

**From:** [Richard Lauckhart](#)  
**To:** [Bedwell, Heidi](#)  
**Subject:** Lauckhart Comments on PSE Application for a CUP re Energize Eastside (File # 17-120556-LB)  
**Date:** Monday, December 11, 2017 8:20:08 AM  
**Attachments:** [Comments made by Lauckhart on PSE CUP Application for Energize Eastside.pdf](#)

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Ms Bedwell-

You have advised me that Individuals or groups who wish to comment on PSE's permit applications will need to submit comments and contact information (i.e., your name and address) to be a party of record for the CUP/CALUP applications.

By this email I am formally submitting my written comments. See attached. Note that my comments also refer to 17 Supporting Attachments. I will be submitting those 17 attachments in separate emails that refer to these comments because of the size limitation on email with attachments.

Please include the attached email and the related 17 Supporting Attachments (coming in separate emails) in the record for this CUP proceeding.

My names is: Richard Lauckhart

My address is: 44475 Clubhouse Drive, Davis, California 95618

My email address is: lauckjr@hotmail.com

Richard Lauckhart

Energy Consultant

Commenting on behalf of PSE home owners who live on the East Side

Former VP at Puget

# Comments made by Richard Lauckhart

December 11, 2017

on

## **Puget Sound Energy application for a Conditional Use Permit (File # 17-120556-LB) (“Application”)**

These comments include:

1. Introduction
2. A general overview of the comments
3. Comments on specific language in the Application
4. Supporting Attachments 1-17

### **1. Introduction**

My name is Richard Lauckhart. My resume' is included in Supporting Attachment 1 at its Appendix H.

I have worked in the electric power industry for 40+ years. For 22 of those years I worked for Puget, most notably 5 years as Vice President of Power Planning. Since leaving Puget, I spent the rest of my career as a consultant in the electric power industry.

Since May of 2015 I have spent considerable time and energy investigating PSE's proposed Energize Eastside project. I have investigated this project on a deeply technical level, for no compensation whatsoever, because I am compelled by my conscience. I would be very much concerned to see home owners and ratepayers in the PSE service territory unnecessarily being subjected to environmental harm, safety risk and increases in their power rates.

As these comments will demonstrate, the Energize Eastside line is not needed now or any time soon. The Supporting Attachments 1-17 to these comments necessarily lead one to this conclusion. PSE has been aware of these 17 documents through their Integrated Resource Plan activity with the WUTC [WUTC Docket No. UE-160918] and other forums for a long time. These 17 documents are also an official part of the record at the WUTC in Docket No. UE-160918. PSE has ignored these 17 documents in this Application. It is as if these documents do not exist.

By these comments I am including these 17 documents and discussing their relevance to the decisions that will be made by the City of Bellevue in this permit Application.

### **2. General Overview of Comments**

The PSE Application is voluminous and deals with many aspects of their proposed Energize Eastside transmission project. The NEED for the project is a key matter that needs to be addressed. I am an expert in studying the need for these kinds of projects. In Section 3 to these comments I will be commenting specifically on those portions of the Application that address the question of project NEED.

It is standard industry practice to use a "Load Flow" model to determine the need for a transmission project like Energize Eastside. In order to assess the reliability of the grid, analysts use specialized computer software to simulate failure of one or two major components while serving peak load conditions. Sometimes these models are called "Power Flow" models – PSE tends to use the term Power Flow model but such a model is the same as a Load Flow model. Just different terminology.

The PSE Application refers to various Load Flow studies that were done which they claim demonstrate the NEED for Energize Eastside. In part 3 of these comments I will point to specific language in the Application where PSE identified Load Flow modeling that they claim demonstrate the NEED for the project. I will also point out the flaws in each of these Load Flow modeling efforts.

In a nutshell, the Load Flow modeling performed by PSE/Quanta is flawed. The primary problem with their Load Flow modeling is that

- (a) They erroneously assumed that the proposed Energize Eastside project must increase the ability of BPA to move large amounts of power to and from Canada during extremely cold temperatures in the Puget Sound region [See PSE Application – "Alternative Siting Analysis" – PDF page 142 – Quanta October 2013 study at page 32, item 4.1.8], and
- (b) They erroneously assumed that essentially all of their owned/controlled power plants located in the Puget Sound region would not be operating during this extremely cold event. [See PSE Application – "Alternative Siting Analysis" – PDF page 142 – Quanta October 2013 study at page 32, item 4.1.9]

Neither one of these assumptions is legitimate.

First, there is no firm requirement to move large amounts of power to and from Canada. See Supporting Attachments 3, 4, 8, and 13. Second, it would make no sense for PSE to fail to run its Puget Sound Area generation in an extremely cold event. PSE could not meet its total System Peak load in such an event if they did not run their Puget Sound Area generation. See Supporting Attachment 5, at pages 22-26. See also Supporting Attachment 7.

PSE is not answering questions/challenges related to problems with their Load Flow studies. The following questions/challenges were asked once on March 28, 2016 [See Supporting Attachment 2] and again on October 5, 2017 [See Supporting Attachment 14]. PSE has never answered these questions/challenges. These questions/challenges are:

1. [We] challenge PSE or ColumbiaGrid to cite a specific requirement to transmit 1,500 MW to Canada in the NERC Reliability Criteria or PEFA.
2. [We] challenge PSE, ColumbiaGrid, or BPA to produce a contract showing a Firm Commitment to deliver 1,500 MW to Canada.
3. [We] challenge PSE to prove that they did not increase flow to Canada relative to the WECC Base Case.
4. [We] challenge PSE to explain how they solved issues that arise from their scenario with the electrical limits of the "West of Cascades-North" transmission lines.
5. [We] challenge PSE to explain their methodology leading to a 2.4% growth rate. We further challenge PSE to dispute the methodology used by Lauckhart-Schiffman to estimate future growth. Both methods should be reviewed by qualified experts.
6. [We] challenge PSE to cite standards that require them to turn off 6 local generation plants at the same time they are serving peak demand with an N-1-1 contingency.

7. [We] challenge PSE or BPA to provide examples of when 1,500 MW was transferred to Canada when temperatures in the Puget Sound region were lower than 23° F, as stipulated in PSE's Energize Eastside Needs Assessment.

During its review of this PSE Application, the City of Bellevue should demand that PSE respond to these questions/challenges.

But there is even a more critical question that PSE has been asked which it has never answered. That question is "**Why has PSE chosen not to re-run their flawed EE load flow studies to fix the flaws?**" See *Supporting Attachment 15*. During its review of this PSE Application, the City of Bellevue should demand that PSE respond to this critical question and demand that PSE re-run its load flow models with these flaws fixed.

PSE claims that the FERC denial of the CENSE Complaint somehow sends a message that FERC believes the Energize Eastside line should be built. Nothing could be further from the truth. The FERC Order denied CENSE's request that FERC use their authorities under FERC Order 1000 to require ColumbiaGrid to run correct load flow studies on the need for Energize Eastside in an open and transparent manner with stakeholder input. See *Application copy of FERC Order in Conditional Use Narrative at paragraph 5*. FERC did not say the Energize Eastside project should be built. As I state in more detail in Section 3 number 3 below, FERC denied this CENSE complaint/request because FERC pointed out that "...neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan..." See *Application copy of FERC Order in Conditional Use Narrative at paragraph 62*. That being the case, FERC stated it does not have jurisdiction to require ColumbiaGrid to do the CENSE requested load flow studies with stakeholder input. That is why FERC denied the CENSE complaint. FERC stated that its only jurisdiction in the Energize Eastside matter was its requirement that PSE have ColumbiaGrid demonstrate that this transmission project, which is being built solely for local reliability purposes, does not adversely impact neighboring utilities. FERC acknowledged in their Order denying the CENSE complaint that ColumbiaGrid did make that finding. But as indicated above, the writing in the PSE/Quanta reports states that the studies were intended to find a solution for the East Side that enhanced BPA's ability to move power to and from Canada. So, who would expect that the Energize Eastside project would have an adverse impact on BPA? Since, as FERC has stated, Energize Eastside is not a part of a Regional Plan, then it is wrong to require the Energize Eastside load flow studies to enhance BPA's ability to move power to and from Canada. The PSE/Quanta load flow studies should have been redone to remove this requirement. The Lauckhart-Schiffman load flow studies removed that inappropriate requirement. See *Supporting Attachment 1 at its Appendix D*.

PSE recently has claimed that Canadian transfers and generation dispatch have no relevance to the need for Energize Eastside. See *Supporting Attachment 17*. **To prove that they are irrelevant, PSE should rerun the load flow studies without inter-regional flows and with local generation operating.** Because PSE refuses to run Load Flow studies without the problematic inputs, I worked with my colleague Roger Schiffman to run corrected Load Flow studies ourselves. See *Supporting Attachment 1*. The Lauckhart-Schiffman Load Flow study found there is no transformer capacity issue or other reliability problem when these inputs are corrected.

Unless PSE reruns its Load Flow models and makes them available for inspection for people like myself that have CEII clearance from FERC, the only correct Load Flow model run on the record regarding the need for Energize Eastside is the Lauckhart-Schiffman Load Flow study. The Lauckhart-Schiffman study

is the only one that uses the load forecast PSE gave to the Western Electricity Coordinating Council, correct inter-regional flows, and appropriate generation dispatch. **That study concludes that Energize Eastside is not needed now or any time soon.**

I have also identified alternatives that would be better than EE if in the future there is a need for reliability improvements on the Eastside. These include more DSM, batteries, 230/115 transformer at Lake Tradition, Seattle City Light line option, etc. *See Supporting Attachments 10 and 11.* If a reliability problem arises in the future on the Eastside, these alternatives would be better solutions than building Energize Eastside.

Why would PSE want to build a project that is not needed? The answer lies in the Macquarie investment objectives it had when it decided to buy all of the common stock of Puget nearly 10 years ago. *See Supporting Attachments 5 and 6.* Also, note that Macquarie has begun the process of selling its ownership share of PSE [See <https://www.bloomberg.com/news/articles/2017-06-15/macquarie-said-to-explore-sale-of-stake-in-utility-puget-energy>] and Macquarie desperately needs to show potential purchasers that there will be new large investment coming into PSE's ratebase soon so that the potential purchaser will believe PSE will be receiving higher revenues from its ratepayers in the near future.

### **3. Comments on specific language in the Application**

**Statement made in Application**      **Responsive Comment**

	<b><u>Statement made in Application</u></b>	<b><u>Responsive Comment</u></b>
1	Conditional Use Narrative Page 1, Paragraph 1 "The new substation and upgraded lines are needed to address electrical system deficiencies identified during federally-required "planning studies"	This statement is False. <i>See Supporting Attachment 1.</i> Also note, PSE has never provided a response to the question/challenge made to them to cite a specific requirement to transmit 1,500 MW to Canada in the FERC/NERC Reliability Criteria or PEFA
2	Conditional Use Narrative Page 2. "The Energize Eastside project is a key electrical infrastructure project needed to bring a 230 kV power source to the Eastside region, including the City of Bellevue, the region's largest city and job center"	This statement is False. <i>See Supporting Attachments 1 and 17.</i>

3	<p>Conditional Use Narrative Page 23. "Performance requirements for any integrated transmission system are heavily regulated at both the federal and regional levels. PSE's regulators include FERC, NERC and WECC (the Federal Energy Regulatory Commission, North American Electric Reliability Corporation and Western Electricity Coordinating Council, respectively"</p>	<p>This statement erroneously ascribes heavy regulation of a transmission line to be used solely for local needs to FERC, NERC and WECC. FERC has stated it has no jurisdiction over this line because it was never intended to be a part of a Regional Plan. <i>See Application copy of FERC Order in Conditional Use Narrative at paragraph 62.</i> PSE and Columbia Grid told FERC that "transmission construction, siting, and permitting fall within the purview of state and local jurisdictions..." <i>See Application copy of FERC Order in Conditional Use Narrative at paragraph 22.</i> And FERC has stated that it has no jurisdiction over Energize Eastside. <i>See same FERC Order at paragraph 66.</i> Also at paragraph 67 FERC states "Nevertheless, the Energize Eastside Project is not subject to the Order No. 1000 regional approval process because it is located completely within Puget Sound's service territory, it was included in Puget Sound's local transmission plan to meet Puget Sound's reliability needs, and neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation." See also Supporting Attachments 1, 9, 14, 16 and 17. <u>A project to be used solely for local need and not in a Regional Transmission Plan to help BPA increase its ability to move power to and from Canada should not have its Load Flow analysis requiring these interregional flows.</u> Also note, the WUTC is reviewing the need for Energize Eastside in the PSE Integrated Resource Plan Docket No. UE-160918</p>
4	<p>Conditional Use Narrative Page 25 et seq. And Alternative Siting Analysis page 23. States "five separate studies performed by four separate parties have confirmed the need to address Eastside transmission capacity (20.20.255.E.4; D.3.b &amp; c): • Electrical Reliability Study by Exponent, 2012 (City of Bellevue); • Eastside Needs Assessment Report by Quanta Services, 2013 (PSE); • Supplemental Eastside Needs Assessment Report by Quanta Services, 2015 (PSE); • Independent Technical Analysis by Utility Systems Efficiencies, Inc., 2015 (City of Bellevue); and • Review Memo by Stantec Consulting Services Inc., 2015 (EIS consultant)"</p>	<p><b>None of the five studies have confirmed the need for the line.</b> (1) The Exponent report simply stated what PSE told them on the need for the line. Exponent performed no study of the need for the line. Exponent advised Bellevue to follow PSE's IRP process at the WUTC. The WUTC is studying the need for the line in PSE's current IRP. (2) The Quanta Services 2013 study was flawed as was (3) the Supplemental Quanta study done in 2015. <i>See Supporting Attachment 12.</i> 4) The Utility Systems Efficiency analysis actually found that 4 of the five overloads on the PSE system go away if you remove the unrequired flows to Canada. And we have found that the remaining overload is so small that it can easily be solved by running the PSE Puget Sound Area generators. <i>See Supporting Attachment 1.</i> (5) The Stantec review memo only parroted what PSE told them. Stantec performed no independent analysis of the need for Energize Eastside.</p>

5	Conditional Use Narrative Pages 63-64. These pages contain a July 20 2017 Jens Nedrud letter to City of Bellevue certifying Reliability Need for Energize Eastside	This letter includes no analysis, and instead relies on the flawed analysis performed by others as described in 4 above. There is nothing legitimate that demonstrates that this certification is correct.
6	Alternative Siting Analysis Page 21. "The Energize Eastside Project is needed to meet local demand growth in the eastside of King County, including Bellevue, Redmond, Kirkland, Renton, Newcastle and Issaquah"	This statement is False. <i>See Supporting Attachments 1 and 17.</i>
7	Alternative Siting Analysis Tetra Tech document starting at page 44. "Based on PSE's technical evaluation of potential solutions, the most effective way to ensure the Eastside's power system will meet growing demand is to add a new 230 kV transmission line to connect PSE's Sammamish (Redmond) and Talbot Hill substations (Renton)."	By its own admission, Tetra Tech is relying on PSE studies. But PSE studies are flawed. See 4 above.

**Submitted by Richard Lauckhart**  
**Energy Consultant**  
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**Former VP at Puget**



## List of Supporting Attachments with Brief Description

These Documents in full have been separately filed with the City of Bellevue

<u>Attachment No.</u>	<u>Attachment Brief Description.....</u>
1	Lauckhart-Schiffman Load Flow study showing EE is not needed (includes my resume)
2	Rebuttal to PSE criticisms of Lauckhart-Schiffman including Q's and challenges to PSE
3	Email demonstrating that there is no Firm Requirement to deliver Canadian Entitlement Power to the Canadian Border
4	Copy of "Agreement on Disposals of the Canadian Entitlement within the United States" covering the years 1998-2024 referred to in the email above
5	Blowing the Whistle Slide show questioning PSE's motive and proof of the need for EE
6	Backstory on PSE's motive to build EE
7	Setting the record straight on EE Technical Facts
8	Comments I made to ColumbiaGrid pointing out the error in their System Assessment write-up regarding the need to deliver 1,350 MW of Treaty power to the Canadian border
9	Evidence that ColumbiaGrid had no substantive role in determining the need for EE
10	Email describing alternatives that would be better than EE if in the future there is a need for reliability improvements on the Eastside
11	Comments demonstrating that the Seattle City Light line is a legitimate and better alternative to EE if there is a need and PSE chooses to use the FERC Open Access Transmission Tariff (OATT) rules available to them in order to enable this option to happen
12	Document describing the "fatal flaws" in the load flow studies PSE ran in an attempt to justify EE. Documents filed this day also include the documents that PSE has alleged show the need for EE because these documents are referenced in the "fatal flaws" write-up
13	Document providing further evidence that the ColumbiaGrid System Assessment write-up stating there exists a Firm Commitment to deliver 1,350 MW of Treaty Power to the Canadian Border is not correct. Includes an email from ColumbiaGrid stating that BPA was the one that told them that such a Firm Commitment exists [even though BPA responded in a Public Record Act request that no such Firm Commitment exists]. ColumbiaGrid explains that it makes no check on what BPA tells them when they write their System Assessment document. They just include the BPA un-validated allegation in their System Assessment write-up. This allegation has subsequently been refuted by BPA in their response to the Public Records Act request

- 14 Questions regarding EE for PSE to respond to at their October 5 IRP Advisory Group meeting
- 15 One further question for PSE to respond to at their October 5, IRP Advisory Group meeting, i.e. Why has PSE chosen not to re-run their flawed EE load flow studies to fix the flaws?
- 16 Document explaining the difference between (1) a WECC Path Rating and (b) a Firm Commitment for transmission delivery. Explains that PSE is erroneously treating the WECC Path Rating for the Northwest to Canada path as if it were a "Firm Commitment" in its load flow studies allegedly showing the need for EE. This treatment of WECC Path Ratings is wrong. PSE needs to re-run their load flow studies allegedly showing the need for EE to eliminate these non-required inter-regional flows.
- 17 Comments Lauckhart made at the October 5, 2017 PSE IRP Advisory Group meeting

**From:** [Richard Lauckhart](#)  
**To:** [Bedwell, Heidi](#); [davev@newcastlewa.gov](mailto:davev@newcastlewa.gov); [jding@rentonwa.gov](mailto:jding@rentonwa.gov)  
**Subject:** EFSEC is the right organization to review the need for Energize Eastside  
**Date:** Monday, September 24, 2018 1:15:11 PM  
**Attachments:** [Email Exchange with EFSEC.pdf](#)

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Heidi, Dave, and Jill-

Please file this email and its attachment in each of your city file of comments on the PSE CUP Application for Energize Eastside.

I have previously sent each of you four sets of comments on the PSE CUP Application for Energize Eastside as follows:

- 1) Comments specifically on the PSE Application...includes 17 Supporting Attachments
- 2) Expert Report saying there is no Need for Energize Eastside
- 3) Expert Report describing Alternatives to Energize Eastside if a legitimate reliability problem is found
- 4) Expert Report on the Problems with the Energize Eastside Final EIS

These comments individually and collectively make it clear that Energize Eastside is not needed now or anytime soon. There should be no permit issued for constructing the Energize Eastside project.

I have also previously indicated to you that it makes no sense for your city to be holding hearings on the PSE CUP Application for the Energize Eastside project in your area given that PSE has chosen not to move forward with applications for North Bellevue and cities further north of Bellevue where permits will be needed in order to construct the Energize Eastside project. It would be a complete waste of everyone's time, effort and money to hold hearings on building half of a line. That would not be in the public interest

It is clear that PSE has the ability to request a permit from EFSEC if any city denies the PSE CUP Application for Energize Eastside. [See the attachment to this email which includes an email to me from the Manager of EFSEC explaining PSE's options for permitting a project like Energize Eastside.] It seems obvious that if PSE really believes the Energize Eastside project is necessary in order to maintain reliability on the east side (*which is questionable given they have not filed for permits to the north*) then PSE will apply for a permit from EFSEC if any city denies a permit.

**The decision (on whether or not Energize Eastside should be permitted) should be made by EFSEC. EFSEC has more knowledge on the matter than the cities have. EFSEC has a proper proceeding that allows for cross examining PSE witnesses under oath on their Energize**

**Eastside studies.**

Your cities can require PSE to go to EFSEC simply by denying the permit at the City forum.

Then if PSE still thinks the line is necessary they can take the matter to EFSEC.

Richard Lauckhart  
Energy Consultant

Email from:  
Posner, Stephen (UTC) <stephen.posner@utc.wa.gov>  
Mon 9/24/2018, 8:51 AM

To:  
Mr. Lauckhart,

EFSEC jurisdiction over electrical transmission facilities is described in RCW 80.50.060 (3). The statute allows an applicant to seek certification through EFSEC but it is not required (opt in). The EFSEC law currently does not preclude an applicant from applying to EFSEC if local review results in rejection of a electrical transmission facility application. Updating this procedure has been considered in the past but as of now it remains unchanged.

I hope this information is helpful.

Sincerely,

Stephen Posner, Manager  
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Utilities and Transportation Commission  
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-----Original Message-----

From: Richard Lauckhart [<mailto:lauckjr@hotmail.com>]  
Sent: Friday, September 21, 2018 7:18 AM  
To: Posner, Stephen (UTC) <stephen.posner@utc.wa.gov>  
Subject: Permitting Transmission lines

Steve-

As I understand it, if PSE wants to permit a new transmission line that passes through 5 cities, PSE can choose to either (1) apply for permits from each of the 5 cities or, (2) apply for a permit from EFSEC. Do I have that right?

And if PSE applies to the 5 cities and one or more of the cities rejects the permit, then PSE can go to EFSEC. right?

Are there any proposals in the works to change this procedure?

Thanks for any insights you can provide.

Richard Lauckhart  
Energy Consultant