EXH. KCH-1T
DOCKET NOS. UE-220066/UG-220067
2022 PSE GENERAL RATE CASE
WITNESS: KEVIN C. HIGGINS

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, **Complainant,** **v.** **PUGET SOUND ENERGY, INC.,** **Respondent.**	**Docket No. UE-220066** **Docket No. UG-220067**

RESPONSE TESTIMONY OF

KEVIN C. HIGGINS

ON BEHALF OF NUCOR STEEL SEATTLE, INC.

July 28, 2022

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RESPONSE TESTIMONY OF KEVIN C. HIGGINS

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Kevin C. Higgins. My business address is 111 East Broadway, Suite 1200, Salt Lake City, Utah, 84111.

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

A. I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

Q. On whose behalf are you testifying?

A. This testimony is being sponsored by Nucor Steel Seattle, Inc. ("Nucor"). Nucor owns and operates a steel mill in Seattle and takes gas transportation service from Puget Sound Energy, Inc. ("PSE") under Schedule 87T.

Q. Please describe your professional experience and qualifications.

A. My academic background is in economics, and I have completed all coursework and field examinations toward the Ph.D. in Economics at the University of Utah. In addition, I have served on the adjunct faculties of both the University of Utah and Westminster College, where I taught undergraduate and graduate courses in economics. I joined Energy Strategies in 1995, where I assist private and public sector clients in the areas of energy-related economic and policy analysis, including evaluation of electric and gas utility rate matters.

Prior to joining Energy Strategies, I held policy positions in state and local government. From 1983 to 1990, I was an economist, then assistant director, for the Utah Energy Office, where I helped develop and implement state energy policy. From 1991 to 1994, I was chief of staff to the chairman of the Salt Lake County Commission, where I was responsible for development and implementation of a broad spectrum of public policy at the local government level.

Q. Have you previously appeared as an expert witness?

A. Yes. I have testified before this Commission in eight PSE general rate cases dating back to 2001, as well as PSE's 2017 retail wheeling proceeding, 2014 cost of service proceeding, 2013 expedited rate filing proceeding, 2013 decoupling proceeding, and the 2009 proceeding that addressed the treatment of revenues from PSE's sales of Renewable Energy Credits.

In addition, I have testified in approximately 270 other proceedings on the subjects of utility rates and regulatory policy before state utility regulators in Alaska, Arizona, Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Utah, Virginia, West Virginia, and Wyoming. I have also filed affidavits in proceedings before the Federal Energy Regulatory Commission and prepared expert reports in state and federal court proceedings involving utility matters.

II. RECOMMENDATIONS

Q. What is the purpose of your testimony?

A. My testimony pertains to PSE's gas operations and addresses class cost allocation, rate design for Schedules 141R and 141N, and revenue allocation. Absence of comment on my part regarding a particular issue does not signify support for (or opposition to) PSE's filing with respect to any non-discussed issue(s).

Q. Please summarize your conclusions and recommendations.

A. I offer the following recommendations:

- Schedules 85, 85T, 86, 86T, 87, and 87T should be excluded from the allocation of small distribution mains (<2") and 87 and 87T should also be excluded from the allocation of medium mains (2-3"), consistent with past practice and the principles of cost causation.
- I agree with PSE's proposed functionalization and allocation of FERC Account 870, which pertains to operation supervision and engineering.
- Transportation rate schedules should be excluded from the allocation of costs associated with the Tacoma Liquified Natural Gas (LNG) Project mains that are included in base rates. The associated Tacoma LNG Facility is designed to serve as a peaking resource for sales customers such that allocation to transportation rate schedules is unwarranted and inappropriate.
- Transportation rate schedules should also be excluded from the allocation of costs of the Tacoma LNG Facility and related mains included in proposed Schedules 141R and 141N, again because the LNG Facility will serve sales customers.

- Transportation rate schedules should be excluded as well from the allocation of costs of the Renewable Natural Gas (RNG) projects included in proposed Schedules 141R and 141N because the RNG projects will process and deliver gas for sales service.
- If a Multiyear Rate Plan (MYRP) is adopted, then the Schedules 141R and 141N rates proposed by PSE to recover the MYRP revenue requirement require a complete overhaul for classes that serve both sales and transportation customers. Specifically, the rates should be redesigned to ensure that LNG and RNG-related costs are recovered from sales customers only. I also recommend that Schedules 141R and 141N rates be applied pro-rata to each volumetric block within an applicable schedule.
- I support the general base rate revenue allocation parameters utilized by PSE, which cap the maximum base rate impact for any class at 150% of the system average increase. I also considered the results of my recommended cost-of-service study to determine my recommended revenue allocation.

III. CLASS COST ALLOCATION

A. <u>Small and Medium Distribution Mains Allocation</u>

Q. Has PSE changed its allocation approach for small and medium-sized distribution mains in this case?

A. Yes. Historically, PSE has excluded certain rate classes from the allocation of smaller distribution mains that do not serve those classes.[1] Specifically, in its 2019 general rate case, PSE excluded Schedules 85, 85T, 86, 86T, 87, and 87T

[1] Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, pp. 20-21.

from the allocation of small mains (<2”), and also excluded 87 and 87T from the allocation of medium mains (2-3”).[2] However, in this case, PSE’s cost-of-service study does not distinguish between main sizes, because the cost allocation method specified in WAC 480-85 does not describe excluding certain classes from the allocation of smaller mains.[3]

Q. What allocation method is prescribed for mains in WAC 480-85?

A. The approved natural gas cost of service allocation methods are outlined in Table 4 of WAC 480-85-060. On the allocation of distribution mains, Table 4 states:

> Direct assignment of distribution mains to a single customer class where practical. All other costs assigned based on design day (peak) and annual throughput (average) based on system load factor.

Regarding this approved method, the Commission explained in General Order R-599:

> One principle of cost of service is assigning costs to a customer or customer class directly, where the costs can be directly attributed to that customer or customer class. It is not the Commission’s intent to change this principle and, as it applies to the allocation of distribution mains, we add language to clarify the Commission’s intent that distribution mains should be allocated to a customer class directly, where practical, with all other costs being allocated based upon design day and annual throughput based on the system load factor.[4]

Q. Does PSE directly assign a portion of distribution mains costs?

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[2] Dockets UE-190259 & UG-190260, Direct Testimony of John Taylor, PSE Exh. JDT-1T, pp. 17-18. The Special Contract class was also excluded from the generic mains cost allocation since the Special Contract class was directly assigned mains costs.

[3] Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, pp. 20-21.

[4] Dockets UE-170002 & UG-170003, General Order R-599, Order Amending and Adopting Rules Permanently, excerpted from Paragraph 77.

A. Yes, PSE directly assigns a portion of distribution mains costs to the Special Contract class based on a special study that determined the specific mains that are utilized to serve the Special Contract customer. Accordingly, the Special Contract class was excluded from the allocation of the remaining balance of mains. This approach is consistent with that used in the 2019 general rate case.[5]

Q. What reasons did PSE provide in the 2019 general rate case for excluding large commercial and industrial classes from the allocation of smaller mains?

A. In his direct testimony in the 2019 general rate case, PSE witness John D. Taylor explained the Company's approach as follows:

> Regarding the smallest mains (less than two inches), a review of the meter sizes for the Non-Exclusive Interruptible (87 and 87T) showed that it is reasonable to assume that none of these customers are served from mains that are smaller than four inches. Further, the smallest main are in isolated locations on PSE's gas distribution system and are unlikely to provide benefits to the large gas commercial and industrial loads served on Schedules 85, 85T, 86, 86T, 87, and 87T. Further, none of the medium size mains were allocated to the Non-Exclusive Interruptible classes (Schedules 87 & 87T), given the mains serving these customers were four inch or larger.[6]

Q. Do you agree with Mr. Taylor's reasoning for excluding certain customer classes from the allocation of costs associated with small and medium sized mains in the 2019 general rate case?

A. Yes, absolutely. It makes no sense and is fundamentally unreasonable to allocate the cost of smaller mains to classes that do not use them. Mr. Taylor's treatment was correct in 2019 and the same approach is equally correct in this case.

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[5] Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, p. 22.

[6] Dockets UE-190259 & UG-190260, Direct Testimony of John Taylor, Exhibit JDT-1T, pp. 17-18.

Unfortunately, the Company's perception that the current rules require customers that do not use an entire class of investment to pay for it anyway has prevented PSE from presenting a fair and reasonable class cost-of-service study that adheres to basic cost causation principles in this case.

Q. Does the change to the mains cost allocation method in this case materially impact the cost-of-service results?

A. Yes, particularly for the Non-Exclusive Interruptible Schedules (87/87T). The new method utilized by PSE, in which Schedules 85, 85T, 86, 86T, 87 and 87T are included in the allocation of mains of all sizes results in a 69.4% increase in the *total* rate base allocated to Schedules 87/87T compared to the prior method.[7] This draconian impact is not justified on the basis of cost but rather is the result of allocating to Schedules 87/87T the cost of small and medium mains that customers in this class do not utilize. The impacts on other classes are much less dramatic. For example, the new method reduces the total rate base allocated to the Residential class by only 1.1%. In other words, the unwarranted cost shift of nearly 70% of rate base to Schedules 87/87T results in a reduction to Residential rate base of little more than one percent.

Q. Do you believe that it is appropriate to distinguish between distribution main sizes for the purpose of cost allocation in this case?

A. Yes, it is essential in the interest of fairness and the principles of cost causation to exclude certain customer classes from the allocation of small and medium sized mains that they do not utilize, consistent with PSE's approach in the 2019 general

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[7] The rate base shown in Exhibit KCH-3, can be compared to the rate base in Mr. Taylor's PSE Exh. JDT-4, Tab E- Summary of Results (WAC).

rate case. I believe this approach is also consistent with the Commission's commitment to the principle of directly assigning costs where practical.

Q. Please describe your recommended approach.

A. I recommend grouping distribution mains into three size categories: small (less than 2"), medium (2-3"), and large (≥4"), with each category allocated using the peak and average method among the subset of customer classes that utilize that size main.

I recommend that Schedules 85, 85T, 86, 86T, 87, and 87T be excluded from the allocation of small mains and 87 and 87T also be excluded from the allocation of medium mains,[8] consistent with past practice and cost causation principles.

Q. Are you requesting that the Commission grant an exemption from the distribution mains allocation method described in WAC 480-85?

A. To the extent that my recommended approach requires an exemption from WAC 480-85, then yes, I recommend that the Commission grant such an exemption.

However, I believe that my recommended method of determining mains cost responsibility is fully in keeping with the spirit of the Commission's directive to directly assign mains costs where possible. My recommended method incorporates a form of direct assignment, in that each main size category is first directly assigned to the subset of customer classes that utilize mains of that size.

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[8] To the extent that any future customers in these classes were to utilize smaller mains, it would be appropriate to limit the allocation of the costs of those mains to only the customers(s) using them and to implement an "up-charge" within the class rate design to reflect those specific customers' use of the smaller mains, while excluding the other customers in the class from cost responsibility for the mains they do not utilize.

Then, the costs of each main size category are allocated among the appropriate customer classes using the peak and average method, in accordance with WAC 480-85-60.

My proposed modification is in the public interest because it would better align with cost causation and is consistent with the principle that costs that can be directly attributed to a customer or class should be directly assigned to that customer or class, as described in General Order R-599.[9]

To underscore this point, consider that if only one class used smaller mains it would be indisputable that the costs of those smaller mains should be directly assigned to that class and *not allocated to the classes that do not use the smaller mains*. The mere fact that the customers using the smaller mains can be subdivided into more than one class does not alter the logic that classes not using the smaller mains should not be allocated any of the costs of those mains. The Commission's commitment to directly assigning costs when possible is firmly grounded in the principles of cost causation and my recommended treatment for directly assigning and allocating smaller mains is fully aligned with the Commission's policy regarding direct assignment of costs.

Q. What are the results of the cost-of-service study reflecting your recommended mains allocation method?

A. These results are summarized in Table KCH-1, below, alongside the results of PSE's study, at PSE's proposed total revenue requirement. I have also provided a Summary of Results of my recommended cost-of-service study based on the Tab

[9] Dockets UE-170002 & UG-170003, General Order R-599, Order Amending and Adopting Rules Permanently, ¶ 77.

E format of the Commission's gas cost of service template in Exhibit KCH-2.[10] I note that Table KCH-1 reflects PSE's recommended allocation of FERC Account 870 and excludes transportation classes from the allocation of Tacoma LNG Project mains[11] in both scenarios, which I will discuss in the following sections of my testimony.

Table KCH-1
Comparison of PSE and Nucor
Cost of Service Results

	Increase/(Decrease) at Equalized ROR			
	PSE Direct COSS		Nucor COSS	
Rate Class	**$**	**%[12]**	**$**	**%**
Residential (16,23,53)	10,983,466	2.96%	15,047,228	4.05%
Comm. & Indus. (31,31T)	36,775,378	33.12%	38,239,277	34.44%
Large Volume (41,41T)	4,130,186	19.95%	4,645,411	22.44%
Interruptible (85, 85T)	3,937,180	45.76%	2,857,329	33.21%
Limited Interruptible (86, 86T)	(185,604)	-12.41%	(281,525)	-18.82%
Non-Exclusive Interruptible (87, 87T)	7,303,973	130.73%	2,440,272	43.68%
Contracts	(486,330)	-29.48%	(489,745)	-29.68%
Total	62,458,247	12.00%	62,458,247	12.00%

B. <u>FERC Account 870 Functionalization & Allocation</u>

Q. What costs are recorded in FERC Account 870?

A. FERC Account 870, operation supervision and engineering, is listed under the Transmission function in FERC's Uniform System of Accounts ("USofA"). WAC 480-85-060 also indicates that Account 870 should be functionalized as

[10] The complete results using the Commission's gas cost of service template are provided in my workpaper, 220066-67-Nucor-WP-KCH-GCOST-Nucor-Recommended-COSS-7-22.

[11] The Nucor COSS also reflects a minor correction to the amount of Tacoma LNG Mains gross plant and accumulated depreciation, discussed later in my testimony.

[12] The percentages in this table represent the increase relative to current Gas Service Revenues (i.e., excluding Other Revenues).

Transmission. However, the description of this account in FERC's USofA makes no mention of transmission, stating:

> This account shall include the cost of labor and expenses incurred in the general supervision and direction of *distribution* system operations. Direct supervision of specific activities such as load dispatching, mains operation, removing and resetting meters, etc., shall be charged to the appropriate account. (See operating expense instruction 1.) [13]

According to PSE witness John D. Taylor, this account relates to the distribution system and should be functionalized as Distribution.[14] PSE includes $2.3 million in total expense in Account 870 in its cost-of-service model and allocates these costs to classes based on the overall allocation of other distribution operation expenses.

Q. Do you agree with PSE's functionalization and allocation of Account 870?

A. Yes. Based on Mr. Taylor's characterization of the nature of these costs as incurred by PSE, I agree with PSE's proposed functionalization and allocation of this account.

C. <u>LNG-Related Mains Class Cost Allocation – Base Rates</u>

Q. What amount of Tacoma LNG Project mains investment is included in PSE's revenue requirement?

A. PSE is including in rate base $29.5 million of LNG-related mains gross plant and $2.5 million in accumulated depreciation, for net plant of $26.9 million.[15]

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[13] 18 CFR § 201, Uniform System of Accounts Prescribed for Natural Gas Companies Subject to the Provisions of the Natural Gas Act (emphasis added).

[14] Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, p. 17.

[15] *See* PSE Exh. NEW-PSE-WP-SEF-11G-RemoveUPGRADETacomaLNG-22GRC-01-2022, Tab FERC G. The stated amounts are for FERC Account 376 only. PSE is also including LNG-related plant in Account 374 and 378, as well as offsetting ADIT, for net rate base of $23.8 million.

However, the mains plant designated as LNG-related in PSE's cost-of-service study appears to be understated relative to the plant included in the revenue requirement. PSE's cost-of-service study designates $14.9 million in gross plant and $5.5 million in accumulated depreciation for LNG-related mains, or net plant of $9.3 million. It appears that this understatement is occurring due to the method PSE used to categorize its mains based on replacement costs, which results in an understatement of the embedded costs of LNG-related mains and an overstatement of non-LNG-related mains by the same amount.[16] I have incorporated a correction to the LNG-related gross plant and accumulated depreciation balances in my cost-of-service study, which has a minor impact on class cost allocation and is neutral on a total revenue requirement basis.

Q. What does PSE propose regarding the allocation of mains associated with the Tacoma LNG Project?

A. PSE recommends that the Tacoma LNG Project 16-Inch Line and the Bonney Lake Lateral Improvements be allocated only to sales classes based on their contribution to total retail design day system peak demand.[17] This is consistent with the settlement agreement approved in Docket UG-151663.[18]

Q. Does PSE's proposed allocation method for LNG-related mains require an exemption from the method prescribed in WAC 480-85-060?

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[16] Based on NEW-PSEWP-JDT-4-GCOS-EXT-ALLOC-22GRC-01-2022, and PSE workpaper Gas Mains Analysis 2021, provided in PSE's response to Nucor DR 10, Attachment H.

[17] Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, pp. 16-17.

[18] Docket UG-151663, Order 10, App'x A - Full Settlement Stipulation, ¶ 32 (Nov. 1, 2016). Paragraph 33 of the settlement agreement indicates that if any transportation customer takes service along the 16-inch line, PSE will propose a specific rate for such customer to recover those costs. *Id.*

A. Yes. As described in the previous section of my testimony, WAC 480-85-060 specifies that distribution mains should be allocated based on design day (peak) and annual throughput (average) based on system load factor. The rules do not indicate that LNG-related mains should be allocated to sales customers only.

Q. Do you agree with PSE's proposed class allocation method for LNG-related distribution mains included in proposed base rates?

A. Yes. I agree that LNG-related costs should not be allocated to transportation classes since regulated transportation customers do not utilize PSE's LNG Facility. PSE's allocation to the sales classes is based on design day peak, which is reasonable since the Tacoma LNG Facility will serve as a peaking resource for PSE's sales customers.[19] This method is also consistent with the settlement agreement approved in Docket UG-151663. Accordingly, I have incorporated this provision in my recommended cost-of-service calculations and support an exemption from WAC 480-85-060 for the allocation of LNG-related mains.

Q. Have you prepared an alternative cost-of-service study that reflects your proposed allocation approach for smaller mains but includes transportation customers in the allocation of LNG-related mains?

A. Yes. In the event that the Commission does not approve PSE's proposed allocation method for LNG-related mains, I have prepared an alternative cost-of-service analysis that reflects my recommended allocation method for small and medium mains but uses the "Commission Rules" alternative for LNG-related

[19] Docket UG-151663, Order 10, ¶ 2.

distribution mains. This alternative also functionalizes Account 870 as Transmission, as I discussed previously, and is summarized in Exhibit KCH-3.[20]

D. LNG-Related Cost Allocation – Multiyear Rate Plan (MYRP)

Q. What rate mechanisms is PSE proposing as part of its MYRP?

A. PSE is proposing two new rate schedules, Schedule 141R, Rates Subject to Refund Rate Adjustment and Schedule 141N, Rates Not Subject to Refund Rate Adjustment. Generally, the incremental plant-related costs of its MYRP, such as return on rate base and depreciation expense, are included in Schedule 141R, while all other costs, such as O&M expenses, are included in Schedule 141N. [21]

Q. Does PSE exclude transportation customers from the allocation of LNG-related costs in its MYRP Schedules 141R and 141N?

A. No. PSE proposes to allocate the costs in Schedules 141R and 141N to all customer classes, exclusive of Special Contracts, based on rate base from the class cost-of-service model.[22] This means that transportation customers are allocated a significant portion of the LNG-related costs in Schedules 141R and 141N.

Q. Do you believe it is appropriate to allocate LNG-related costs to transportation customers?

A. Absolutely not. PSE's regulated transportation customers do not utilize the Tacoma LNG Facility and should not be allocated any of the associated costs. Including transportation customers in the allocation of Tacoma LNG-related costs

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[20] The complete results using the Commission's gas cost of service template are provided in my workpaper, 220066-67-Nucor-WP-KCH-GCOST-WAC-Rules-for-LNG-Mains-&-Acc-870-7-22.

[21] Direct Testimony of Susan E. Free, PSE Exh. SEF-1T, pp. 46-47.

[22] Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, pp. 32-33.

is also inconsistent with the settlement agreement in Docket UG-151663, which provides that:

> PSE will support the interclass allocation of the Tacoma LNG Facility costs to only sales customers on the basis of their contribution to PSE's total retail design day system peak demand (Dth/day).[23]

While PSE excludes transportation customers from the allocation of certain LNG-related mains rate base in the cost-of-service study, which allocates the base rate revenue requirement, PSE does not extend this same treatment to the LNG-related costs included in Schedules 141R and 141N.

Q. Do you have any general observations regarding the implications for cost allocation and rate design for classes that include both sales and transportation customers?

A. Yes. Traditionally, PSE has included sales and transportation customers in the same classes for cost allocation and rate design purposes, e.g., Schedules 87/87T. With PSE's inclusion of new LNG facilities in rate base, great care must now be taken to properly segregate the LNG-related costs such that they are allocated only to sales customers within those classes. Similarly, the rate design applicable to these classes must be revised to incorporate specific LNG-related charges to the sales customers.

Although PSE has gone to great lengths in this case to allocate relatively minor amounts of LNG-related mains costs to sales customers, when it comes to its much larger LNG Facility investments, the Company has completely failed to

[23] Docket UG-151663, Order 10, App'x A - Full Settlement Stipulation, ¶ 32.

properly distinguish between sales and transportation customers for the allocation and recovery of these costs. In particular, the Company's mechanism for recovering costs associated with its proposed MYRP, Schedules 141R and 141N, would result in significant cost shifting from sales to transportation customers. If the Company is allowed to proceed with a MYRP, the rate design for Schedules 141R and 141N requires an overhaul.

Q. What LNG-related costs are included in Schedules 141R and 141N?

A. The majority of PSE's LNG-related costs are included in proposed Schedules 141R and 141N rather than base rates in this case. These LNG-related costs fall into four main categories:

1. The amortization of the deferred depreciation and return on distribution investments termed the Tacoma LNG Upgrades, a major component of which is the new four-mile section of 16-inch pipeline discussed in the previous section of my testimony.[24] While the rate base associated the Tacoma LNG Upgrades is included in base rates, the three-year amortization of the deferred depreciation and return is included in Schedule 141N, amounting to a revenue requirement of approximately $2.2 to $2.3 million annually during the 2023-2025 MYRP. [25]

2. The amortization of the deferred depreciation, return, and operating expenses for the Tacoma LNG Facility itself.[26] The four-year

[24] *See* PSE Adjustment 11.48, NEW-PSE-WP-SEF-11G-RemoveUPGRADETacomaLNG-22GRC-01-2022.

[25] This revenue requirement amount includes the rate base impact of PSE's Adjustment 11.48. *See* 220066-67-Nucor-WP-LNG-Upgrade-MYRP-RR-7-22 for this revenue requirement calculation.

[26] *See* PSE Adjustment 11.50, NEW-PSE-WP-SEF-11G-RemoveTacomaLNG-22GRC-01-2022.

amortization of these deferred costs is included in Schedule 141N, amounting to a revenue requirement of $8.4 to $8.8 million annually during the 2023-2025 MYRP.[27]

3. The projected O&M expenses for the Tacoma LNG Facility, which are included in Schedule 141N, with a revenue requirement $5.1 to $5.3 million annually during the 2023-2025 MYRP. [28]

4. The going-forward return on rate base and depreciation expense associated with the Tacoma LNG Facility, which is included in Schedule 141R. The revenue requirement associated with this rate base, at PSE's proposed cost of capital, is $25.7 million to $26.4 million annually during the 2023-2025 MYRP.[29]

These costs are summarized in Table KCH-2, below.

Table KCH-2
LNG Costs in Schedules 141N & 141R

LNG Cost Component	**2023**	**2024**	**2025**
LNG Upgrade Deferral Amortization	$2,293,852	$2,255,767	$2,217,120
LNG Facility Deferral Amortization	$8,756,440	$8,569,507	$8,379,797
LNG Facility O&M	$5,134,910	$5,239,605	$5,346,463
Total LNG-Related in 141N	$16,185,202	$16,064,879	$15,943,380
LNG Facility Return & Depreciation - 141R	$26,374,432	$26,041,279	$25,701,040
Total LNG-Related in Sch. 141N & 141R	$42,559,634	$42,106,158	$41,644,420

[27] *See* Nucor Exh. KCH-6, PSE's revised response to Nucor DR 11, 220066-67 PSE Resp Nucor DR 011_Rev 01_Attach A. This revenue requirement amount includes the rate base impact of PSE's Adjustment 11.50.

[28] *See* Nucor Exh. KCH-6, PSE's revised response to Nucor DR 11, 220066-67 PSE Resp Nucor DR 011_Rev 01_Attach A

[29] *See* Nucor Exh. KCH-6, PSE's revised response to Nucor DR 11, 220066-67 PSE Resp Nucor DR 011_Rev 01_Attach B.

Q. What allocation approach do you recommend for Tacoma LNG-related costs included in Schedules 141R and 141N?

A. I recommend that these costs be allocated only to sales classes based on their contribution to the total retail design day system peak demand. This approach is aligned with cost causation because the regulated function of the Tacoma LNG Facility is to serve as a peaking resource for sales customers. This approach is also consistent with the allocation method specified in the settlement agreement approved in Docket UG-151663 for the Tacoma LNG Facility and related distribution upgrades.

Q. Have you reallocated these LNG-related costs in the manner you recommend?

A. Yes. I summarize these results in Exhibit KCH-4. Exhibit KCH-4 presents my recommended allocation of base rate revenues as well as my allocation of Schedules 141R and 141N, including the impact of my recommendations to exclude transportation customers from the allocation of LNG-related and RNG-related costs, as discussed in the following sections of my testimony.

E. RNG-Related Cost Allocation – MYRP

Q. What RNG project funding is PSE seeking to include in Schedules 141R and 141N in this case?

A. According to the Direct Testimony of Joshua E. Jacobs, PSE is planning $87 million in capital investments in four RNG projects over the MYRP.[30] PSE includes $1.8 million in 2023, $5.3 million in 2024, and $8.6 million in 2025 for

[30] Direct Testimony of Joshua J. Jacobs, PSE Exh. JJJ-1T, p. 53.

the return and depreciation expense associated with its planned RNG projects in Schedule 141R.[31] PSE also includes a small amount of RNG-related operating expense in Schedule 141N. These amounts are summarized in Table KCH-3, below.

Table KCH-3
RNG Costs in Schedules 141R & 141N

RNG Cost Component	**2023**	**2024**	**2025**
RNG Project Return & Depreciation - 141R	$1,792,274	$5,287,210	$8,624,481
RNG Operating Expense- 141N	$17,793	$18,839	$31,399
Total RNG Costs	$1,810,067	$5,306,049	$8,655,880

Q. What allocation method does PSE use for RNG-related costs included in Schedules 141R and 141N?

A. PSE proposes to allocate the costs in Schedules 141N and 141R to all customer classes, exclusive of Special Contracts, based on rate base from the class cost-of-service model.[32]

Q. Do you agree with PSE's proposed allocation method for RNG-related costs?

A. No. I recommend that transportation customers be excluded from the allocation of RNG-related costs because transportation customers do not receive their gas supplies from PSE. An allocation method based on annual sales throughput would be a reasonable approach.

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[31] *See* Nucor Exh. KCH-6, PSE's revised response to Nucor DR 11, 220066-67 PSE Resp Nucor DR 011_Rev 01_Attach B. I note that Mr. Jacobs references $87 million in RNG investments but Nucor DR 11 appears to be based on $72.2 million in gross plant (NEW-PSE-WP-SEF-21-Project-RB-Detail-Prov-Proforma-22GRC-01-2022). Further, the Direct Testimony of William T. Einstein, PSE Exh. WTE-1CT, p. 78 states that PSE is seeking to recover $1 million in Voluntary RNG program start-up costs but this amount is not readily identifiable in Nucor DR 11 or PSE's filing.

[32] Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, pp. 32-33.

Q. Have you reallocated these RNG-related costs in the manner you recommend?

A. Yes. These results are presented in Exhibit KCH-4. As shown on page 2 of Exhibit KCH-4, I allocated the remaining Schedules 141R and 141N revenue requirement that is not related to LNG or RNG to classes based on the overall allocation of rate base from my recommended cost-of-service study, excluding the net plant for LNG-related mains.

IV. RATE DESIGN FOR SCHEDULES 141R & 141N

Q. What do you recommend regarding the rate design for Schedules 141R and 141N?

A. If a MYRP is adopted, then the Schedules 141R and 141N rates proposed by PSE to recover the MYRP revenue requirement require a complete overhaul for classes that serve both sales and transportation customers. Specifically, the rates should be redesigned to ensure that transportation customers are not allocated any LNG and RNG-related costs. This means that different Schedules 141R and 141N rates should apply to sales and transportation customers within each applicable class (e.g., 87 Sales and 87 Transportation).

I also recommend that Schedules 141R and 141N rates be applied pro-rata to each volumetric block within an applicable rate schedule, effectively spreading these impacts on an equal percentage basis to each volumetric block within a rate schedule. This will ensure that Schedules 141R and 141N do not disproportionately impact customers of different sizes within a class. I illustrate my rate design recommendations for 2023 Schedules 141R and 141N for 87/87T in Exhibit KCH-5.

I note that in future rate cases, it is probable that larger amounts of LNG and RNG-related costs will be included in base rates. This will likely necessitate greater differentiation within PSE's base rates for sales and transportation schedules within a class to reflect the cost of such facilities that transportation customers do not utilize.

V. BASE RATE REVENUE ALLOCATION

Q. What does PSE recommend regarding the revenue allocation for its base rate revenue requirement?

A. According to the Mr. Taylor's Direct Testimony, PSE considered the parity ratios resulting from its cost-of-service study and rate impacts to determine its proposed revenue allocation. PSE recommended the following revenue allocation parameters:

- Applying 125% of the system average increase to Schedules 31, 31T, 41, and 41T;
- Applying 150% of the system average increase to Schedules 85, 85T, 87, and 87T;
- Applying no increase to Schedules 86 and 86T;
- Applying the remaining increase to Schedules 16, 23, and 53, which results in an increase that is 89% of the system average increase.[33]

[33] Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, p. 29.

It is important to recognize that PSE's rate impact cap is only applied to the base rate revenue requirement. The rate impacts associated with PSE's MYRP and Schedules 141R and 141N that PSE utilizes to implement that plan are not capped in PSE's proposal. The cost shifting from sales to transportation customers inherent in the cost allocation and rate design PSE proposes for 141R and 141N, compounded with the misallocation of smaller mains to larger customers, results in significant unmitigated rate impacts for the larger transportation classes over the course of the MYRP as proposed by PSE. However, if the allocation of LNG-related and RNG-related costs is corrected as I recommend above, and if smaller diameter mains are not allocated to classes that do not use them, also as I recommend above, then it is not necessary to apply a second level of mitigation beyond that applied to the base rate revenue allocation.

Q. Do you agree with the general approach PSE used for base rate revenue allocation?

A. Yes. I believe that PSE's approach to allocating base rate revenue is generally reasonable. I agree with PSE's recommendation to limit the increase to 150% of the system average increase while moving each class closer to parity. However, I considered the results of my recommended cost-of-service study, as shown in Exhibit KCH-2, in determining my recommended revenue allocation. The parity ratios resulting from my cost-of-service study are summarized in Table KCH-4, below.

Table KCH-4
Nucor Cost-of-Service Study Parity Ratios &
Base Rate Revenue Allocation
at PSE's Proposed Revenue Requirement

Rate Class	**Parity Ratios at Present Rates**	**Parity Ratios at Proposed Rates**	**Nucor Recommended Increase**[34]
Residential (16,23,53)	1.08	1.06	9.78%
Comm. & Indus. (31,31T)	0.83	0.88	17.91%
Large Volume (41,41T)	0.91	0.94	14.93%
Interruptible (85, 85T)	0.84	0.89	17.91%
Limited Interruptible (86, 86T)	1.38	1.23	0.00%
Non-Exclusive Interruptible (87, 87T)	0.78	0.82	17.91%
Contracts	1.59	1.55	8.76%
Total	1.00	1.00	11.91%

As shown in Table KCH-4, the parity ratio for Schedules 31/31T is in a similar range as the parity ratios for Schedules 85/85T and 87/87T. Accordingly, I recommend that Schedules 31/31T also receive 150 percent of the average increase. I applied PSE's other recommended revenue allocation parameters to calculate my recommended base rate revenue allocation. The resulting increase to the Residential class is 82% of the system average increase. These results are shown in greater detail in Exhibit KCH-4, page 1.

Q. Does this conclude your response testimony?

A. Yes, it does.

[34] These percentages are comparable to Mr. Taylor's Table 2 (Direct Testimony of John D. Taylor, PSE Exh. JDT-1T, p. 30), and include Other Revenues in the denominator.