BEFORE THE WASHINGTON

UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Complainant,

v.

PUGET SOUND ENERGY

Respondent.

DOCKETS UE-220066, UG-220067, and UG-210918 (*Consolidated*)

RESPONSE TESTIMONY OF ROBERT L. EARLE
ON BEHALF OF
WASHINGTON STATE OFFICE OF ATTORNEY GENERAL
PUBLIC COUNSEL UNIT

Exhibit RLE-1CTr

July 28, 2022
Revised September 16, 2022

Shaded Information is Designated Confidential Per Protective Order in Dockets UE-220066, UG-220067, and UG-210918 (*Consolidated*)

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Exhibit RLE-2	Curriculum Vitae of Robert Earle
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Exhibit RLE-4C	Powerex Calculations
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I. INTRODUCTION / SUMMARY

Q. Please state your name and business address.

A. My name is Robert Earle. My business address is 1388 Haight St. #49, San Francisco, California 94117.

Q. By whom are you employed and in what capacity?

A. I am employed by Alea IE, LLC as the owner.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the Public Counsel Unit of the Washington Attorney General's Office (Public Counsel).

Q. Please describe your professional qualifications.

A. I have over two decades of experience in the electric power and natural gas industries. This includes working on infrastructure planning, environmental mitigation, and analysis of gas and electric power markets. I have Ph.D. and M.S. degrees from Stanford University in operations research, and an A.B. in mathematics from the College of William and Mary. My curriculum vitae is attached as Exhibit RLE-2.

Q. What exhibits are you sponsoring in this proceeding?

A. I sponsor the following exhibits:

Exhibit RLE-2	Curriculum Vitae of Robert Earle
Exhibit RLE-3C	Puget Sound Energy Response to Public Counsel Data Request No. 200
Exhibit RLE-4C	Powerex Calculations
Exhibit RLE-5	Puget Sound Energy Response to WUTC Staff Data Request No. 92
Exhibit RLE-6	Puget Sound Energy Response to Public Counsel Data Request No. 311

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Q. Please give an overview of your testimony.

A. My testimony addresses three areas in Puget Sound Energy's (PSE) general rate case (GRC). First, I address PSE's Powerex Contract entered into on December 7, 2021. This contract is for 250 MW of firm energy during the 16 heavy load hours of each day, seven days per week from June 1 through September 30, 2022 through 2024.[1] In calculating its bid for this contract, PSE was not prudent in its calculations and did not shop for alternative contracts to fulfill its needs. As a result, the Commission should disallow a total of $[redacted] over the life of the contract.

Second, I examine the prudence of the Tacoma Liquefied Natural Gas (LNG) Project. The record does not support the prudence of the Tacoma LNG Project for PSE ratepayers. At the two major decision points to continue with the Tacoma LNG Project,

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[1] Direct Testimony of Paul K. Wetherbee, Exh. PKW-1CT at 22:7–13.

a better-informed Board of Directors acting in the interest of PSE's ratepayers might reasonably have concluded that the need forecasting was problematic and should be re-examined; that, even if the forecasts were to be believed, the LNG facility would not satisfy the projected need for more than four or five years; and that the analysis had not considered sufficient alternatives. In any event, the Board could have concluded that the project should have been suspended until it had better evidence that it was the best solution for ratepayers.

PSE did not establish the necessity of an LNG liquefaction and storage facility for ratepayers, excluded some alternatives from consideration, and did not consider the evidence that its gas load forecasts incorrectly predicted the need for the Tacoma LNG Project to avoid gas curtailments over the years leading up to the decisions to proceed. As a result, the decision to complete the Tacoma LNG Project was imprudent, and the Commission should disallow all Project capital costs. These include $239 million in total plant costs for what PSE describes as the Tacoma LNG Facility[2] and $46.6 million for the Tacoma LNG distribution upgrades plus any allowance for funds used during construction (AFUDC).[3]

Third, I address PSE's proposal for updates to fixed and variable power costs. PSE has proposed an updated system and schedule that will result in intervenors being unable to properly examine the prudence of PSE's decisions affecting power costs.

Q. How did you consider equity as described in RC 80.28.425 in your testimony?

A. RCW 80.28.425(1) provides:

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[2] Direct Testimony of Ronald J. Roberts, Exh. RJR-1CT at 51:5.
[3] Direct Testimony of Roque B. Bamba, Exh. RBB-1T at 22:15–16.

> The commission's consideration of a proposal for a multiyear rate plan is subject to the same standards applicable to other rate filings made under this title, including the public interest and fair, just, reasonable, and sufficient rates. In determining the public interest, the commission may consider such factors including, but not limited to, environmental health and greenhouse gas emissions reductions, health and safety concerns, economic development, **and equity**, to the extent such factors affect the rates, services, and practices of a gas or electrical company regulated by the commission. (Emphasis added.)

My testimony considers the fairness of power costs paid for by ratepayers as a key factor. Higher rates disproportionately impact poorer communities. By striving to make sure that rates are no higher than warranted, my testimony addresses equity.

I also consider equity specifically in the context of the Tacoma LNG Project, where PSE did not take issues of equity into account in their decision and PSE's proposed system of power cost updates would disparately impact disadvantaged communities.

II. PRUDENCY

Q. Please explain your understanding of the Commission's prudence standard.

A. My understanding of the Commission's prudence standard is based on Order 12 from Docket UE-031725[4] and Order No. 08 from Dockets UE-111048/UG-111049.[5] In Docket UE-031725, the Commission stated:[6]

> The Commission has consistently applied a reasonableness standard when reviewing the prudence of decisions relating to power costs, including those arising from power generation asset acquisitions. The test the Commission applies to measure prudence is what would a reasonable board of directors and company management have decided given what they knew or reasonably should have known to be true at the time they made a decision. This test applies both to the question of need and the appropriateness of the expenditures. The company must establish that it

[4] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Docket UE-031725, Order 12 (Apr. 7, 2004).
[5] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-111048/UG-111049, Order 08 (May 7, 2012).
[6] Docket UE-031725, Order 12 ¶ 19.

> adequately studied the question of whether to purchase these resources and made a reasonable decision, using the data and methods that a reasonable management would have used at the time the decisions were made.

Citing the passage language, in Dockets UE-111048/UG-111049, the Commission said:[7]

> There is no single set of factors by which the Commission evaluates prudence but the Commission typically focuses on four factors:
>
> 1) *The Need for the Resource:* The utility must first determine whether new resources are necessary. Once a need has been identified, the utility must determine how to fill that need in a cost-effective manner. When a utility is considering the purchase of a resource, it must evaluate that resource against the standards of what other purchases are available, and against the standard of what it would cost to build the resource itself.
>
> 2) *Evaluation of Alternatives:* The utility must analyze the resource alternatives using current information that adjusts for such factors as end effects, capital costs, dispatchability, transmission costs, and whatever other factors need specific analysis at the time of a purchase decision. The acquisition process should be appropriate.
>
> 3) *Communication With and Involvement of the Company's Board of Directors:* The utility should inform its board of directors about the purchase decision and its costs. The utility should also involve the board in the decision process.
>
> 4) *Adequate Documentation:* The utility must keep adequate contemporaneous records that will allow the Commission to evaluate the Company's decision-making process. The Commission should be able to follow the utility's decision process; understand the elements that the utility used; and determine the manner in which the utility valued these elements.

Q. To your knowledge, does PSE agree with your understanding of the Commission's prudence standard?

[7] Dockets UE-111048/UG-111049, Order 08 ¶ 409.

A. PSE cites the same language I do above, from Order 12 from Docket UE-031725 and Order No. 08 from Dockets UE-111048/UG-111049, so the Company and I would appear to have common ground in our understanding of the Commission's prudence standard.[8]

III. POWEREX CONTRACT

Q. Please describe the Powerex Contract.

A. PSE submitted bids for the purchase of firm hydroelectric energy during summer peak hours beginning in 2022 in response to an RFP issued by Powerex in October 2021. PSE entered into a contract with Powerex on December 7, 2021, for 250 MW of firm energy during the 16 heavy load hours of each day, seven days per week from June 1 through September 30, 2022 through 2024. The contract specifies a fixed price of $[redacted]/MWh.[9]

Q. How did PSE develop its bid for the Powerex Contract?

A. In developing its bid, [redacted][10] [redacted]

[redacted].[11]

[8] Direct Testimony of Zacarias C. Yanez, Exh. ZCY-1CT at 2:14–3:24. Direct Testimony of Colin P. Crowley, Exh. CPC-1HCT at 5:4–6:18. Catherine A. Koch, Exh. CAK-7 at 23.
[9] Wetherbee, Exh. PKW-1CT at 22:3–13.
[10] Wetherbee, Exh. PKW-7C at 8.
[11] Wetherbee, Exh. PKW-7C at 6

Q. [redacted]

A. [redacted].[12]

Q. [redacted]

A. [redacted].[13]

Q. [redacted]

A. [redacted][14] [redacted][15] On this basis alone, the Commission should disallow [redacted]

Q. Is there other evidence that PSE behaved imprudently with respect to the Powerex Contract?

[12] Wetherbee, Exh. PKW-1CT at 13:14–18.
[13] [redacted] obert L. Earle, Exh. RLE-3C at 2 (PSE Response to Public Counsel Data Request No. 200, sub-part f.)
[14] Dockets UE-111048/UG-111049, Order 12 ¶ 19.
[15] Earle, Exh. RLE-3C at 3 (PSE Response to Public Counsel Data Request No. 200, sub-part g):

[redacted]

A. Yes. Another factor the Commission focuses on in determining prudence is the evaluation of alternatives.[16] PSE, however, did not evaluate alternatives. When asked if it contacted any other suppliers to get competing offers, it stated it did not.[17] That is, PSE did no "comparison shopping." While PSE points out that it did not initiate contact with Powerex,[18] this argument lacks merit. To demonstrate, suppose someone offered the opportunity to bid on a house. A prudent buyer would not just add up the value of various attributes of the house, such as the number of bedrooms, number of bathrooms, etc. A prudent buyer would also look at the price of similar houses on the market and at the sales prices of recently sold houses that were similar. PSE neglected to be a prudent buyer.

PSE's argument is undercut further by their responses to Public Counsel Data Request No. 200, sub-parts g., j. and l, as shown in Exhibit RLE-3C. On one hand, PSE argues that it had a need for summer capacity;[19] on the other hand, PSE says it did not contact other suppliers.[20] If PSE had a need for summer capacity, it should have been talking with other suppliers.

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[16] Dockets UE-111048/UG-111049, Order 12 ¶ 19.

[17] Earle, Exh. RLE-3C (PSE Response to Public Counsel Data Request No. 200, sub-part l):

> PSE did not contact any other suppliers. The Powerex Summer Peak PPA was an opportunistic acquisition in response to an offer received outside of PSE's normal long-term RFP process. PSE pursues opportunities identified outside of its normal competitive procurement process when the opportunities align with PSE's resource needs and provide economic benefits to customers.

[18] Earle, Exh. RLE-3C (PSE Response to Public Counsel Data Request No. 200, sub-part j).: "PSE did not contact other suppliers to meet its identified near term summer capacity need. To be clear, PSE did not contact Powerex either – PSE received the RFP from Powerex and the product offered in that RFP aligned with PSE's need for summer capacity."

[19] Earle, Exh. RLE-3C (PSE Response to Public Counsel Data Request No. 200, sub-part g).

[20] Earle, Exh. RLE-3C (PSE Response to Public Counsel Data Request No. 200, sub-parts j. and l).

Q. What were prices for summer capacity around the time of the decision to enter into the Powerex Contract?

A. Figure 1 shows prices for summer capacity around the time PSE decided to enter into the Powerex Contract. These prices are [redacted]

Figure 1: June through September Mid-C On Peak Price[21]

Q. What is your recommendation to the Commission?

A. The Commission should disallow $[redacted]/MWh for the Powerex Contract, or a total of

[21] Wetherbee, Exh. PKW-7C at 11.

$[redacted] over the life of the contract.[22] The disallowance breaks down as follows:

- For the PCAM true-up for 2022, $[redacted][23] should be removed from the calculation of actual power costs.
- $[redacted] should be removed from baseline power costs for 2023 and not included in calculating actual power costs for the 2023 PCAM true-up.
- $[redacted] should be removed from baseline power costs for 2024 and not included in calculating actual power costs for the 2024 PCAM true-up.

IV. TACOMA LNG

A. Introduction

Q. Please describe the Tacoma LNG Project.

A. The Tacoma LNG Project is a natural gas liquefaction and storage facility, along with associated improvements to PSE's distribution system needed to support the Tacoma LNG Facility. PSE uses the term "Tacoma LNG Facility" to refer to the following:[24]

- buildings, gas processing, storage and support equipment, and foundations located on PSE's leased site at the Port of Tacoma;
- underground LNG fuel line connecting the LNG tank to TOTE's berthing area, marine fueling system and in-water platform at TOTE's site;
- LNG tanker truck loading racks;
- the lease from the Northwest Seaport Alliance; and
- the ground lease from the Port of Tacoma.

[22] Earle, Exh. RLE-4C shows the calculations for the disallowance.
[23] The contract lasts three years, so [redacted].
[24] Direct Testimony of Jon A. Piliaris, JAP-1T at 53:10–18.

In contrast, according to PSE the term "Tacoma LNG Project" is broader, incorporating the Tacoma LNG Facility along with distribution system upgrades and other items:[25]

- the development, construction and operation of the Tacoma LNG Facility;
- improvements to PSE's gas distribution system needed to support the Tacoma LNG Facility;
- regulatory approval to operate the Tacoma LNG Facility to provide peaking capability for PSE's regulated core gas utility customers; and
- commercial contracts to sell LNG to non-utility customers for use as fuel as a non-regulated service.

The regulated peaking function is designed to provide up to 85,000 Dth/day of peak-day supply to the PSE gas system up to 10 times a year.[26]

Q. Why does PSE say it developed the Tacoma LNG Project?

A. PSE says it developed the Tacoma LNG Project for two reasons.

1. The Tacoma LNG Project would provide the ability to "meet a peak demand for a few days that may only occur once every few winters."[27]

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[25] Piliaris, JAP-1T at 53:19–54:7. This fine distinction between the Facility and the Project was not shared by all Parties in the Tacoma LNG Settlement Agreement:

> The Settling Parties do not agree whether the 16-Inch Line and Bonney Lake Lateral Improvements should be classified as distribution plant or as part of the Tacoma LNG Facility. NWIGU and PSE both believe that the 16-Inch Line and Bonney Lake Lateral Improvements are only necessary because of the Tacoma LNG Facility, and thus those distribution system improvements should actually be classified as part of the Tacoma LNG Facility and not recoverable as distribution plant.

Joint Testimony of Settling Parties Supporting Full Settlement Stipulation, Exh. JT-1 at 34:14–20, *In re: Petition of Puget Sound Energy for (i) Approval of Special Contract for LNG Fuel Serv. with Totem Ocean Trailer Express, and (ii) Declaratory Ord. Approving Methodology for Allocating Costs between Regul. and Non-regul. LNG Servs.*, Docket UG-151663 (revised Oct. 25, 2016).

[26] Roberts, Exh. RJR-1CT at 32:9-12. Earle, Exh. RLE-5 (PSE Response to WUTC Staff Data Request No. 92).

[27] Roberts, Exh. RJR-1CT at 17:17–19. This view of the Tacoma LNG Project need for only a few days that may only occur once very few winters is repeated in other places by PSE in Docket UG-151663:

1. Direct Testimony of Roger Garratt, Exh. RG-1CT at 9:22–10:1 (filed Aug. 11, 2015).
2. Brief (Confidential) of Puget Sound Energy, Inc. ¶ 29 (filed Nov. 24, 2015).
3. Brief of Puget Sound Energy ¶ 29 (filed Apr. 15, 2016).

Staff also shared this point of view:

2. PSE intended to "provide LNG as a transportation fuel to large maritime and trucking customers as well as industrial users in the region, through its affiliate Puget LNG."[28]

Q. Please summarize your findings on the Tacoma LNG Project.

A. The record does not support the prudence of the Tacoma LNG Project for PSE ratepayers. At the two major decision points to continue with the Tacoma LNG Project, a better-informed Board of Directors acting in the interest of PSE's ratepayers might reasonably have said something like:

> *The need for the Tacoma LNG Project to meet a peak demand for a few days that may occur only once every few winters keeps getting forecast, but the need does not appear. Maybe our forecasts are wrong and need re-examining. Moreover, even if we still believe our forecasts that a need for a peaking resource may arise some time in the next few years, the Tacoma LNG Project is a stopgap measure at best. After four to five years, we will still need to add new peaking resources. In the meantime, we have not considered sufficient alternatives. Rather than waste ratepayers' money on a poorly documented stopgap measure , we should suspend the Tacoma LNG Project until we have better evidence that it is the best solution for ratepayers.*

However, as I will discuss, PSE did not establish the necessity of an LNG liquefaction and storage facility for ratepayers, excluded some alternatives from consideration, and did not consider the evidence that its gas load forecasts incorrectly predicted the need for the Tacoma LNG Project to avoid gas curtailments over the years leading up to the decisions to proceed. The Commission should disallow all capital costs of the Tacoma

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> From Staff's perspective, when you look at a peaker plant, as an example, from a very high level, you have a peaker plant, and it will be needed a few days a year perhaps, or maybe not at all. And as we all know, in the natural gas side of the business, customer use is going down, weather is getting warmer, so those heat days that are required are beginning to decrease.

Pat Oshie, TR. 89:5-11, Docket UG-151663 (Hearing on May 26, 2016).

[28] Roberts, Exh. RJR-1CT at 17:9–11.

LNG Project. These include $239 million in total plant costs for what PSE describes as the Tacoma LNG Facility,[29] and $46.6 million plus any AFUDC for the Tacoma LNG distribution upgrades.[30]

B. Tacoma LNG Settlement Agreement

Q. Please describe the 2016 Settlement Agreement concerning the Tacoma LNG Project.

A. The Commission approved a settlement stipulation on November 1, 2016.[31] The Settlement Agreement resolved issues concerning the corporate structure of the Tacoma LNG Facility, and the allocation of certain capital costs of the Tacoma LNG Project.[32] As a result of that Settlement, PSE formed an unregulated subsidiary, Puget LNG, which has been a tenant in common with PSE in developing the Tacoma LNG Facility.[33]

Q. Did the 2016 Tacoma LNG Project Settlement Agreement provide for the allocation of *all* costs of the Tacoma LNG Project between PSE and PSE's unregulated subsidiary, Puget LNG?

A. No. The Settlement Agreement only agreed to the allocation of some costs of the Tacoma LNG Project. Table 1 is from Order 10. It sets forth the responsibility of the regulated PSE entity and Puget LNG (the unregulated entity) for various components of

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[29] Roberts, Exh. RJR-1CT at 51:5.
[30] Bamba, Exh. RBB-1T at 22:15–16.
[31] *In re: Petition of Puget Sound Energy for (i) Approval of Special Contract for LNG Fuel Serv. with Totem Ocean Trailer Express, and (ii) Declaratory Ord. Approving Methodology for Allocating Costs between Regul. and Non-regul. LNG Servs.*, Docket UG-151663, Order 10 (Nov. 1, 2016).
[32] Docket UG-151663, Order 10 ¶¶ 1–3, 61.
[33] Docket UG-151663, Order 10 ¶ 12.

the Tacoma LNG Facility: liquefaction, storage, bunkering, truck loading, and vaporization.

Table 1: Tacoma LNG Facility Ownership Shares[34]

Component Ownership Share	PSE	Puget LNG	Projected Capital Expenditures (No AFUDC)	Projected Capital Expenditures Allocated to PSE	Projected Capital Expenditures Allocated to Puget LNG
Liquefaction	10%	90%	$88,546,234	$8,854,623	$79,691,611
Storage	79%	21%	$96,237,245	$76,027,424	$20,209,821
Bunkering	0%	100%	$29,671,922	$0	$29,671,922
Truck Loading	5%	95%	$6,229,252	$311,463	$5,917,789
Vaporization	100%	0%	$17,135,822	$17,135,822	$0
Common	43%	57%	$72,884,330	$31,340,262	$41,544,068
TOTAL	**N/A**	**N/A**	**$310,704,805**	**$133,669,593**	**$177,035,212**

Costs not falling under one of those five components are considered to be common costs. Common costs are allocated per Appendix D of the Settlement Stipulation and are equal to the ratio of the sum of the five components for an entity to the total cost of those components.[35]

Q. What cost allocations did the Settlement Agreement not address?

A. Other than the allocation of cost components that Table 1 explicitly addresses, the Settlement Agreement did not reach terms regarding the level of costs or address the

[34] Docket UG-151663, Order 10 ¶ 61.

[35] Docket UG-151663, Order 10 ¶ 60, App. A, Settlement Stipulation, Attach. D. Despite the high inaccuracy of the projected capital costs, the common cost allocator did not change, meaning that even though the estimates for each component were wildly off, the relative costs of each component did not change.

allocation of other costs. Allocation of AFUDC, manufacturer's tax incentive, and the costs of distribution system upgrades are not part of the Settlement Agreement.

Q. Are the cost allocations fixed?

A. Not necessarily. They can vary because the common cost allocator might change based on changes in the relative size of cost components. More significantly, "the Commission does retain authority to use hypothetical ownership allocations for ratemaking purposes if conditions or usage patterns change dramatically in the future."[36]

Q. Did Order 10 or the Settlement Agreement find any aspect of the Tacoma LNG Project or its costs to be prudent?

A. Not at all. The Settlement Stipulation states:[37]

> By agreeing to this Settlement Stipulation, each of Commission, Staff, Public Counsel, NWIGU, and ICNU does not waive, and expressly reserves, the right to challenge in future PSE rate proceedings, the prudence and the recovery of any costs associated with the Tacoma LNG Facility used as a peaking resource and allocated to PSE. PSE agrees that nothing in this Settlement Stipulation alters its burden to prove in future rate proceedings the prudence of any costs associated with the Tacoma LNG Facility used as a peaking resource and allocated to PSE.

Order 10 also made clear that its approval of the Settlement Stipulation did not constitute approval of the Tacoma LNG Project or its costs:[38] "The Commission's approval of the Settlement Stipulation is not an approval of the project; the Settlement Stipulation expressly reserves the Settling Parties' rights to challenge the financial

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[36] Joint Testimony of Settling Parties, Exh. JT-1 at 34:6–8, *In re: Petition of Puget Sound Energy for (i) Approval of Special Contract for LNG Fuel Serv. with Totem Ocean Trailer Express, and (ii) Declaratory Ord. Approving Methodology for Allocating Costs between Regul. and Non-regul. LNG Servs.*, Docket UG-151663 (revised Oct. 25, 2016).
[37] Docket UG-151663, Order 10, App. A, Settlement Stipulation ¶ 36.
[38] Docket UG-151663, Order 10 ¶ 4.

prudence and reasonableness of the Tacoma LNG Facility in future Commission proceedings."

C. The Need for the Tacoma LNG Project to Meet a Peak Demand Kept Getting Forecast, but the Need Did Not Appear

Q. Please explain the issue you raise about the need for the Tacoma LNG Project to meet forecasted peak demand that did not appear.

A. PSE has repeatedly forecast "immediate" needs to justify the Tacoma LNG Project to serve peaking needs. Yet, the needs did not show up. Table 2 provides some examples.

Table 2: Examples Where Immediate Needs Were Forecast, but Did Not Materialize

On January 23, 2013, PSE forecast a shortfall of 13.65 MDth/day for winter 2019/2020. [39] There were no curtailments during the winter of 2019/2020.[40]
On November 8, 2013, PSE forecast a shortfall of 19.24 MDth/day for winter 2017/2018.[41] There were no curtailments during the winter of 2017/2018.[42]
On July 30, 2014, PSE forecast a shortfall of 8.82 MDth/day for winter 2015/2016. [43] There were no curtailments during the winter of 2015/2016.[44]
On November 2, 2017, PSE forecast a shortfall of 27.22 MDth/day for the coming winter 2017/2018. [45] There were no curtailments during the winter of 2017/2018.[46]

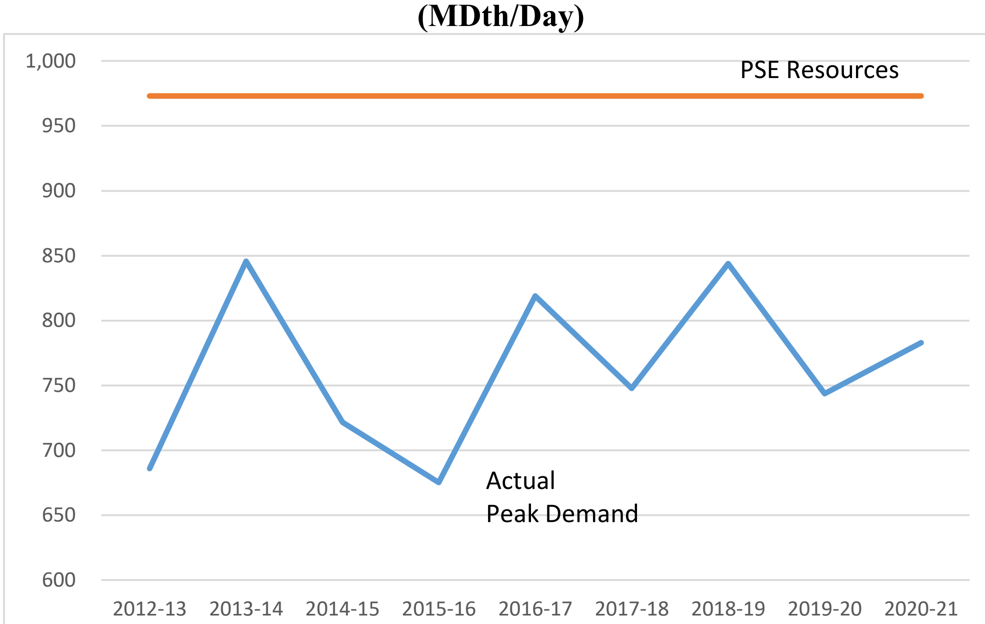
[39] Roberts, Exh. RJR-1CT at 58:13.
[40] Earle, Exh. RLE-6 (PSE Response to Public Counsel Data Request No. 311).
[41] Roberts, Exh. RJR-1CT at 58:13.
[42] Earle, Exh. RLE-6 (PSE Response to Public Counsel Data Request No. 311).
[43] Roberts, Exh. RJR-1CT at 58:13.
[44] Earle, Exh. RLE-6 (PSE Response to Public Counsel Data Request No. 311).
[45] Roberts, Exh. RJR-1CT at 58:13.
[46] Earle, Exh. RLE-6 (PSE Response to Public Counsel Data Request No. 311). There was one curtailment incident on October 10, 2018, as a result of supply constraints associated with the Enbridge/West Coast natural gas line-break in Canada was an extended curtailment. This curtailment of 1,663,296 therms would not have been addressable by the Tacoma LNG Project had it been operating.

> Despite the winter having passed (or almost passed) with no curtailments,[47] on March 1, 2018 and June 21, 2018, PSE said there had been a need of 27.22 MDth/day in the previous winter (winter 2017/2018).[48]

The situation is made clear by examining the actual peak demand on PSE's system compared with its resources. Figure 2 shows actual peak load for nine winters 2012/2013 through 2020/2021. In each of the years, PSE's gas resources far exceeded the actual peak load. Despite years of forecasts of an "immediate need," that need did not materialize.

Figure 2: PSE Resources have Far Exceeded Actual Gas Peak Load for Nine Years[49]

(MDth/Day)



[47] Earle, Exh. RLE-6 (PSE Response to Public Counsel Data Request No. 311). There was one curtailment incident on October 10, 2018, as a result of supply constraints associated with the Enbridge/West Coast natural gas line-break in Canada was an extended curtailment. This curtailment of 1,663,296 therms would not have been addressable by the Tacoma LNG Project had it been operating.
[48] Roberts, Exh. RJR-1CT at 58:13. While unusual, the need for winter 2017/2018 is indicated by PSE's testimony.
[49] Data from Puget Sound Energy Response to Public Counsel Data Request No. 106, Attachment A which is provided as Exh. RLE-7 and from Puget Sound Energy Response to Public Counsel Data Request No. 378, Attachment A which is provided as Exh. RLE-8.

In September 2016 when the PSE Board of Directors approved proceeding with the Tacoma LNG Project, PSE would have known all of the information depicted in Figure 3 and more. The Figure shows the actual peak load (MDth/day) and the forecasts for peak load. A few striking observations can be made about Figure 3. First, the F2013 forecast is a major jump above the F2012 forecast.

The F2013 forecast is greater than all the other forecasts from 2023/2024 onward. With this jump in forecast, PSE says that the F13 forecast and 2013 Integrated Resource Plan (IRP) both projected an immediate need for an LNG liquefaction and storage facility.[50]

Second, after F2013 forecasts, the forecasts all came down dramatically from the F2013 forecast in the last half of the forecasts. F2014 is lower than F2013, F2015 is lower than F2014, and F2016 is lower than F2015. The subsequent forecasts tend to flatten out as well with lower rates of growth. This should have made PSE pause to further evaluate building an LNG liquefaction and storage facility.

Third, the starting point for each of the forecasts is far above the recent actual peak loads. Even if one believed the rate of growth in a forecast, one might wonder if the forecasts did not overstate the need for new resources based on their starting point alone.

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[50] Roberts, Exh. RJR-3 at 11–12.

Figure 3: Actuals and Forecasts at the Time of September 2016 Decision Point[51] (MDth/Day)

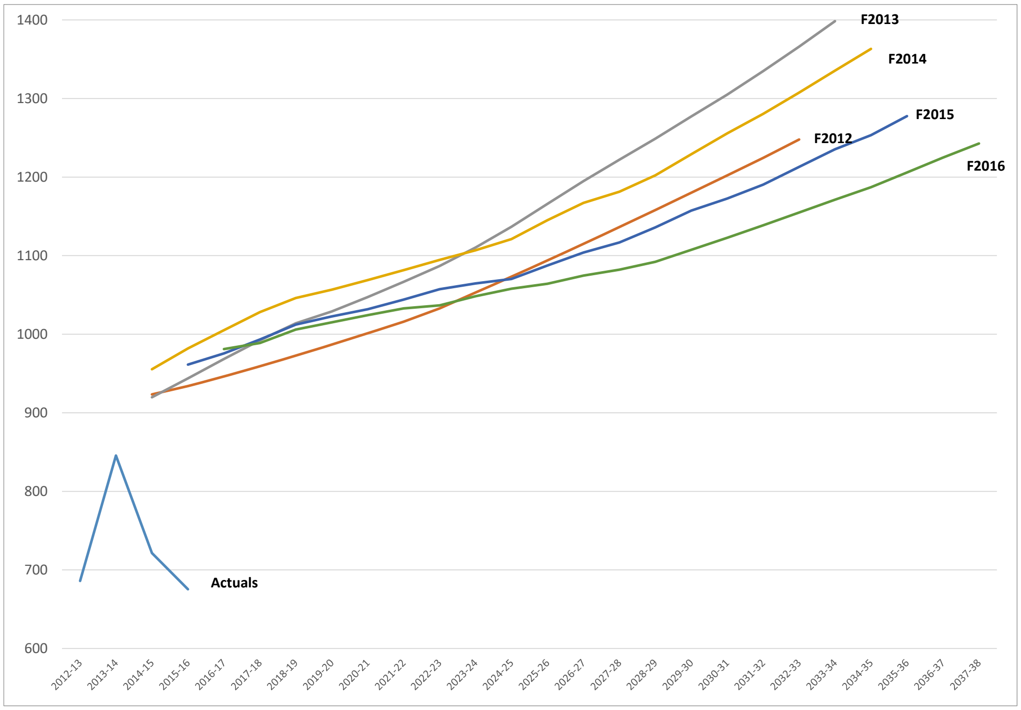
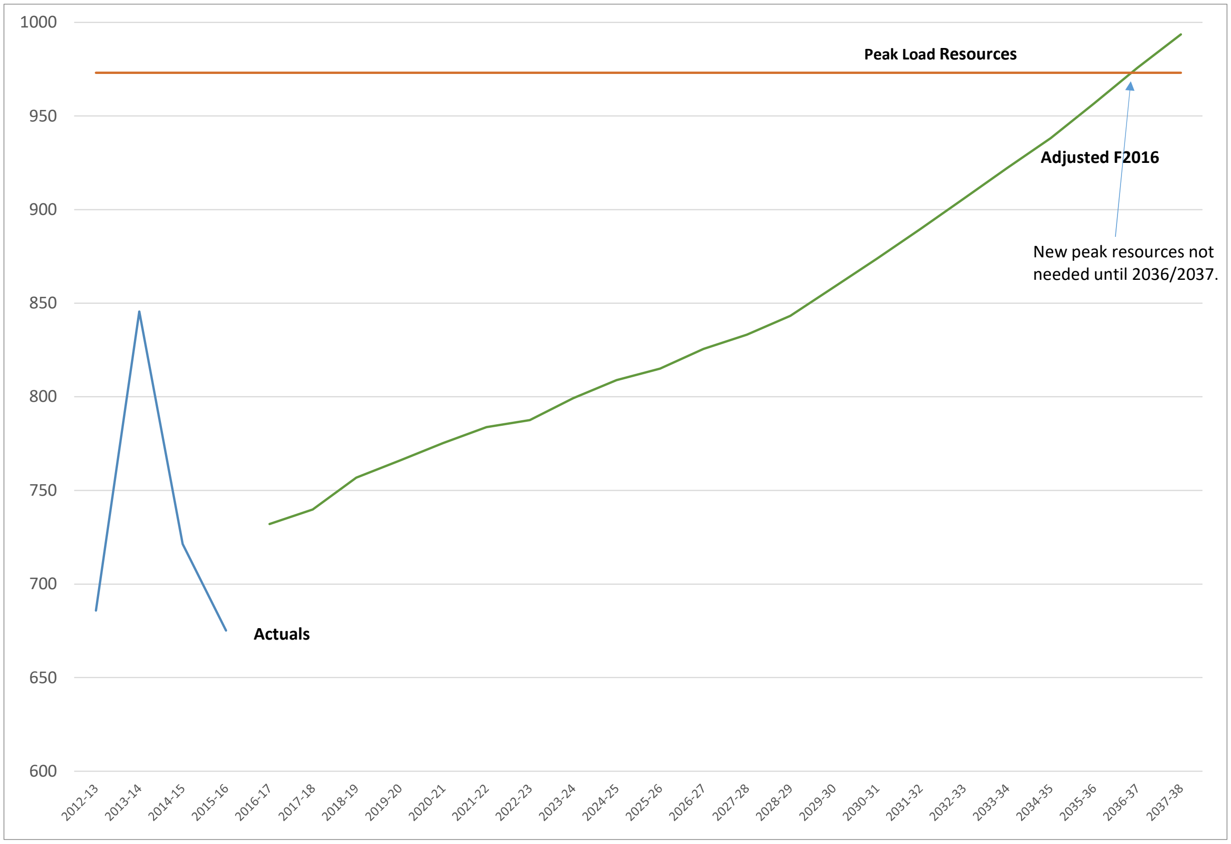


Figure 4 shows the F2016 forecast adjusted so that it starts at the average of previous actual peak loads. The adjusted F2016 shows new peak resources would not be needed until 2036/2037.

[51] Data from Puget Sound Energy Response to Public Counsel Data Request No. 106, Attachment A which is provided as Exh. RLE-7 and from Puget Sound Energy Response to Public Counsel Data Request No. 378, Attachment A which is provided as Exh. RLE-8.

Figure 4: Adjusted F2016 Shows New Peak Resources not Needed until 2036/2037[52]



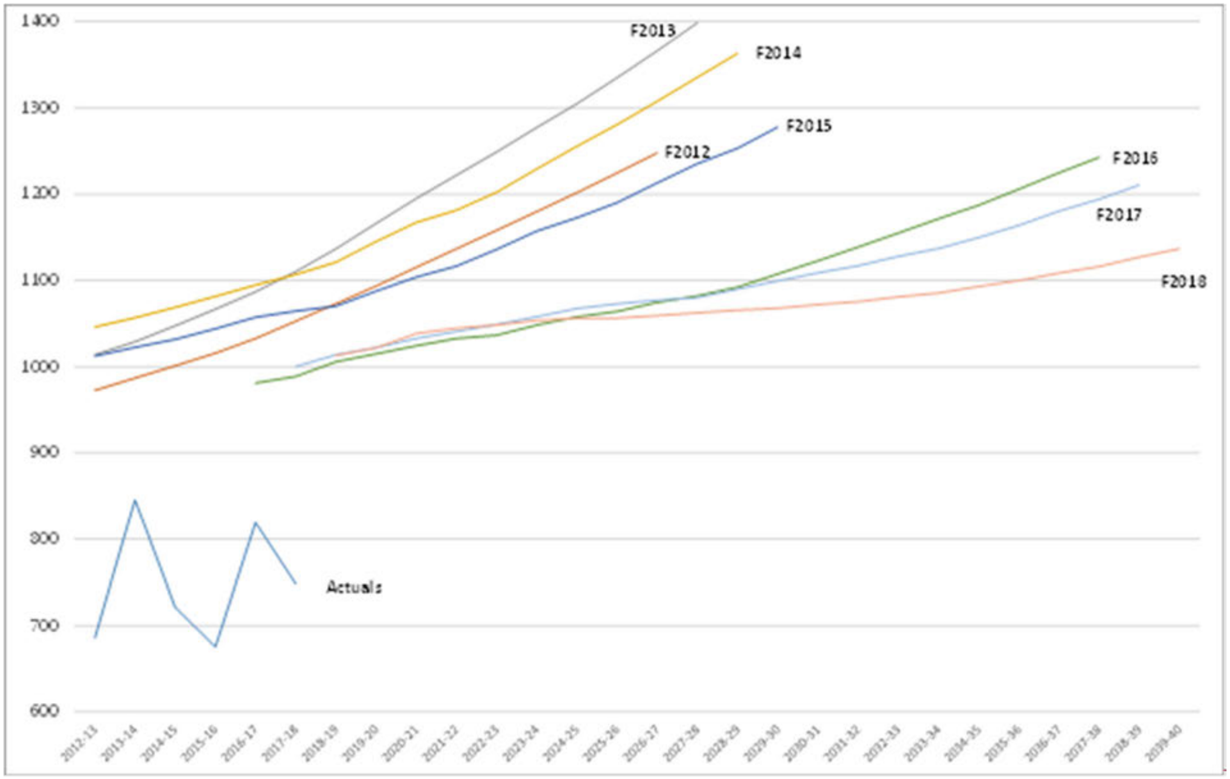
It would have been reasonable for PSE to inform its Board of Directors of the facts in the Figures 2–4 and recommend delaying a decision on the Tacoma LNG Project until the need became clearer. Unfortunately, it appears that PSE did not inform its Board of Directors of these facts.

Around the time of the 2018 Board of Directors decision to move forward, the information in Figure 5 would have been available to PSE.[53]

[52] Data from Puget Sound Energy Response to Public Counsel Data Request No. 106, Attachment A which is provided as Exh. RLE-7, and from Puget Sound Energy Response to Public Counsel Data Request No. 378, Attachment A which is provided as Exh. RLE-8.

[53] The Board of Directors decision was in March 2018 and the F2018 forecast was finalized in July 2018 (Roberts, Exh. RJR-3 at 68). The months are close enough to reasonably think that the preliminaries of the F2018 forecast would have been available for consideration.

Figure 5: Actuals and Forecasts Available Near the 2018 Decision Point[54]

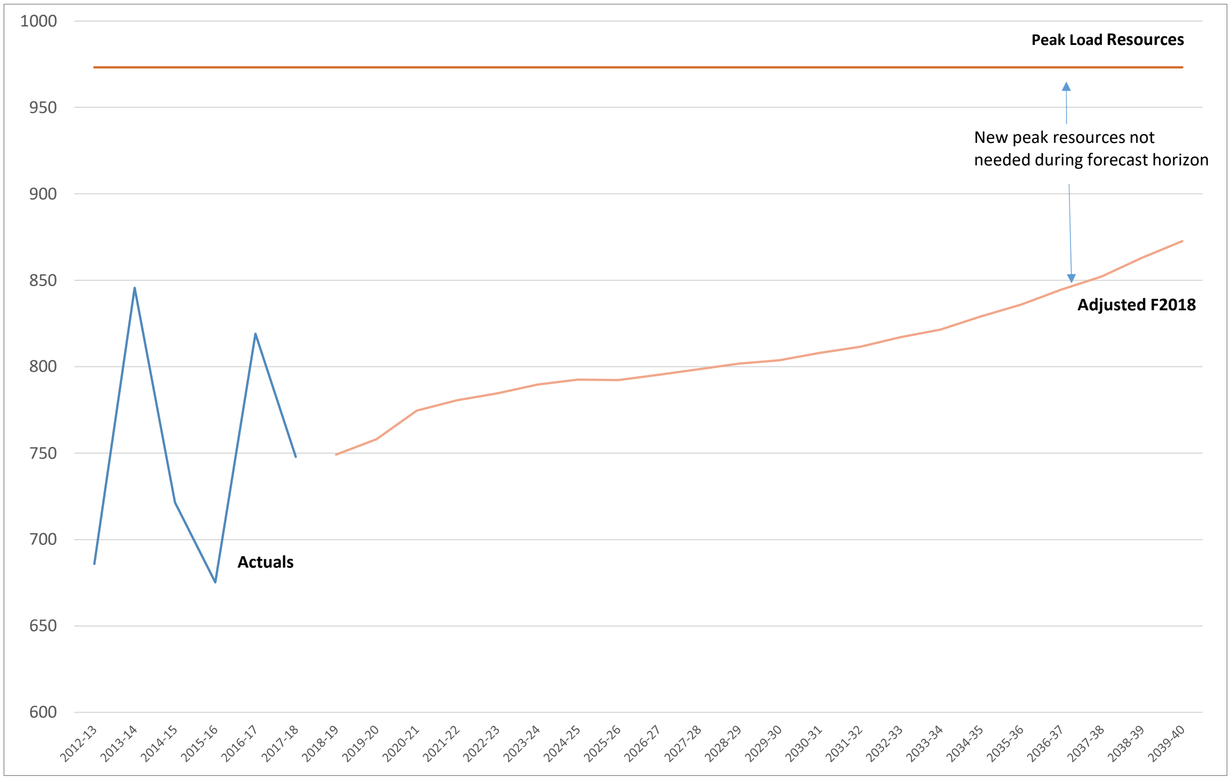


The pattern shown in Figure 5 continues the pattern shown in Figure 3. Forecasts continue to flatten and drop from F2016 through F2018. Moreover, the beginning of the new forecasts, 2017 and 2018, continue to be well above recent actual peak loads. As in 2016, even if one believed the rate of growth in a forecast, one might wonder if the forecasts did not overstate the need for new resources based on their starting point alone.

Figure 6 shows the F2018 forecast adjusted so that it starts at the average of previous actual peak loads. The adjusted F2018 shows no new peak resources are needed during the forecast period (through 2039/2040).

[54] Data from Puget Sound Energy Response to Public Counsel Data Request No. 106, Attachment A which is provided as Exh. RLE-7, and from Puget Sound Energy Response to Public Counsel Data Request No. 378, Attachment A which is provided as Exh. RLE-8.

Figure 6: Adjusted F2018 Shows New Peak Resources not Needed during Forecast Period (through 2039/2040)[55]



It would have been prudent for PSE to inform its Board of Directors of the facts in the Figures 2–6 and recommend delaying a decision on the Tacoma LNG Project until the need became clearer. Unfortunately, it appears PSE did not inform its Board of Directors of these facts.

Q. Why are these facts concerning the inaccuracy of forecasts important?

A. One of the four factors that the Commission focuses on in determining prudence is the need for the resource.[56] These facts call into question whether there was a need for new resources in the short term or the long term. Based on the evidence PSE provided, the

[55] Data from Puget Sound Energy Response to Public Counsel Data Request No. 106, Attachment A which is provided as Exh. RLE-7 and from Puget Sound Energy Response to Public Counsel Data Request No. 378, Attachment A which is provided as Exh. RLE-8.
[56] Dockets UE-111048/UG-111049, Order 12 ¶ 19.

Company ignored these facts in its analysis and did not present these facts to PSE's Board of Directors. PSE management should have considered these facts before recommending proceeding with the Tacoma LNG Project in September 2016 and March 2018. At the very least, PSE management should have informed its Board of Directors of this issue and explained to them why PSE management still believed, despite the facts before them, that the resource was needed. Because PSE Management failed to consider the facts and present them to the Board, the decision to move forward with the Tacoma LNG Project was not prudent.

Q. Was the PSE Board of Directors informed of these facts?

A. It appears they were not. PSE stated in discovery that it provided all presentation materials concerning the regulated portion of the Tacoma LNG given to its Board of Directors in Exhibit RJR-5C.[57] Indeed, for nearly two years, PSE's Board of Directors received no updates on the regulated portion of the Tacoma LNG Project.[58] An examination of the Board of Directors presentation materials in Exhibit RJR-5C shows no discussion of curtailments to its gas customers, nor does any mention appear in Board presentations of the level of the immediate need in Table 2. Moreover, the Board materials appear to contain no comparison of forecasts or forecasts versus actuals.

Q. Why does it matter that the PSE Board of Directors was not informed that the forecasts repeatedly predicted a need that did not occur?

[57] Earle, Exh. RLE-9 (PSE Response to Public Counsel Data Request No. 105): "No additional material regarding the regulated Tacoma LNG Project was presented to the Puget Sound Energy Board subsequent to the May 6, 2020 meeting."
[58] *Id*. The date of the response is April 5, 2022, and the last Board meeting at which materials related to the Tacoma LNG Project were presented was May 6, 2020.

A. One of the four factors that the Commission focuses on in determining prudency concerns "communication with and involvement of the Company's Board of Directors. The utility should inform its board of directors about the purchase decision and its costs. The utility should also involve the board in the decision process."

An alert Board of Directors informed of these facts and committed to finding the most-effective solution for ratepayers would, at the major decision points in September 2016 and March 2018, reasonably have questioned whether the forecasts of need were reliable and whether proceeding with the Tacoma LNG Project was in the ratepayers' interest. The Board of Directors apparently was not informed that management's projections of need had turned out to be false alarms.

Q. What is your conclusion concerning the repeated inaccuracy of forecast need and the lack of communication with the PSE Board of Directors on this issue?

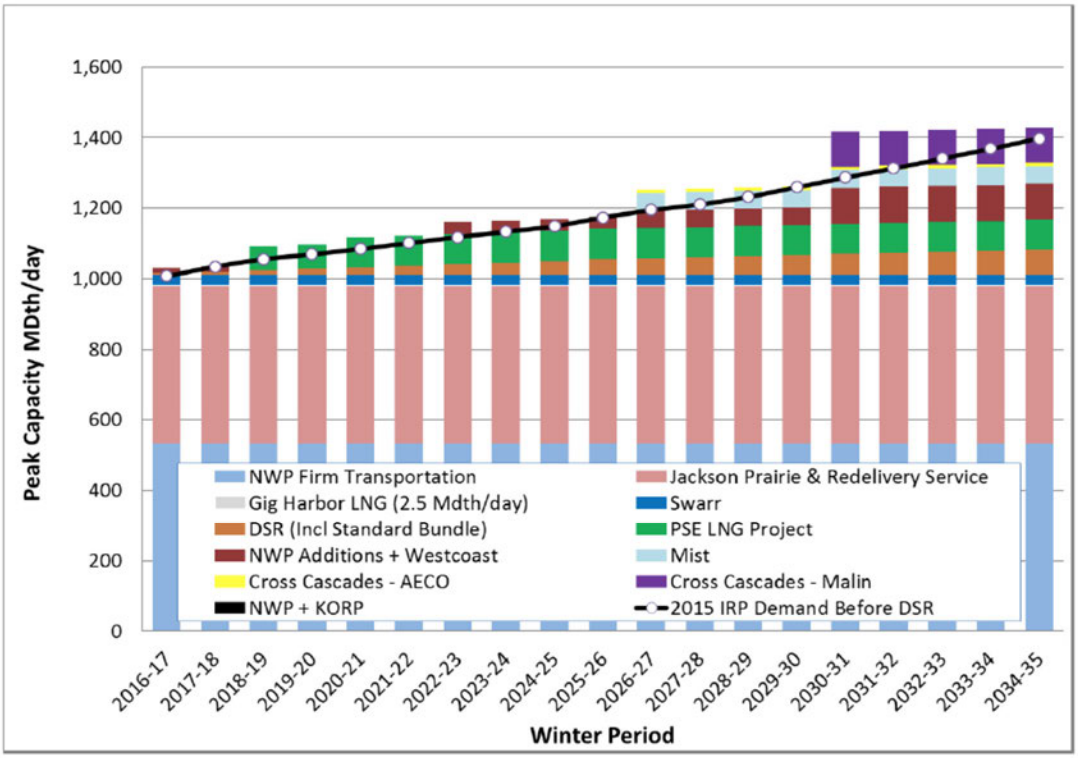
A. Based on this fact pattern alone, the Commission should find that PSE's decision to proceed with the Tacoma LNG Project was imprudent.

D. The Tacoma LNG Project Was a Stop-Gap Measure, and PSE Did Not Consider Sufficient Alternatives

Q. Please explain the issue you raise regarding the Tacoma LNG Project being a stop-gap measure.

A. PSE's integrated resource plans (IRPs) indicate that according to its forecasts, the Tacoma LNG Project would forestall the need for other peaking resources only for four to five years.[59] Figure 7 from PSE's 2015 IRP shows the Tacoma LNG Project coming on-line for winter 2018/2019, with new resource needs arising four years later.

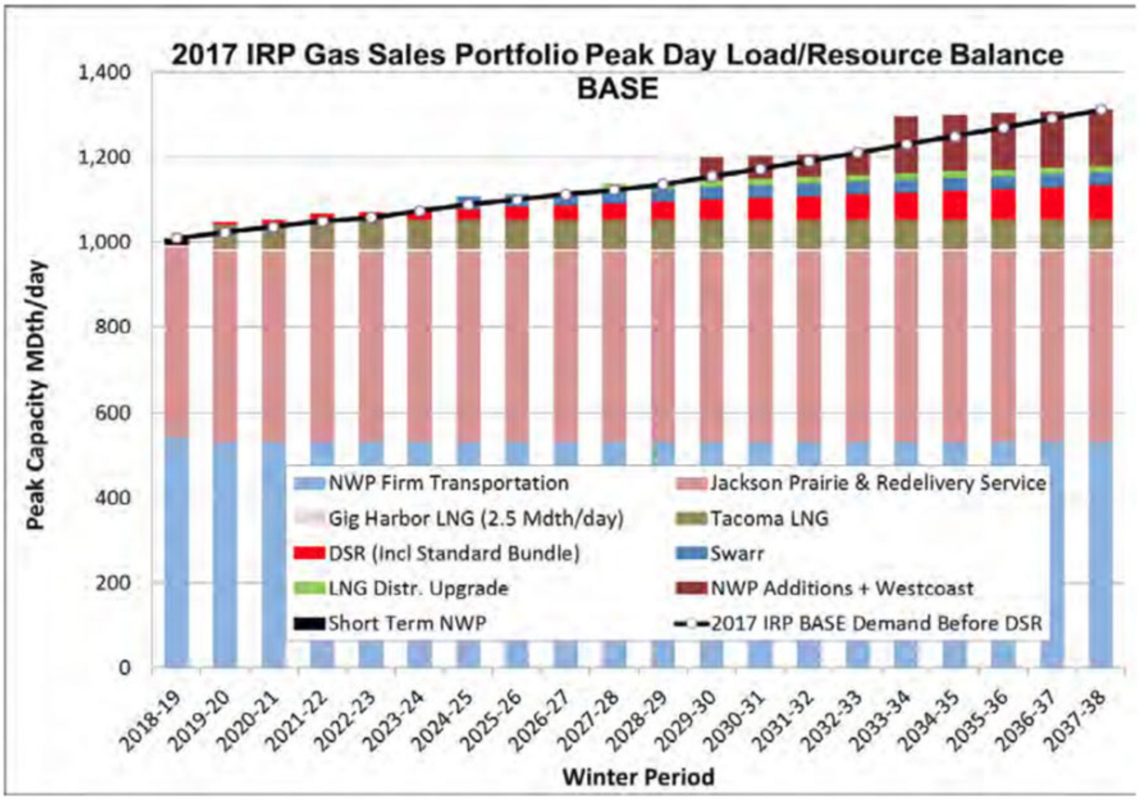
Figure 7: PSE 2015 Gas Sales Base Scenario Resource Portfolio[60]



Similarly, PSE's 2017 IRP shows the Tacoma LNG Project coming on-line for the winter of 2019/2020, with other new resource needs arising five years later, for winter 2024/25. Figure 8 from PSE's 2017 IRP shows the stop-gap nature of the Tacoma LNG Project.

[59] The 2021 IRP indicates a longer time period until when new resources would be needed, but this is because of aggressive demand-side measures along with other factors. PSE 2021 IRP at 9-54.
[60] PSE 2015 IRP at 7-41.

Figure 8: PSE 2017 Gas Sales Base Scenario Resource Portfolio[61]



Q. Why is it important that the Tacoma LNG Project was a stop-gap measure?

A. That it was a stop-gap measure means that PSE could implemented other measures, perhaps temporary, until a better solution was found. This is particularly true in light of the Company's repeated failures in forecasting immediate need.

Q. Did PSE consider alternatives to the Tacoma LNG Project?

A. PSE did consider some alternatives to the Tacoma LNG Project, as outlined in its 2015 IRP.[62] Among these were access to expanded service on various pipeline combinations, lease of storage from the Mist storage facility, and an upgrade to the existing Swarr LP-air facility. However, PSE left other viable options out of consideration in its analysis.

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[61] PSE 2017 IRP at 7-46.
[62] By the 2017 IRP, published November 2017, the Tacoma LNG Project appears to be considered a foregone conclusion. PSE 2017 IRP at 7-4.

Q. What options did PSE leave out of its analysis?

A. During peak periods, demand for gas for generation could be curtailed. If substitute power was needed, this could be purchased and imported. Another alternative would be to use fuel oil to generate electricity from dual-fuel combustion turbines, as PSE suggested would be possible to the Puget Sound Clean Air Agency (PSCAA). [63] Yet another alternative would be to explore the installing compressed natural gas storage at generating stations for use during peak periods.[64]

Q. Was PSE aware of the option to address gas for generation demand as an alternative to building the Tacoma LNG Project?

A. Yes, it was. As part of its analysis of the air impacts of the Tacoma LNG Project, PSCAA asked PSE, "What would the alternate supply of NG be in the absence of the LNG plant?" On May 25, 2018, in its response to questions by the PSCAA, PSE replied:[65]

> If the Tacoma LNG project does not occur then there is no alternate supply of natural gas from regasification. To meet initial customer demand for natural gas during those peak days, PSE would have to repurpose firm gas transmission from peak period electricity generation to residential gas service. In the absence of the Tacoma LNG Facility, during peak periods PSE would have to use this firm gas transmission to supply gas customers and thus would be required to operate "peaker" dual-fuel combustion turbine electric generating units utilizing fuel oil rather than using natural gas.

Q. Does addressing gas for generation therefore appear to be a viable alternative?

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[63] Earle, Exh. RLE-10 (PSE Response to Public Counsel Data Request No. 312 with Attachment A (PSE Response to SEIS Data and Information Request at 14–15, May 25, 2018).
[64] *See*, *e.g.*, Gerad M. Freeman, Jay Apt, Seth Blumsack, and Thomas Coleman, *Could on-site fuel storage economically reduce power plant – gas grid dependence in New England*?, (Carnegie Mellon Univ. 2020) (Electricity Industry Center Working Paper CEIC-20-02), https://www.cmu.edu/ceic/research-publications/working-papers html (click on '2020' to display link to white paper).
[65] Earle, Exh. RLE-10 (PSE Response to Public Counsel Data Request No. 312 with Attachment A (PSE Response to SEIS Data and Information Request at 14-15, May 25, 2018)).

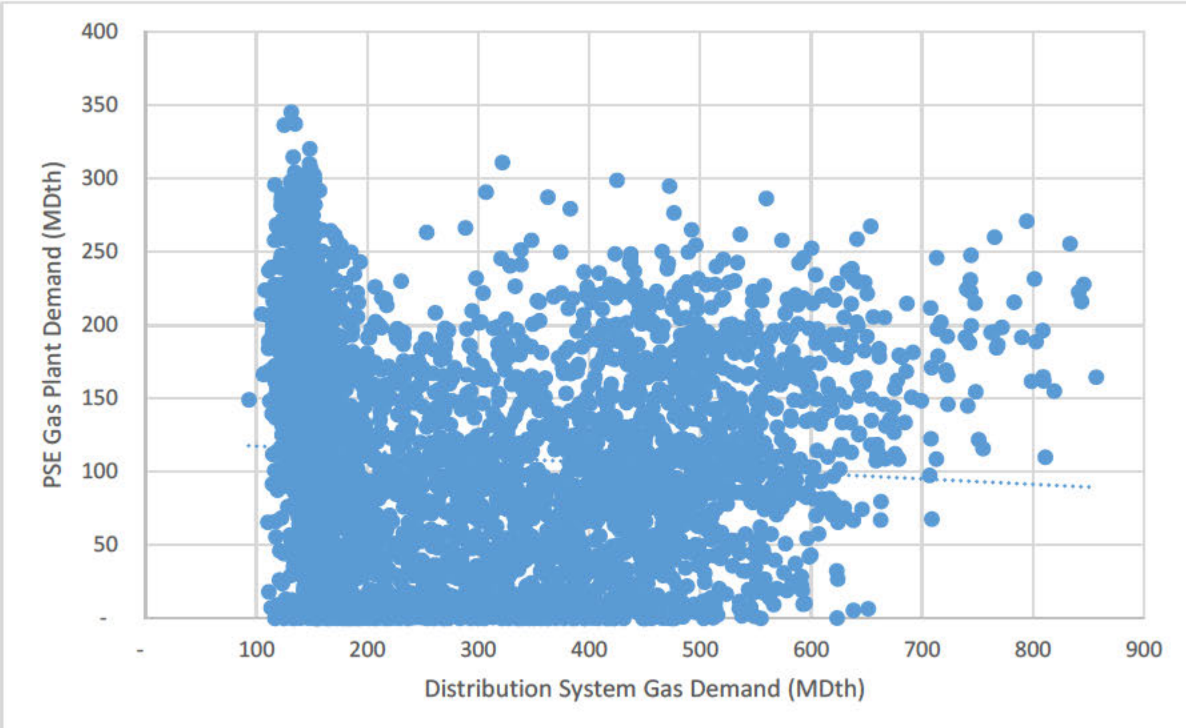
A. Yes, it does. The problem the Tacoma LNG Project intended to solve for ratepayers was to avoid curtailments for a few days, days that might occur only once every few winters. It would have been worth exploring whether addressing gas for generation demand would have been a less expensive solution for PSE's ratepayers, through either curtailing the gas plants and buying power on the open market or having the gas plants burn fuel oil. PSE states that it,

> presumed that if a peak event occurs, both PSE gas system needs and gas generation needs may very likely be coincident, thus putting extreme pressure on the entire gas and electric grid. In such an event, PSE's market purchases and transmission capacity may already be maximized and all PSE generation, including dual-fuel generation, would be required. If gas pipeline capacity is not available because it is being used to serve gas system demand, the referenced plants would need to run on fuel-oil.[66]

This makes clear that PSE does recognize it might be possible to use fuel oil or curtailments to PSE generation. However, an examination of the data shows a low correlation between PSE gas system needs and gas generation needs, as Figure 9 illustrates. The correlation between PSE gas system needs and gas generation needs is -0.08, meaning that they are essentially uncorrelated. There may indeed be an occasional day when out of 12 years where gas sales demand is high and gas for generation is high, but as can be seen from the graph, those days are rare.

[66] Earle, Exh. RLE-10 at 2–3 (PSE Response to Public Counsel Data Request No. 312, sub-part d).

Figure 9: Gas Distribution Needs and PSE Gas for Generation Needs are Uncorrelated[67]



Q. Does it matter that PSE did not consider addressing gas for generation as a potentially viable alternative then?

A. Yes, it does. The second of the four factors that the Commission focuses on in evaluating prudence is the evaluation of alternatives:[68] "The utility must analyze the resource alternatives using current information that adjusts for such factors as end effects, capital costs, dispatchability, transmission costs, and whatever other factors need specific analysis at the time of a purchase decision. The acquisition process should be appropriate." PSE completely left out alternatives of which it was well aware: addressing gas for generation demand. In doing so, it failed the second

[67] Data from Puget Sound Energy Response to Public Counsel Data Request No. 378, Attachment A, which is provided as Exh. RLE-8.
[68] Dockets UE-111048/UG-111049, Order 12 ¶ 19.

factor in the Commission's focus. Because of this alone, the Commission should find PSE's decisions to proceed with the Tacoma LNG Project imprudent.

Q. Did PSE management present to its Board of Directors any potential alternatives that would address gas for generation demand as a solution?

A. It appears they did not.

Q. Why does it matter that the PSE Board of Directors was not informed about alternatives addressing gas for generation demand?

A. As discussed above, one of the four factors that the Commission focuses on in determining prudency concerns "communication with and involvement of the Company's Board of Directors. The utility should inform its board of directors about the purchase decision and its costs. The utility should also involve the board in the decision process."

An alert Board of Directors informed of these facts and committed to finding the most-effective solution for ratepayers would, at the major decision points in September 2016 and March 2018, reasonably have questioned whether the analysis of alternatives was thorough enough, and have paused approval of the Tacoma LNG Project until after such an evaluation. Management apparently did not inform the Board of Directors about such alternatives.

Q. What is your conclusion concerning the omission of gas for generation alternatives and the lack of communication with the PSE Board of Directors on this issue?

A. Based on this fact pattern alone, the Commission should find that PSE's decision to proceed with the Tacoma LNG Project was imprudent.

E. PSE Did Not Consider Equity in Its Decisions on The Tacoma LNG Project

Q. Did PSE consider equity or impacts on Named Communities in its decision-making or analyses of the Tacoma LNG Project?

A. No. It did not.[69] PSE explains that the phrase "Highly Impacted Communities and Vulnerable Populations" was defined with respect to energy law only after its decision to construct the Tacoma LNG facility, and that "RCW 70A.02 which created obligations for various state agencies to incorporate environmental justice into the planning process and other processes was enacted in 2021."[70]

Q. Is PSE's explanation sufficient to explain why it did not consider equity or impacts on Named Communities in its decision-making or analyses of the Tacoma LNG Project?

A. No. While the laws that speak to this issue may have been enacted after the decision to proceed with its Tacoma LNG Project, PSE has said that it does act because of "***anticipated*** or approved laws and regulations, and analyses of the economic impact those laws and regulations may have…"[71]

Because PSE considers anticipated laws and regulations in its decision-making, it is surprising that it did not consider equity at all given the evolving political atmosphere concerning equity and the Puyallup Tribe's concerns about the Tacoma LNG Project.[72] PSE has long been aware of equity considerations: "Starting in 2017, PSE has offered competitive funding awards to local non-profits, public housing authorities, and tribal entities to install solar on their facilities … providing vital

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[69] Earle, Exh. RLE-11 at 1 (PSE Response to Public Counsel Data Request No. 373, sub-part a.).
[70] Earle, Exh. RLE-11 at 2 (PSE Response to Public Counsel Data Request No. 373, sub-part b.).
[71] Roberts, Exh. RJR-1CT at 77:6–7 (emphasis added).
[72] Roberts, Exh. RJR-5C at 939.

support to those in need through lower utility bills for our low-income or Black, Indigenous, and People of Color (BIPOC) customers …"[73]

Defending the absence of equity considerations in its Tacoma LNG Project decision-making, PSE says

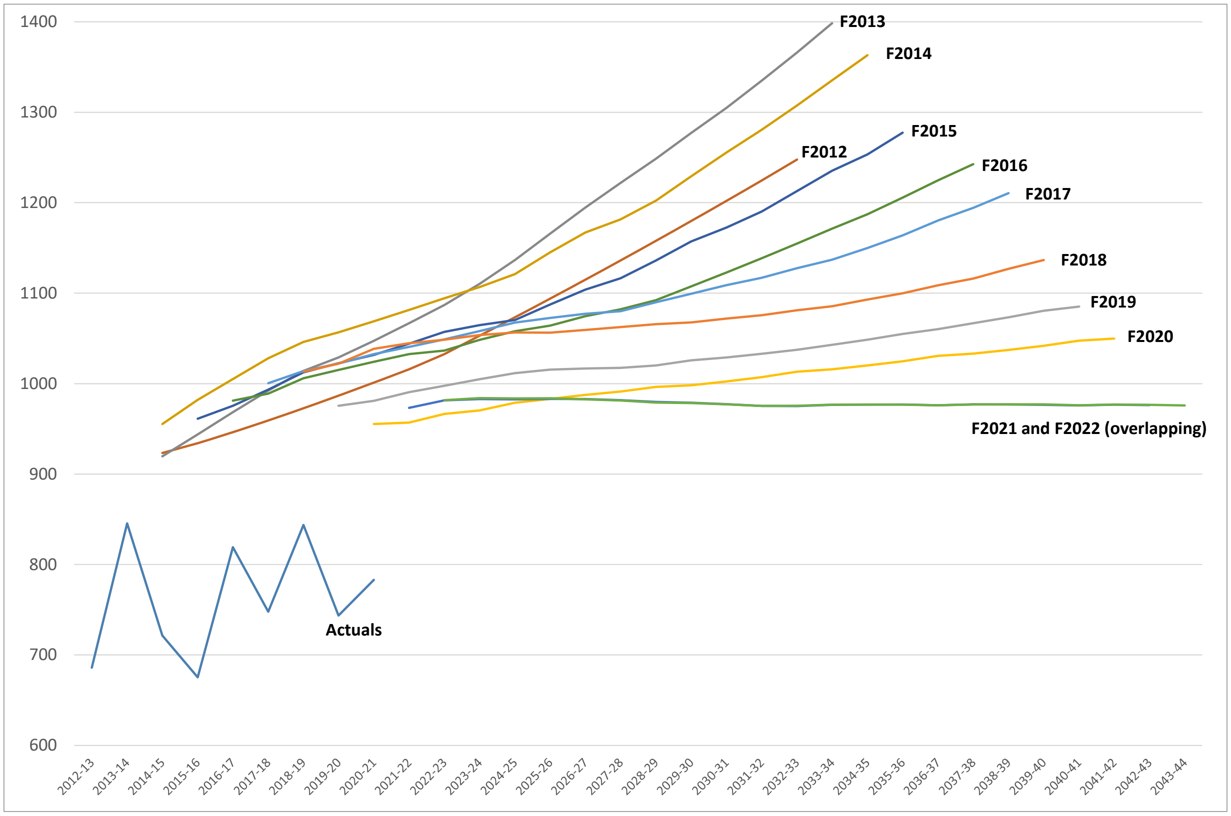
> At the time Puget Sound Energy ("PSE") made the decision to construct the Tacoma LNG Project, it believed the facility would provide a safe and clean option for meeting its gas system peaking needs (see the Prefiled Direct Testimony of Ronald J. Roberts, Exh. RJR-1CT at 7-9, 17) and a clean transportation fuel for the marine and trucking industries (see Exh. RJR-1CT at 17-18) - both of which would provide benefits to those living in the communities PSE serves and the greater Puget Sound Region. PSE continues to hold this belief.[74]

As my testimony demonstrates above, the Tacoma LNG Project was not a good option at the time of its consideration for meeting PSE's at best evanescent gas system peaking needs. Currently, both the use of meeting gas system peaking needs and providing clean transportation fuel appear to be in doubt.

With respect to meeting gas system peaking needs, PSE's forecasting pattern of ever-receding need continues. Figure 10 shows the continued pattern of decreasing forecasts along with the disconnect with actual peak load levels.

[73] PSE CEIP Chapter 4.
[74] Earle, Exh. RLE-11 at 1–2 (PSE Response to Public Counsel Data Request No. 373, sub-part a.).

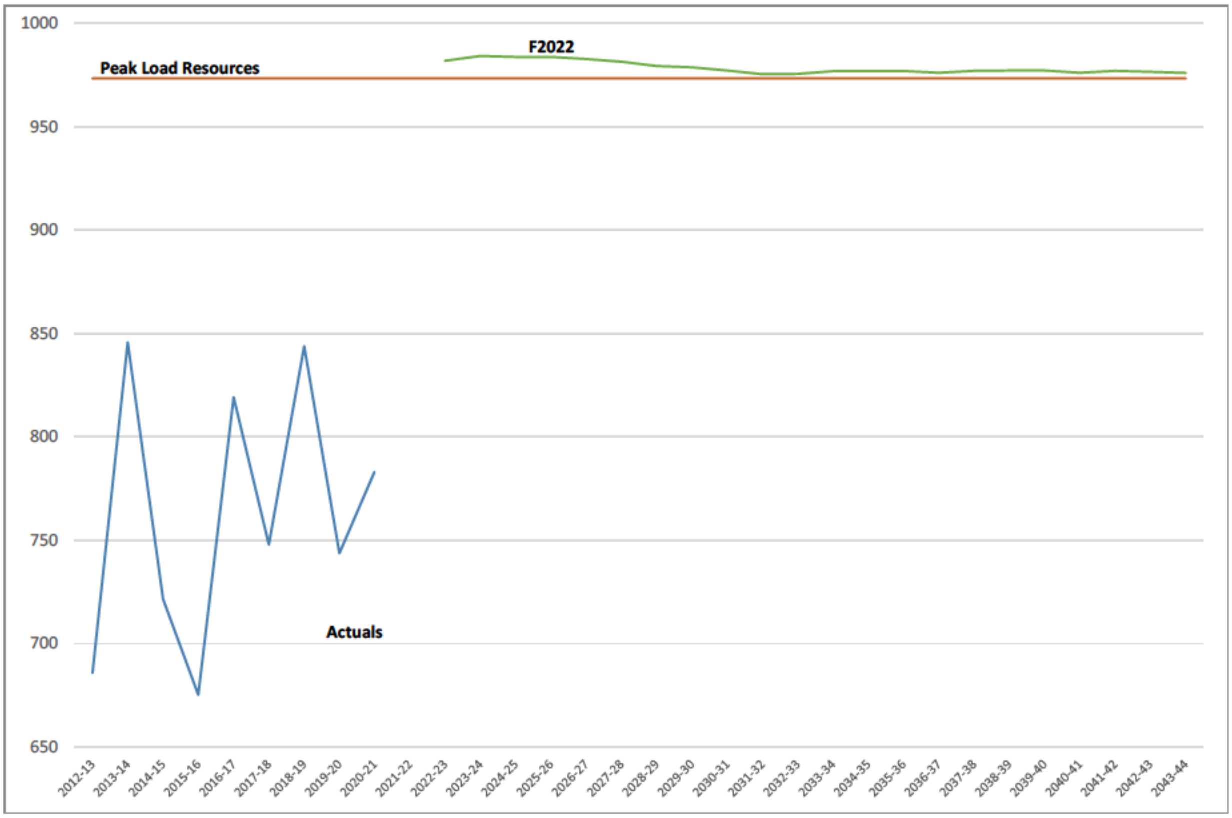
Figure 10: The Trend to Date Shows that the Tacoma LNG Project May Never be Needed for Peak Shaving[75]



Note that the 2019 through 2022 forecasts all start at levels well above the historical actuals. Given how much above the historical actuals these forecasts start, it appears that the Tacoma LNG Project might never be used or useful for PSE ratepayers. Moreover, the F2022 forecast is barely above the current resource level of 973 MDth/day as Figure 11 shows.

[75] Data from Puget Sound Energy Response to Public Counsel Data Request No. 106, Attachment A which is provided as Exh. RLE-7 and from Puget Sound Energy Response to Public Counsel Data Request No. 378, Attachment A which is provided as Exh. RLE-8.

Figure 11: The Most Recent Forecast Lies Barely Above the Peak Load Resources (Excluding Tacoma LNG)[76]



With respect to reducing pollution from transportation fuels, that goal for the Tacoma LNG Project also seems to be in doubt. [redacted].[77] [redacted].[78]

Shaded Information is Designated Confidential Per Protective Order in Dockets UE 220066, UG-220067, and UG-210918 (Consolidated)

[76] Data from Puget Sound Energy Response to Public Counsel Data Request No. 106, Attachment A which is provided as Exh. RLE-7 and from Puget Sound Energy Response to Public Counsel Data Request No. 378, Attachment A which is provided as Exh. RLE-8.
[77] Earle, Exh. RLE-12C (PSE Response to Public Counsel Data Request No. 263, with Attachment K(C) at 4).
[78] Earle, Exh. RLE-13C at 1 (PSE Response to Public Counsel Data Request No. 352 at 1, sub-part b.).

F. The Tacoma LNG Project Is Imprudent and the Commission Should Disallow All Associated Capital Costs

Q. Please summarize why the Tacoma LNG Project is imprudent.

A. As I explain above, the Tacoma LNG Project fails in the first three and possibly all four factors the Commission focuses on to evaluate prudency: Need, Evaluation of Alternatives, Communication with and Involvement of the Board of Directors, and Adequate Documentation. Because of these failures, the Commission should find the decision to proceed with the Tacoma LNG Project imprudent and disallow all capital costs associated with it.

V. FIXED AND VARIABLE POWER COST UPDATES

Q. Please describe PSE's proposal concerning updating fixed and variable power costs.

A. PSE's proposal would add an annual update of the variable portion of power costs that would be combined with the existing PCA annual filing.[79] In addition, "PSE proposes that the PCORC be amended to provide for updates to the costs that are included in the fixed portion of the PCA baseline rate ..."[80]

Q. Why does PSE say these two mechanisms are necessary?

A. PSE anticipates having to add large amounts of generation capacity to its portfolio over the next 10 years. According to PSE, the GRC process does not allow for timely addition of generation capacity or changes in variable costs into rates. As a result, price signals for consumption and conservation are distorted.[81]

Q. What are your concerns with PSE's proposal?

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[79] Direct Testimony of Janet K. Phelps, Exh. JKP-1 at 9–11.
[80] Phelps, Exh. JKP-1 at 49:13–16.
[81] Phelps, Exh. JKP-1 at 50:1–8.

A. I have several concerns with PSE's proposal having to do with the number and timing of proceedings, the number of updates made in the proceedings, and the lack of opportunity for effective prudence review in PSE's proposal.

Q. Why are you concerned about the number of proceedings PSE proposes?

A. PSE does not make clear whether a PCORC filing would be separate from the PCA/variable power cost filing. Every separate proceeding incurs a set of fixed costs. For intervenors, these include coordination costs and informational costs of separately examining filings in different dockets. These costs are high and are one of the reasons GRCs combine a large number of related issues rather than split them into many different proceedings.

It appears that PSE's proposal could result in both an annual PCA/variable power cost filing as well as a PCORC proceeding in the same year. Launching two proceedings to address power costs – one focused on variable costs and the other on fixed costs – would impose unnecessary burdens on Public Counsel and other intervenors. For intervenors representing disadvantaged communities, concerns about equity arise. If these intervenors lack the staff or budgets to follow Commission filings closely and engage in all relevant proceedings, they lose the ability to guard the rights of their represented disadvantaged communities.

Q. What remedy do you suggest concerning the number of proceedings proposed by PSE?

A. The Commission should consolidate any PCORC filing with the annual PCA/variable power cost filing. This will create efficiencies for intervenors and combine related issues into one docket. Moreover, any new assets included in a PCORC filing would affect variable costs, so it would make sense to combine the PCORC filing with any annual PCA/variable power cost filing.

In addition, as I propose below, the prudency of costs from the PCORC or annual PCA/variable power cost filings should be determined in the next GRC. To do otherwise imposes a burden on intervenors. If, however, the Commission allows PSE to file a PCORC in which prudency of costs is determined, PSE should be limited to one PCORC during the pendency of the rate plan. This lessens the regulatory burden, making it more feasible to have robust participation by intervenors.

Q. Why are you concerned about the number of updates in the proceedings proposed by PSE?

A. PSE proposes to run the power cost model at least three times for the annual PCA/variable power cost filing: once in April for the initial filing, in an October update, and for a compliance filing update.[82] The updates create three types of problems.

The first is that the updates make it difficult for parties to agree to a settlement. With updates, unless the updates are removed in the settlement agreement, any party to a settlement agreement is buying a pig in a poke. Party representatives cannot tell their management or clients what the outcome in rates will be for a settlement, because what rates will be cannot be determined without knowing the outcome of the update. This problem is illustrated by a recent PacifiCorp GRC.[83] In that proceeding, power costs were updated in April 2020 to be $112.2 million. The subsequent October 2020 update

[82] Phelps, Exh. JKP-1T at 18:18–22.
[83] *Wash. Utils. & Transp. Comm'n v. Pac. Power & Light Co.*, Docket UE-191024.

resulted in a $10.0 million *increase* in power costs to $122.2 million.[84] Changes such as this make it hard for ratepayer advocates to know what sort of deal they may be getting, and make it harder to get buy-in from their management or clients.

The second problem with updates is that they create a disincentive for the utility to hedge power and gas prices because gas and power prices will simply be passed through to ratepayers because of the update. Instead, the utility should have the incentive to hedge on behalf of ratepayers to stabilize rates with variances passed through the PCA mechanism.

The third problem with the updates concerns prudence. The timing of the updates in October and then mid-December for the compliance filing gives little opportunity for review of the updates. These updates would occur after testimony and rebuttal in October and then mid-December, and providing little to no time for review, discovery, supplemental testimony, rebuttal, and so on. If these updates are allowed to be deemed prudent without an adequate opportunity for review, the Commission is essentially abandoning the principle of prudency of rates for power costs.

To illustrate the problem with the updates, consider the long list of items PSE proposes to include in any updates: costs associated with Mid-C hydro contracts, costs associated with upstream pipeline capacity, outage schedules, BPA rates, load forecast, input assumptions used in dispatch logic such as variable operation and maintenance (O&M) costs, hedges and physical supply contracts, natural gas prices, changes to terms of current resources, and limited new and updated resources.[85] With so many

[84] Supplemental Joint Testimony in Support of Settlement Stipulation, Exh. JT-3CT at 3, Fig. 1, *Wash. Utils. & Transp. Comm'n v. Pac. Power & Light Co.*, Docket UE-191024 (filed Nov. 6, 2020).
[85] Phelps, Exh. JKP-1T at 16:3–18:15.

potential changes, in the short period after the October update and the even shorter period after the mid-December update, little time would remain to ferret out what changes the utility may have made in its power cost modeling, much less to determine their impact.

Q. What remedy do you suggest concerning the updates proposed by PSE?

A. While the updates if done correctly might result in power cost estimates closer to actual power costs, they create disincentives to settlement and appropriate hedging by PSE. So, on balance, I recommend that the Commission not permit the updates requested by PSE.

In the alternative, if the Commission approves the update process PSE proposes, it should not deem the updates prudent, but instead subject them to a prudency determination in the next GRC. Otherwise, power costs could not be subject to prudency review in a reasonable manner.

Q. What are your other concerns regarding prudency determination in PSE's proposal?

A. PSE proposes that power cost prudency, both variable and fixed, be determined annually in dockets separate from the GRC process.[86] Having annual prudency determinations for variable and fixed power costs[87] imposes the burden of an increased number of proceedings on Staff, Public Counsel, and other intervenors. As I discuss above concerning separate PCORC and PCA/variable cost proceedings, annual prudency reviews are particularly prejudicial against vulnerable populations and

[86] Direct Testimony of Jon A. Piliaris, Exh. JAP-1T at 31:18–34:14.
[87] Fixed power costs might not be determined annually if PSE's preferred separate PCORC structure is retained.

disadvantaged communities, who often lack the abundance of resources required to intervene frequently in Commission proceedings.

Q. What remedy do you suggest concerning the problems with prudency in PSE's proposal?

A. Instead of having separate annually occurring prudency reviews of variable costs and fixed costs for either completed projects or those in rates subject to refund,[88] the Commission could mandate PSE detail in filings the variable and fixed costs it wishes to put into rates. The Commission could review and allow these costs in rates subject to refund pending approval of prudency in the next GRC.

At the very least, if the Commission were to approve PSE's proposal to have annual prudency reviews for both variable and fixed costs, it should order that all such the annual reviews should include actual variable power costs and fixed costs including those already in rates subject to refund, and should go through a full adjudicative process including testimony, response testimony, rebuttal/cross answering testimony, and hearings and briefs if necessary. The process should include the standard full discovery process as with a GRC, not just the "reasonable amount of discovery" PSE suggests for the determination of the prudency of fixed costs already in rates.[89]

Q. Does this conclude your testimony?

A. Yes.

[88] For review of investments in rates subject to refund, see Piliaris, Exh. JAP-1T 41:5–43:10.
[89] Piliaris, Exh. JAP-1T at 41:16–18.