Exh. BAE-1CT
Docket UG-230393
Witness: Betty A. Erdahl
REDACTED VERSION

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY,** **Respondent.**	**DOCKET UG-230393**

TESTIMONY OF

BETTY A. ERDAHL

STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

Tacoma LNG Tracker
Cost Allocation of the Four-Mile Distribution Pipeline

September 8, 2023

CONFIDENTIAL PER PROTECTIVE ORDER – REDACTED VERSION

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Betty A. Erdahl, and my business address is 621 Woodland Square Loop SE, Lacey, Washington, 98503. My business mailing address is P.O. Box 47250, Olympia, Washington, 98504-7250. My business email address is betty.erdahl@utc.wa.gov.

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

A. I am employed by the Washington Utilities and Transportation Commission (Commission) as a Regulatory Analyst in the Energy Section of the Regulatory Services Division. I have worked at the Commission since June 1991.

Q. Please state your qualifications to provide testimony in this proceeding.

A. I graduated from Washington State University in 1988 with a Bachelor of Arts degree in Accounting. I have also completed relevant coursework such as the “Basics of Regulation” offered by New Mexico State University; the Rate Making Process Technical Program; the USTA class on Understanding Separations, Access Charges, and Settlements; and Utility Ratemaking: The Fundamentals and the Frontier. Before joining the Commission in June 1991, I worked for two years as an accountant in the financial sector.

Q. Have you testified previously before the Commission?

A. Yes. I testified on behalf of Commission Staff (Staff) in numerous dockets related to rate filings by telecommunications, gas, and electric companies.

II. SCOPE AND SUMMARY OF TESTIMONY

Q. What is the purpose and scope of your testimony?

A. I will provide staff recommendations regarding the proposed Tacoma Liquefied Natural Gas (LNG) Facility Tracker and the allocation of the costs of the four-mile distribution pipeline connecting the facility to PSE's distribution system that PSE provisionally included in Schedule 141D after its most recent general rate case.

Q. What does Staff recommend with regard to the costs at issue in this proceeding?

A. Staff recommends (a) a decrease of $5.3 million to $42.4 million[1] in revenue requirement collected through the Tacoma LNG Tracker and (b) a decrease of at least $8.8 million to $8.11 million[2] of the four-mile distribution pipeline costs collected from PSE customers. Additionally, since the four-mile distribution pipeline rates are provisional, this recommendation results in a refund to PSE customers and a decrease in the related rates going forward.[3]

Specifically, Staff recommends that the Commission (1) disallow PSE from recovering $18.9 million of the return on its investment that it has deferred; (2)

[1] Erdahl, Exh. BAE-2.
[2] Erdahl, Exh. BAE-3.
[3] The ultimate amount of the refund, should the Commission accept Staff's recommendations, will depend on the Rule 6 recalculation that Staff recommends below.

disallow $0.7 million in deferred depreciation expense related to plant that was not used and useful; (3) disallow PSE from recovering $0.5 million in costs related to the redesign of the LNG facility to meet the needs of one of the customers of PSE's unregulated affiliate and co-tenant at the Tacoma LNG facility, Puget LNG; and (4) reject PSE's proposed allocation of the costs related to the four-mile pipeline connecting the Tacoma LNG facility with PSE's distribution system, accept Staff's, order PSE to update the Rule 6 calculation and require Puget LNG to make a contribution in aid of construction (CIAC) if appropriate, and require PSE to refund provisional rates based on the appropriate cost allocations.

Q. Does Staff have any other recommendations?

A. Yes. In addition to the treatment of costs set out above, the Commission should order PSE to: (1) complete monthly audits of NAES Corporation's LNG production operations to ensure compliance with Puget Sound Clean Air Agency (PSCAA) permit restrictions, (2) report any permit violations directly to PSCAA copying the Commission on any such communication, and (3) seek amendment to the O&M Services Agreement between Puget Sound Energy, Inc. and NAES Corporation to further dis-incent non-compliance with environmental laws and permit requirements. Specifically, PSE should seek to reform the existing incentive provision assigning greater weight to the environmental factor component of the incentive calculation or add a new separate provision that outlines specific damages that may be owed by NAES for each instance of environmental law or permit violations.

Q. Please summarize the net effect of your recommendations.

A. Staff's recommendations decrease the revenue requirement collected from the Tacoma LNG Tracker by $5.3 million, resulting in a revenue requirement of $42.4 million, and decrease provisional rates recovering the costs of the four-mile distribution pipeline by at least $8.8 million by allocating $8.11 million of its costs to PSE customers.

Q. Have you prepared any exhibits in support of your testimony?

A. Yes, I prepared Exhibits BAE-2 through BAE-12.

- Exh. BAE-2 Comparison of Tacoma LNG Tracker Revenue Requirement
- Exh. BAE-3 Allocation of Four-Mile Distribution Pipeline
- Exh. BAE-4 PSE Response to WUTC Staff DR No. 024
- Exh. BAE-5 PSE Response to WUTC Staff DR No. 020
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- Exh. BAE-11 Vaporizer and Liquefaction Annual Maximum Capacity
- Exh. BAE-12 PSE Response to Public Counsel DR No. 023 Attachment A

III. TACOMA LNG FACILITY

Q. What is the Tacoma LNG Facility?

A**.** As explained by PSE witness Roberts, the Tacoma LNG Facility is a dual-use facility located on Port of Tacoma land near the Hylebos waterway.[4] PSE uses the facility to store liquefied natural gas for peak day needs.[5] An unregulated PSE affiliate, Puget LNG, uses the facility to sell liquefied natural gas to transportation companies.[6]

Q. Please describe the Tacoma LNG Facility.

A. The central feature of the facility is a large storage tank capable of holding eight million gallons of LNG.[7] The rest of the facility consists largely of five things: the liquefaction equipment, which PSE uses to receive, treat, and cool the natural gas delivered to the facility in order to produce LNG; the vaporization equipment, which PSE uses to convert LNG to gaseous methane; piping needed to move LNG or gaseous methane within the facility and to Puget LNG's nearby facilities; truck loading facilities, which PSE may use to transport LNG for injection into other portions of its distribution system; and the ancillary buildings and equipment required to operate and maintain the facility.[8]

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[4] Roberts, Exh. RJR-1T at 2:12-13.
[5] Roberts, Exh. RJR-1T at 2:15-18.
[6] Roberts, Exh. RJR-1T at 2:20-21.
[7] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Roberts, Exh. RJR-1T at 16:8-9 (Jan. 31, 2022) ("220067 Roberts").
[8] 220067 Roberts at 16:9 – 17:3, 23:3-29:3; *see in re Petition of PSE*, Docket UG-151663, Order 10, Appx. A at 9-10 ¶ 25 (Oct. 31, 2016).

Q. What peaking capacity does the LNG Facility provide to PSE?

A. As a peak day resource for regulated customers, the Tacoma LNG Facility was designed to be capable of injecting 66,000 dekatherms (Dth) per day of vaporized gas into PSE's gas distribution system. PSE is also able to divert 19,000 Dth/day of natural gas intended for the LNG facility on peak days, bringing the total volume of gas PSE can make available for customers on a peak day 85,000 Dth/day.

Q. Please describe the area in which PSE and Puget LNG built the LNG Facility.

A. PSE and Puget LNG built the facility on Tacoma's waterfront, locating it on the ancestral homelands of the Puyallup Tribe and near the Puyallup Indian Reservation. Nearby areas score highly for social vulnerability and health disparities on the Washington State Department of Health's Washington Environmental Health Disparities Map, indicating that they bear heavy socio-environmental burdens.[9]

Q. Please explain the history of the Tacoma LNG Facility at the Commission.

A. The Tacoma LNG Facility has appeared prominently in at least three Commission Dockets: UG-151663, UG-210918, and UG-220067.

In Docket UG-151663, PSE and a number of parties entered into a settlement agreement that modified the ring-fencing commitments given to win the approval of PSE's sale to a consortium of international investors.[10] Those modifications allowed Puget Energy, PSE's holding company, to form as a subsidiary Puget LNG, the

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[9] Washington State Department of Health, Washington Environmental Health Disparity Map, *available at* https://fortress.wa.gov/doh/wtn/WTNIBL/ (last visited September 1, 2023).

[10] *In re Petition of PSE*, Docket UG-151663, Order 10, 5-6 ¶ 12.

unregulated affiliate with which PSE shares the Tacoma LNG Facility, and to use certain credit facilities to finance construction by PSE and Puget LNG.[11] The settlement also allocated the costs of the LNG facility's components between PSE and Puget LNG.[12] The Commission adopted the settlement, allowing PSE to move forward with construction of the Tacoma LNG Facility.[13]

In 2021, as PSE neared placing the Tacoma LNG Facility into service, PSE petitioned for permission to defer operations and maintenance expense, depreciation expense, and the return on its investment in the LNG facility.[14] The Commission docketed that petition as UG-210918, and it later consolidated the petition with PSE's 2022 general rate case, which it docketed as UE-220066 and UG-220067.[15]

In that 2022 general rate case, PSE sought to include the LNG project costs in rates. Several parties ultimately agreed to two settlements that resolved the LNG related issues through four means.[16] First, the settlements allowed PSE to defer project costs pursuant to the company's 2021 petition.[17] Second, the settlements provided that PSE could seek to recover the deferred costs through a tracker mechanism, although all parties retained their right to challenge those costs, subject to the prudence provision discussed next.[18] Third, the settlements included a

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[11] *In re Petition of PSE*, Docket UG-151663, Order 10, at 5-6 ¶ 12.
[12] *In re Petition of PSE*, Docket UG-151663, Order 10, at Appx. A at 10 ¶ 26.
[13] *In re Petition of PSE*, Docket UG-151663, Order 10, at 61-62 ¶¶ 161-64.
[14] *See generally in re Petition of PSE*, Docket UG-210918, Petition of Puget Sound Energy (Nov. 24, 2021).
[15] *See generally Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-22067 & UG-210918, Order 14 (May 12, 2022).
[16] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Order 24, at Appxs. A & C.
[17] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Order 24, at Appx. C at 4 ¶ 18.A.1-.2.
[18] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Order 24, at Appx. C at 4 ¶ 18.A.3, 5 ¶ 18.D.

determination that PSE had acted prudently with respect to the LNG project up to and including the point at which the company's board of directors approved construction of the facility and the associated distribution-system upgrades on September 22, 2016.[19] Fourth, the settlement provided for the inclusion in base rates of the costs of building the four-mile segment of pipeline connecting the Tacoma LNG Facility with PSE's distribution system.[20] The Commission approved the LNG settlement, although it conditioned its approval on the inclusion of the four-mile pipeline costs only on a provisional basis in a separate schedule, with the final allocation of costs to be decided when PSE files the tariffs necessary to implement the LNG tracker mechanism.[21] The parties accepted this condition.

Q. Given that procedural history, what is before the Commission in this docket?

A. PSE proposes the Tacoma LNG Facility tracker mechanism to recover "the return on rate base, depreciation expense, and O&M costs associated with the regulated portion of the Tacoma LNG Facility. Additionally, PSE requests recovery on and of the regulatory assets that were deferred under the Accounting Petition" authorized by the settlement of its 2022 GRC.[22] PSE also seeks approval of its proposed allocation of costs related to the four-mile distribution pipeline provisionally included in rates after its last GRC.[23]

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[19] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Order 24, at Appx. C at 4 ¶ 18.B.
[20] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Order 24, at 118-19 ¶ 406.
[21] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Order 24, at 120 ¶ 410, 138-39 ¶¶ 508-10.
[22] Free, Exh. SEF-1T at 8:6-9.
[23] *See generally* Donahue, Exh. WFD-1T.

IV. CONTESTED DEFERRALS

A. Deferred Return on Rate Base

Q. Above you mentioned that PSE sought to defer the return on its investment in the Tacoma LNG Facility. What is the amount of return on investment that PSE deferred?

A. PSE projects a cumulative deferral balance of $35.2 million through October 2023. Of the $35.2 million balance, $18.9 million will have accumulated between February 2022 and December 2022, and the remaining $16.3 million will have accumulated between January 2023 and October 2023.[24]

Q. What does Staff contest with respect to PSE's deferred return on rate base?

A. Staff contests PSE's recovery of the portion of the deferred return on Tacoma LNG rate base recorded between February 1, 2022 (the date the facility was placed in service) and January 11, 2023 (the date PSE's 2022 GRC rates went into effect). This portion represents $18.9 million of the total return deferral of $35.2 million.[25]

Q. Why does Staff recommend that the Commission disallow PSE from recovering that portion of the deferred return on its investment?

A. The Commission rarely allows a utility to book expenses into a deferral, requiring that any utility seeking to do so show extraordinary circumstances involving material

[24] Free, Exh. SEF-3 at 8, column (b) (balances at December 2022 and October 2023).
[25] *See* Free, Exh. SEF-3 at 8 (December 2022 balance as compared to October 2023 balance).

amounts of money. Allowing a utility to recover not only the return of (an expense), but also the return on a rate base item involves extraordinary ratemaking on top of extraordinary ratemaking. The Commission should rarely grant such treatment, and only with compelling justification.

Q. Staff does not find PSE's justification compelling?

A. No.

Q. Why not?

A. PSE's argument for why it should be allowed to recover the deferred return on rate base lacks merit. Specifically, contrary to the Company's claims, allowing PSE to recover the deferred return on rate base does not promote a defined public policy objective and, therefore, would not incentivize a specific, desired utility behavior.

Q. What argument does PSE make in support of its claim that allowing it to recover the return on the deferral is in the public interest?

A. PSE argues that the justification the Commission used when it authorized the Company to recover from ratepayers the deferred return on its investments in electric vehicle supply equipment (EVSE) – i.e., that authorizing recovery of the return deferral promoted the public policy objective of RCW 80.28.360 – is applicable to the Commission's consideration of the Tacoma LNG return deferral. PSE contends that authorizing rate recovery of the Tacoma LNG return deferral is similarly in the public interest because it would promote the public policy objective of RCW 80.28.280.[26]

Q. Does Staff find that reasoning compelling?

A. No. A look at what happened in the EVSE docket shows why the company should not recover the deferred return on here. The Legislature, through enactment of RCW 80.28.360, directed the Commission to incent utilities to build out EV infrastructure. The Commission did so by allowing PSE to earn a return on the deferral in which PSE booked its investment in EV plant. PSE, in other words, modified its behavior, built out EV infrastructure, and was rewarded for conforming its conduct to what the Legislature determined was good policy.

Here, the situation is entirely different. In RCW 80.28.280 and .290, the Legislature directed the Commission to incent the build out of marine-vessel-LNG-fueling-station infrastructure. But PSE did not modify its behavior in pursuit of the Legislature's preferred policy outcomes here in the way that it did in the EVSE docket. Puget LNG, not PSE, built the infrastructure for the marine-vessel fueling stations. The cost allocations for the liquefaction train, storage tank, and bunkering equipment built into the settlement in Docket UG-151663 show as much. PSE simply built the infrastructure it was already required to build in order to maintain adequate facilities for its natural gas customers. An incentive, a return on the deferral of its plant investment, is unwarranted under those facts.

[26] Free, Exh. SEF-1T at 8:15-9:16.

Q. Why does Staff recommend that the Commission allow PSE to recover the deferred return booked beginning January 11, 2023?

A. PSE should be allowed to recover the portion of the return deferral that accumulated after the 2022 GRC rates went into effect, as that is the date the facility otherwise would have been included in rate base (i.e., had the Commission not authorized the Tacoma LNG tracker). Therefore, Staff does not contest the portion of the deferral balance that PSE will have accumulated between January 2023 (when the 2022 GRC rates went into effect) and the date the TLNG tracker rates go into effect).[27]

B. Deferrals Related to Plant that was not Used and Useful or Prudently Acquired

Q. What does Staff contest with respect to the Tacoma LNG facility plant balances?

A. Staff contests the level of TLNG plant-in-service PSE used to calculate and record depreciation deferrals and return deferrals in calendar year 2022.

Q. What is the issue with the level of Tacoma LNG plant PSE used to record deferrals in 2022?

A. There are two distinct issues that impact the depreciation deferrals and return deferrals. First, a portion of the TLNG facility was not used and useful to ratepayers

[27] While PSE initially requested an effective date of November 1, 2023, given the Commission's procedural schedule the tracker rates are not likely to go into effect until January or February 2024. However, to avoid confusion, Staff calculates the deferral balances using the same deferral period ending October 2023 that PSE used in its initial filing.

until the end of 2022, yet PSE recorded depreciation deferrals and return deferrals in 2022 that were based on the full facility cost, including the portion that was not yet used and useful.

Second, PSE included in its plant balances an amount related to an investment made to address gas quality standards outlined in the TOTE contract and, therefore, should have been fully allocated to Puget LNG.

1. Deferral of return on and expenses for plant that was not used and useful.

Q. You noted above that the Tacoma LNG Facility was intended to serve as a peaking resource. Has the Commission recognized this intended function when discussing whether the Tacoma LNG Facility was considered used and useful?

A. Yes. In its final order of PSE's 2022 GRC – and specifically regarding the Tacoma LNG facility – the Commission noted the standalone benefit for customers of the capacity of a peaking resource, and specifically recognized that "*capacity* is, by itself, a used and useful resource for customers."[28] Again, as a peak day resource, the Tacoma LNG Project was designed to be capable of providing 85,000 Dth of capacity to PSE's core natural gas customers (66,000 Dth/day of vaporized gas from the LNG Facility and 19,000 Dth/day of natural gas intended for Puget LNG but diverted to PSE's distribution system for natural gas customer use).

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[28] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Order 24, at 118 ¶ 405.

Q. Has PSE placed the Tacoma LNG Facility into service?

A. Yes.

Q. When was the Tacoma LNG Facility placed into service?

A. The TLNG facility started operating February 1, 2022.

Q. Has the LNG facility been able to provide that 85,000 Dth of capacity on peak days ever since PSE placed it in service?

A. No. The LNG facility was not able to provide 85,000 Dth of capacity on peak days in 2022.

Q. Please explain why not.

A. PSE needed to make upgrades to its distribution system to allow the Tacoma LNG Facility to inject the full 66,000 Dth of vaporized gas that it was designed to deliver in addition to the 19,000 Dth that can be diverted. PSE originally planned to make these upgrades to its Bonney Lake lateral.[29] However, it never made those upgrades, meaning that in 2022 injection capacity was limited to 50,000 Dth/day and, therefore, the total peak delivery capacity of the TLNG facility was limited to 69,000 Dth/day, or 81 percent of the project's design capacity of 85,000 Dth/day.[30]

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[29] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, McGuire, Exh. CRM-11 at 6:3-15 (July 28, 2022). More specifically, the upgrades to the Bonney Lake lateral were necessary to allow the outlet pressure at the North Tacoma Gate Station to be lowered which is a requirement for injection volumes above 50 million cubic feet per day (MMCFD).

[30] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Order 24, McGuire, Exh. CRM-12 (July 28, 2022).

Q. Is the fact that only 81 percent of the peaking capacity of Tacoma LNG was available in 2022 relevant to the Commission's consideration of whether (or the extent to which) the facility was used and useful in 2022?

A. Yes. Consistent with the Commission's determinations with respect to Tacoma LNG in PSE's 2022 GRC, the available capacity of the facility *is the used and useful resource.* Therefore, Tacoma LNG can be considered used and useful only to the extent that its advertised capacity as a peaking resource is in service and able to be called upon for the benefit of PSE's natural gas customers. Given that the facility's capacity as a peaking resource was limited to 81 percent in 2022, one must conclude that the facility was only 81 percent used and useful in 2022.

Q. Is the full capacity of the facility now available?

A. Yes. Staff learned through discovery that in 2022 PSE installed a revised outlet configuration at the North Tacoma Gate Station which enables the Tacoma LNG facility to inject vaporized gas directly into PSE's gas distribution system at the full designed capacity of 66,000 Dth/day.[31]

PSE did not identify the specific date the facility was able to begin operating at full capacity, stating in its discovery response only that the maximum hourly rate capability was tested and proven during the winter of 2022-2023.[32] For the purposes of recalculating the depreciation deferrals and return deferral based on only used and

[31] Erdahl, Exh. BAE-4.
[32] Erdahl, Exh. BAE-4.

useful plant, Staff assumed that the full capacity of the facility was available starting January 1, 2023.

Q. What does Staff recommend?

A. Staff recommends that, for the purposes of calculating the depreciation deferrals and return deferrals for 2022, the Commission remove from rate base the 19 percent (16,000/85,000 Dth) of the facility that was not used and useful for ratepayers in 2022.

Q. How does Staff's recommendation impact revenue requirement?

A. Reflecting the plant at 81 percent used and useful in 2022 reduces gross plant by approximately $46 million.[33] The associated $0.7 million reduction to the depreciation deferral reduces the annual amortization expense by $0.3 million shown on Exh. BAE-2, line 28, col. c.[34] [35]

Given that Staff is recommending that the 2022 return deferrals be removed from revenue requirement entirely, reflecting the plant at 81 percent used and useful in 2022 has no additional impact on the portion of revenue requirement associated with the return deferral.

If the Commission rejects Staff's recommendation to remove the 2022 return deferrals, adopting Staff's recommendation to reflect the plant at 81 percent used and useful in 2022 would reduce the return deferral by approximately $3.6 million

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[33] See Free, Exh. SEF-3 at 2, col. (b) (adjusted for 81 percent used and useful).
[34] Erdahl, Exh. BAE-2.
[35] This includes the revenue requirement impact of a higher rate-year rate base reflecting a lower accumulated depreciation reserve resulting from a lower depreciation expense in 2022.

which, in turn, would reduce annual amortization expense by approximately $0.9 million.

2. Imprudent investments in the liquefaction equipment.

Q. Did Staff investigate changes in the design of the Tacoma LNG Facility's pre-liquefaction treatment equipment?

A. Yes.

Q. Why was that equipment redesigned?

A. As explained by PSE witness Roberts, Exh. RJR-1T, around 2017 there were changes in the composition of natural gas supplied to it. The redesign resulted from those changes.

Q. Does Staff have any concerns about the redesign and the resulting incremental costs given that the change in gas composition prompted it?

A. Yes.

Q. What is Staff's concern?

A. The change in gas composition does not present problems for PSE's natural gas customers. They burn the gas as currently constituted every day, and they have done so since 2017. But the change in composition does affect the customers of PSE's unregulated affiliate, Puget LNG. There are specific provisions in Puget LNG's contract with one of its customers, Totem Ocean Express, Inc. (TOTE), that impose certain requirements on the composition of gas that Puget LNG supplies. The change in gas composition created problems for Puget LNG, as noted in Robert's Confidential Exhibit 8C, Exh. RJR-8C at 15, which recognizes that [redacted].

Q. Did Staff investigate whether PSE's or Puget LNG's needs drove the redesign?

A. Yes. Staff sought to obtain that information from PSE with a data request. Specifically, Staff asked PSE "If the facility were being used only for liquefication and LNG storage to later be vaporized to meet peak-shaving needs, would these changes have been necessary?"

Q. What did Staff learn from PSE's answer to that data request?

A. PSE answered "No" to Staff's question.[36] Staff thus concludes that the redesign was not intended to serve the interests of PSE's ratepayers but was intended instead to allow Puget LNG to satisfy the terms of its contract.

Q. What does Staff recommend with regard to the capital invested in the redesigned plant?

[36] Erdahl, Exh. BAE-5.

A. Staff recommends that the Commission deny recovery of the return of and the return on the incremental capital involved with the redesign in the LNG tracker's revenue requirement, and thus disallow recovery of those amounts in rates.

Q. On what basis should the Commission deny PSE recovery?

A. Staff recommends that the Commission conclude those expenses were imprudently incurred on behalf of PSE customers.

Q. Why does Staff view those expenses as imprudent?

A. The first step in any prudence inquiry requires a utility seeking cost recovery to demonstrate a need for the expense.[37] Here, while Puget LNG may have had a need to redesign the facility with more capital-intensive equipment, neither PSE nor its customers did. PSE's failure to show a regulated need for the redesign means that it did not prudently act when incurring expenses related to the redesign.

Q. How does Staff's recommendation impact revenue requirement?

A. Removing the $0.5 million in gross plant[38][39] has a modest impact on the depreciation deferral ($20,000 reduction) and return deferral ($40,000 reduction). The overall impact of Staff's recommendation to reflect the $0.5 million in plant – which includes the impact on the deferrals as well as on going-forward rate base and

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[37] *E.g., Wash. Utils. & Transp. Comm'n v. Puget Sound Energy, Inc.*, Dockets UE-111048 & UG0111949, Order 08, 148 ¶ 409 (May 7, 2012)..
[38] Erdahl, Exh. BAE-2, at 14, col. (c).
[39] Erdahl, Exh. BAE-6.

depreciation expense – is a $0.05 million reduction to revenue requirement relative to PSE's as-filed request.

V. PROVISIONAL COSTS OF THE FOUR-MILE DISTRIBUTION LINE

Q. Please describe the four-mile distribution line.

A. PSE installed a new 16-inch line to integrate the LNG Facility with its distribution system.[40] This line runs between the existing North Tacoma high pressure line and its endpoint at the Port of Tacoma. According to PSE witness Donahue, a 12-inch distribution line would have been adequate to get natural gas <u>to</u> the LNG facility for liquefaction but serving PSE customers during peak demand with 66,000Dth/day <u>from</u> the LNG facility required a 16-inch line.[41]

Q. Is the four-mile distribution line referred to in this docket the same 16-inch distribution line that is referred to in Docket UG-151663?

A. Yes. In the 2015 Tacoma LNG docket the four-mile distribution line was referred to as the 16-inch distribution line.

Q. Is the cost of the four-mile distribution pipeline currently in rates?

A. Yes. The settling parties in PSE's 2022 GRC agreed to allow PSE to recover the costs of the four-mile pipeline through base rates.[42] The Commission, however,

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[40] *In re Petition of PSE*, Docket UG-151663, Order 10, at 27 ¶ 62.
[41] Donahue, Exh. WFD-1T at 6:9-13.
[42] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Appx. C at 4 ¶ 18.A.4.

required further process in terms of the proper allocation of those costs. It conditioned its approval of the settlement resolving the GRC on provisional inclusion of the pipeline's costs in rates, with the understanding that it would make a final determination as to proper cost allocation when PSE sought recovery of the LNG deferral.[43] The rates for this distribution pipeline are included on Schedule 141D.

Q. How is the four-mile pipeline used?

A. The four-mile pipeline can be used to deliver 21,400 Dth/day of natural gas to the Tacoma LNG Facility and, at other times, to deliver 66,000 Dth/day of vaporized natural gas from the Tacoma LNG Facility to other portions of the PSE distribution system.

Q. What is the cost of the four-mile distribution pipe?

A. The total cost of the four-mile pipe is $27.4 million.

Q. What is the estimated difference in costs between constructing four miles of 12-inch pipeline versus four miles of 16-inch pipeline?

A. The estimated cost difference between constructing four miles of 12-inch pipeline and four miles of 16-inch pipeline was approximately $4.1 million, according to PSE witness Donahue.[44]

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[43] *Wash. Utils. & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 & UG-210918, Final Order 24/10 at 120 ¶ 410.
[44] Donahue, Exh. WFD-1T at 7:8-9.

Q. How does PSE propose to allocate the $27.4 million in costs of the four-mile pipeline?

A. Of the $27.4 million, PSE proposes that $10.48 million, or 38.3 percent, of the costs be allocated to Puget LNG while $16.92 million, or 61.8 percent, of the costs be allocated to PSE.[45]

Q. How does PSE arrive at this allocation?

A. First PSE takes the estimated cost difference between constructing four miles of 12-inch pipeline and four miles of 16-inch pipeline, $4.1 million, and allocates 100 percent of that cost differential to PSE.

Next, PSE takes the remaining $23.29 million in costs and proposes a 50/50 split based on gas going to and from the Tacoma LNG plant. PSE applies the previously agreed upon 90/10 liquefaction allocation to the $11.65 million of costs associated with gas flowing to the plant via the pipeline, resulting in $1.16 million being allocated to PSE and $10.48 million being allocated to Puget LNG.

Finally, PSE allocates 100 percent of the $11.65 million costs associated with gas flowing from the plant via the pipeline to PSE.

Q. Does Staff agree with PSE's proposed allocation of the four-mile distribution line to PSE customers?

A. No. Staff does not agree with PSE's allocation of the four-mile distribution pipeline.

[45] Donahue, Exh. WFD-3.

Q. Why not?

A. Staff finds PSE's allocation inconsistent with principles of cost causation. Staff, accordingly, recommends a different allocation based on maximum capacity and how the pipeline will be used to transport gas to and from the facility rather than PSE's proposed 50/50 split.

Q. What factors limit the capacity of the pipeline to carry gas to and from the Tacoma LNG Facility?

A. In order for vaporized natural gas to be delivered to PSE customers via the pipeline from the liquefied natural gas storage tanks at the Tacoma LNG facility, the liquefied natural gas must first be vaporized. The Puget Sound Clean Air Agency (PSCAA) Notice of Construction No. 11286[46] under which the LNG facility operates includes restrictions and conditions which limit the LNG vaporizer use. Under restriction 4, the vaporizer must "operate no more than 240 hours (10 days) per any 12 consecutive month period." According to PSE's response to WUTC Staff DR No. 018, Exhibit BAE-8, 66,000 Dth can be vaporized in a day. This limit on the hours the vaporizer can be used subsequently limiting the use of the pipeline to transport vaporized gas from the Tacoma LNG facility.

Meanwhile, vaporized gas traveling to the facility via the pipeline is limited to a maximum of 21,400 Dth/day based on the liquefaction train's capacity.

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[46] Erdahl, BAE-7.

Q. Given those constraints, how does staff propose to allocate the $27.4 million in costs of the four-mile pipeline?

A. Of the $27.4 million, Staff proposes that $19.29 million, or 70.4 percent, of the costs be allocated to Puget LNG while $8.11 million, or 29.6 percent, of the costs be allocated to PSE. Staff's proposed allocation is shown on Exh. BAE-3.

Q. How does staff arrive at this allocation?

A. First Staff takes the estimated cost difference between constructing four miles of 12-inch pipeline and four miles of 16-inch pipeline, $4.1 million, and allocates 100 percent of that cost differential to PSE. It does so because a 12-inch line suffices to transport gas to the facility, but the 16-inch line is necessary to transport the full 66,000 Dth/day from the vaporizer, and only PSE's customers benefit from the injection of that vaporized natural gas into PSE's system.

Next staff takes the maximum vaporization of 66,000 Dth per day and multiplies it by 10, the day limit set by the PSCAA Notice of Construction, arriving at 660,000 Dth per year.[47]

Staff takes the remaining 355 days in a year and multiplies that by the maximum liquefaction of 21,400 Dth per day, resulting in 7,597,000 Dth per year.[48] Staff then adds 660,000 Dth and 7,597,000 Dth together to arrive at 8,257,000 representing the annual total capacity for natural gas flowing from and to the Tacoma LNG Facility via the pipeline based on vaporization and liquefaction limits.

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[47] Erdahl, Exh. BAE-11.
[48] Erdahl, Exh. BAE-11.

Staff then divides the total vaporized Dth/year of 660,000 by the total Dth/year of 8,257,000 to calculate the percentage the distribution line can be used to provide natural gas from the facility via the pipeline to PSE customers. This works out to eight percent,[49] leaving the pipeline to be used 92 percent of the time to transport gas to the Tacoma LNG Facility.

Staff splits the remaining $23.29 million in costs (after subtracting out the incremental cost of the 16-inch line) 92/8 percent[50] based on 92 percent of the gas flowing to the Tacoma LNG facility and 8 percent of the gas flowing from the facility. Staff then applies the previously agreed upon 90/10 liquefaction allocation to the $21.43 million costs associated with gas flowing to the plant via the pipeline, resulting in $2.14 million being allocated to PSE and $19.29 million being allocated to Puget LNG. This calculation is conservative because it assumes PSE customers will need the most gas that may be vaporized per the PSCAA permit. A lesser amount may be provided to PSE customers because it is not a requirement to provide gas to PSE customers of 660,000 Dth/year.

Finally, Staff allocates 100 percent of the $1.86 million costs associated with gas flowing from the plant via the pipeline to PSE because, again, only PSE customers benefit from the injection of this gas onto the system.

Q. What does the overall split of costs associated with the four-mile distribution pipeline upgrade look like under Staff's proposal compared to PSE's proposal?

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[49] Erdahl, Exh. BAE-11.
[50] Erdahl, Exh. BAE-3 at 2-3, col. (b).

A. The following is a comparison of PSE's proposal[51] vs. staff's recommendation:[52]

<u>PSE's proposal</u>:

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
					Per PSE Theoretical Allocation			**Per PSE CapEx Allocated**			
	Project		CapEx ($Million)	In-Service Date	Non LNG PSE Dist	LNG for PSE Dist	PSE Dist for PLNG	Non LNG PSE Dist	LNG for PSE Dist	PSE Dist for PLNG	Total
	Upgrade 1- new 4 mile line										
1	4 mile 16" line (est. attributed as follows:)										
2	85% for permits,trench & 12" pipe (21,400 to plant)	50%	$ 11.65	Oct.2017	0.0%	10.0%	90.0%	$ -	$ 1.16	$ 10.48	
3	85% for permits,trench & 12" pipe (21,400 from plant	50%	$ 11.65	Oct.2017	0.0%	100.0%	0.0%	$ -	$ 11.65	$ -	
4	15% for upgrade to 16" (66,000 less 21,400 from plant)		$ 4.11	Oct.2017	0.0%	100.0%	0.0%	$ -	$ 4.11	$ -	
5	*other volumes, but unplanned, so 100% attributed to*		**$ 27.40**					**$ -**	**$ 16.92**	**$ 10.48**	**$ 27.40**
6	*plant)*							0.0%	61.8%	**38.3%**	
7								PSE=	**61.8%**		

<u>Staff's recommendation</u>:

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
					Per PSE Theoretical Allocation			**Per PSE CapEx Allocated**			
	Project		CapEx ($Million)	In-Service Date	Non LNG PSE Dist	LNG for PSE Dist	PSE Dist for PLNG	Non LNG PSE Dist	LNG for PSE Dist	PSE Dist for PLNG	Total
	Upgrade 1- new 4 mile line										
1	4 mile 16" line (est. attributed as follows:)										
2	85% for permits,trench & 12" pipe (21,400 to plant)	92%	$ 21.43	Oct.2017	0.0%	10.0%	90.0%	$ -	$ 2.14	$ 19.29	
3	85% for permits,trench & 12" pipe (21,400 from plant)	8%	$ 1.86	Oct.2017	0.0%	100.0%	0.0%	$ -	$ 1.86	$ -	
4	15% for upgrade to 16" (66,000 less 21,400 from plant)		$ 4.11	Oct.2017	0.0%	100.0%	0.0%	$ -	$ 4.11	$ -	
5	*other volumes, but unplanned, so 100% attributed to*		**$ 27.40**					**$ -**	**$ 8.11**	**$ 19.29**	**$ 27.40**
6	*plant)*							0.0%	29.6%	**70.4%**	
7	to PSE							PSE=	**29.6%**		

Staff's recommendation shifts $8.81 million in costs from PSE customers to Puget LNG.

Q. Is this the only change that staff recommends regarding the allocation of cost of the four-mile distribution line to PSE customers?

A. No. Staff recommends the Commission order PSE to recalculate under Rule 6[53] whether Puget LNG must make a contribution in aid of construction (CIAC) given Staff's recommended changes in the allocation of the four-mile pipeline.

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[51] Donahue, Exh. WFD-3.
[52] Erdahl, Exh. BAE-3.
[53] Donahue, Exh. WFD-4.

Q. What is the purpose of the Rule 6 calculation?

A. The purpose of the Rule 6 calculation is to determine whether a customer is required to make a CAIC.[54] If Puget LNG owes more for the distribution upgrades related to providing service to the Tacoma LNG Facility than it will pay over five years, then it must pay a lump sum or contribution up front to cover costs that result from this investment.

Q. Why would the rates of the four-mile distribution pipeline need to be updated depending on the results of the Rule 6 calculation?

A. If a CIAC is made to PSE for an investment, PSE will need to adjust the amount of booked plant by the value of the contribution to prevent double recovery of the contribution amount.

Q. What is staff's recommendation regarding the provisional rates for the costs of the four-mile distribution pipeline?

A. Staff recommends that after PSE has determined whether Puget LNG must make a contribution in aid of construction, PSE refund the difference between the rates it has provisionally collected and the rates produced by the allocations applied to the four-mile pipeline arrived at in this proceeding.

Q. How should PSE refund the provisional rates related to the four-mile distribution line?

[54] Donahue, Exh. WFD-1T at 8:12-20, 9:1-3.

A. Staff proposes the refund be included as a separate line item/rate(refund) on Schedule 141D. Additionally, rates need to be updated on Schedule 141D to reflect Commission approved rates going forward.

VI. OTHER ISSUES

Q. Who regulates the emissions generated by the Tacoma LNG Facility?

A. The Tacoma LNG Facility was built and now operates pursuant to a Notice of Construction issued by the PSCAA to protect air quality.

Q. What conditions does the PSCAA Notice of Construction impose on the operation of the LNG Facility?

A. As noted above, the PSCAA limits the number of days that the vaporizer may operate.[55] It also requires that the Tacoma LNG Facility produce or process no "more than 250,000 gallons of liquefied natural gas per calendar day."[56]

Q. Did the Tacoma LNG Facility comply with PSCAA conditions and restrictions?

A. In attempting to determine the proper allocation of the four-mile pipe running to the facility, Staff asked PSE "What is the most liquefied gas the facility has generated in a day?" PSE responded with "22,529 Dth (gross)/ 257,507 gallons (gross),"[57]

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[55] Erdahl, Exh. BAE-7
[56] Erdahl, Exh. BAE-7.
[57] Erdahl, Exh. BAE-9 at 2 (c).

indicating that the Tacoma LNG Facility operated in violation of its Notice of Construction Permit.

Q. What day did PSE state that production of an unlawful amount of LNG occur on?

A. May 18, 2023.[58]

Q. Did the PSCAA take enforcement action against PSE?

A. Staff asked the company that question during discovery. PSE answered that, as of "August 22, 2023,"[59] the PSCAA had not taken any enforcement action for the permit violation occurring on May 18, 2023. Staff cannot say whether the PSCAA is unaware of the violation or has exercised its discretion not to take enforcement action related to it.

Q. Did PSE produce more LNG than allowed on any other occasion?

A. Yes. PSE produced a spreadsheet during discovery that indicates the Tacoma LNG Facility produced more than 250,000 gallons in a calendar day on multiple occasions.[60]

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[58] Erdahl, Exh. BAE-10.
[59] Erdahl, Exh. BAE-10.
[60] Erdahl, Exh. BAE-12.

Q. Did Staff investigation the operational structure that produced those permit violations?

A. Yes. Staff reviewed the O&M Services Agreement between Puget Sound Energy, Inc. and NAES Corporation dated as of January 27, 2020,[61] and identified several areas in the contract that relate to PSCAA compliance.

Q. What did Staff discover in that contract?

A. The contract explicitly states in Section 10.4 that NAES Corporation will be responsible for any liabilities connected with its failure to perform services in accordance with environmental law as well as for any related permit violations.[62] Additionally, the contract includes in Appendix B an incentive and liquidated damages provision which includes an environmental factor where the overall incentive will be reduced by [redacted].[63]

[61] Roberts, Exh. RJR-10C.
[62] Roberts, Exh. RJR-10C.
[63] Roberts, Exh. RJR-10C.

Q. Does Staff have any other operational concerns?

A. Yes. PSE provided no testimony indicating that it was previously aware of NAES Corporation's PSCAA permit violations, nor did PSE indicate that the contract had been reevaluated to determine the prudence of continuing to have NAES Corporation operate the Tacoma LNG facility after the violations.

Q. What does Staff take away from the permit violations?

A. While the UTC is not an environmental regulator, it is tasked with "serving the public interest and may consider such factors as including, but not limited to, environmental health and greenhouse gas emissions reductions, health and safety concerns."[64] Commission staff finds it unacceptable for rate payers to fund operation of the Tacoma LNG Facility when it is not compliant with PSCAA permit restrictions as the Clean Air Act, which established PSCAA, was put in place to "preserve, protect, and enhance the air quality for current and future generations."[65] Additionally, as discussed above, the Tacoma LNG Facility sits close to Tribal lands, vulnerable populations, and overburdened communities. Staff is highly concerned about the lack of environmental justice and equitable distribution of burdens resulting from non-compliant operation of the Tacoma LNG facility by NAES Corporation.

[64] RCW 80.28.425.
[65] RCW 70A.15.1005.

Q. What does Staff recommend the Commission do in this regard?

A. Staff recommends that the Commission order PSE to complete monthly audits of NAES Corporation's LNG production operations to ensure compliance with the PSCAA permit restrictions, and also that it require PSE to report any permit violations directly to PSCAA, copying the Commission on any such communication. Staff also recommends that the Commission order PSE to seek an amendment to the O&M Services Agreement between Puget Sound Energy, Inc. and NAES Corporation to further dis-incent non-compliance with environmental laws and permit requirements. Specifically, the Commission should order PSE to seek modification of the existing incentive provision, assigning greater weight to the environmental factor component of the incentive calculation or adding a new separate provision that outlines specific damages that may be owed by NAES Corporation for each instance of environmental law or permit violation.

Q. Does this conclude your testimony?

A. Yes.