

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Complainant,

v.

PUGET SOUND ENERGY

Respondent.

DOCKETS UE-240004 and UG-240005 (*Consolidated*)

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

EXHIBIT RLE-1CT

August 6, 2024

Shaded Information is Designated as Confidential per WAC 480-07-160

RESPONSE TESTIMONY OF DR. ROBERT L. EARLE

DOCKET(S) UE-240004 AND UG-240005

EXHIBIT RLE-1CT

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RESPONSE TESTIMONY OF DR. ROBERT L. EARLE

DOCKET(S) UE-240004 AND UG-240005

EXHIBIT RLE-1CT

EXHIBITS LIST

Exhibit RLE-2	Curriculum Vitae
Exhibit RLE-3	CONE Penalty Task Force – Proposal
Exhibit RLE-4	PSE Response to Public Counsel Data Request No. 173 with Attachment
Exhibit RLE-5	PSE Response to Public Counsel Data Request No. 178

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[REDACTED]

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¹ Direct Test. of Phillip A. Haines, Exh. PAH-1CT at 23:13-24:17.
² *Id.* at 27.
³ Direct Test. of Brennan D. Mueller, Exh. BDM-1T at 17:20-21.

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⁴ Robert L. Earle, Exh. Exh. RLE-3 at 1 (CONE Penalty Task Force – Proposal).

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⁵ Haines, Exh. PAH-1CT at 26:5-11. [REDACTED]

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16 [REDACTED] For
17 2025, PSE's forecast power costs should be adjusted down by \$3,562,650 and the
18 costs discussed above should be excluded from PSE's 2025 PCAM review. [REDACTED]

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⁶ Haines, Exh. PAH-1CT at 23:17-20, 31:3-6. [REDACTED]

⁷ Haines, Exh. PAH-1CT at 37:15-17.

⁸ *Id.* at 33:9-12.

⁹ *Id.* at 32, Table 2.

¹⁰ *Id.* at 41, Table 4.

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III. GAS SYSTEM RETIREMENTS

Q. How do you respond to PSE’s request for shortened depreciation lives of gas plant because of shorter service lives and reduced gas throughput?

A. While Public Counsel witness David Garrett is providing testimony concerning the appropriate depreciation rates for gas plant, I address the foundation for PSE’s request for shortened depreciation lives. PSE bases its request for shortened depreciation lives on the impact of Climate Commitment Act (CCA) and Clean Energy Transition Act (CETA) on PSE’s gas utility operations.¹¹

PSE claims that there will be “significant reductions in gas usage” and “assets will become obsolete as customers electrify with new technologies, resulting in such assets being retired earlier than they otherwise would, which will shorten service lives.”¹² These claims are contradicted by PSE’s own planning as shown in its 2023 Gas Utility Integrated Resource Plan (Gas IRP). Figure 1 shows PSE’s planned emissions for its gas utility.

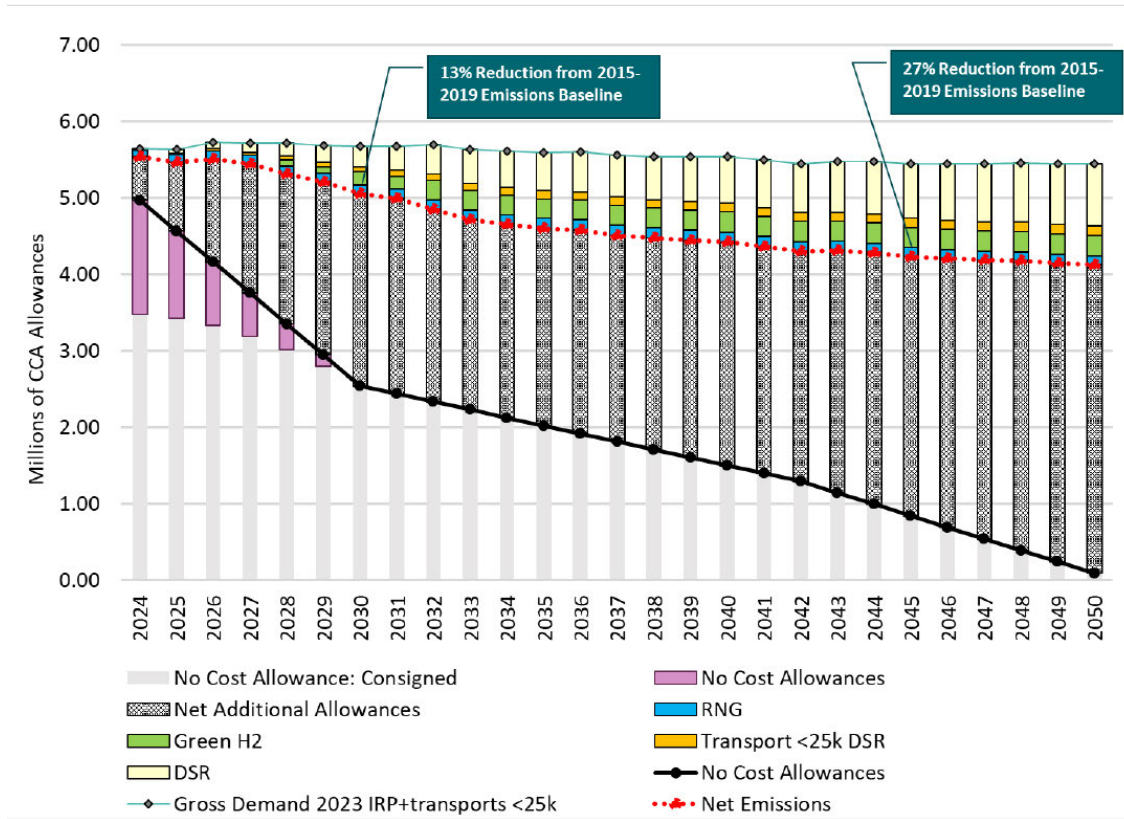
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¹¹ Direct Test. of Ned W. Allis, Exh. NWA-1T at 19:1-20:11.
¹² *Id.* at 20:1-6.

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Figure 1
Emissions from PSE's Gas Operations¹³



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The line at the top of the graph with the diamond shapes shows the emissions from gross demand on the system.¹⁴ Emissions from gross demand means the projected emissions from demand before measures to reduce demand are introduced. As the figure shows, there is little reduction in gross demand emissions from now until 2050.

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The red dotted line shows the net emissions on the system after green hydrogen (the green bars), DSR (demand side resources such as energy

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efficiency, the light yellow bars), RNG (renewable natural gas, the blue bars), and

¹³ Puget Sound Energy, *2023 Gas Utility Integrated Resource Plan*, at 2.21. <https://www.pse.com/en/IRP/Past-IRPs/2023-IRP>. (*Supra*, 2023 Gas IRP).

¹⁴ The transports <25k is a very small part of the system and consists of gas sales customers plus transport gas customers with emissions less than 25,000 tons per year.

1 DSR for smaller transport customers (dark yellow bars) are taken into account. In
2 the short term, efforts to reduce emissions through reduced consumption or
3 alternative fuels such as RNG or green hydrogen are limited in their impact.

4 The black line shows the number of no-cost allowances projected to be
5 allocated to PSE. The number of no-cost allowances is broken out by the number
6 of no cost allowances to be consigned for auction (light grey bars) and the number
7 of no cost allowances that do not have to be consigned to auction (pink bars). As
8 the graph shows, by 2030, all of the no-cost allowances must be consigned to
9 auction.

10 Finally, the net additional allowances (cross hatched bars) show the
11 number of allowances needed under the CCA.

12 Figure 1 illustrates two important concepts. First, PSE is not planning on
13 electrification to reduce gas demand. Indeed, PSE has stated that it believes that
14 the cost of electrification exceeds the social cost of carbon.¹⁵ Thus, PSE
15 contradicts itself when it says there will be “obsolescence and declining gas
16 demand resulting from the electrification resulting from current policies and the
17 requirements to achieve Net Zero by 2050.”¹⁶ Second, the use of the distribution
18 system barely changes from 2024 to 2050. While there is a decline in emissions of
19 27 percent from the 2015 to 2019 baseline, part of the decline is made up of DSR
20 (light yellow and dark yellow bars) and part of the decline is made up of RNG and
21 Green H2. The top of the Green H2 gives an indication of the level of the use of
22 the distribution system. Green H2 and RNG will still use the distribution system for

¹⁵ *Supra*, 2023 Gas IRP at 1.4.

¹⁶ Allis, Exh. NWA-1T at 18:10-13.

1 delivery. Transport DSR does not affect the use of the distribution system. In other
2 words, the very system assets for which PSE seeks accelerated depreciation will
3 necessarily remain in service according to the Company's forecasts. The potential for
4 PSE to shut down parts of the distribution system appears to be extremely small
5 based on gross usage. PSE's claims about shorter service lives and reduced gas
6 throughput are overblown if one believes PSE's own IRP planning.

7 **Q. Is PSE witness Allis correct in his representation that PSE expects a**
8 **59 percent decline in the size of the gas system by 2050?**

9 A. Allis is not correct that PSE expects a 59 percent decline in the gas system by
10 2050. Allis bases this on "full electrification."¹⁷ As discussed above, in its
11 planning, PSE does not expect its gas system to decline by anywhere close to that
12 amount, and PSE's core planning does not involve electrification. While it may be
13 true that studies were performed on electrification and found the impacts Allis
14 cites,¹⁸ PSE has rejected them in its expectations and resource planning. Allis's
15 assertions concerning the decline in the size of the gas system by 2050 should
16 likewise be rejected.

17 **Q. How do you respond to PSE witness Allis claiming that "gas mains and**
18 **regulator stations would also be affected if gas throughput declines, as many**
19 **of these facilities become obsolete"?**¹⁹

20 A. Allis misses the fact that as long as there are customers on the system, the gas
21 mains serving those customers must be kept in service and maintained. There

¹⁷ *Id.* at 31:14-19.

¹⁸ Earle, Exh. REL-4 (PSE Response to Public Counsel Data Request No. 173, with Attachment)

¹⁹ Allis, Exh. NWA-1T at 20:19-21.

1 must also be regulator stations to support those gas mains. Failure to operate and
2 maintain these assets while customers remain on the system would result in
3 unsafe gas operations. While it is theoretically possible that some regulator
4 stations would be no longer needed, when asked, PSE could not provide any
5 support that system changes could mean that regulator stations might no longer be
6 needed.²⁰ Neither Allis nor PSE have estimates for the number of miles of gas
7 mains or regulator stations that PSE will retire from 2023 to 2050.²¹ Allis's
8 assertion that that "gas mains and regulator stations would also be affected if gas
9 throughput declines, as many of these facilities become obsolete" is
10 unsubstantiated and without merit.

11 IV. REVIEW OF POWER COSTS

12 **Q. What has PSE requested with respect to updates to power costs?**

13 A. PSE has requested the continuation of the PCORC framework²² and annual power
14 cost updates.²³

15 **Q. Do you have concerns about PSE's request?**

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

²⁰ Earle, Exh. RLE-5 (PSE Response to Public Counsel Data Request No. 178).

²¹ *Id.*

²² Direct Test. of Susan E. Free, Exh. SEF-1T at 29:1-18.

²³ Mueller, Exh. BDM-1T at 42:18-20.

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

2 A. PSE’s proposal goes against one of the motivations for Washington Engrossed
3 Substitute Senate Bill 5295 (SB 5295) relating to multi-year rate plans: to reduce
4 the load of cases. The Senate Bill Analysis stated,

5 Utilities have been filing general rate cases (GRCs) on an annual
6 cycle. They are highly complex filings that have to be completed
7 within 11 months by statute. In 2020, all five utilities had pending
8 rate cases. This revolving load of rate cases is heavy and
9 unsustainable in addition to implementing CETA and other work.
10 This bill makes workload more predictable and provides more
11 certainty for customer rates and allows the UTC to pursue
12 performance-based regulation.²⁴

13
14 PSE proposes annual power cost updates in addition to and separate from
15 any PCORC proceeding.²⁵ In addition, PSE proposes to remove the update of
16 variable power costs in the GRC.²⁶ Even with the removal of Power Cost
17 Adjustment (PCA) variable power costs in the GRC, the GRC would still need to
18 address power costs such as variable and fixed operation and maintenance costs
19 (O&M). Moreover, there would be an annual PCA review every year. PSE’s
20 proposal results in up to three proceedings concerning power costs every year
21 assuming PCORC and GRC filings do not overlap.

22 Every separate proceeding incurs a set of fixed costs. For intervenors,
23 these include coordination costs and informational costs of separately examining
24 filings in different dockets. In particular, for intervenors representing vulnerable
25 populations and highly impacted communities, additional proceedings raise

²⁴ Senate Bill Report, ESSB 5295 at 6, 67th Leg., Reg. Sess. (Wash. Amnd. Apr. 7, 2021), <https://app.leg.wa.gov/billsummary?billnumber=5295&year=2021> (click on ‘Engrossed Substitute Senate Bill Report’ under ‘Available Documents’).

²⁵ Mueller, Exh. BDM-1T at 48:14-20.

²⁶ *Id.* at 49:6-15.

1 concerns about equity and procedural justice. If these intervenors lack the staff or
2 budgets to follow Commission filings closely and engage in all relevant
3 proceedings, they lose the ability to guard the rights of their represented
4 disadvantaged communities. This is even more the case if the proceedings involve
5 determinations of prudence. It takes a quick reaction time and plentiful resources
6 to analyze and then file arguments for opening the process into full adjudication.
7 These costs are high and are one of the reasons GRCs combine a large number of
8 related issues rather than split them into many different proceedings.

9 While there is reason to separate the annual PCA review because it
10 addresses retrospective power costs, launching two proceedings to address
11 prospective power costs—one focused on PCA variable costs and the
12 other-on-other costs (both variable and fixed)—would impose unnecessary burdens
13 on Public Counsel and other intervenors. Moreover, costs addressed in a PCORC
14 are closely related to PCA costs as any new assets included in a PCORC filing
15 would affect variable costs. GRCs address issues not included in an annual power
16 cost update, but closely related to PCA eligible power costs such as variable and
17 fixed O&M. The Commission should consolidate any PCORC filing with the
18 annual power cost update, or in a year where there is a GRC, the annual power
19 cost update should be a part of the GRC showing. This will create efficiencies for
20 intervenors and combine related issues into one docket and thereby improve
21 judicial efficiency. In a year where there is no PCORC or GRC, an annual power
22 cost update could be made if the Commission decides to approve them.

1 **Q. What are your other concerns regarding prudence determination in PSE's**
2 **proposal?**

3 A. PSE proposes that power cost prudence, both variable and fixed, be determined in
4 dockets outside the GRC process. Having multiple dockets every year to
5 determine prudence for variable and fixed power costs²⁷ imposes the burden of an
6 increased number of proceedings on Staff, Public Counsel, and other intervenors.
7 As I discuss above concerning separate GRC, PCORC, and annual power cost
8 updates, annual prudence reviews are particularly prejudicial against vulnerable
9 populations and highly impacted communities, who often lack the abundance of
10 resources required to intervene frequently in Commission proceedings.

11 **Q. What remedy do you suggest concerning the problems with prudence in**
12 **PSE's proposal?**

13 A. The power costs addressed in any annual power cost updates or PCORCs, if
14 allowed by the Commission, should only be approved provisionally and be
15 subject to a full prudence determination in the next GRC. If PCORCs and annual
16 power cost updates are allowed by the Commission, making any prudence
17 determination in them provisional and subject to refund would allow PSE to put
18 costs into rates, while giving intervenors a reasonable chance to address related
19 issues and prudence in a single proceeding.

20 Establishing the review of the prudence of power cost updates and capital
21 additions in the next GRC would be consistent with the Commission's Used and

²⁷ Fixed power costs might not be determined annually if PSE's preferred separate PCORC structure is retained.

1 Useful Policy Statement²⁸ and alleviate concerns about equity and the opportunity
2 for full review by intervenors. There would be no conflict with the established
3 PCA annual review process. If the subsequent GRC found power costs imprudent
4 that were included in an annual review process and PCA true-up, adjustments
5 could be easily made after the fact.²⁹

6 **Q. Does that conclude your testimony?**

7 A. Yes, it does.

²⁸ *In re the Comm'n Inquiry into the Valuation of Pub. Serv. Co. Property*, Docket U-190531, Policy Statement on Property that Becomes Used and Useful After Rate Effective Date, ¶ 33 (Jan. 31, 2020).

²⁹ Post-Hearing Brief of Comm'n Staff, ¶ 49, *Wash. Utils & Transp. Comm'n v. Puget Sound Energy*, Dockets UE-220066, UG-220067 and UG-210918 (*consol.*) (filed Oct. 31, 2022). In PSE's last GRC, Staff appeared to misunderstand the implications of moving final prudency reviews to the GRC from the PCA process and the like, by saying it would "needlessly turn PSE's power cost filings into an adjudication by default." However, the clear advantage of moving prudency determinations to the GRC is that it would lessen the need for complete review and requests for adjudication for most PCAM proceedings by interested parties.