Sather** (zip code: 98006)

I612-A-1 | **423. Kelvin Yiu** (zip code: 98006)

I125-B-1 | **424. Kenneth YAMAMOTO** (zip code: 98006)  
The upgraded evidence convinces me that we do not need this extensive upgrade that PSE proposed. If we can wait for the battery backups in in 10 to 20 years a less expensive and simpler solution will be the way to go.

I613-A-1 | **425. Kenny Dudunakis** (zip code: 98005)

I614-A-1 | **426. Kristin Quam** (zip code: 98006)  
I support the no action alternative because it gives the community time to increase conservation efforts and to harness technological advancements. If alternative one is approved there will be no going back. Please do what is best for our neighborhoods and community. PSE can find another way to satisfy their foreign investors.

I615-A-1 | **427. Kerri Sheldon** (zip code: 98006)  
The transmission line alternatives must be explored. A transmission line would only: \* degrade our city,  
\* harm the environment (thousands of trees will be destroyed) ,  
\* increase risk of catastrophic pipeline fires,  
\* raise our electricity rates for decades.

I616-A-1 | **428. Kerry Schwartz** (zip code: 98033)  
Not through Kirkland. Lines need to be buried.

I617-A-1 | **429. Kerste Helms** (zip code: 98006)  
It is so important to be sure that we have an accurate, independent assessment of the true power needs and solutions for 21st century living.

I109-II-1 | **430. Karen Esayian** (zip code: 98006)

I618-A-1 | **431. Karen Graylin** (zip code: 98006)

I619-A-1 | **432. Kristi Weir** (zip code: 98006)  
DEIS should be about protecting the environment. The best thing for the environment would be NOT to build Energize Eastside as it is to needed. We can meet our energy needs by renewable resources as well as conservation through building design. It would be hard to replace the carbon sequestration that 8000 tree provide and which Energize Eastside would cut down.

I620-A-1 | **433. Steven Shimamoto** (zip code: 98006)  
NO POWER LINES!!

I621-A-1 | **434. Kim Long** (zip code: 98005)  
PSE should not be able to get out of paying for damage to property when their lines fall down and claiming"act of god"

I125-B -1 | See responses for Key Theme OBJ-1 and Key Theme ALT-1.

I614-A -1 | Comment noted.

I615-A -1 | See responses for Key Themes ALT-1 and ALT-3, Key Theme ECON-4, and Topic PLS.

I616-A -1 | See response for Key Theme ALT-1.

I617-A -1 | See response for Key Theme OBJ-2.

I619-A -1 | Comment noted.

I620-A -1 | Comment noted.

I621-A -1 | See response for Key Theme EARTH-2.



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I622-A-1 | **435. Shioon Kim** (zip code: 98006)  
 Before PSE processes the high voltage project, they needs to prove it is safe or not for electric magnetic field.  
 It looks like for them for their business grow but not for our residents.

I623-A-1 | **436. Kim-Hoang Tran** (zip code: 98056)

I624-A-1 | **437. Kristina Leonard** (zip code: 98033)

I625-A-1 | **438. Eri Koizumi** (zip code: 98056)  
 After all, please think about what if your house is in this zone.

I626-A-1 | **439. Cindy Lee** (zip code: 98056)

I627-A-1 | **440. Kathleen Quam** (zip code: 98006)  
 I support a no-action alternative. With the 15 year anniversary of the Nisqually earthquake, I am reminded of the unique safety concerns our region faces. The proposed transmission lines are too close to the aging Olympic pipeline.

I628-A-1 | **441. Kristina Dudunakis** (zip code: 98005)

I629-A-1 | **442. Krishna Nareddy** (zip code: 98006)  
 Please do not abuse the existing easement to install a high powered power transmission line whose main purpose is to sell power to Canada.  
  
 Our neighborhoods will pay the price and that's not fair!

I630-A-1 | **443. Kristen McSherry** (zip code: 98005)

I631-A-1 | **444. Karen Sillivan** (zip code: 98006)

I632-A-1 | **445. Kevin Steenis** (zip code: 98056)  
 Dear Ms. Bedwell,  
  
 I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
 PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
 Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I622-A -1 | See response for Key Theme EMF-1.

I625-A -1 | Comment noted.

I627-A -1 | Comment noted.

I629-A -1 | Comment noted.



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- I632-A-1 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.
- I632-A-1 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.
- I632-A-1 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.
- I633-A-1 | **446. Linda P Taylor** (zip code: 98056)
- I634-A-1 | **447. Kyle Hauge** (zip code: 98056)
- I635-A-1 | **448. Kyle Anderson** (zip code: 98006)
- I636-A-1 | **449. Jean Hyde** (zip code: 98006)  
Please do not allow new power lines to be installed
- I637-A-1 | **450. Mary Kenny** (zip code: 98006)  
Please consider the beauty of Somerset when planning utilities - many have invested life savings in their property in this area.
- I638-A-1 | **451. Charles Lorme** (zip code: 98006)  
Trashing property values, potentially causing a pipeline explosion, forcibly moving neighbors.. All to make an Australian companys stock tick up 1/4 of a point!?!? Seems like an awful idea!
- I639-A-1 | **452. Lynda Ardern** (zip code: 98005)
- I640-A-1 | **453. Larry Johnson** (zip code: 98056)
- I641-A-1 | **454. Larry Tidwell** (zip code: 98033)
- I642-A-1 | **455. Laura Brodniak** (zip code: 98034)
- I643-A-1 | **456. Laura Hoff** (zip code: 98006)
- I644-A-1 | **457. Laurel Rand** (zip code: 98005)  
We are very opposed to PSE's Energize Eastside plan which is unjustified and dangerous.

- I636-A -1 | Comment noted.
- I637-A -1 | See responses for Key Theme VR-1 and Key Theme ECON-1.
- I638-A -1 | See response for Key Theme ECON-1 and Key Theme OBJ-1.
- I644-A -1 | Comment noted.



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I645-A-1 | **458. Laurie Tish** (zip code: 98005)  
Alternative 1A is not appropriate for our city and our neighborhoods. PSE's justification is not reasonable and we need to slow this process down and use a methodical, rational approach.

I646-A-1 | **459. Laura Liutkiene** (zip code: 98006)

I647-A-1 | **460. yueqin wang** (zip code: 98006)  
Protect our beautiful home. Please give up or change new high voltage power line design in Somerset. Thanks.

I648-A-1 | **461. Laura Boylan** (zip code: 98008)

I649-A-1 | **462. Lindsey Brisimitzis** (zip code: 98033)

I650-A-1 | **463. Leah Willert** (zip code: 98027)

I651-A-1 | **464. Abel Carp** (zip code: 98006)

I652-A-1 | **465. Leslie Milstein** (zip code: 98006)

I653-A-1 | **466. Laurie Hauge** (zip code: 98056)

I654-A-1 | **467. Yumin Li** (zip code: 98007)

I655-A-1 | **468. Anita Li** (zip code: 98006)

I656-A-1 | **469. Jeanette Liao** (zip code: 98006)

I657-A-1 | **470. Lia Unrau** (zip code: 98008)  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: Lia Unrau  
  
Dear Ms. Bedwell,  
  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.  
  
Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have

I645-A -1 | Comment noted.

I647-A -1 | Comment noted.



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I657-A-1 | suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I657-A-1 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

I657-A-1 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I658-A-1 | **471. Steve wu** (*zip code: 98006*)  
support CENSE, keep our community safe for kids.

I659-A-1 | **472. Lisa Heilbron** (*zip code: 98005*)  
Please don't approve Energize Eastside.

I660-A-1 | **473. Lillian Baillie** (*zip code: 98006*)

I661-A-1 | **474. Linda Anderson** (*zip code: 98005*)

I662-A-1 | **475. Linda Bergam** (*zip code: 98056*)  
The proposed plans for Energize Eastside are flat out wrong and must be stopped. Your corporate arrogance and refusal to accept public outrage is deplorable. No private company, including yours, should be allowed to come into our neighborhood and destroy it. Your studies are slanted, your reasoning is flawed. Stop this.

I663-A-1 | **476. Linda Woo** (*zip code: 98006*)

I664-A-1 | **477. Lindsey Kaner** (*zip code: 98055*)

I665-A-1 | **478. Linda Bruce** (*zip code: 98005*)

I666-A-1 | **479. Linda Beckman** (*zip code: 98006*)  
This project is wrong. Please stop it from happening. There are far better alternatives. Thank you

I123-B-1 | **480. Iiping ke** (*zip code: 98006*)  
Make it less impact to our neighborhood make it environmental friendly

I667-A-1 | **481. Lisa Wolff** (*zip code: 98005*)  
Alternative 1A should not be selected. This is too harmful for our neighborhoods.

I668-A-1 | **482. Lisa Yalcin** (*zip code: 98034*)

I189-B-1 | **483. Lisa Merrill** (*zip code: 98006*)

I658-A -1 | Comment noted.

I659-A -1 | Comment noted.

I662-A -1 | See responses for Key Theme EIS-2 and Key Theme OBJ-1.

I666-A -1 | Comment noted.

I123-B -1 | See response for Key Theme ALT-1.

I667-A -1 | Comment noted.



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I669-A-1 | **484. Lisa Howard** (zip code: 98006)

I42-B-1 | **485. Dapeng Liu** (zip code: 98006)  
Support!

I670-A-1 | **486. Livia Yamamoto** (zip code: 98006)  
I am against this any plan to build this powerline until PSE REVIEWS all of the new options available with CENSE .  
Why did PSE ignore all of the many new technology available and choose the most expensive and obsolete technology for Bellevue? Why did Bellevue city not reject this plan when PSE initially proposed this?

I79-H-1 | **487. Lori Elworth** (zip code: 98056)  
Pause this EIS here and get the truth. Determine energy need that is unbiased. The city of Bellevue, as the lead agency, should determine need. You have the responsibility to control this process with regard to safety and cost. Use your independent technical experts and legal council and pause the DEIS. PSE is not providing answers to questions asked by CENSE. I am a member of CENSE.

I671-A-1 | **488. LT Tong** (zip code: 98006)  
Dear Ms. Bedwell,  
  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.  
  
Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.  
  
The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
  
Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I42-B-1 | Comment Noted.

I670-A -1 | Comment noted.

I79-H -1 | See response for Key Theme EIS-1.



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RESPONSE

I672-A-1 | **489. Lori Wheatley** (zip code: 98006)

I673-A-1 | **490. Luxi Ji** (zip code: 98006)

I674-A-1 | **491. Laura Polt** (zip code: 98005)  
I am against overhead transmission lines running through our city. With today's technology, there must be a better alternative!

I675-A-1 | **492. Lorraine Meyer** (zip code: 98005)  
I do not feel that this project is in the best interests for the Eastside and the residents. The logistics of installing these mammoth poles in our area is certainly unreasonable due to access to the proposed area.

I676-A-1 | **493. Lisa Schilling** (zip code: 98006)

I677-A-1 | **494. Luanne Lemmer** (zip code: 98005)

I678-A-1 | **495. Lucy Regan** (zip code: 98006)  
I am against locating the proposed power lines in close proximity to aging petroleum pipelines, next to Tyee middle school to put potential safety risk to our neighborhood and students.

I679-A-1 | **496. Matthew Luhr** (zip code: 98058)  
Enough is enough.

I680-A-1 | **497. Diane Guest** (zip code: 98006)

I681-A-1 | **498. Lori White** (zip code: 98005-1353)

I682-A-1 | **499. Laurie Wick** (zip code: 98005)  
Stop this project!

I683-A-1 | **500. Michelle Liu** (zip code: 98006)  
Negative impact to the environment, safety issues for the community.

I65-C-1 | **501. Lily Yin** (zip code: 98006)  
EIS program will definitely damage all scenic view from eastside. We love this land because it is beautiful. We enjoyed the land and against any program would destroy the view.

I684-A-1 | **502. Lynn Ang** (zip code: 98006)  
There is no need for a 18 foot overhead transmission line. Any new lines should be underground. It's ugly, outdated and dangerous to have such a thing in a neighborhood. It's also expensive and destroy the beauty of our neighbour.

I190-B-1 | **503. Lynne Prevette** (zip code: 98056)  
\* Bulldoze dozens of homes in Newcastle.

I190-B-2 | \* Increase risk of catastrophic pipeline fires.

I674-A -1 | Comment noted.

I675-A -1 | Comment noted.

I678-A -1 | See response for Key Theme PLS-3.

I679-A -1 | Comment noted.

I682-A -1 | Comment noted.

I683-A -1 | Comment noted.

I65-C -1 | See response for Key Theme VR-1.

I684-A -1 | Comment noted.

I190-B -1 | See response for Key Theme LU-1.

I190-B -2 | See response for Key Theme PLS-2.



CENSE PETITION

COMMENT

RESPONSE

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                         |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| I47-C-1  | <p><b>504. Linda Young</b> (zip code: 98056)<br/>         I am a homeowner in Olympus, Newcastle. My home and my neighbors could have our homes smashed to nothing for PSE's unnecessary project. The almighty dollar is not everything. I have a neighbor with MS and her husband with ALS - they are going to have to move to assisted living. Your plans hold them "hostage" as how do they sell and get the full market price so they have the money for their ongoing huge medical and living expenses? How would you like the bulldozer aiming for your home that contains your memories? - for me the memories of my late husband of 52 years of marriage. About time you people "got the message" and listened to CENSE and the countless bright people (eg. MIT engineer) who spoke at the Bellevue Meeting. Remember the three little boys who burnt to death in Bellingham - their parents would do anything to have them back in their families. By now they would be through university, married and have children of their own - all denied due to greed.<br/>         You cannot say 100% that an accident will not happen.</p>                                                                                                                                                                                                                                                                                                                                                                                                                              | I47-C -1 See responses for Key Themes ALT-1 and ALT-3, Key Theme ECON-1, and Topic PLS. |
| I188-C-1 | <p><b>505. Katherine Ma</b> (zip code: 98006)<br/>         We bought our house last summer. One big reason to love our house is the views we own. As Bellevue residents, we deserve our rights from City of Bellevue to protect our views yet PSE's high-voltage will, if permitted to build, ruin our views. We, the Bellevue Residents, urge our government, to deny PSE's Energize Eastside plan from impact of our views. Shall you have any questions, please contact me at 734-474-8578.<br/>         Thank you.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | I188-C -1 See response for Key Theme ECON-1.                                            |
| I685-A-1 | <p><b>506. Madeline Hamilton</b> (zip code: 98005)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                         |
| I686-A-1 | <p><b>507. Madalyn Rustagi</b> (zip code: 98006)<br/>         To: Heidi Bedwell, Energize Eastside EIS Program Manager<br/>         From: Madalyn Rustagi</p> <p>Dear Ms. Bedwell,</p> <p>I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).</p> <p>PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.</p> <p>Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.</p> <p>Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.</p> |                                                                                         |





CENSE PETITION

COMMENT

RESPONSE

I686-A-1 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I687-A-1 | **508. Maggie Peloquin** (zip code: 98056)

I688-A-1 | **509. Mingmei Xu** (zip code: 98006)  
pse is crazy for money. They think of none for local residence.

I689-A-1 | **510. Lisa Beelin** (zip code: 98005)

I690-A-1 | **511. Mai-Tram Huynh** (zip code: 98006)

I691-A-1 | **512. Kim Smerekanych** (zip code: 98006)

I692-A-1 | **513. Mark Hendrickson** (zip code: 98006)  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I693-A-1 | **514. Margaret & Shing-Hing Chung** (zip code: 98006)

I694-A-1 | **515. Marci Hennes** (zip code: 98006)

I695-A-1 | **516. Marcia Reass** (zip code: 98005)  
The scope of this plan through PSE preferred route far exceeds the needs of this community which will be paying the bill.

I696-A-1 | **517. Marcia LeVeque** (zip code: 98006)  
Please be progressive in planning to keep Bellevue a safe place for all our neighborhoods without high voltage poles near an oil pipeline. It's important to consider different alternatives that other states are already using to help provide the power we need for our beautiful city.

I697-A-1 | **518. Maria Orlow** (zip code: 98005)  
The gas explosion in Seattle yesterday should give Bellevue a hint of the dangers we face in allowing PSE to install high tension transmission lines by gas and aviation fuel pipelines. Don't do this to us!!!

I698-A-1 | **519. Marjorie Reger** (zip code: 98006)

I699-A-1 | **520. Marlena Baker** (zip code: 98056)

I688-A -1 | See response for Key Theme OBJ-1.

I692-A -1 | See response for Key Theme OBJ-1.

I695-A -1 | See responses for Topic OBJ and Key Theme ECON-4.

I696-A -1 | Comment noted.

I697-A -1 | See response for Key Theme PLS-2.



CENSE PETITION

COMMENT

RESPONSE

I203-B-1 | **521. Marlo Straub** (zip code: 98006)

I700-A-1 | **522. Martha Spieker** (zip code: 98005)

I701-A-1 | **523. Marty Arnot** (zip code: 98006)  
Let's not destroy our neighborhoods with unneeded power poles. There are better solutions for the Eastside

I702-A-1 | **524. Mary Dahl** (zip code: 98006)

I703-A-1 | **525. Mary Jo Huelsemann** (zip code: 98006)

I704-A-1 | **526. Mary Lee** (zip code: 98056)  
Please stop this blight from moving forward and impacting our wonderful neighborhoods.

I705-A-1 | **527. Matthew Dixon** (zip code: 98006)  
We would hate to see huge power line poles being installed on the back of our property.

I706-A-1 | **528. denise woodley** (zip code: 98006)  
The railway corridor is currently home to a protected eagle nest with a mated pair who produced two offspring in 2015. The trees cannot be cut and the power lines can't be placed in this protected area.

I707-A-1 | **529. Marilyn Mayers** (zip code: 98008)  
The current Energize plan is essentially a scam. We don't need it; we don't want it. It's time for us to take the company back and make it a public utility company operated in our name. Shame on Puget Sound Energy for proposing Energize Eastside!

I708-A-1 | **530. Megan Bettilyon** (zip code: 98005)

I7-B-1 | **531. Richard McNeill** (zip code: 98006)  
I am concerned by PSE's lack of respect for the public. It releases glossy versions of its business plan and leaves us to figure out what's true. I rely on you to protect the Eastside from profit-motivated companies.

I709-A-1 | **532. Laurent Mechain** (zip code: 98006)

I710-A-1 | **533. Andy Mednikoff** (zip code: 98056)

I711-A-1 | **534. Mei Qi** (zip code: 98006)

I712-A-1 | **535. Melina Cox** (zip code: 98006)

I713-A-1 | **536. Melinda Carbon** (zip code: 98008)

I701-A -1 | Comment noted.

I704-A -1 | See response for Key Theme LU-4.

I705-A -1 | Comment noted.

I706-A -1 | See response for Key Theme P&A-5.

I707-A -1 | See response for Key Theme OBJ-1.

I7-B -1 | See response for Key Theme EIS-2.



CENSE PETITION

COMMENT

RESPONSE

I714-A-1 | **537. Melinda Hirsch** (zip code: 98005)  
Time to stop this senseless project. The energy expansion is not necessary. The study is not in the least scientific and needs to be fixed.

I715-A-1 | **538. Marie Emerson** (zip code: 98052)  
It's time to reexamine the PSE's claim of immediate need for this greatly expanded proposed line which will directly affect a large number of local residents' views, health and real estate values with no direct benefit. Let's refocus on conservation and other cheaper, easier and locally controlled methods of meeting demand.

I716-A-1 | **539. Amy Correa** (zip code: 98034)

I717-A-1 | **540. Meredith Selfon** (zip code: 98034)

I718-A-1 | **541. Michael Evered** (zip code: 98006)  
This project is not needed, would endanger public safety and would be a visual blight on our City

I719-A-1 | **542. Linda Meyer** (zip code: 98005)  
I do not feel it is necessary for large high wire lines. If energy is needed there are other options. Do not believe energy is needed for this area.

I720-A-1 | **543. Meng Wang** (zip code: 98006)

I721-A-1 | **544. Mark Grossbard** (zip code: 98005)

I722-A-1 | **545. Miao Miao** (zip code: 98006)

I723-A-1 | **546. Yanjie Lu** (zip code: 98056)

I724-A-1 | **547. Michael Kenway** (zip code: 98005)

I725-A-1 | **548. Michal Silverman** (zip code: 98033)

I726-A-1 | **549. Michal Tidwell** (zip code: 98033)

I727-A-1 | **550. Michele Scanlan** (zip code: 98005)

I728-A-1 | **551. Tomiko Teramoto** (zip code: 98056)  
We decided to die at our exiting home instead that we are going back to our original country. If we have to sell this house, how can we find a house equivalent to our house in Olympus? We will not be able to get mortgage for a new house because of our ages if we have to move out. Do not destroy our retirement life.

I729-A-1 | **552. Michael Moricz** (zip code: 98006)  
Dear Ms. Bedwell,

I714-A -1 | Comment noted.

I715-A -1 | Comment noted.

I718-A -1 | Comment noted.

I719-A -1 | Comment noted.

I728-A -1 | See response for Key Theme LU-1.



CENSE PETITION

COMMENT

RESPONSE

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                  |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | <p>I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).</p> <p>PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.</p> <p>Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.</p> <p>Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.</p> <p>The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.</p> <p>Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.</p> | <p>I177-A -1 See response for Key Theme ALT-1.</p> <p>I731-A -1 See responses for Key Theme OBJ-1 and Key Theme ALT-1.</p> <p>I732-A -1 See responses for Key Themes ECON-1 and ECON-2, and Key Theme EMF-1.</p> |
| I729-A-1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                  |
| I30-C-1  | <p><b>553. Mike Abel</b> (zip code: 98006)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                  |
| I177-A-1 | <p><b>554. Mike Young</b> (zip code: 98006)<br/>         I strongly support Alt 2 (or even taking no action at the moment). I strongly oppose Alt 1 &amp; Alt 3. Alts 1 &amp; 3 exact unnecessarily high costs (physical and financial) on our community, our environment, our neighborhoods, our neighbors (and their homes), and our safety -- both short-term and long-term. They would impose burdens that would persist for generations, that cannot be undone, and that are not necessary.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                  |
| I730-A-1 | <p><b>555. Michael Zwilling</b> (zip code: 98007)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                  |
| I731-A-1 | <p><b>556. Michele Miller</b> (zip code: 98005)<br/>         Enough is enough I already have the four lines of power and two pipelines. The people that maintain these utilities forget the properties belong to the home owners and not them. All this happens on less than an acre of land. My family has owned this property since 1971. This is all about PSE selling more power outside this area and making money not protecting us for the future.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                  |
| I732-A-1 | <p><b>557. Mina Peterson</b> (zip code: 98005)<br/>         As a full time real estate professional for 30 years, I can say unequivocally putting any visible towers in this or any neighborhood will dramatically devalue homes considerably throughout the neighborhoods and have a continued impact indefinitely.</p> <p>The impact will be felt immediately and even the possibility of this project proceeding will and is</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                  |



CENSE PETITION

COMMENT

RESPONSE

1732-A-1 something that buyers who might be considering a move to the area are asking about and rethinking the locations they are considering.

Whether or not the energy companies care or consider our home values, Buyers and Homeowners do care.

I know many many buyers and property owners believe, living near these towers can cause cancers and have other potential harmful health effects. This belief is particularly evident with the wave of many cultures new to the area. It is definitely seen as bad luck and bad energy.

Just having the power towers that currently run through these areas or any other, I can attest to the fact that 80% or more of the potential buyers to a particular home in close proximity to these current towers will NOT purchase a home due to health concerns alone, real or not real.

The values of homes with views will drop as well just having the eye sore of possible huge towers, not just possible health concerns.

RUN THE CABLE UNDERGROUND AND IN CABLES ON THE FLOOR OF LAKES! NOT THROUGH OUR NEIGHBORHOODS.

1733-A-1 **558. Melinda Miller** (zip code: 98005)  
PSE knows they have better solutions to Eastside's Energy future than the ones they are proposing. If they are allowed to go through with their current plans it will be a huge blight to our community.

1734-A-1 **559. Mira Lane** (zip code: 98005)

1735-A-1 **560. Merrisa Claridge** (zip code: 98005)

1736-A-1 **561. Michael Derr** (zip code: 98004)

1737-A-1 **562. Melody KirkWagner** (zip code: 98005)

1738-A-1 **563. Michael Locke** (zip code: 98056)

1739-A-1 **564. Mary Lynne Poole** (zip code: 98005)  
Puget Sound is pushing ugly, unnecessary and dangerous high tension wires throughout the East side. Please rule against Puget Sound.

1740-A-1 **565. Mick Tish** (zip code: 98005)

1741-A-1 **566. Min Chen** (zip code: 98006)

1742-A-1 **567. Margaret Makar** (zip code: 98005)  
I am against what PSE is proposing and for what cense is doing

1733-A -1 See response for Key Theme LU-4.

1739-A -1 Comment noted.

1742-A -1 Comment noted.



CENSE PETITION

COMMENT

RESPONSE

I743-A-1 | **568. Michelle Molan** (zip code: 98006)

I75-E-1 | **569. Margaret Moore** (zip code: 98006)  
PSE cannot be allowed to move forward with this project as planned. There is ample evidence that it is poorly conceived for many of the wrong reasons. Help us now!

I368-C-1 | **570. An anonymous signer** (zip code: 98006)

I744-A-1 | **571. Money Wan** (zip code: Wa98056)  
Do not agree with PSE plan .

I745-A-1 | **572. Mary Schneider** (zip code: 98006)  
After considering the facts, I am very sure that alternatives to all the big poles is NOT a good idea for our community.

I746-A-1 | **573. Margaret Bumgarner** (zip code: 98006)

I747-A-1 | **574. Mindy Suurs** (zip code: 98006)

I748-A-1 | **575. Robert Johnson** (zip code: 98006)  
PSE needs to further study their proposed transmission lines as their proposal is seriously flawed.

I108-B-1 | **576. Maxine Voetberg** (zip code: 98006)  
PLEASE DO NOT LET THIS HAPPEN TO OUR NEIGHBORHOOD!

I749-A-1 | **577. Michelle Wannamaker** (zip code: 98006)

I750-A-1 | **578. Michael Creel** (zip code: 98056)  
Having worked for eight years in Iraq and Afghanistan to keep and maintain my property in Newcastle and a rental in Somerset through the market crash of 2008 and ensuing recession, I'm told the power company will either take my homes, or greatly devalue them. I've spent a fortune remodeling them, and it may have been a massive waste of time, effort, and money. This isn't right.

I751-A-1 | **579. Dr. Mel Wilenzick** (zip code: 98006)  
Please don't allow this PSE construction continue.

I752-A-1 | **580. Mike Wong** (zip code: 98056)  
Get PSE out of our "backyard" and the farther the better. If we had any choice, we wouldn't be doing business with them. While our house was being rebuilt, this company bilked us with several bogus charges. All we have to do is show the ridiculous multiple accounts (5) they set up, making it a nightmare for us to keep up with. If they'll stoop to this to get a few dollars from one customer, I can't imagine what they'd do to get a few million from Eastside. Shameless!

I753-A-1 | **581. Michelle wang** (zip code: 98006)

I75-E -1 | Comment noted.

I744-A -1 | Comment noted.

I745-A -1 | Comment noted.

I748-A -1 | See response for Key Theme ALT-1.

I108-B -1 | Comment noted.

I750-A -1 | See responses for Key Themes ECON-1 and ECON-2.

I751-A -1 | Comment noted.

I752-A -1 | See responses for Key Theme OBJ-1.



CENSE PETITION

COMMENT

RESPONSE

1754-A-1 | **582. Scott Lee** (zip code: 98006)  
 We do not want higher high-voltage transmission lines. It would severely block our views and we are concerned with the safety of our small children with such transmission lines generating more electromagnetic fields.

1755-A-1 | **583. Mei yan** (zip code: 98006)

1756-A-1 | **584. Natalie Duryea** (zip code: 98005)  
 Save our City!!!!

1757-A-1 | **585. Keqin Gong** (zip code: 98006)

1758-A-1 | **586. Nancy Bennett** (zip code: 98005)  
 To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Nancy Bennett  
 Dear Ms. Bedwell,  
  
 I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
 PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
 Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.  
  
 Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.  
  
 The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
  
 Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

16-B-1 | **587. Nathan Hoff** (zip code: 98006)

1153-A-1 | **588. Thomas Neighbors** (zip code: 98004-8610)

1759-A-1 | **589. Lois and Neil Buhman** (zip code: 98056)  
 We are against the proposed changes.

1754-A -1 | See response for Key Theme VR-1.

1756-A -1 | Comment noted.

1759-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- 1760-A-1 | **590. Marlene Nelson** (zip code: 98006)
- 1761-A-1 | **591. Hao Wang** (zip code: 98006)  
Dear Ms. Bedwell:
- We are very concerned about PSE's proposal to build 130 ft tall power lines that potentially go through several Bellevue residential neighborhoods. The concept to build high voltage transmission lines in the middle of residential homes is extremely irresponsible. It will create significant risks to the people who live in the adjacent areas. Our city is located in a seismic active zone. And those transmission lines are too close to the petroleum pipelines and residential homes.
- As a public official, you are in the position can change this project into right direction. We ask you to listen to the voices of local residents. Please don't let the big cooperation dictate the future of our beautiful city.
- Thank you very much!
- Sincerely yours,
- Hao Wang  
Yingli Xu  
Emily Wang
- 1762-A-1 | **592. Michael Nimmons** (zip code: 98006)  
As a retired environmental engineer, I fail to see that the benefits of Alternative 1A over Alternative 2 for the COMMON GOOD of our impacted communities and the Eastside Region in general. I judge Alternative 1A promotes principally the economic benefit of Puget Sound Energy over the welfare, safety and environmental quality of the Eastside population that Puget Sound Energy is supposed to serve! Objective holistic analysis should be applied in the analysis and selection of the preferred alternative should result in choosing Alternative 2 over Alternative 1A.
- 1763-A-1 | **593. Nancy Cambron** (zip code: 98006)
- 1764-A-1 | **594. Choy Leng Yeong** (zip code: 98006)
- 1765-A-1 | **595. Sara Neuman** (zip code: 98006 )
- 1766-A-1 | **596. Nora Retik** (zip code: 98005)  
It seems indeed that Energize Eastside project have not been thoroughly thought through from the environmental, safety, and consumers impacts. I'm a mechanical engineer with experience in managing design of the large scale chemical and petro-chemical projects, and would be ashamed to be a part of you project in any capacity. You certainly deal more in politics than in producing and evaluating sound design alternatives.
- 1767-A-1 | **597. Debra Haraldson** (zip code: 98006)
- 1768-A-1 | **598. Anna Novikoff** (zip code: 98006)  
Letter attached

- 1761-A -1 | See responses for Key Themes PLS-2 and PLS-3 and Key Theme EARTH-1.
- 1762-A -1 | See response for Key Theme ALT-1.
- 1766-A -1 | Comment noted.





CENSE PETITION

COMMENT

RESPONSE

1769-A-1 | **599. Peter O'Brien** (zip code: 98006)  
Listen to the community and don't build the towers or remove trees. CENSE is more than opinions. Among its representatives are experts and past PSE employees.  
By the way, gas lines and power lines don't mix safely.

1770-A-1 | **600. Judith Odell** (zip code: 98006)  
Please do not have these built.

1124-B-1 | **601. Orville Gunnoe** (zip code: 98007)  
There is a reason why responsible power/utility companies found their origins as government-owned organizations. PSE could learn lessons by not trying to bulldoze or steamroll its customers to submit to poorly devised and flawed plans for the future.

1771-A-1 | **602. Olga Gousman** (zip code: 98006)

1772-A-1 | **603. Ontie Griebel** (zip code: 98005)

1773-A-1 | **604. Michael Oldham** (zip code: 98006)  
I am against any new power transmission lines being added next to the Lake Lanes corridor.

1774-A-1 | **605. Olivier Arbey** (zip code: 98005)

1775-A-1 | **606. Jin Wang** (zip code: 98006)

1776-A-1 | **607. OF** (zip code: 98034)

1777-A-1 | **608. Barbara A** (zip code: 98006)  
The basis used to determine the need is flawed with unrealistic requirements; no need for 1500mw of power to Canada, not fully utilizing peaking power plants in high demands, dangerously co-locating with fuel pipeline, and lack of transparency. This building of infrastructure is to benefit PSE, not the citizens of the Eastside.

1778-A-1 | **609. Eva & Jack Emadi** (zip code: 98005)  
STOP your Energize Eastside Project NOW! We do not need these tall expensive ugly towers in our city. We need to protect our mature trees, environment, livability, safety, reliability, esthetics, property values. Please, work with the city of Bellevue & local Eastside neighborhood organizations to come up with alternative acceptable solutions, such as underground power lines, increased capacity batteries, gas generators, etc. This is a local issue that must be resolved locally and not by a foreign hedge fund. Thank you, Eva & Jack Emadi

1195-B-1 | **610. Eugen Pajor** (zip code: 98056)  
Please stop the "not needed" and unsafety PSE project

1779-A-1 | **611. Patricia Lozier** (zip code: 98006)  
WE are against this plan, as it is not necessary and it's a money maker for PSE to sell power to Canada.

1769-A -1 | See responses for Key Themes ALT-1 and ALT-3, and Topic PLS.

1770-A -1 | Comment noted.

1124-B -1 | Comment noted.

1773-A -1 | Comment noted.

1777-A -1 | See response for Key Theme OBJ-1.

1778-A -1 | See responses for Key Themes ALT-1 and ALT-3.

1195-B -1 | See responses for Key Theme OBJ-1.

1779-A -1 | See response for Key Theme OBJ-1.



CENSE PETITION

COMMENT

RESPONSE

I780-A-1 | **612. Pam Dara** (zip code: 98006)

I781-A-1 | **613. Patricia Magnani** (zip code: 98006)

I782-A-1 | **614. Bernadette Monroe** (zip code: 98004)

I783-A-1 | **615. Pat Malte** (zip code: 98005)

I784-A-1 | **616. Pat Owen** (zip code: 98005)

I785-A-1 | **617. Patricia Janes** (zip code: 98005)  
 The PSE proposal is dangerous, will destroy the views of many, will send the power to Canada, will send the profits to Australia at the expense of all the rate payers in All the cities involved. There are alternatives that would give the extra power, if really needed. These have been neglected by PSE. The city of Bellevue and others involved deserve more respect. Please ask for it Thank you.

I786-A-1 | **618. Patrick McCall** (zip code: 98056)

I787-A-1 | **619. Patricia Gerken** (zip code: 98006)  
 It is now been proved PSE is supplying false assumptions in order to gain approval of the increased power lines so the Austrilian hedge fund can make a profit at the end of its term.  
 PSE needs to be exposed for their dishonesty.

I788-A-1 | **620. Patricia Allen** (zip code: 98033)  
 This is all about Corporate profits at the expense of tax paying residents.  
 This will:  
 \* degrade our city,  
 \* harm the environment (thousands of trees will be destroyed),  
 \*decrease value of homes  
 \* increase risk of catastrophic pipeline fires,  
 \* raise our electricity rates for decades.

I789-A-1 | **621. Paula Doe** (zip code: 98006)  
 Seems to me that neither public need nor public safety have been honestly considered in PSE's plans, and that local government should have some control to limit the ability of private corporate profit to have such negative impact on its citizens.

I790-A-1 | **622. Paul Archer** (zip code: 98006)

I791-A-1 | **623. Paul Moran** (zip code: 98005)  
 NO!

I785-A -1 | See response for Key Theme OBJ-1.

I787-A -1 | See response for Key Theme OBJ-1.

I788-A -1 | See responses for Key Theme P&A-4, Key Theme VR-4, and Key Themes ECON-1 and ECON-4.

I789-A -1 | See responses for Key Theme OBJ-1 and Key Theme ALT-3.

I791-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- I792-A-1 | **624. Paul Smits** (zip code: 98006)
- I793-A-1 | **625. Paul Kim** (zip code: 98006)
- I794-A-1 | **626. Pal Nichoson** (zip code: 98052)  
This "Energize Eastside" project by Puget sound Energy is a badly flawed idea that is not needed. Lets put a hold on this now.
- I795-A-1 | **627. Julie Baker** (zip code: 98005)  
We are very concerned about the PSE powerline project and do not believe that adequate research has been performed to justify the need for these proposed towers.
- I796-A-1 | **628. PING CHEN** (zip code: 98006)
- I797-A-1 | **629. Priscilla Locke** (zip code: 98056-1753)
- I798-A-1 | **630. PRENTICE COX** (zip code: 98006)  
Not at all convinced that the good of PSE out weighs the good of the neighborhoods.
- I799-A-1 | **631. Peter Llano** (zip code: 98006)  
I am against the building of 130 foot electrical towers replacing the current towers already traversing the Somerset neighborhood.
- I800-A-1 | **632. Penny Bahner** (zip code: 98005)  
The PSE's Energize Eastside project is shown to not be necessary per the Lauckhart-Schiffman Load Flow Study and it is just another way that a government agency believes we, the people, are stupid and uninformed. I am absolutely not in favor of this project being jammed down our throats.
- I801-A-1 | **633. Penny Olson** (zip code: 98006)  
I am concerned that the Energize Eastside project is unnecessary and will be disastrous for our Eastside cities.
- I802-A-1 | **634. Albert Newman** (zip code: 98006)
- I803-A-1 | **635. Marilyn Peterson** (zip code: 98006)
- I804-A-1 | **636. Peter Wise** (zip code: 98007)  
Please think harder and more deeply about how you can improve service without putting Eastside residents in danger and destroying our views with giant poles and pylons.
- I805-A-1 | **637. Petra Sixl** (zip code: 98006)  
I have great fears regarding safety in our area and communities. In the Seattle Times on Sunday, 2/28/16, was an article about a Quake drill in June. The article says, the next Quake will be far more damaging then the one in 2001, magnitude 9, which is equivalent to 35,2 billion tons of TNT and will last 4-5 minutes.  
I think, we all should keep this in mind when we plan for our future!

- I794-A -1 | See responses for Key Theme OBJ-1 and Key Theme EIS-1.
- I795-A - | See response for Key Theme OBJ-1.
- I798-A -1 | Comment noted.
- I799-A -1 | Comment noted.
- I800-A -1 | See response for Key Theme OBJ-3.
- I801-A -1 | See response for Key Theme OBJ-1.
- I804-A -1 | Comment noted.
- I805-A -1 | See response for Key Theme PLS-2.



CENSE PETITION

COMMENT

RESPONSE

I806-A-1 | **638. Kathleen Petty** (zip code: 98005)  
I attended the meeting at city hall, and feel there is a compelling case for re-examining both the need and the methods that PSE proposes.

I807-A-1 | **639. Paul Fergen** (zip code: 98006)  
The safety risk is too great particularly given the questionable need and better and less costly alternatives.

I808-A-1 | **640. Patti Flanik** (zip code: 98059)  
More studies need to be done on this project, especially if high voltage power lines are being installed near old gas pipelines. The risk does not outweigh the benefits!

I809-A-1 | **641. Dan Phillips** (zip code: 98006)

I810-A-1 | **642. Phil Sherman** (zip code: 98006)

I811-A-1 | **643. Maria Pickering** (zip code: 98006)  
Keep Somerset beautiful and safe!

I812-A-1 | **644. Margie Pietz** (zip code: 98056)  
I really resent the way PSE is trying to ram this project down our throats. It will not only be a huge blight to our neighborhood but take away some of our homes. PSE has not shown that this project is needed and the net result of building this mega project is we get to pay for it and PSE makes money selling the extra power to Canada, etc.

I813-A-1 | **645. ping yin** (zip code: 98006)

I814-A-1 | **646. Patrick Knorr** (zip code: 98006)  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: Patrick Knorr  
  
Dear Ms. Bedwell,  
  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.  
  
Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the

I806-A -1 | See response for Key Theme OBJ-2.

I807-A -1 | See response for Key Theme OBJ-1.

I808-A -1 | See responses for Topic PLS.

I811-A -1 | Comment noted.

I812-A -1 | See responses for Key Theme VR-5 and Key Theme OBJ-1.



CENSE PETITION

COMMENT

RESPONSE

1814-A-1 solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

1815-A-1 **647. parul shah** (zip code: 98005)

1816-A-1 **648. Phil Gable** (zip code: 98006)

1817-A-1 **649. Huimin Huang** (zip code: 98056)

1818-A-1 **650. Marcela Cecil** (zip code: 98006)  
I am very concerned that this transmission line will degrade and endanger(over a highly flammable jet fuel pipeline) and it pse has not shown a necessity for additional power, just corporate greed.

1819-A-1 **651. Philipp Schmidt-Pathmann** (zip code: 98056)  
Energy efficiency, alternative energies and individual storage options first.  
Please spend more time on evaluating alternatives. Fossile fuels need to be replaced by renewable energies and local storage solutions. Invest in helping people with those first.  
Our aging fuel and fossile fuel/energy infrastructure needs to be replace by new clean energies.

1820-A-1 **652. Punam Agrawal** (zip code: 98005)

1821-A-1 **653. Qiang Zhang** (zip code: 98006)  
negative impacts on environments; safety issues to our communities; et al

1822-A-1 **654. Li Qiao** (zip code: 98006)  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: [Your Name]

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational

1818-A -1 See responses for Topic PLS.

1819-A -1 See response for Key Theme ALT-1.

1821-A -1 See response for Key Theme ALT-3.



CENSE PETITION

COMMENT

RESPONSE

1822-A-1 | accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

1823-A-1 | **655. Qi Li** (zip code: 98006)

1824-A-1 | **656. Angela qu** (zip code: 98006)

1825-A-1 | **657. Bin Xu** (zip code: 98006)

1826-A-1 | **658. Gene Gierrek** (zip code: 98059)

1827-A-1 | **659. Richard Shepard** (zip code: 98006)  
PSE is promoting a scam with false assumptions. Use reliable data going forward.

1828-A-1 | **660. Rob Downs** (zip code: 98056)

1829-A-1 | **661. Ross Heise** (zip code: 98056)

1830-A-1 | **662. Rachel Ting** (zip code: 98006)

1831-A-1 | **663. Jim Gianacos** (zip code: 98056)

**664. Rajendra Kuramkote** (zip code: 98056)  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: Rajendra Kuramkote

171-C-1 | Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario that would cause regional

1827-A -1 | See response for Key Theme OBJ-2.



CENSE PETITION

COMMENT

RESPONSE

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                              |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | <p>blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.</p> <p>Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.</p> <p>Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.</p> <p>The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.</p> <p>Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.</p> <p><b>665. William Rambo (zip code: 98006)</b><br/>         Marilyn an I have attended many PSE meetings at City Hall, Hotels and neighborhood discussions. We have done it:<br/>         - Out of SAFETY concerns with the gas lines (Possible fires will run up the hill very fast).<br/>         - The PSE forecast on growth in demand vs actual expectations seem to be greatly overblown.<br/>         - PSE's inputs into the simulations neglect the supplemental generation that the "rate payers" have already funded for peak shaving in emergencies.<br/>         - the analysis gives no importance to the negative property value impact of the industrial look on one of the largest and best Puget Sound Basin/ Olympic Mt. view subdivisions which invested in underground distribution to protect the views.</p> <p>We don't see a need or justification for this significant investment at the expense of rate payers.<br/>         Respectfully,<br/>         Marilyn and Bill Rambo</p> | <p>I832-A -1 See responses for Topic PLS.</p> <p>I832-A -2 See response for Key Theme OBJ-2.</p> <p>I832-A -3 See response for Key Theme ECON-1.</p> <p>I835-A -1 Comment noted.</p> <p>I2-SS -1 The comment is not specific enough regarding concerns with the EIS to allow a response.</p> |
| I832-A-1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                              |
| I832-A-2 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                              |
| I832-A-3 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                              |
| I833-A-1 | <p><b>666. Randi McDonald (zip code: 98056)</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                              |
| I834-A-1 | <p><b>667. Randy Chung (zip code: 98056)</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                              |
| I835-A-1 | <p><b>668. Ray Reass (zip code: 98005)</b><br/>         There are better ways that what PSE is proposing. Let's break this chain of nonsense.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                              |
| I2-SS-1  | <p><b>669. Russell Borgmann (zip code: 98005)</b><br/>         Please address fundamental flaws in EIS assumptions and the EIS process.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                              |
| I836-A-1 | <p><b>670. Robert Bratlee (zip code: 98006)</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                              |



CENSE PETITION

COMMENT

RESPONSE

I113-D-1 | **671. Ron Bromwell** (zip code: 98005)  
NO on Energize Eastside

I837-A-1 | **672. Ron Chatterton** (zip code: 98056)  
NO NEED FOR NEW LINES!!!

I838-A-1 | **673. Michael Davis** (zip code: 98006)  
Very concerned about damage to pipeline and noise from wires. Our house is very close. and existing electrical line crosses over our backyard. The pipeline also is in our backyard.

I839-A-1 | **674. Richard Dworkis** (zip code: 98006)  
No new lines!

I840-A-1 | **675. Frank Song** (zip code: 98006)  
this is not good for our environment

I841-A-1 | **676. Rebecca Kinnestrand** (zip code: 98052)  
I do not believe PSE has the welfare of the citizens of this area in mind. Building power lines over the gas pipeline is an extreme danger to our house and my children who play within 20 yards of the buried pipeline. The Eastside does not need more power, that is only what PSE is saying to push through this project.

I842-A-1 | **677. Rebecca Laughlin** (zip code: 98006)

I168-B-1 | **678. Richard Bateman** (zip code: 98006)  
We do not need this project for the foreseeable future

I843-A-1 | **679. Reid Mickelsen** (zip code: 98006)  
People are more important than profits.

I844-A-1 | **680. Reiner Decher** (zip code: 98005)

I845-A-1 | **681. Rhee Elikor** (zip code: 98006)  
I strongly believe, based on the research done by CENSE, that this project is neither necessary nor safe for the citizens of Bellevue and the surrounding communities.

I846-A-1 | **682. Robert Moloney** (zip code: 98006)

I847-A-1 | **683. Rena Peterson** (zip code: 98033)  
As the explosion in Greenwood this morning demonstrates, gas lines and electricity can be a very dangerous combination.  
  
More work needs to be done to explicitly address the issues highlighted in this letter.

I113-D -1 | Comment noted.

I837-A -1 | Comment noted.

I838-A -1 | See responses for Key Theme NOI-2 and Key Theme PLS-3.

I839-A -1 | Comment noted.

I840-A -1 | Comment noted.

I841-A -1 | See response for Key Theme PLS-3.

I168-B -1 | See response for Key Theme OBJ-1.

I843-A -1 | See response for Key Theme OBJ-1.

I845-A -1 | See responses for Key Theme EIS-1, Key Theme OBJ-1, Topic PLS, and Topic EMF.

I847-A -1 | See response for Key Theme PLS-2.





CENSE PETITION

COMMENT

RESPONSE

1848-A-1 | **684. Jennifer Teramoto** (zip code: 98056)

1849-A-1 | **685. Richard Randall** (zip code: 98005)

1850-A-1 | **686. Richard Chen** (zip code: 98006)

**687. Bo Han** (zip code: 98006)  
Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

1851-A-1 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

1852-A-1 | **688. Riley O'Brien Wolff** (zip code: 98006)

1853-A-1 | **689. Ron Imhoff** (zip code: 98005)  
I don't think this is the best way to improve the grid reliability.

1854-A-1 | **690. Rita Click** (zip code: 98006)  
We have a right to decide what is best for our neighborhoods and not be told/forced by big brother PSE. I would prefer facing 7 days of no electricity every year rather than accept PSE's monstrous power poles.

1855-A-1 | **691. Rita Lei** (zip code: WA98006)

1856-A-1 | **692. Carol Klobucher** (zip code: 98005)

1853-A -1 | See response for Key Theme OBJ-1.

1854-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

1857-A-1 | **693. Linda Visser** (zip code: 98005)  
Please do not build these towers and destroy our neighborhoods. Please put people first. My grandchildren live here.

1858-A-1 | **694. Robert Zapalski** (zip code: 98056)

1859-A-1 | **695. E Robert Butenko** (zip code: 98005)  
We should not have the consequences of delivering power to Canada -- how about putting the lines just north of the hydroelectric source of their power.

1860-A-1 | **696. Rodney Ryan** (zip code: 98005)

1861-A-1 | **697. Ronda Woodcox** (zip code: 98006)

1862-A-1 | **698. Ron Wollum** (zip code: 98006)

1863-A-1 | **699. Rosamund Wu** (zip code: 98006)

1864-A-1 | **700. Cheryl Monaghan** (zip code: 98006)

1865-A-1 | **701. Rachel Primeau** (zip code: 98007)

1866-A-1 | **702. Louise Joost** (zip code: 98006)

1867-A-1 | **703. Ronald Redpath** (zip code: 98056)

1868-A-1 | **704. Regina Sperry** (zip code: 98005)

1869-A-1 | **705. Diane Rush** (zip code: 98056)  
There are better solutions - let's focus on innovation

1870-A-1 | **706. Russell Green** (zip code: 98006)  
Bellevue = Beautiful View  
Let's keep it that way...

1871-A-1 | **707. Ruth Marsh** (zip code: 98006)  
The EIS process is being short-circuited and thus is not fair to the citizens of Bellevue. Alternative 2 needs review by an independent third party. Furthermore, the need for this project has never adequately been demonstrated.

1872-A-1 | **708. Ruth Raskind** (zip code: 98006)

1873-A-1 | **709. Ruth Steiner** (zip code: 98006)

1857-A -1 | Comment noted.

1859-A -1 | See responses for Key Theme EIS-1 and Key Theme ALT-1.

1869-A -1 | See response for Key Theme ALT-1.

1870-A -1 | Comment noted.

1871-A -1 | See responses for Key Theme OBJ-1 and Key Theme EIS-1.



CENSE PETITION

COMMENT

RESPONSE

**710. Roger Visser** (zip code: 98005)

Dear PSE.

I ask that you please not jeopardize the safety and the character of our eastside neighborhoods by adding a likely unnecessary eyesore that is dangerous to individuals living in homes and schools in the immediate area both during construction and a danger later when in use. Here are some of my thoughts.

1874-A-1

As we saw in the Seattle Greenwood neighborhood, gas leaks just need a small spark to cause a catastrophe. The construction near aging gas lines alone is an unnecessary risk to the workers and residents. Wouldn't that be an awful and unavoidable tragedy.

The height of these towers is a danger to small aircraft. A single airplane crash could cause multiple deaths and/or injuries in our neighborhoods through the vehicle impact and any resulting fires and likely the loss of power.

I am pretty sure that most modern cities would consider it unacceptable to add overhead power lines through populated areas.

If you need power for the Spring district, consider local power generation or underground cables. Underground cables take up less right-of-way than overhead lines, have lower visibility, are safer, and are less affected by bad weather. While the initial costs may be higher, the maintenance cost are much lower. In my evaluation, the high voltage line being suggested is obviously not focused on local power usage since underground lines (AC or DC) or local generation could handle the local needs.

1874-A-2

It's time to admit that the capacitive line losses suffered using antiquated long distance AC transmission lines should make this a distant/dinosaur option, not a modern option when supplying power. Climate change means it is time to think in modern ways about energy and the inherent inefficiency of long distance AC electrical transmission when there are other options. Just because it might be cheaper and easier and more familiar, doesn't mean it is the right way.

Another possibility would be using part of the murky \$150-300 million construction estimate to help customers conserve energy and reduce consumption to levels consistent with current power sources. Growth is less than 5% so saving a mere 5% through conservation would exceed the need.

Canada should be able to generate its own power. They are trying to export petroleum energy to the U.S. Why are we sending them electrical energy? However, if PSE feels the need to supply power to Canada, please place these inefficient transmission lines outside of populated areas. That's just common sense.

1874-A-3

The time has come to work with the community, improve the community, and not blindly push the community around. Let's have some transparency on what is going on and please don't ignore community input.

Finally, think of your relationship with your customers as if it were a marriage. Which wife would not complain viciously and justifiably if her husband said he was going to run the plumbing and electrical on the outside of the walls in the new addition to their house. After than saying "That's crazy" and "NO" she would like say things like "That would be an eye sore, unsafe, unreliable, and reduce the value of our home." Sounds like she would be right. Guess who is the wife in this story? We have the same very reasonable concerns. In the end, the wife would and should win this fight even though the husband thinks he has all the "power". :-)

Thank you

1874-A -1 See responses for Key Themes PLS-1 and PLS-2.

1874-A -2 See response for Key Theme ALT-1.

1874-A -3 See responses for Key Theme EIS-2 and Key Theme ALT-3.



CENSE PETITION

COMMENT

RESPONSE

I875-A-1 | **711. Kathryn Behrens** (zip code: 98006)  
 Many children play in the Forest Hill Neighborhood park which is adjacent to the Olympic Pipeline, not to mention the homes that are also adjacent to this pipeline. Please do not place new poles and lines close to these aging pipelines, parks, and homes.

I876-A-1 | **712. Ryam Hill** (zip code: 98008)

I877-A-1 | **713. Ryan Shan** (zip code: 98006)

I878-A-1 | **714. ROGER LEE** (zip code: 98006)

I879-A-1 | **715. Sadie Arnold** (zip code: 98034)

I880-A-1 | **716. Shannon Rome** (zip code: 98033)

I881-A-1 | **717. Anlee Cox** (zip code: 98006)

I882-A-1 | **718. Sal Dhanani** (zip code: 98006)

I883-A-1 | **719. Carmen Kaperick** (zip code: 98034)

I95-B-1 | **720. sallie herling** (zip code: 98006)

I884-A-1 | **721. Sandra MacKenzie** (zip code: 98052)  
 There are flaws in the PSE "Energize Eastside" project

I885-A-1 | **722. Sandra Alston** (zip code: 98004)  
 Please make available to customers more info to explain contradictory findings. This would include-- need, cost, and hazards.

I886-A-1 | **723. Sandy Grace** (zip code: 98006)

I887-A-1 | **724. Sandy Seppi** (zip code: 98027)

I888-A-1 | **725. Sarah Daniels** (zip code: 98006)

I889-A-1 | **726. scally liang** (zip code: 98006)

I890-A-1 | **727. Jennifer Schroeder** (zip code: 98006)

I891-A-1 | **728. Scott LeVeque** (zip code: 98006)  
 Please hold PSE accountable to respond to the numerous concerns raised against this project. I've attended multiple meetings where PSE simply deflects, or refuses to answer, questions which get raised that challenge their own internal agenda.

I875-A -1 | See response for Key Theme PLS-4.

I884-A -1 | See response for Key Theme EIS-1.

I885-A -1 | See response for Key Theme EIS-1.

I891-A -1 | See response for Key Theme EIS-2.



CENSE PETITION

COMMENT

RESPONSE

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|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Thank you.</p> <p><b>729. Steve O'Donnell</b> (zip code: 98006)<br/> PSE's proposed EE is NOT needed as the Lauckhart-Shiffman Load Flow Study demonstrates and perhaps for as long as 20-40 years, if ever. New advance energy technology, non wired solutions, Demand Side Response/Conservation are the way to go...NOT Century old technology that will Industrially BLIGHT five eastside cities, some 40 residential neighborhoods and literally thousands of home values degraded immediately and permanently. EE is massively out of scale for the need, cost too much and does too much environmental damage not the least of which is clear cutting some 8,000 mature trees...really??? It is past time for Officials at all levels...PSE, ESA, City of Bellevue Electeds/Policy Makers and Staff to get some good CENSE! There ARE reliable, cost effective energy alternatives available to us now and more coming into the future that allow us to not make such an enormous mistake! Visit <a href="http://www.CENSE.org">www.CENSE.org</a><br/> Thank you.<br/> Steve O'Donnell, Co-Founder<br/> and Exec. Board Member of CENSE.</p> <p><b>730. Susan Adamson</b> (zip code: 98056)<br/> I am concerned about the EMF exposure from the high voltage lines planned as it would run through neighborhoods, parks and school areas.</p> <p><b>731. Sean Cox</b> (zip code: 98006)</p> <p><b>732. Sean McNamara</b> (zip code: 98059)<br/> Do not allow PSE's to push through a selfish plan that is not in the best interest of our communities. This is a half baked plan to recoup their falling energy revenue through infrastructure upgrades that have built in profit for PSE shareholders</p> <p><b>733. Kayla Laughlin</b> (zip code: 98056)<br/> I ask you to please reread the letter I sent you dated February 22, 2016. As more cause for concern has been raised, I am writing again. I am now reading about the inaccurate cost basis used and even the need for this Energize Eastside project. Recently, I found out about the need to expand easements, so I continue to worry about a possible construction accident. Also, the need to tear up neighborhoods and uprooting families is a real concern by taking their homes, or destroying property value, or even destroying the surrounding environment e.g., trails, greenbelts, parks. Please consider carefully the outstanding questions and concerns of the community.</p> <p><b>734. Yanbing Wang</b> (zip code: 98006)<br/> I have two little kids. I am really concern the impact on kids' health.</p> <p><b>735. Serret Salles</b> (zip code: 98034)</p> <p><b>736. Sam Esayian</b> (zip code: 98006)</p> <p><b>737. Janset Sey</b> (zip code: 98033)</p> <p><b>738. Susan Hagensen</b> (zip code: 98006)<br/> Please consider the findings of CENSE.</p> | <p>I103-C -1 See response for Key Theme OBJ-3.</p> <p>I892-A -1 See responses for Key Themes EMF-1 and EMF-3.</p> <p>I893-A -1 See response for Key Theme OBJ-1.</p> <p>I27-B -1 Comment noted.</p> <p>I894-A -1 See responses for Key Themes EMF-1 and EMF-3.</p> <p>I897-A -1 Comment noted.</p> |
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CENSE PETITION

COMMENT

RESPONSE

I210-B-1 | **739. Stephen Wagner** (*zip code: 98005*)  
 Conservation measures are vastly undervalued in the DEIS analysis, based only upon what PSE told the writers about what is possible. Conservation should play a much larger role in PSE's overall plans.

I898-A-1 | **740. shan hu** (*zip code: 98006*)

I899-A-1 | **741. Sharon Chen** (*zip code: 98006*)

I900-A-1 | **742. Sharon Jamieson** (*zip code: 98006*)

I901-A-1 | **743. Shawn Nickerson** (*zip code: 98005*)

I902-A-1 | **744. Sheli Hadari** (*zip code: 98005*)

I903-A-1 | **745. Sher Garfield** (*zip code: 98006*)

I904-A-1 | **746. Shi Sun** (*zip code: 98006*)

I905-A-1 | **747. Jason Shim** (*zip code: 98005*)

I906-A-1 | **748. xiao Meng** (*zip code: 98006*)  
 We don't want power line going through Somerset area.

I907-A-1 | **749. Jamie Tan** (*zip code: 98006*)

I908-A-1 | **750. Zhi Sun** (*zip code: 98006*)  
 I am against the PSE's plans to build 230kv 130-foot power poles though Somerset and our city.

I909-A-1 | **751. helen wu** (*zip code: 98006*)  
 no high voltage power transmission line in Somerset area, we want Green tree and safety park for family.

I910-A-1 | **752. Shyan Griffith** (*zip code: 98006*)  
 We want to preserve the appearance of our neighborhood and protect the environment for our children by fighting against PSE's plans to build 230kv 130-foot power poles though Somerset and our city.

I911-A-1 | **753. Sigrid Elenga** (*zip code: 98033*)  
 We oppose this project which poses large environmental risks, requiring cutting down trees and introducing other undesirable consequences.

I912-A-1 | **754. George Sillivan** (*zip code: 98006*)

I210-B -1 | See response for Key Theme OBJ-2.

I906-A -1 | Comment noted.

I908-A -1 | Comment noted.

I909-A -1 | Comment noted.

I910-A -1 | Comment noted.

I911-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

I86-B-1 | **755. Sirisha Dontireddy** (zip code: 98006)

I913-A-1 | **756. Steven Geagan** (zip code: 98056)

I914-A-1 | **757. Gayle Brown** (zip code: 98006)

I915-A-1 | **758. LeMoin Beckman** (zip code: 98006)  
Please do not let this ugly, costly, and unnecessary tragedy happen.

I916-A-1 | **759. Charles Cobb** (zip code: 98006)  
Bring Sanity back to Bellevue. Stop this unneeded corporate ripoff

I917-A-1 | **760. Shari Herrgoss** (zip code: 98006)

I918-A-1 | **761. sherri monteith** (zip code: 98033)

I919-A-1 | **762. Sofi** (zip code: 98034)

I920-A-1 | **763. Chao Song** (zip code: 98006)

I921-A-1 | **764. Sonia Zwilling** (zip code: 98007)

I922-A-1 | **765. sue johnson** (zip code: 98007)  
I don't believe PSE really needs to do this and that it is simply a way to increase their profits.

I923-A-1 | **766. Sorin Gherman** (zip code: 98006)

I924-A-1 | **767. Spencer Hinds** (zip code: 98006)

I925-A-1 | **768. Sue Raschella** (zip code: 98005)  
This Environmental Impact Study is ill-conceived. It is a project which proposes high-voltage transmission lines which will traverse FOUR Eastside cities with new lines and poles too close to old petroleum pipelines, costs based on inaccurate and obsolete studies and lacked review by experienced independent experts.  
Please return to the drawing boards and develop a plan worthy of presenting to our residents which is fiscally sound, safe for our neighborhoods and endorsed by knowledgeable experts in this area.

I926-A-1 | **769. Linda Reichenbach** (zip code: 98006)

I927-A-1 | **770. Samir Rustagi** (zip code: 98006)  
Dear Ms. Bedwell,  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I915-A -1 | Comment noted.

I916-A -1 | Comment noted.

I922-A -1 | See response for Key Theme OBJ-1.

I925-A-1 | See response to Key Theme EIS-1.



CENSE PETITION

COMMENT

RESPONSE

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                  |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <p>1927-A-1</p> | <p>PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.</p> <p>Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.</p> <p>Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.</p> <p>The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.</p> <p>Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.</p>                                                                                                                                                                                                                                                      | <p>I94-H -1 See response for Key Theme EIS-2.</p> <p>I928-A-1 Comment Noted.</p> |
| <p>194-H-1</p>  | <p><b>771. Sue Stronk</b> (zip code: 98056)<br/>Stop this process now and unite Lauckhart and PSE in front of EFSEC and settle NEED once and for all!</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                  |
| <p>1928-A-1</p> | <p><b>772. Scott Shih</b> (zip code: 98005)<br/>Dear Ms. Bedwell,</p> <p>I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).</p> <p>PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.</p> <p>Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.</p> <p>Also, in my own personal experience with PSEG when we had a downed PSEG power lines on our property that caused a back surge into our house, started a fire and destroyed our fuse box and various electronic devices in our house, they denied having any responsibility and absolved themselves of paying for any damages, stating that it was" an act of God."</p> <p>Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.</p> |                                                                                  |





CENSE PETITION

COMMENT

RESPONSE

1928-A-1 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

1929-A-1 | **773. Stacy Dunlap** (zip code: 98005)

1930-A-1 | **774. Star Evans** (zip code: 98006)  
The eagles have a nest in the tree above my house and the lines would literally span OVER the top of my house!

1931-A-1 | **775. Stefanie Snow** (zip code: 98006)

1932-A-1 | **776. Jennifer Steinman** (zip code: 98006)  
please see letter and my comments

1933-A-1 | **777. Stela Shepard** (zip code: 98006)  
Please slow this project down in order to consider carefully alternatives that would be safer and cleaner. This project would drastically impact the Eastside. Utmost caution is paramount.

1934-A-1 | **778. Stephanie Kristen** (zip code: 98006)

1935-A-1 | **779. Steven Harris** (zip code: 98058)

**780. Lisa Stix** (zip code: 98056)  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: Lisa Stix  
  
Dear Ms. Bedwell,  
  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.  
  
Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed

1930-A -1 | See response for Key Theme P&A-4.

1932-A -1 | Comment noted.

1933-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

plan would easily beat alternative 1A in cost, safety, and support for the environment.

I936-A-1 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I937-A-1 | **781. Stuart Campbell** (zip code: 98006)  
Is this really necessary?

I938-A-1 | **782. mary lienhard** (zip code: 98005)  
im against this project

I939-A-1 | **783. Stanislav Rumega** (zip code: 98006)

I940-A-1 | **784. Su Yamamura** (zip code: 98006)

I941-A-1 | **785. Suzanne Coker** (zip code: 98034)  
Please don't!

I942-A-1 | **786. Xun Sun** (zip code: 98005)

I943-A-1 | **787. Susan Mackey** (zip code: 98059)

I33-C-1 | **788. susan wu** (zip code: 98006)  
We need keep our community safe.

I944-A-1 | **789. Suzie Wagner** (zip code: 98005)

I945-A-1 | **790. Suzie Lyons** (zip code: 98005)  
Please take Cense's viewpoint very seriously. These types of big business pushes happen all over the world because individuals do not have the time or resources to respond to the bully tactics of wealthy businesses. Cense is doing something positive for the individuals of Bellevue (and surrounding communities) so please listen.

I4-B-1 | **791. Suzi Beerman** (zip code: 98056)

I946-A-1 | **792. Surendra Verma** (zip code: 98006)  
PSE's energize eastside is a greedy, self centered corporate project by pse. They need to look at more environmentally friendly alternatives. Also, their demand projections are untrustworthy and not corroborated by independent experts. We cannot put huge power carrying lines through our neighborhoods where all those lines with enormous magnetic and electric fields will negatively impact growing children. Plus there is a huge concern about accidently damaging the Olympic pipeline. please stop the energize eastside project.

I937-A -1 | See response for Key Theme OBJ-1.

I938-A -1 | Comment noted.

I941-A -1 | Comment noted.

I33-C-1 | Comment noted.

I945-A -1 | See response for Key Theme OBJ-3.

I946-A -1 | See responses for Key Themes ALT-1 and ALT-3.



CENSE PETITION

COMMENT

RESPONSE

1947-A-1 | **793. Stephen Weyl** (zip code: 98006)

1948-A-1 | **794. Terry and Kari Block** (zip code: 98006)  
Please correct the flaws in the Energize Eastside draft EIS. Protect our neighborhoods!

1949-A-1 | **795. Derek Locke** (zip code: 98056)

1950-A-1 | **796. tom allwardt** (zip code: 98056)  
To go through with this project is a disaster to the area.

1951-A-1 | **797. Tammy Alford** (zip code: 98006)

1952-A-1 | **798. tamara Gilliam** (zip code: 98033)  
There are alternatives to running high voltage lines through our neighborhoods.

1953-A-1 | **799. Yuhong Liu** (zip code: 98006)

11-C-1 | **800. Keith Watts** (zip code: 98006)  
I want reliable, low cost, clean energy to enable the Eastside to grow without brown outs. I want a solution that is smart, modern and cost effective. I want a solution that encourages citizens to use clean energy more. I want a solution that does not impact my neighbors lives in a negative way (noise, visual, chemical, etc.). I am not a power engineer so I do not know what solution that is. Please try your best to use the latest science and engineering to provide an innovative solution. Thank you.

1954-A-1 | **801. Tanya Franzen-Garrett** (zip code: 98006)  
The lack of regulation, oversight and accountability with regards to PSE and their proposed "necessary project" greatly disturbs me. A privately, foreign owned company should not be allowed to bully it's will and profit gain onto the backs of unwilling citizens. Not only will it cost us Millions of dollars, but it will greatly affect our neighborhoods, the esthetics that we have worked hard to build and maintain, and our property values.

1955-A-1 | **802. Tarun Chopra** (zip code: 98005)

1956-A-1 | **803. Thad Mills** (zip code: 98006)  
I heard about the Lauckhart-Schiffman load study. I don't believe the project is necessary, and I support CENSE.

153-C-1 | **804. Thomas Cezeaux** (zip code: 98056)

1957-A-1 | **805. Turner Chatterton** (zip code: 98056)

1958-A-1 | **806. Heidi Dean** (zip code: 98006)  
Stop lying, PSE, and make your money by investing in 21st century technology rather than destroying neighborhoods & cities with outdated technology.

1948-A -1 | See response for Key Theme EIS-4.

1950-A -1 | Comment noted.

1952-A -1 | Comment noted.

11-C -2 | See response for Key Theme EIS-3.

1954-A -1 | See responses for Key Theme EIS-2 and Key Theme ALT-3.

1956-A -1 | See response for Key Theme OBJ-3.

1958-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- 1959-A-1 | **807. Raymond Flaherty** (zip code: 98006)  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A). Many of us affected need to be compensated for damages and taking of ownership rights which has not been fully considered in the project.
- 1960-A-1 | **808. Teresa Healy** (zip code: 98006)
- 1961-A-1 | **809. Randy Tada** (zip code: 98006)  
Please eliminate this wasteful and unnecessary project to protect our neighborhoods and our pocketbooks.
- 1962-A-1 | **810. Theresa Hayden** (zip code: 98005)  
I believe PSE has failed to prove a new transmission line is necessary. I see no positives in it for anyone except PSE (and city/county treasuries, should there be a related tax)
- 1963-A-1 | **811. Irene Endow** (zip code: 98006)  
I am very concerned about the enormous poles being so close to the pipeline. No good can come of this combination. Please don't let this unnecessary plan go through.
- 154-B-1 | **812. Thomas Heinzle** (zip code: 98006)  
I am absolutely opposed to this as it is not needed and only lines the pockets of PSE's owners.
- 190-F-1 | **813. Richard Kaner** (zip code: 98006)
- 1964-A-1 | **814. Theresia McLynne** (zip code: 98006)
- 1965-A-1 | **815. Joe Collier** (zip code: 98006)
- 1966-A-1 | **816. erich kirsch** (zip code: 98005)
- 132-B-1 | **817. Tim liu** (zip code: 98006)  
support CENSE, keep our community safe for kids.
- 1967-A-1 | **818. Todd Johnson** (zip code: 98006)
- 1151-B-1 | **819. Ron Wilson** (zip code: 98006)
- 1179-C-1 | **820. Todd Andersen** (zip code: 98006)  
please see letter and my comments
- 1968-A-1 | **821. Todd Dunlap** (zip code: 98005)
- 1969-A-1 | **822. Joon Kim** (zip code: 98006)

- 1959-A -1 | Comment noted.
- 1961-A -1 | Comment noted.
- 1962-A -1 | See response for Key Theme OBJ-1.
- 1963-A -1 | See responses for Topic PLS.
- 154-B -1 | Comment noted.
- 132-B -1 | Comment noted.
- 1179-C-1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

- 1970-A-1 | **823. Thomas Catterson** (zip code: 98006)
- 1971-A-1 | **824. Toni Vincent** (zip code: 98005)
- 1972-A-1 | **825. Tony Schuler** (zip code: 98006)  
Puget Sound Energy is not being honest with our community about future power requirements. My family appreciates your efforts to force them to better serve local customers instead of their desire for more profits from faraway markets.
- 1973-A-1 | **826. Tracy Bury** (zip code: 98006-1421)  
I do not want enormous poles through our community - especially high voltage lines next to schools!
- 1974-A-1 | **827. Trent Wheatley** (zip code: 98006)  
Dear Ms. Bedwell,  
  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.  
  
Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.  
  
The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
  
Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.
- 1975-A-1 | **828. Trevor Gilchrist** (zip code: 98056)  
As a citizen and family of Olympus/Newcastle I adamantly oppose the proposal, it will:  
\* degrade our city,  
\* harm the environment (thousands of trees will be destroyed),  
\* bulldoze dozens of homes in Newcastle,  
\* increase risk of catastrophic pipeline fires,  
\* raise our electricity rates for decades
- 1976-A-1 | **829. Edd Popejoy** (zip code: 98005)

- 1972-A -1 | See responses for Key Themes EIS-1 and Key Theme OBJ-2.
- 1973-A -1 | See response for Key Theme EMF-3.
- 1975-A -1 | See response for Key Theme ALT-3.



CENSE PETITION

COMMENT

RESPONSE

- 1977-A-1 | **830. Joan Sinclair** (zip code: 98006)  
 There are too many flaws in the reasons PSE has for putting these towers in which will not benefit us as they claim.
- 1978-A-1 | **831. Tom Weir** (zip code: 98006)  
 This project is not needed and there are other technologies to use to meet any future demand which are less harmful to the environment and would make the system more flexible and less prone to blackouts.
- 1979-A-1 | **832. Tzeghe Makonnen** (zip code: 98056)  
 o: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Tzeghe Makonnen  
  
 Dear Ms. Bedwell,  
  
 I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
 PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
 Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.  
  
 Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.  
  
 The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.  
  
 Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.
- 1980-A-1 | **833. Yuqiong Liu** (zip code: 98006)
- 1981-A-1 | **834. alex borg** (zip code: 98006)
- 1982-A-1 | **835. Gary A. Johnson** (zip code: 98006)  
 Supports Alternative 2
- 1983-A-1 | **836. Valerie Redpath** (zip code: 98056)

- 1977-A -1 | See response for Key Theme EIS-1.
- 1978-A -1 | See responses for Key Theme OBJ-1 and Key Theme ALT-1.
- 1982-A -1 | See response for Key Theme ALT-1.



CENSE PETITION

COMMENT

RESPONSE

1984-A-1 | **837. Vilia Johnson** (zip code: 98005)

1985-A-1 | **838. ning wang** (zip code: 98006)  
Negative impact on environment.

1986-A-1 | **839. Dean Smith** (zip code: 98006)

1987-A-1 | **840. Vicky Svidenko** (zip code: 98056)

1988-A-1 | **841. An anonymous signer** (zip code: 98006)

**842. William Herling** (zip code: 98006)

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: William Herling

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

1990-A-1 | **843. Baicen Wang** (zip code: 98006)

1991-A-1 | **844. william aron** (zip code: 98005)  
Its a bad idea kill it!

1992-A-1 | **845. Yuan Li** (zip code: 98006)

1985-A -1 | Comment noted.

1991-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

1993-A-1 | **846. Kenneth Dore** (zip code: 98006)

1994-A-1 | **847. Wendy Dore** (zip code: 98006)

1995-A-1 | **848. Wayne Bruning** (zip code: 98005)

1996-A-1 | **849. JOHN WOO** (zip code: 98056-1796)  
Home/property was purchased in 1987 knowing that Olympic Pipeline was in "my backyard", safe from further development. Boy was I wrong. If Alternative 1A moves forward, my home/property will be "MARKED FOR DEATH". Why should I continue to pay Property Tax if the only value left is with PSE?

1997-A-1 | **850. Wendy Gulick** (zip code: 98005)  
Please protect Bellevue from unneeded, unwanted projects designed primarily to earn dollars for large corporations, but financed by the citizens of Bellevue.

1998-A-1 | **851. Leonard Yee** (zip code: 98006)  
I'm against the visual plight of the planned towers. It doesn't fit in a neighborhood.

1999-A-1 | **852. An anonymous signer** (zip code: 98059)

11000-A-1 | **853. William Schilb** (zip code: 98005)  
We should not compromise our environment so PSE can sell power to customers outside this country...Canada has adequate Hydro Power of its own,. We do not need to supply them. Do not pursue this project any further.

11001-A-1 | **854. Le Wang** (zip code: 98006)

11002-A-1 | **855. Wendy Wiley** (zip code: 98006)  
Unnecessary, underhanded, deceptive, just wrong for Bellevue and the Eastside!

1217-B-1 | **856. Wolfgang Sixl** (zip code: 98006)  
Please correct the flaws

11003-A-1 | **857. Dave Womeldorff** (zip code: 98006)

11004-A-1 | **858. Gordon Woodley** (zip code: 98006)  
EE is an unnecessary project and is based on fatally flawed projections by PSE which is all too willing to sacrifice our environment and quality of life for profit.

11005-A-1 | **859. Xudan He** (zip code: 98006)  
No new high voltage power lines in the neighborhood please. Thanks.

11006-A-1 | **860. Xiaohong yang** (zip code: 98006)  
Please don't build the new powerline in our neighbor. It's not safe, and lower our neighborhood environment.

1996-A -1 | See responses for Key Themes ECON-1 and ECON-2.

1997-A -1 | See responses for Key Theme ECON-4 and Topic OBJ.

1998-A -1 | See response for Key Theme VR-4.

11000-A-1 | See response for Key Theme OBJ-1.

11002-A -1 | Comment noted.

1217-B -1 | The comment is not specific enough about the concerns with the EIS to allow a response.

11004-A -1 | See responses for Key Themes OBJ-1 and OBJ-2.

11005-A -1 | Comment noted.

11006-A -1 | See response for Key Theme VR-5.





CENSE PETITION

COMMENT

RESPONSE

I1007-A-1 | **861. Xiao Shang** (zip code: 98006)  
Not safe for dense neighborhoods

I1008-A-1 | **862. Xiaoxuan Li** (zip code: 98005)

I1009-A-1 | **863. Xin Wang** (zip code: 98006)

I1010-A-1 | **864. Xin Yu** (zip code: 98006)

I1011-A-1 | **865. Xueyi Wang** (zip code: 98006)  
Strongly support CENSE!

I1012-A-1 | **866. Yan Jiang** (zip code: 98006)  
please don't hang power lines over our neighborhood schools. our kids need a safe environment to grow up.

I1013-A-1 | **867. Yan zhou** (zip code: 5402301158)  
I strongly object this project since it will have an negative effect on environment and people.

I1014-A-1 | **868. Amy Yates** (zip code: 98033)

I1015-A-1 | **869. Yatindra Aras** (zip code: 98006)

I1016-A-1 | **870. Yun Bai** (zip code: 98006)

I1017-A-1 | **871. Allen Su** (zip code: 98008)  
The right thing needs to be done. The proper assesement should be made before reaching any decision.

I1018-A-1 | **872. Grace Huang** (zip code: 98006)  
  
To: Heidi Bedwell, Energize Eastside EIS Program Manager  
From: Grace Huang  
  
Dear Ms. Bedwell,  
  
I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).  
  
PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.  
  
Alternative 1A would place new lines and poles much too close to aging petroleum pipelines.

I1007-A-1 | This comment was not specific enough to allow a response.

I1011-A -1 | Comment noted.

I1012-A -1 | See response for Key Theme EMF-3.

I1013-A -1 | Comment noted.

I1017-A -1 | Comment noted.



CENSE PETITION

COMMENT

RESPONSE

11018-A-1 Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

11019-A-1 **873. Ying Liu** (zip code: 98006)  
I live close to the power line. There're studies showed that the high voltage power lines have negative effects to children's development. It's unfair to sacrifice my children's health to "energize Canada"

11020-A-1 **874. Yiting huang** (zip code: 98006)  
i strongly against this PSE project

11021-A-1 **875. Maya Keselman** (zip code: 98006)  
No to new power lines.

11022-A-1 **876. vivian yorita** (zip code: 98056)  
Not in our backyard!!!!

11023-A-1 **877. Joyce Lim-Chua** (zip code: 98006)

11024-A-1 **878. Yun Li** (zip code: 98056)

11025-A-1 **879. Ryan Zhang** (zip code: 98006)  
Please do not destroy our community by adding more high-voltage transmission lines

11026-A-1 **880. Zachary McIntyre** (zip code: 98007)  
This is not ok. I'm against this.

11027-A-1 **881. Mechelle Cheng** (zip code: 98006)

1180-C-1 **882. Barry Zimmerman** (zip code: 98006)  
The EIS alternatives cannot be reviewed with no cost data, no actual load flow data frm past 20 yrs, and no route for Alternatives 1a and 3. Your job is to make certain the project is defined. You have quite a way to go to finish this document and submit for review with the missing data and definition before moving forward. A 6-9 month moratorium is required.

11019-A -1 Comment noted.

11020-A -1 Comment noted.

11021-A -1 Comment noted.

11022-A -1 Comment noted.

11025-A -1 Comment noted.

11026-A -1 Comment noted.

1180-C -1 See responses for Key Theme EIS-3 and Key Theme OBJ-2.



CENSE PETITION

COMMENT

RESPONSE

- I1028-A-1 | **883. David Zhang** (*zip code: 98006*)  
Save our environment! No Powerlines!
- I1029-A-1 | **884. yong zhang** (*zip code: 98006*)  
The power line is too close to tyee middle school. It also damage housing market in my neighborhood. I am strongly against it
- I1030-A-1 | **885. Zhanbing Wu** (*zip code: 98007*)
- I1031-A-1 | **886. Mingyan Li** (*zip code: 98006*)
- I1032-A-1 | **887. Zachary Holcomb** (*zip code: 98006*)
- I1033-A-1 | **888. Wei Zhuang** (*zip code: 98006*)  
negative impacts on environments; safety issues to our communities
- I1034-A-1 | **889. Zhenming Jiang** (*zip code: 98006*)
- I1035-A-1 | **890. Helen Zoerb** (*zip code: 98056*)  
The PSE proposed power line should be re routed so that NO HOMES need to be condemned, and so that any work can be conducted with utmost concern for safety with provisions and procedures agreed by homeowners adjacent to the power line routing .
- I175-B-1 | **891. Mel Zoerb** (*zip code: 98056*)  
I support the effort CENSE is conducting to prevent PSE from building the proposed power line, particularly as planned through the Olympus area of Newcastle
- I1036-A-1 | **892. jian zhang** (*zip code: 98006*)  
Pse shluld consider the safety and property value of local residents, in stead of only corporate profit.

- I1028-A -1 | Comment noted.
- I1029-A -1 | See responses for Key Theme ECON-1 and Key Theme EMF-3.
- I1033-A -1 | Comment noted.
- I1035-A -1 | See response for Key Theme LU-1.
- I175-B -1 | Comment noted.
- I1036-A -1 | See response for Key Theme ECON-3.



COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp             | First Name | Last Name |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
|         | I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).                                                                                                                                                                                                                                                                                                                                                                                          | 2/22/2016<br>10:45:18 | Yanfen     | Song      |
| I31-A-1 | PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |
| I31-A-2 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.                                                                                                                                                                                                                     |                       |            |           |
| I31-A-3 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment. |                       |            |           |
| I31-A-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                       |            |           |

- I31-A-1 See response to Key Theme OBJ-3.
- I31-A-2 See response to Key Themes PLS-1 and PLS-3.
- I31-A-3 See response to Key Theme ALT-1.
- I31-A-4 See Topic ALT.



| Comment                                                                                                                                                                                                                                                                   | Timestamp | First Name | Last Name |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| <p>I31-A-5   Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.</p> |           |            |           |

I31-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp             | First Name | Last Name |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
|         | Dear Ms. Bedwell,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2/22/2016<br>10:47:32 | tim        | liu       |
|         | I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |           |
| I32-A-1 | PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |
| I32-A-2 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.                                                                                                                                                                                                                     |                       |            |           |
| I32-A-3 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment. |                       |            |           |
| I32-A-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |            |           |

- I32-A-1 See response to Key Theme OBJ-3.
- I32-A-2 See response to Key Themes PLS-1 and PLS-3.
- I32-A-3 See response to Key Theme ALT-1.
- I32-A-4 See Topic ALT.



|         | Comment                                                                                                                                                                                                                                                  | Timestamp | First Name | Last Name |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I32-A-4 | reasons.                                                                                                                                                                                                                                                 |           |            |           |
| I32-A-5 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future. |           |            |           |

I32-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

**From:** [Susan Wu](#)  
**To:** [Info@EnergizeEastsideEIS.org](mailto:Info@EnergizeEastsideEIS.org)  
**Subject:** Puget Sound Energy's "Energize Eastside" project  
**Date:** Tuesday, February 23, 2016 12:53:40 PM

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Susan Wu

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I33-A-1

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I33-A-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I33-A-3

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I33-A-4

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for

I33-A-1 See response to Key Theme OBJ-3.

I33-A-2 See response to Key Themes PLS-1 and PLS-3.

I33-A-3 See response to Key Theme ALT-1.

I33-A-4 See Topic ALT.





I33-A-4 | financial or political reasons.

I33-A-5 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

I33-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

|                                                                            |                       |       |    |
|----------------------------------------------------------------------------|-----------------------|-------|----|
| To: Heidi Bedwell, Energize Eastside EIS Program Manager<br>From: Susan Wu | 2/23/2016<br>12:53:24 | susan | wu |
|----------------------------------------------------------------------------|-----------------------|-------|----|

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I33-B-1

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I33-B-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I33-B-3

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative

I33-B-1 See response to Key Theme OBJ-3.

I33-B-2 See response to Key Themes PLS-1 and PLS-3.

I33-B-3 See response to Key Theme ALT-1.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                     | Timestamp | First Name | Last Name |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I33-B-3 | 1A in cost, safety, and support for the environment.                                                                                                                                                                                                        |           |            |           |
| I33-B-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.                                                                                                                                    |           |            |           |
| I33-B-5 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line.<br>The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future. |           |            |           |

I33-B-4 See Topic ALT.  
I33-B-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp             | First Name | Last Name |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
|         | Dear Ms. Bedwell,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2/23/2016<br>13:11:29 | Alice      | Wang      |
|         | I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |           |
| I34-A-1 | PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |
| I34-A-2 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.                                                                                                                                                                                                                     |                       |            |           |
| I34-A-3 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment. |                       |            |           |
| I34-A-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |            |           |

- I34-A-1 See response to Key Theme OBJ-3.
- I34-A-2 See response to Key Themes PLS-1 and PLS-3.
- I34-A-3 See response to Key Theme ALT-1.
- I34-A-4 See Topic ALT.

|         | <b>Comment</b>                                                                                                                                                                                                                                                                                                                    | <b>Timestamp</b> | <b>First Name</b> | <b>Last Name</b> |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|
| I34-A-4 | reasons.                                                                                                                                                                                                                                                                                                                          |                  |                   |                  |
| I34-A-5 | <p>Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line.</p> <p>The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.</p> <p>Thank you.</p> <p>Sincerely your,</p> <p>Alice Wang</p> |                  |                   |                  |

I34-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp             | First Name | Last Name |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
|         | Dear Ms. Bedwell,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2/23/2016<br>13:26:44 | Huifen     | Li        |
|         | I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |           |
| I35-A-1 | PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |
| I35-A-2 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.                                                                                                                                                                                                                     |                       |            |           |
| I35-A-3 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment. |                       |            |           |
| I35-A-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |            |           |

- I35-A-1 See response to Key Theme OBJ-3.
- I35-A-2 See response to Key Themes PLS-1 and PLS-3.
- I35-A-3 See response to Key Theme ALT-1.
- I35-A-4 See Topic ALT.



|         | <b>Comment</b>                                                                                                                                                                                                                                                                                                  | <b>Timestamp</b> | <b>First Name</b> | <b>Last Name</b> |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|
| I35-A-4 | reasons.                                                                                                                                                                                                                                                                                                        |                  |                   |                  |
| I35-A-5 | <p>Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line.</p> <p>The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.</p> <p>Yours Sincerely,</p> <p>Huifen Li</p> |                  |                   |                  |

I35-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Timestamp             | First Name | Last Name |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------|-----------|
|         | Dear Ms. Bedwell,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2/23/2016<br>14:59:18 | Xun        | Sun       |
|         | I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).                                                                                                                                                                                                                                                                                                                                                                                          |                       |            |           |
| I37-A-1 | PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.                                                                                                                                                                                                                                                                                                                                                                                           |                       |            |           |
| I37-A-2 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.                                                                                                                                                                                                                     |                       |            |           |
| I37-A-3 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment. |                       |            |           |
| I37-A-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |            |           |

- I37-A-1 See response to Key Theme OBJ-3.
- I37-A-2 See response to Key Themes PLS-1 and PLS-3.
- I37-A-3 See response to Key Theme ALT-1.
- I37-A-4 See Topic ALT.



|         | <u>Comment</u>                                                                                                                                                                                                                                           | <u>Timestamp</u> | <u>First Name</u> | <u>Last Name</u> |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|
| I37-A-4 | reasons.                                                                                                                                                                                                                                                 |                  |                   |                  |
| I37-A-5 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future. |                  |                   |                  |

I37-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

|                 |                       |      |      |
|-----------------|-----------------------|------|------|
| From Jing long: | 2/23/2016<br>18:31:16 | Jing | Long |
|-----------------|-----------------------|------|------|

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I38-A-1

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I38-A-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I38-A-3

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I38-A-1 See response to Key Theme OBJ-3.

I38-A-2 See response to Key Themes PLS-1 and PLS-3.

I38-A-3 See response to Key Theme ALT-1.

COMMENT

RESPONSE

|         | Comment                                                                                                                                                                                                                                                  | Timestamp | First Name | Last Name |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|
| I38-A-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.                                                                                                                                 |           |            |           |
| I38-A-5 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future. |           |            |           |

- I38-A-4 See Topic ALT.
- I38-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

**From:** [Dapeng Liu](#)  
**To:** [info@energizeeastsideEIS.org](mailto:info@energizeeastsideEIS.org)  
**Subject:** Problems of the Energize Eastside Draft EIS  
**Date:** Thursday, February 25, 2016 2:56:36 PM

Dear Ms. Bedwell,

My name is Dapeng Liu, and moved to Somerset Bellevue two years ago. I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I42-A-1

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I42-A-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I42-A-3

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies.

I42-A-1 See response to Key Theme OBJ-3.

I42-A-2 See response to Key Themes PLS-1 and PLS-3.

I42-A-3 See response to Key Theme ALT-1.



I42-A

COMMENT

RESPONSE

I42-A-3

As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I42-A-4

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

I42-A-5

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

Thanks,

Dapeng

I42-A-4 See Topic ALT.

I42-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

March 2, 2016

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Kenneth Yamamoto

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

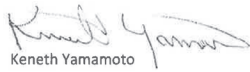
I125-A-1 | PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I125-A-2 | Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I125-A-3 | Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I125-A-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

I125-A-5 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.



Kenneth Yamamoto

4551 135<sup>th</sup> Ave. SE

Bellevue, Wa, 98006

I125-A-1 See response to Key Theme OBJ-3.

I125-A-2 See response to Key Themes PLS-1 and PLS-3.

I125-A-3 See response to Key Theme ALT-1.

I125-A-4 See Topic ALT.

I125-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

**From:** [Robin Jacobson](#)  
**To:** [info@energizeeastsideEIS.org](mailto:info@energizeeastsideEIS.org)  
**Subject:** Phase 1 Draft EIS Comments  
**Date:** Thursday, March 10, 2016 9:12:26 AM

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Robin Jacobson (13601 SE Allen Road, Bellevue, WA 98006)

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I136-A-1 PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I136-A-2 Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I136-A-3 Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I136-A-4 The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

I136-A-5 Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

Please accept my comments and note that I am a party of record.

Sincerely,  
 Robin Jacobson  
 13601 SE Allen Road  
 Bellevue, WA 98006

I136-A-1 See response to Key Theme OBJ-3.

I136-A-2 See response to Key Themes PLS-1 and PLS-3.

I136-A-3 See response to Key Theme ALT-1.

I136-A-4 See Topic ALT.

I136-A-5 See response to Key Theme ECON-4.



COMMENT

RESPONSE

**From:** [Sam Esayan](mailto:Sam.Esayan)  
**To:** [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org)  
**Cc:** [sesayan@aol.com](mailto:sesayan@aol.com)  
**Date:** Friday, March 11, 2016 11:29:30 AM

March 11, 2016

To: Heidi Bedwell, Energize Eastside EIS Program Manager  
 From: Sam Esayan, Member of CENSE

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I148-A-1

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I148-A-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I148-A-3

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative 1A in cost, safety, and support for the environment.

I148-A-1 See response to Key Theme OBJ-3.

I148-A-2 See response to Key Themes PLS-1 and PLS-3.

I148-A-3 See response to Key Theme ALT-1.





I148-A

COMMENT

RESPONSE

I148-A-4

The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.

I148-A-5

Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line. The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future.

Sincerely,

Sam Esayian

4601 135<sup>th</sup> Avenue, SE

[Bellevue, WA 98006-3005](#)

Sent from [Mail](#) for Windows 10

I148-A-4 See Topic ALT.

I148-A-5 See response to Key Theme ECON-4.

COMMENT

RESPONSE

| Comment | Timestamp | First Name | Last Name |
|---------|-----------|------------|-----------|
|---------|-----------|------------|-----------|

|                                                                               |                       |     |          |
|-------------------------------------------------------------------------------|-----------------------|-----|----------|
| To: Heidi Bedwell, Energize Eastside EIS Program Manager<br>From: [Your Name] | 3/14/2016<br>18:50:59 | Jim | Berglind |
|-------------------------------------------------------------------------------|-----------------------|-----|----------|

Dear Ms. Bedwell,

I am very concerned about Puget Sound Energy's "Energize Eastside" project, which proposes to build 18 miles of high-voltage transmission lines through four Eastside cities (Alternative 1A).

I160-A-1

PSE tries to justify the need for the project using an impossible scenario that would cause regional blackouts, according to the Lauckhart-Schiffman Load Flow Study, available at CENSE.org.

I160-A-2

Alternative 1A would place new lines and poles much too close to aging petroleum pipelines. Responsible safety standards require at least a 50 foot separation. A construction or operational accident could cause a catastrophic pipeline explosion like the one that killed three Bellingham residents in 1999. This risk is not adequately addressed in the EIS.

I160-A-3

Alternative 2, the Integrated Resources Approach, is a safer and less costly alternative. But the solution described in the EIS was not developed or reviewed by independent experts that have suitable experience with modern electrical grid technologies, including Demand Side Management and Distributed Energy Resources. The costs and capabilities are based on inaccurate and obsolete studies. As the Northwest Power Council's Seventh Power Plan makes clear, a carefully developed plan would easily beat alternative

I160-A-1 See response to Key Theme OBJ-3.

I160-A-2 See response to Key Themes PLS-1 and PLS-3.

I160-A-3 See response to Key Theme ALT-1.



COMMENT

RESPONSE

|          | <b>Comment</b>                                                                                                                                                                                                                                              | <b>Timestamp</b> | <b>First Name</b> | <b>Last Name</b> |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|
| I160-A-3 | 1A in cost, safety, and support for the environment.                                                                                                                                                                                                        |                  |                   |                  |
| I160-A-4 | The other transmission line options (1B, 1C, 1D and Alternative 3) are not practical for financial or political reasons.                                                                                                                                    |                  |                   |                  |
| I160-A-5 | Ratepayers are asked to spend more than a billion dollars over the lifetime of PSE's transmission line.<br>The Draft EIS must answer these basic questions in order to convince residents that we are getting the best possible plan for our energy future. |                  |                   |                  |

I160-A-4 See Topic ALT.  
I160-A-5 See response to Key Theme ECON-4.