

EXH. RL-1T
Dockets UE-220066/UG-220067
2022 PSE GENERAL RATE CASE
WITNESS: RICHARD LAUCKHART

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

Docket UE-220066

Docket UE-220067

v.

PUGET SOUND ENERGY,

Respondent

PREFILED TESTIMONY OF
RICHARD LAUCKHART
ON BEHALF OF THE
COALITION OF EASTSIDE NEIGHBORHOODS FOR SENSIBLE ENERGY
(CENSE)

JULY 28, 2022

1 **COALITION OF EASTSIDE NEIGHBORHOODS FOR SENSIBLE ENERGY**

2
3 **PREFILED TESTIMONY OF**
4 **RICHARD LAUCKHART**

5
6 **CONTENTS**

7
8 I. INTRODUCTION.....5
9 II. EVIDENCE THAT ENERGIZE EASTSIDE IS NOT PRUDENT.....6
10 III. TESTIMONY, FEBRUARY 2018.....7
11 IV. PERMIT MATTERS REGARDING ENERGIZE EASTSIDE.....15
12 V. PRUDENCE RECOMMENDATION.....16

13
14
15
16
17
18
19
20
21
22
23
24
25
26
27

1 **COALITION OF EASTSIDE NEIGHBORHOODS FOR SENSIBLE ENERGY**

2
3 **PREFILED TESTIMONY OF**
4 **RICHARD LAUCKHART**

5
6 **LIST OF EXHIBITS**

- 7
8
9 Exh RL-2 Professional Qualifications of Richard Lauckhart
- 10 Exh RL-3 Lauckhart written report for City of Newcastle
- 11 Exh RL-4 Lauckhart Power Point for City of Newcastle
- 12 Exh RL-5 Lauckhart-Schiffman Feb 18, 2016 Report
- 13 Exh RL-6 Rebuttal to PSE criticisms of Lauckhart-Schiffman
- 14 Exh RL-7 Lauckhart 2017 expert report on Alternatives
- 15 Exh RL-8 Selected pages from FERC Order on Johnson Complaint
- 16 Exh RL-9 PSE letter rejecting Lauckhart CEII request
- 17 Exh RL-10 CENSE response to PSE letter rejecting Lauckhart CEII request
- 18 Exh RL-11 Selected Pages from PSE 2021 Integrated Resource Plan (IRP) report
- 19 Exh RL-12 PSE September 8, 2020 Motion to WUTC to cancel Resource Solicitation
- 20 Exh RL-13 Selected Pages from PSE OATT Attachment K
- 21 Exh RL-14 Documents related to SCL alternative (embedded in RL-3)
- 22 Exh RL-15 EQL Feb 15, 2016 report on Alternatives to Energize Eastside
- 23 Exh RL-16 WUTC Competitive Bidding Rule for resource needs
- 24 Exh RL-17 Press Release indicating Macquarie wants to buy PSE
- 25 Exh RL-18 BPA will not build the I-5 Corridor Reinforcement Project
- 26 Exh RL-19 Synapse draft report for City of Newcastle
- 27 Exh RL-20 Puget Sound Area reliability plan and associated 1990 Letter Agreement

- 1 Exh RL-21 NERC/FERC TPL-001 reliability requirement
- 2 Exh RL-22 NorthernGrid – FERC Approved Transmission Planning Region FAQ
- 3 Exh RL-23 RC West Electric Reliability Coordinator
- 4 Exh RL-24 List of Base Cases that are available from WECC
- 5 Exh RL-25 Four-page Power Point describing Transient Stability Analysis
- 6 Exh RL-26 WECC developed document discussing voltage stability and collapse
- 7 Exh RL-27 Quanta list of Puget Sound Area generation operating in their studies
- 8 Exh RL-28 Lauckhart Declaration re CEII rules
- 9 Exh RL-29 Lauckhart Comments to WUTC February 21, 2018 re PSE IRP
- 10 Exh RL-30 Synapse first draft report for City of Newcastle
- 11 Exh RL-32 Synapse third and final report for City of Newcastle
- 12 Exh RL-33 Exchange of email between CENSE and PSE re M-and-C re data responses
- 13 Exh RL-34 Quanta estimated cost of EE in 2011
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23

1 **COALITION OF EASTSIDE NEIGHBORHOODS FOR SENSIBLE ENERGY**

2
3
4 **PREFILED TESTIMONY OF**
5 **RICHARD LAUCKHART**
6

7
8 **I. INTRODUCTION**
9

10
11 **Q. Please state your name, business address, and position with CENSE**

12
13 A. My name is Richard Lauckhart. My business address is 44475 Clubhouse Drive, El
14 Macero, California 95618. I have studied the need for Energize Eastside since first being
15 contacted by CENSE for help in April of 2015. I have been retained as a Consultant by
16 CENSE to provide testimony regarding the Prudence of Energize Eastside. Recently
17 CENSE has had major changes in its organization with (a) the withdrawal of their
18 Attorney Rick Aramburu, (b) Resignation by Don Marsh of his Presidency of CENSE,
19 (c) claims to have run out of money, and (d) decision by Don Marsh its Past President
20 (but still CENSE Board member) to file comments on May 31,2022 in this proceeding
21 UE-220066 as “Lead, Washington Clean Energy Coalition.” While I find those changes
22 to be problematic, I still feel the obligation to bring my testimony to the attention of other
23 parties in US-220066 and the Commissioners themselves. This testimony is being filed
24 for that purpose.

25 **Q. Have you prepared an exhibit describing your education and relevant employment**
26 **experienced and other professional qualifications?**
27

28 A. Yes, I have. It is Exhibit RL-2
29

30 **Q. BRIEFLY DESCRIBE YOUR BACKGROUND**
31

1 A. I received a Bachelor of Science Degree in Electrical Engineering from Washington State
2 University in 1971. I received a Masters Degree in Business Administration from the
3 University of Washington in 1975. I worked for Puget Sound Power and Light (the
4 predecessor Company of Puget Sound Energy [PSE]) for 21 years, five years as the Vice
5 President of Power Planning. I left Puget in 1996 when they merged with the gas company
6 and offered lucrative exit packages. I took an exit package. From 1996 to today I have
7 been a power system consultant. My Bio (RL-2) details many of the consulting
8 engagements I have been involved in.

9
10
11
12 **II. EVIDENCE THAT ENERGIZE EASTSIDE IS NOT PRUDENT**

13
14 **Q. WHAT TOPICS ARE YOU COVERING IN YOUR TESTIMONY**

15 A. My testimony provides a background on Power Planning as it relates to the topic of the
16 Prudence of the PSE Investment in the Energize Eastside project. I describe Fatal Flaws in
17 PSE’s attempt to justify Energize Eastside. I describe that:

- 18 • PSE fails in its legal burden to prove EE project need.
- 19 • The solid verifiable facts demonstrating project need have not been provided (i.e., “show
20 us your homework”)
- 21 • It is clear that PSE relies on load flow studies that contain fatal flaws
- 22 • PSE is attempting to meet its stated goal of increasing its rates to retail customers in
23 order to grow its profits

- 1 • PSE makes no legitimate effort to study appropriate alternatives to EE
- 2 • MaxETA/Synapse provide an interesting but flawed review of project need

3 **Q. Where do you provide the basis for the above 6 bulleted points?**

4 A. That evidence is provided in my Exhibits RL-3 and RL-4

5 **Q. What specific topics are you discussing in this testimony?**

6 A. The following topics are included as attachments to this testimony:

- 7 1) Discussion of safety of EE...Attachment 1 to this testimony.
- 8 2) Discussion of what the WUTC has already said about EE...Attachment 2 to this
9 testimony.
- 10 3) Discussion of PSE's improper reliance on PSE TPL studies and other
11 studies...Attachment 3 to this testimony
- 12 4) Discussion of Lauckhart/Schiffman report (including reference to Attachment on summer
13 peak)...Attachment 4 to this testimony.
- 14 5) Alternatives to EE if needed...Attachment 5 to this testimony.
- 15 6) Discussion of MaxETA/Synapse report included in Koch testimony ...Attachment 6 to
16 this testimony.
- 17 7) Discussion of problems with foreign ownership and my testimony in ownership transfer
18 proceeding ...Attachment 7 to this testimony.
- 19 8) City of Newcastle Hearing Examiner Ruling ...Attachment 8 to this testimony

20

21

22

23

1 **III. TESTIMONY I MADE ON THIS SUBJECT IN FEB 2018**

2

3 **Q. Have you testified at the WUTC on the prudence of Energize Eastside prior to this**
4 **hearing?**

5 A. Yes. On February 21, 2018 I provided this commission a lengthy email with a large
6 number of attachments as public comment on the PSE IRP Docket No. UE-160918. I
7 spoke at the WUTC Public Meeting February 21, 2018 re PSE IRP and provided hard
8 copies of the information I had emailed. My concluding statement to the WUTC on
9 February 21, 2018 was that any decision PSE made to build Energize Eastside ...would
10 be imprudent based on the information that is available on February 21, 2018.

11

12 **Q. Did the WUTC Acknowledgement Letter in PSE IRP Docket No. UE-160918 reflect**
13 **your concerns?**

14 A. Yes. The Commission Acknowledgement Letter in that case stated the Plan does not
15 include a narrative regarding:

- 16 • The effect of the power flows due to entitlement returns on the need for the
17 Energize Eastside Project.
- 18 • The reason for, and effect on the need for the Energize Eastside Project, of
19 modeling zero output from five of PSE’s Westside thermal generation
20 facilities.
- 21 • PSE’s choice not to provide modeling data to stakeholders with Critical
22 Energy Infrastructure Information clearance from FERC.

- 1 • Resolution of the effect of lower load assumptions on the study of need for the
2 Energize Eastside Project
- 3 • It is still not clear if a joint utility analysis of all available transmission and
4 potential interconnections in the Puget Sound region might solve the Energize
5 Eastside reliability issues.

6 **Q. You indicate above that WUTC Acknowledgement Letter in PSE IRP Docket No.**
7 **UE-160918 indicated that the Commission was concerned about PSE’s choice not to**
8 **provide modeling data to stakeholders with Critical Energy Infrastructure**
9 **Information clearance from FERC. Did that get fixed in the Data Requests that**
10 **CENSE made in this proceeding UE-220066?**

11 A. No. CENSE made 56 data requests in this proceeding. PSE responded to several of the
12 data requests that what is being asked for is “Critical Energy Infrastructure Information
13 (“CEII”) data which would be designated as EXEMPT per WAC 480-07-160.” But
14 FERC has made it clear that energy consultants like myself need to be able to see CEII as
15 long as they sign a Non-Disclosure Agreement. And in this proceeding, there are
16 Confidentiality Agreements on file that would protect CEII information from being
17 disclosed. PSE continues to avoid providing evidence of their studies of the need for
18 Energize Eastside. Without other parties being provided that information for their
19 inspection, there can be no finding of Prudence of Energize Eastside.

20 **Q. Do you have other concerns about the responses that PSE made to the CENSE data**
21 **requests?**

22 A. Yes. Other concerns are:

1 (1) CENSE-17 asked for the following files for PSE/Quanta load flow studies, Exhs. DRK-
2 3 and DRK-4: 1) areatie, 2) buslist, 3) Flows, 4) owner, 5) Summary, and 6) .raw file.

3 The PSE response was:

4 *"Puget Sound Energy ("PSE") objects to CENSE Data Request No 017 as overbroad,*
5 *unduly burdensome, and not reasonably calculated to lead to the discovery of*
6 *admissible evidence. PSE further objects to this request as unduly burdensome or*
7 *expensive. Furthermore, conversion capability to the requested file format is not*
8 *readily available to PSE and the PSE/Quanta load flow study files contains Critical*
9 *Energy Infrastructure Information ("CEII") data which would be designated as*
10 *EXEMPT per WAC 480-07-160."*

11 That response is not adequate. I have received these kinds of files from others who use
12 the PowerWorld model. These files need to be provided.

13 PSE also responds:

14 *"Attached as Attachment A to PSE's Response to CENSE Data Request No. 017 is an*
15 *email to PSE from Richard Lauckhart, an energy consultant contracted by CENSE to*
16 *act as an expert witness. The email indicates that CENSE had all necessary information*
17 *from the Western Electricity Coordinating Council base case to run load flow studies*
18 *and did not need to obtain them from PSE using PSE's CEII process."*

19 That response is incorrect. My email says I will be using the WECC Base Case file
20 because I have those, even though I would like to be able to use the PSE/Quanta files
21 because it is clear that the PSE/Quanta files differ from the Base Cases...and I want to
22 get the PSE/Quanta files so I can see all the differences.

1 PSE needs to provide at least the "flows" file from their PowerWorld run. A
2 PowerWorld "Flows" file is available from a PowerWorld load flow model run.

3
4 **2) Several of the CENSE data requests** asked for load on the Eastside (and on the
5 substations on the Eastside). *PSE answered in several places that they do not forecast*
6 *flows on Eastside substations.* That is clearly wrong since PSE provides to WECC the
7 forecast loads on all their substations. We therefore must assume the substations loads
8 that PSE provided to WECC are the right ones to use.

9
10 **3) CENSE-8** asked for all studies produced in each TPL study over the years, The PSE
11 response was:

12 *"Puget Sound Energy ("PSE") objects to CENSE Data Request No. 008 as overbroad,*
13 *unduly burdensome, and not reasonably calculated to lead to the discovery of*
14 *admissible evidence because Transmission Planning Assessment studies ("TPLs") are*
15 *conducted for the entire PSE system and potentially identify various other PSE system*
16 *deficiencies other than Energize Eastside. Additionally, TPLs contain significant*
17 *Critical Energy Infrastructure Information ("CEII"), which would be designated as*
18 *EXEMPT per WAC 480-07-160."*

19
20 This is not a proper response. If PSE wants to refer to these studies in support of the
21 prudence request, then PSE needs to provide these reports.

1 **4) In several places CENSE asked for documentation of the stakeholder process that**
2 **is found in Attachment 1 of TPL-001-4.** *PSE responded in several places that such*
3 *Stakeholder process does not apply to their studies of Energize Eastside. That is*
4 *wrong. We can take from their response that PSE simply chose not to conduct the*
5 *required Stakeholder process when performing their TPL annual studies.*

6
7 **5) CENSE-16** asked if PSE ever sought to include the Energize Eastside project in a
8 regional transmission plan. The PSE response was:

9 *"Puget Sound Energy ("PSE") did not seek to include the Energize Eastside project in*
10 *any regional transmission plan because it is not addressing a regional need."*

11 That response does not square with the PSE/Quanta study assumption that Energize
12 Eastside needs to be built in part to assure that 1,500 MW of power can be moved to
13 Canada under a Heavy Winter condition with N-1-1 contingencies. *[If PSE would have*
14 *sought to have Energize Eastside included in a regional transmission plan, then FERC*
15 *would have examined the 'need' for Energize Eastside, not the State of Washington.*
16 *And FERC policies on allocating the cost of Energize Eastside to regional utilities*
17 *would have been invoked. And Bonneville Power would have been assigned the*
18 *majority of the cost because of the requirement that Energize Eastside needed to*
19 *develop the capability to move 1,500 MW to Canada under heavy winter conditions and*
20 *N-1-1 contingency. And a NEPA Environmental Review would have been triggered*
21 *rather than SEPA. PSE did not want any of that to happen.]*

1 **6)** While PSE quotes extensively from the MaxETA report on load flow studies done by
2 MaxETA, **when asked for the files from those MaxETA load flow studies PSE**
3 **states as follows:**

4 *"Puget Sound Energy ("PSE") objects to CENSE Data Request No. 039 to the extent it*
5 *seeks documents beyond the scope of PSE's possession, custody or control as it seeks*
6 *documents from third-party entities that are not participants in this proceeding.*
7 *Synapse and MaxETA were contracted by the City of Newcastle to support the City's*
8 *review of PSE's Conditional Use Permit ("CUP") application and provide an*
9 *independent analysis. PSE provided data and information to Synapse and MaxETA;*
10 *however, the power flow analysis performed by MaxETA was never provided to or seen*
11 *by PSE. Therefore, which "power flow models" were run, or analysis ultimately*
12 *performed by Newcastle's consultant is not known."*

13
14 If PSE wants to rely on language in the MaxETA report, PSE needs to make a witness
15 from MaxETA available to answer data requests and for cross examination. Further, in
16 response to a Public Record Request I made to the City of Newcastle, MaxETA
17 provided all the load flow studies they ran in the work they did for the City of
18 Newcastle. That response clearly demonstrates that many of the load flow studies they
19 talk about in their report simply were not made by MaxETA/Synapse.

20
21 **7) CENSE-21** asked for information about the DRK-1T testimony regarding audits
22 performed by other on TPLs prepared by PSE. PSE responded as follows:

1 *"Members of Puget Sound Energy's ("PSE") Transmission Planning team were present*
2 *and engaged throughout the audit processes related to the North American Electric*
3 *Reliability Corporation ("NERC") Standard TPL-001. The specific participant names*
4 *in the audits by the Western Electricity Coordinating Council ("WECC") and Federal*
5 *Energy Regulatory Commission ("FERC") are only available in the non-public*
6 *WECC/NERC compliance audit reports."*

7
8 This response is completely inadequate, especially in light of clear evidence that neither
9 NERC nor WECC have ever conducted an audit of PSE TPL studies.

10
11 **8) CENSE-18** asked PSE to re-run load flow studies DRK-3 and DRK-4 with the gas fired
12 generation turned on and with only 500MW flowing to Canada. PSE responded as
13 follows:

14 *"Puget Sound Energy ("PSE") objects to CENSE Data Request No. 018 as unduly*
15 *burdensome and duplicative with because it requests PSE complete a new load flow*
16 *study. The requested powerflow analysis would take around four months to complete*
17 *using the PowerWorld software."*

18 This response makes no sense. First, it is not necessary to use the PowerWorld
19 software to make these runs. WECC makes the data bases available for PTI and GE
20 PSLF software which should be readily available to PSE load flow modelers. Further
21 changing of the data for the running of (a) the gas fired generators and (b) changing the
22 flow to Canada could be done in less than an hour. Running the model itself after
23 changing the input data only takes minutes.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

9) CENSE 43 asked PSE to identify all substations that would be served by the Energize Eastside project and provide for each winter peak loads, summer peak loads, and the duration of such load for the period from 2006 to the present. *PSE provided a list of 12 KV substations impacted by CAPs.*

Those PSE listed substations include substations north of the Sammamish substation that can be served by other 230/115 KV substations such as Echo Lake, BPA Snohomish and Beverly Park. Those listed 12KV substations also include substations south and east of Talbot Hill that can be served by other 230/115 KV substations such as OBrien, Berrydale, White River, BPA Tacoma, and Tacoma City Light SW.

Clearly a failure of a bank at Sammamish or Talbot Hill or both during a heavy load situation would not require load shedding at all these 12 KV substations. The other nearby 230/115 KV substations would be available in such an emergency to supply customers served by these other listed substations. And these other substations can be loaded to their emergency ratings in such an event. Lauckhart and Schiffman made a load flow run under Winter peak with N-1-1 outages of Sammamish and Talbot Hill 230/115 KV transformers. No transmission problems were found because the other nearby 230/115 KV transformers performed to avoid any problems.

Q. Are these WUTC expressed concerns as valid today as they were in February of 2018?

A. Yes.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

IV. PERMIT MATTERS REGARDING ENERGIZE EASTSIDE

Q. Have FERC or WECC ever stated that PSE need to build Energize Eastside in order to comply with FERC/NERC reliability criteria?

A. No. On October 21, 2015 FERC stated that (a) since Energize Eastside is located completely in the PSE service territory AND (b) because PSE never asked for Energize Eastside to be included in a Regional Transmission Plan; that FERC has no jurisdiction over Energize Eastside and the need for Energize Eastside needs to be decided by the State of Washington. See Exhibit RL-8.

Q. Given this FERC finding, where could PSE go to demonstrate the need for PSE in order to get a permit to build Energize Eastside?

A. PSE had the choice of asking the State of Washington Energy Facility Site Evaluation Council (EFSEC) to permit the line or to ask for Conditional Use Permits from the Cities that the Energize Eastside lines pass through. PSE chose the latter. That being the case, each city needs to determine if Energize Eastside fits within its codes.

Q. Has PSE received the permits it needs to build Energize Eastside?

A. No. PSE has not received permits from the Cities of Newcastle, North Bellevue, Redmond or Kirkland. See Attachment 9 to this testimony. The Hearing Examiner in Newcastle gave Conditional Approval to the PSE request for a Conditional User Permit for Energize Eastside. But the Condition has not yet been satisfied.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

V. PRUDENCE RECOMMENDAION

Q. What are the four factors the WUTC looks for in a prudency review and how well has PSE met those criteria?

A. The four factors are:

1) **Is there a need for Energize Eastside?** *[As indicated in this testimony, PSE fails in its legal burden to prove EE project. PSE inappropriately relies on CEII arguments and confidentiality arguments to refuse to provide the solid verifiable facts demonstrating project need.]*

2) **If yes, have Alternatives to Energize Eastside been properly identified and studied?** *[As indicated in this testimony, PSE makes no legitimate effort to study appropriate alternatives to Energize Eastside.]*

3) **Was there adequate communication with the PSE Board of Directors?** *[Based on PSE answers to data request, it appears there has not been adequate communication with the PSE Board of Directors. This answer is further complicated by the Ownership Transfer Proceeding in 2018 in which the new owners were advised by myself of problems with the justification Energize Eastside, but the new owners on the Board imprudently chose not address the matters brought to their attention.]*

4) **Is there adequate documentation of the decisions made by PSE?** *[As indicated in this testimony, PSE continues to refuse to provide the necessary information to allow for proper investigation by parties like CENSE on why the project is needed and why the conclusions of the Lauckhart-Schiffman load flow study are not correct.]*

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. Given the testimony you have to the WUTC in February of 2018 and given the testimony you provide here regarding PSE’s failure in its legal burden to prove EE project need, what is your recommendation to the PUC regarding Energize Eastside in this proceeding?

A. There are several candidate dates when the commission could establish when PSE should have known not to continue to pursue Energize Eastside as follows:

- PSE knew, or should have known, that Energize Eastside was not a prudent project in **2013**. They should have known the assumptions in the Quanta studies (including shutting down PSE west side gas fired generation during a heavy winter peak) were not proper. And they were aware of the problem of co-locating gas and transmission lines was extremely dangerous from the experience in Bellingham in 1998.
- Quanta told PSE and Columbia Grid in 2011 that the cost of EE would be \$70 million. [Exh RL-34]. That is why ColumbiaGrid chose EE over the SCL line option. But by the year **2015**, the estimated cost of the Energize Eastside project had jumped to over \$250 million, apparently because PSE had come to the understanding that the 115 KV lines could not be removed for conversion to 230 KV until the 230KV was already in place and operating. That required a complete redesign of the Energize Eastside project and a very large increase in cost. It was imprudent not restudy at that time.
- PSE was put on notice by the WUTC in **Feb 2018** that their project was at risk in the WUTC Acknowledgement Letter in their IRP.

1 • PSE Owners were made aware of the problems with the prudence of Energize
2 Eastside in 2018 in the Ownership Transfer proceeding. A prudent owner would have
3 negotiated the price it paid for purchasing PSE at the time to eliminate the investment
4 made in Energize Eastside up to that time and chosen to stop pursuing Energize
5 Eastside at the time.

6 I recommend the WUTC pick one of the dates highlighted above as when PSE should
7 have known not to continue spending money on Energize Eastside.

8 **Q. Does this conclude your prefiled testimony?**

9 A. Yes it does.

10

11

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

Attachment 1 ... Discussion of safety of EE

If there is a transmission reliability problem on the Eastside (*something that I dispute*), then I have identified several options for dealing with any such problem that do not require building Energize Eastside on the same right-of-way as the Olympic Pipeline. It is obvious that if there are several options to solve a problem where only one among them is capable of killing people, no matter how remote that risk might be, a prudent utility would pick any one of the safe options over the one with its unique lethality.

The WUTC needs to be reminded of what happened with the Olympic Pipeline in Bellingham in the year 1999. View the video at the link below.

<https://komonews.com/news/local/on-this-day-20-years-ago-pipeline-explosion-kills-3>

Imagine if this disaster happened in one of the cities on the eastside rather than in a park in Bellingham.

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 [SCADA](#) 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.^[2] Olympic, Equilon and several employees faced a seven count indictment after the investigation in 2002. The companies pleaded guilty to several of the charges, leading to a \$112 million settlement, a record at the time. This was the first conviction against a pipeline company under the 1979 [Hazardous Liquid Pipeline Safety Act](#)

ON THE BASIS OF SAFETY ALONE, THE WUTC SHOULD FIND PSE'S INVESTMENT IN ENERGIZE EASTSIDE TO BE IMPRUDENT.

1 **Attachment 2 ... Discussion of what the WUTC has already said about EE**

2 Proceeding UE-160918 dealt with the PSE 2017 IRP. The WUTC staff and myself and others
3 provided considerable comment/concern regarding Energize Eastside and how PSE was treating
4 that in their IRP. The June 19, 2018 WUTC Acknowledgement Letter in that proceeding
5 provided a list of several matters related to Energize Eastside that needed to be dealt with in
6 the future. PSE has failed to do that. For example, the
7 Acknowledgement Letter stated:

8
9 the Plan does not include a narrative regarding:

- 10 • The effect of the power flows due to entitlement returns on the need for the Energize
11 Eastside Project.
12 • The reason for, and effect on the need for the Energize Eastside Project, of modeling zero
13 output from five of PSE's Westside thermal generation facilities.
14 • PSE's choice not to provide modeling data to stakeholders with Critical Energy
15 Infrastructure Information clearance from FERC.
16 • Resolution of the effect of lower load assumptions on the need for Energize Eastside Project.

17
18 These problems have still not been addressed by PSE. Note:

19
20 Regarding power flows to Canada...PSE has never provided any contract that PSE has entered
21 into which requires PSE to pay for transmission infrastructure improvements to enable their
22 transmission grid to provide for 1,500 MW of flows to Canada under extreme winter peak
23 conditions with N-1-1 or N-2 contingencies. PSE has failed to correct their load flow studies to
24 remove the requirement that PSE ratepayers pay for the cost of upgrading their transmission
25 lines to enable 1,500 MW to flow to Canada under these conditions.

26
27 Regarding modeling zero output from five of PSE's Westside thermal generation facilities...PSE
28 has never explained why their load flow studies modeled these power plants at zero
29 output. PSE has failed to correct their load flow studies to show these plants operating full out
30 in extreme winter peak conditions. WECC Base Cases show these plants running full out under
31 winter peak load conditions.

32
33 Regarding PSE's choice not to provide modeling data to stakeholders with Critical Energy
34 Infrastructure Information clearance from FERC...PSE has still not provided this
35 information. Clearly PSE is using data in its load flow studies dealing with Energize
36 Eastside that differ substantially from what PSE tells WECC to include in WECC Base
37 Cases. What is needed is a "data autopsy" on the data that PSE used when attempting to
38 justify Energize Eastside. PSE continues to hide the ball on this information so we cannot
39 know what all they chose to vary from what they told WECC and why they varied.

1 **Regarding Resolution of the effect of lower load assumptions on the need for**
2 **Energize Eastside Project**...PSE refuses to show the latest forecast and actual load on the
3 18 substations that are in the Energize Eastside area. They clearly have that data available,
4 but they claim that the load in King County is all they are willing to provide.

5
6

7 **ON THE BASIS OF PSE'S FAILURE TO ADDRESS THESE ISSUES RAISED IN THE 2017**
8 **PSE IRP ALONE, THE WUTC SHOULD NOT AGREE THAT PSE'S INVESTMENT IN**
9 **ENERGIZE EASTSIDE IS PRUDENT**

10

11

1 completely located in the PSE service territory, AND BECAUSE PSE never asked for the line to be
2 included in a Regional Transmission Plan; that FERC has no jurisdiction over Energize Eastside
3 and any need for Energize Eastside needed to be decided by the State of Washington. That
4 being the case, PSE had the option of either (a) attempting to permit the project at EFSEC or (b)
5 to seek permits from the individual cities such as Newcastle. PSE chose the latter, which itself
6 was an imprudent decision because of the cost and lengthy time compared to the EFSEC
7 process. PSE has already spent over \$100 Million on permitting of Energize Eastside and still
8 does not have all its needed permits after 8 years of trying.

9
10 PSE also argues that FERC Reliability criteria TPL-001-4 requires PSE to build transmission to
11 address any transmission reliability problems it finds when doing TPL-001-4 Transmission
12 Planning assessments. But that is not true. TPL lists many actions that are allowed to be taken
13 to address any transmission reliability problems it finds. TPL 001-4 requires an analysis of
14 system deficiencies. But at page 4, the rule lists the “associated actions needed to achieve
15 required system performance.” Though “installation of transmission” is one of those
16 “associated actions,” several other actions are listed, including “Operating Procedures” as well
17 as “use of rate applications, DSM, new technologies or other initiatives.” There is no one
18 required “associated action” or “solution.” Instead, a utility must plan a solution that will
19 eliminate the deficiency.

20
21 **PSE has provided absolutely no concrete evidence that Energize Eastside**
22 **is needed, or that if needed, that other prominently identified**
23 **alternatives (such as a small peaker located near the load in Bellevue, or**
24 **use of the Existing Seattle City Line, or a new 230/115 KV transformer at**
25 **the PSE Lake Tradition substation, or a cocktail of DSM activities such as**
26 **rate design or battery installations) would be more prudent to invest in**
27 **rather than Energize Eastside.**

1 **Attachment 4 ... Discussion of Lauckhart/Schiffman (including reference to**
2 **Attachment on summer peak)**
3

4 As the WUTC stated in their Acknowledgement Letter in UE-160918, the IRP does not
5 include a narrative regarding three key items related to their examination of the need for
6 Energize Eastside. These three items are:

7
8
9 * The effect of the power flows due to entitlement returns on the need for the Energize
10 Eastside Project

11 * The reason for, and effect on the need for the Energize Eastside Project, of modeling zero
12 output from five of PSE's Westside thermal generation facilities.

13 * Resolution of the effect of lower load assumptions on the need for Energize Eastside Project
14
15

16 PSE has chosen not to modify their load flow studies to adjust for these three items. Nor has
17 PSE run a series of load flow studies for a heavy summer peak load situation.

18
19 The Lauckhart-Schiffman load flow study dated February 18, 2016 corrected for these three
20 items. The Lauckhart-Schiffman load flow study was provided to the WUTC on July 25, 2017 in
21 connection with the PSE IRP Docket No. UE-160918.

22
23 The Lauckhart-Schiffman load flow study found there are no transmission reliability issues on
24 the Eastside in a heavy winter load flow situation. That study also addressed the heavy
25 summer situation in its Appendix G. As Appendix G states, the heavy winter loads on the 18
26 substations on the Eastside total 402 MW. The heavy summer loads on the 18 substations on
27 the Eastside total 281 MW. There is no generation on the eastside, so all generation needed
28 to feed these 18 substations needs to be brought in from outside the eastside geographic
29 area. The problem with the PSE/Quanta load flows studies of Energize Eastside is that the
30 1,000+ MW of PSE Westside thermal generation that they decided to take offline during the
31 winter peak (*much more than the 402 MW of Eastside load*) is the generation that is designed
32 to serve these eastside loads. Taking them offline during a heavy winter peak results in
33 problems with the transmission system on the eastside. PSE/Quanta should have rerun their
34 load flow study to see if any transmission deficiency remained if those power plants were
35 running full out. WECC Base Cases have these projects running full out in a heavy winter
36 condition. **The Lauckhart-Schiffman study turned these plants on and we found no**
37 **transmission reliability problem on the eastside.** Further, Appendix G of the Lauckhart-
38 Schiffman study explains why it is clear that no summer problem exists even without having to
39 run a heavy summer load flow study.
40

41 The Lauckhart-Schiffman load flow study used the loads that PSE had provided to WECC in 2015
42 for WECC Base Cases in year 2018. These loads were considerably lower than the loads used by

1 PSE/Quanta in their load flow studies. Since February of 2016 when the Lauckhart-Schiffman
2 studies were run, loads have proven to be even lower than what Lauckhart-Schiffman
3 used. Making the finding of the Lauckhart-Schiffman load flow study work even more
4 legitimate that there are no transmission reliability problems on the eastside.
5

6 **The Lauckhart-Schiffman load flow study corrected flaws in the**
7 **PSE/Quanta load flow studies. When these flaws are corrected, it is**
8 **clear there are no transmission reliability problems in the PSE Eastside**
9 **area. That being the case, any money PSE continues to spend on**
10 **Energize Eastside is imprudent.**
11

12

1 environmental impacts from power plants because the power plants serving Bellevue have
2 all been located where the adverse environmental impacts affect others. That is not
3 environmental justice.

4
5
6 4) **A cocktail of Demand Side Management programs**...Demand Side Management
7 (DSM) programs include (a) energy efficiency measures (e.g. insulation and double pain
8 windows) put in customer premises, (b) rate incentives to cause customers to reduce load
9 during peak load hours, (c) batteries to provide a source of power near the load when
10 needed, (d) decentralized located small generators, etc. The draft Synapse report strongly
11 criticized PSE for not making more effort to accomplish a cocktail of these DSM
12 programs. Prudent planning would involve more activity on this front rather than just
13 looking for a Transmission Solution. Especially if Energize Eastside is the proposed
14 transmission solution that is extremely costly and suffers from safety problems to PSE
15 customers.

16
17
18 **There is clear evidence that there is no reliability problem on the**
19 **transmission grid on the eastside. But if the WUTC believes otherwise,**
20 **then any of the above 4 alternatives need to be seriously studied before**
21 **it is determined that building Energize Eastside is a prudent use of PSE**
22 **ratepayer funds.**

23
24

1 3) Mr. Koch attaches the report that MaxETA/Synapse prepared for the City of Newcastle as his
2 Exhibit DRK-12. His testimony neglects to mention that MaxETA/Synapse found no winter
3 transmission system problems on the eastside. MaxETA/Synapse got recent WECC Base Cases
4 with the more recent PSE forecast of loads on the 18 substations on the eastside. When
5 MaxETA/Synapse ran their load flow studies they found no transmission problems on the
6 eastside in the winter. That is fully consistent with the Lauckhart-Schiffman study. PSE has
7 made no attempt to discredit the MaxETA/Synapse finding that there is no transmission
8 reliability problem on the eastside in the Winter.

9
10 4) Mr. Koch relies on the MaxETA/Synapse **alleged** finding of a Bulk Electric System
11 vulnerability in King County in the summer as a demonstration of "NEED" for Energize
12 Eastside. But MaxETA/Synapse did not run any load flow studies or Transient Stability studies
13 that demonstrated that there was a Bulk Electric System vulnerability in King County in the
14 summer. *(Note: In response to a Public Record Act request, MaxETA/Synapse made it clear that*
15 *they just got recent WECC Base Cases from FERC and made some load flow runs with*
16 *those. But they never ran a load flow study that demonstrated there was a Bulk Electric System*
17 *vulnerability in either King County or the Eastside. Further, they never ran any study that*
18 *demonstrated that Energize Eastside would solve this unidentified problem).*

19
20 The information that MaxETA/Synapse relied on to conclude there is a Bulk Electric System
21 vulnerability in King County can be found on Exhibit DRK-12 at pages 24 and 25 of 33
22 pages. The insights gained from pages 24 and 25 of DRK-12 include:

23 a) At page 24 MaxETA/Synapse make it clear that they are relying on PSE's assumption of a
24 King County threshold of 1,594 MW on Figure 10. MaxETA/Synapse did not develop this
25 number.

26 b) Figure 10 on DRK-12, page 25 shows that for every year starting in 2008 until today, the
27 actual load exceeded the PSE estimated 1,594 MW Threshold. If PSE believes that is true, then
28 PSE is under a FERC/NERC obligation to address/fix that problem ASAP. And if not fixed, then
29 PSE needs to have "self-reported" a violation of FERC/NERC reliability criteria. And PSE would
30 be assessed big fines by FERC for (a) failing to self-report a violation, and (b) failing to address
31 the problem. If the MaxETA/Synapse finding of a Bulk Electric System vulnerability in King
32 County is true, then PSE needs to be working with Seattle City Light and Bonneville Power to
33 determine the best fix for the problem. However, since no other reliability organization is
34 aware of this problem and since MaxETA did not run load flow studies that demonstrated that
35 such problem exists, then likely no such problem exists. Therefore, MaxETA/Synapse have
36 actually found that (a) there is no winter problem that needs to be addressed by building
37 Energize Eastside and (b) there is no summer problem that needs to be addressed by building
38 Energize Eastside.

39
40 **THE MaxETA/SYNAPSE REPORT DEMONSTRATES THAT ATTEMPTING**
41 **TO BUILD ENERGIZE EASTSIDE IS IMPRUDENT**
42

1 **Attachment 7 ... Discussion of problems with foreign ownership and my**
2 **testimony in ownership transfer proceeding**

3
4 Four foreign companies acquired US electric utilities during a four-year period starting in 1999.
5 The buyers decided that the prospect of US regulation was an acceptable price of owning a US
6 utility. State approval of these acquisitions was contentious, and the applicants had to enter in
7 settlements with consumer advocacy groups and to agree to numerous conditions to get
8 through them.

9
10
11 In 2009 Macquarie (An Australian based company) bought all of the stock of Puget. Why did
12 Macquarie want to buy Puget?

13
14
15 Macquarie stated: "*We don't have employees. We're not the neighboring utility. Combining*
16 *work forces and eliminating redundancies is not the story. Our interest is to grow the*
17 *business.*"

18
19 **How do you grow a utility regulated by the WUTC?**

20
21 Macquarie had a plan to invest \$1 Billion each year into new PSE utility infrastructure so
22 they could get the WUTC to increase the electric rates for PSE retail customers and increase
23 their profit. By the year 2013, Macquarie was 4 years into the five-year period and had been
24 able to justify only a small amount of new investment. Macquarie came up with the idea of
25 justifying Energize Eastside in order to greatly increase their investment. Macquarie hired
26 Quanta to run load flow studies to attempt to justify the need for EE. Macquarie was using
27 Quanta to build any new PSE infrastructure. Macquarie apparently advised Quanta that they
28 would become the Engineer, Procure, Construct (EPC) contractor on Energize Eastside if
29 Macquarie could get it permitted. It would appear that Quanta adopted a fatally flawed
30 load flow analysis in order to get the lucrative EPC contract.

31
32 But Macquarie ran into opposition to their plan to permit Energize Eastside, so in 2018
33 (WUTC Docket No. U-180680) a number of Canadian Pension fund management firms
34 petitioned the WUTC to authorize the sale of Macquarie's ownership of PSE to them.

35
36 At the time I commented to the WUTC that it is apparent that foreign ownership under
37 Macquarie has been very problematic. **Foreign ownership prioritizes financial returns**
38 **for distant investors over local community values.** A foreign investor that is investing
39 retirement fund monies has the primary goal of maximizing the return they make on those
40 invested funds. This becomes particularly problematic when it comes to Transmission
41 Planning of PSE's internal transmission system since these owners, with a primary goal of
42 maximizing profit, have worked to avoid knowledgeable review of their desired plans to

1 build transmission lines in PSE's service territory. In pursuing profit, the foreign owners
2 have the incentive to build large transmission projects that are not needed in order to
3 increase ratebase and reap the WUTC regulated return on those unneeded investments.

4
5 The transfer of ownership of PSE to Canadian Pension fund management firms results in PSE
6 owners being primarily interested in making the most money they can for the pension funds
7 they are managing. The owners do not pay PSE electric bills, so they don't care what PSE
8 rates are. The owners do not live near the Olympic Pipeline so they have no fear that their
9 families and friends are facing risk of a catastrophic explosion. By approving the ownership
10 of PSE by these Canadian Pension Fund management companies, WUTC takes on a critical
11 responsibility to regulate the actions these foreign investors are pursuing.

12
13 **In proceeding UE-220066, the WUTC should recognize that the owners of**
14 **PSE are making an imprudent decision to build Energize Eastside in**
15 **order to meet their mission of maximizing profits for their pension**
16 **funds.**

17
18

Attachment 8 ... City of Newcastle Hearing Examiner Ruling

On April 28, 2022, after a 5-day hearing and extensive briefing, the Hearing Examiner for the City of Newcastle issued his "FINDINGS OF FACT, CONCLUSIONS OF LAW, DECISION AND CONDITIONS OF APPROVAL" on the application submitted by Puget Sound Energy for a Conditional Use Permit in the City of Newcastle for the Energize Eastside transmission project. The Hearing Examiner produced an 81-page document to explain and support his decision.

The Hearing Examiner gave Conditional Approval of the permit for Energize Eastside. He rejected all the testimony of CENSE witnesses including myself, saying that Jens Nedrud had clearly rebutted the expert testimony of all CENSE witnesses including myself. This Hearing Examiner 81-page document has many problems which need to be brought to the attention of the WUTC in proceeding UE-220066. In this public comment I will address some of the problems.

1. The Hearing examiner was not asked to address, and did not address, the Prudence of Energize Eastside. He only ruled on whether or not Energize Eastside fit within the City Code of the City of Newcastle.
2. At the outset of the hearing, the Hearing Examiner was asked to order PSE to produce key documents, including the key load flow files, that were produced when PSE ran their load flow studies that allegedly demonstrated the need for Energize Eastside. PSE objected to having to produce this information. The Hearing Examiner refused to require PSE to produce this information even though myself and others had signed a CEII Non-Disclosure Agreement. That allowed PSE to continue its 8-year effort to refuse to make available the standard vital underlying information that power planners use and expect from others to justify system upgrades.
3. The Hearing Examiner stated that PSE had very recently performed a TPL-001-4 Annual Transmission Plan that continued to show there was a need for Energize Eastside. However, PSE never produced a TPL-001-4 report in that proceeding to support their statement. And PSE took the position that the Stakeholder Process required by TPL-001-4 did not apply to studies they made on Energize Eastside.
4. The Hearing Examiner stated that the PSE TPL-001-4 studies were reviewed and accepted as appropriate through WECC audits, despite the fact that PSE never produced an audit report to support their claim that such an audit was performed. As I stated in my third set of comments to you on April 9, 2022, the information in the link below indicates that neither WECC nor NERC has ever conducted such an audit of PSE TPL-001-4 compliance.

<https://www.nerc.com/pa/comp/Pages/NERC%20Regional%20Audit%20Reports.aspx>

Regional Audit Reports of Registered Entities

One-Stop Shop (Compliance Monitoring & Enforcement Program) Compliance Assurance; Compliance Guidance; Compliance Investigations; Compliance Analysis and Certification

www.nerc.com

- 1 5. The Hearing Examiner found, based on the testimony of Jens Nedrud, that Seattle City Light
2 could not be required to let PSE use its transmission line that runs parallel to the Energize
3 Eastside proposed route. This despite the clear evidence that SCL must make its Transmission
4 Line available for use under the FERC Open Access Tariff reciprocity requirement. And despite
5 the fact that Seattle City Light has officially adopted its own Open Access Transmission Tariff
6 that complies with FERC requirements for such a tariff. And despite the fact that the Hearing
7 Examiner was provided a copy of a letter from Seattle City Light written to Larry Johnson saying
8 that PSE never officially requested to be allowed to use their line and SCL would have entered
9 into discussions with PSE to allow that to happen if PSE ever formally requested us of their line.
10 6. The Hearing Examiner relies extensively on the report by MaxETA/Synapse for the City of
11 Newcastle. This despite the many problems with this MaxETA/Synapse report that were
12 provided him in the Newcastle CUP hearing. And the Hearing Examiner refused to require that
13 authors of the MaxETA/Synapse report appear in hearing and stand cross examination. There
14 was considerable criticism of the MaxETA/Synapse report brought to the attention of the
15 Hearing Examiner, but he simply ignored that testimony.

16 The WUTC is clearly more qualified to review these complicated power planning matters than is the
17 Hearing Examiner for Newcastle. In UE-220066, the WUTC needs to examine these and other matters
18 related to the PSE attempt to have the WUTC find that Energize Eastside is a Prudent Investment.

19
20

21

22

23

24

25

26

27

28

29