

**BEFORE THE WASHINGTON  
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Complainant.

v.

PACIFICORP d/b/a PACIFIC POWER & LIGHT COMPANY,

Respondent,

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DOCKET UE-230172

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

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**EXHIBIT RLE-1CT**

September 14, 2023

**Shaded Information is Designated Confidential per Protective Order in Docket UE-230172**

REDACTED VERSION

**RESPONSE TESTIMONY OF ROBERT L. EARLE**

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**RESPONSE TESTIMONY OF ROBERT L. EARLE**

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**EXHIBITS LIST**

Exhibit RLE-2	Curriculum Vitae of Robert Earle
Exhibit RLE-3C	PacifiCorp Confidential Response to Public Counsel Data Request 88, with Attachments
Exhibit RLE-4	Henry Hubb Natural Gas Prices 1997 to 2023
Exhibits RLE-5C	PacifiCorp Confidential Response to Public Counsel Data Request 84, with Attachments
Exhibit RLE-6C	PacifiCorp Confidential Response to Public Counsel Data Request 192, with Attachments

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**I. INTRODUCTION / SUMMARY**

**Q. Please state your name and business address.**

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

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

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

**Q. On whose behalf are you testifying?**

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

**Q. Please describe your professional qualifications.**

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

**Q. What exhibits are you sponsoring in this proceeding?**

A. I am sponsoring the following exhibits:

- Exhibit RLE-2 Curriculum Vitae of Robert Earle
- Exhibit RLE-3C PacifiCorp Response to Public Counsel Data Request 88, with Attachments
- Exhibit RLE-4 Henry Hubb Nautral Gas Prices 1997 to 2023

1 Exhibits RLE-5C PacifiCorp Response to Public Counsel Data Request 84,  
2 with Attachments

3 Exhibit RLE-6C PacifiCorp Response to Public Counsel Data Request 192,  
4 with Attachments

5 **Q. Please give an overview of your testimony.**

6 A. My testimony addresses three issues. First, PacifiCorp's request to remove the  
7 dead band and sharing bands from the power cost adjustment mechanism  
8 (PCAM) should be rejected by the Washington Utilities and Transportation  
9 Commission (Commission). Second, I recommend disallowance of \$2,512,499.50  
10 for rate year one and \$735,463.15 for rate year two due to [REDACTED]

11 [REDACTED]  
12 [REDACTED]. Third, PacifiCorp (the  
13 Company) has proposed a multi-year rate plan (MYRP) design that has six  
14 additional rate filings in it. These proceedings should not have prudence  
15 determinations made in them, but rather prudence determinations should be made  
16 in PacifiCorp's next GRC.

17 **II. POWER COST ADJUSTMENT MECHANISM**

18 **Q. Please describe the history of the power cost adjustment mechanism.**

19 A. The PCAM was designed to consider differences between Forecast Net Power  
20 Costs (NPC) and Actual NPC while "protect[ing] the Company from extra-normal  
21 power cost variability while giving Pacific Power adequate incentive to manage

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1 carefully its full power portfolio.”<sup>1</sup> The PCAM mechanism was established  
2 through a settlement in the 2014 general rate case (GRC). Previously, PacifiCorp  
3 had filed other PCAM proposals, which had been rejected because they failed to  
4 follow the Commission’s direction:<sup>2</sup>

5 [T]he Company’s proposal here is even more at odds with the  
6 direction the Commission has given PacifiCorp than its proposals in  
7 prior cases that have been rejected. Contrary to express Commission  
8 direction, and in contrast to the power cost adjustment mechanisms  
9 approved in other PacifiCorp jurisdictions, the Company’s proposal  
10 here includes neither dead bands nor sharing bands. These are  
11 critically important elements that provide an incentive for the  
12 Company to manage carefully its power costs and that protect  
13 ratepayers in the event of extraordinary power cost excursions that are  
14 beyond the Company’s ability to control.

15 **Q. What does PacifiCorp propose regarding the PCAM in this case?**

16 A. PacifiCorp proposes to “eliminate the deadband and sharing bands from the  
17 PCAM due to the difficulty in accurately forecasting net power costs (NPC) and  
18 the Company’s pending participation in an independent system operator type  
19 organized market.”<sup>3</sup> This is directly at odds with the Commission’s Order in the  
20 2014 GRC.

21 **Q. Are PacifiCorp’s stated reasons sufficient for eliminating the deadband and  
22 sharing bands?**

23 A. No. Neither the Company’s pending participation in an independent system  
24 operator type organized market nor the difficulty in accurately forecasting NPC,  
25 are sufficient reasons for eliminating the deadband and sharing bands.

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<sup>1</sup> *Wash. Utils. & Transp. Comm’n v. Pacific Power & Light*, Dockets UE-140762 et al., Order 08: Final Order, at ii (Mar. 25, 2015).

<sup>2</sup> *Id.*, ¶ 107 (citing *Wash. Utils. & Transp. Comm’n v. PacifiCorp*, Docket UE-130043, Order 05).

<sup>3</sup> Direct Testimony of Jack Painter, Exh. JP-1T at 1:18–21.

1       **Q.     Please explain why the Company’s pending participation in an independent**  
2           **system operator type organized market does not provide support for**  
3           **eliminating the deadband and sharing bands.**

4       A.     The Company apparently refers to its anticipated participation in the Extended  
5           Day-Ahead Market (EDAM) and continued participation in EIM when it refers to  
6           its pending participation in an independent system operator type organized  
7           market.<sup>4</sup> PacifiCorp claims that the “EDAM will economically control and  
8           optimize most of the day ahead, hour ahead and intra-hour Company generation  
9           and market transactions”<sup>5</sup> and “the majority of the Company’s NPC will be driven  
10          as low as the EDAM can achieve and, simultaneously, out of the Company’s  
11          control.”<sup>6</sup>

12                   The Company mischaracterizes the effects of its participation in EDAM in  
13           several ways. First, the Company claims that the [REDACTED]  
14           [REDACTED]  
15           [REDACTED]  
16           [REDACTED]  
17           [REDACTED]  
18           [REDACTED]  
19           [REDACTED].

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<sup>4</sup> Painter, Exh. JP-1T at 25:4–30:15.  
<sup>5</sup> *Id.* at 27:21–22.  
<sup>6</sup> *Id.* at 28:18–20.  
<sup>7</sup> Robert L. Earle, Exh. RLE-3C (PacifiCorp Response to Public Counsel Data Request 88 with Attachments. *See* file “Exh RLE-3C Majority of NPC CONF”).

1                   Second, [REDACTED] that goes through the EDAM, the  
2                   Company still has areas in which it should be optimizing its performance. For  
3                   example, the Company must still choose how to bid into the EDAM. PacifiCorp  
4                   states, “[REDACTED]  
5                   [REDACTED]”<sup>8</sup> [REDACTED]  
6                   [REDACTED]  
7                   [REDACTED]  
8                   [REDACTED]  
9                   [REDACTED]  
10                  [REDACTED]  
11                  [REDACTED]  
12                  [REDACTED]  
13                  [REDACTED]  
14                  [REDACTED]  
15                  [REDACTED]  
16                  [REDACTED]

17                  Third, it is curious that if PacifiCorp is correct that participation in EDAM  
18                  and EIM takes optimization of NPC out of the Company’s control, that the  
19                  Company has not, to my knowledge, announced savings through the reduction or  
20                  elimination of trading personnel and other staff. After all, if the optimization will  
21                  be out of PacifiCorp’s control, at least some of the staff who have been working

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<sup>8</sup> Earle, Exh. RLE-3C (PacifiCorp Response to Public Counsel Data Request No. 88 subpart a, with Attachments).



1 on resource optimization should be redundant. This begs the question: Does  
2 PacifiCorp intend to keep its day-ahead and real-time trading desks even though  
3 such optimization is out of its control?

4 Fourth, whether units are bid into EDAM or not, there is still optimization  
5 for the Company to perform in terms of scheduling maintenance outages, optimal  
6 maintenance of equipment to maximize capacity factors and minimize forced  
7 outages, and improving heat rates at plants that burn fuel.

8 All of these reasons show why participation in EDAM and EIM do not  
9 eliminate the need and opportunity for PacifiCorp to actively optimize its  
10 resources. Incentives must be in place for PacifiCorp to do so. The Commission  
11 should therefore reject PacifiCorp's claim that "in and of itself, participation in a  
12 complete organized market, overseen by an independent third-party operator and  
13 monitored for efficiency by an independent market monitoring agency, merits the  
14 elimination of the deadband and asymmetrical sharing bands."<sup>9</sup>

15 **Q. Please explain why the Company's difficulty in accurately forecasting NPC**  
16 **does not provide support for eliminating the deadband and sharing bands.**

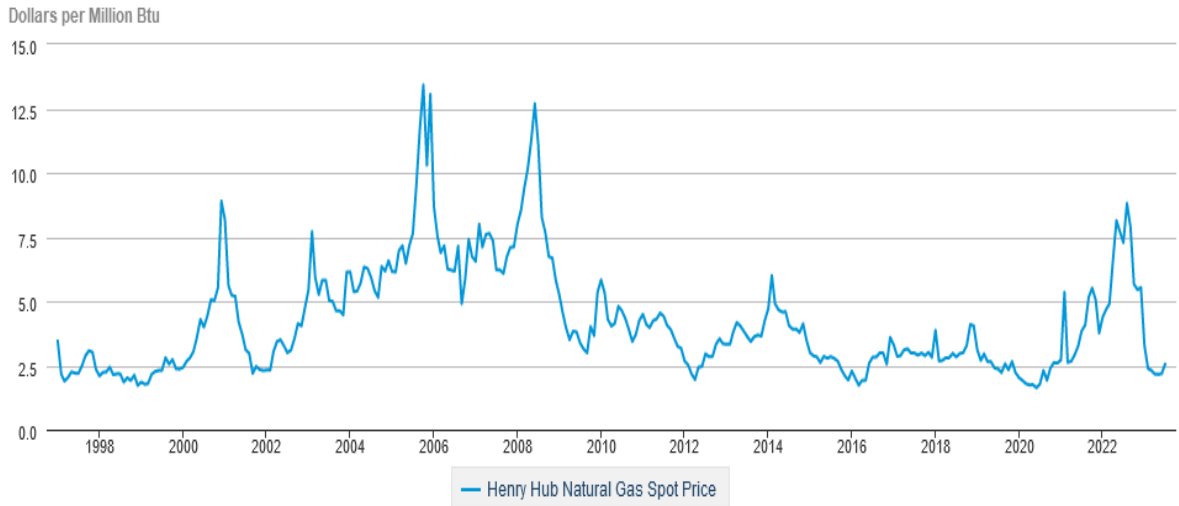
17 A. The way PacifiCorp frames the issue is a red herring. Power cost, gas price, and  
18 weather (heat, cold, and rain) variability all make forecasting certain inputs to  
19 NPC difficult. However, the issue is not whether many inputs to the NPC are hard  
20 to predict and absent that, the NPC would be easily predictable. Indeed, part and  
21 parcel of a utility's job is to deal with volatile fuel prices and other inputs for

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<sup>9</sup> Painter, Exh. JP-1T at 29:20–30:1.

1 NPC. Volatile energy prices are not new. Figure 1 shows Henry Hub natural gas  
2 prices since 1997.

3 **Figure 1. Henry Hub Natural Gas Prices from 1997 to 2023<sup>10</sup>**



4  
5 As the figure shows, the recent levels and volatility of natural gas prices are not  
6 unprecedented. The levels of natural gas prices around 2001, 2005, and 2009 are  
7 similar to or exceed recent prices. Given this history, PacifiCorp should be  
8 capable of planning for natural gas and power price volatility.

9 What is at issue here is not whether there is volatility in various markets,  
10 but whether PacifiCorp is doing enough to address volatility. PacifiCorp has at  
11 least two interrelated approaches it might take to address volatility. The first is  
12 increased reliance on long-term contracts. The second is increased hedging.

13 On both counts, no doubt, PacifiCorp will claim it is doing enough. But,  
14 its claim falls short for the fundamental reason that it optimizes its system on  
15 behalf of all its service territories and ignores the consequences specific to

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<sup>10</sup> Earle, Exh. RLE-4.

1 Washington ratepayers.<sup>11</sup> Whether PacifiCorp’s hedging practices or balance of  
2 long-term contracts vs the power markets are in the best interests of Washington  
3 ratepayers is the key issue here. PacifiCorp has made it clear on both issues that it  
4 does not optimize on behalf of Washington ratepayers.

5 The Commission should reject PacifiCorp’s claim that it is incapable of or  
6 cannot improve its managing of NPC input volatility on behalf Washington  
7 ratepayers and, therefore, the deadband and sharing bands should be eliminated.

8 **Q. Do you have other concerns about what PacifiCorp says about incentives and**  
9 **the deadband and sharing mechanisms?**

10 A. Yes. PacifiCorp was asked, “Without the deadband and asymmetrical sharing  
11 bands, what incentives does the Company have to effectively manage or reduce  
12 power costs?” PacifiCorp responded, “Regardless of the deadband or  
13 asymmetrical sharing bands, any costs that are determined to be imprudent can be  
14 disallowed.”<sup>12</sup> Abandoning incentives with respect to power costs, however,  
15 burdens the Commission and intervenors requiring a higher level of review of  
16 PacifiCorp’s actions. Such review is inevitably disadvantaged by the  
17 informational asymmetry that works in favor of the Company. As the National  
18 Regulatory Research Institute describes:

19 Although the utility may have the burden to demonstrate the  
20 reasonableness of its forecasts, any proposed adjustments by other  
21 parties would require an evaluation showing the forecasts’  
22 inaccuracies. The utility has a big advantage over other parties in

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<sup>11</sup> Direct Testimony of Ramon J. Mitchell, Exh. RJM-1T at 5:9–13, *Wash. Utils. & Transp. Comm’n v. PacifiCorp*, Docket UE-230482 (June 15, 2023).

<sup>12</sup> Earle, Exh. RLE-3C (PacifiCorp Response to Public Counsel Data Request 88 with Attachments, subpart b.1).

1 knowing its prudent costs. It is difficult for a regulator's staff and  
2 interveners to either (a) show that the utility's costs are excessive or  
3 (b) produce their own forecasts that reflect efficient utility  
4 management.<sup>13</sup>

5 **Q. What is your recommendation?**

6 A. The Commission should reject PacifiCorp's proposal to eliminate the deadband and  
7 sharing bands in the PCAM.

8 **III. REVENUE REQUIREMENT ADJUSTMENT**

9 **Q. Please describe your revenue requirement adjustment for PacifiCorp.**

10 A. PacifiCorp plans to convert Jim Bridger Units 1 and 2 from coal-fired units to  
11 gas-fired units. According to PacifiCorp, this involves

12 [R]etrofitting of the boilers with natural gas burners and flame scanners  
13 as well as construction of a distribution pipeline which can provide a  
14 sufficient supply of natural gas. Certain coal and ash handling  
15 equipment will be isolated from the boilers. Additionally, the project  
16 requires new filters, gas heaters, pressure regulators, safety valves,  
17 high- and low-pressure valves, piping, pipe supports, instrumentation,  
18 controls, meters, and other equipment to operate reliably and safely.<sup>14</sup>

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

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<sup>13</sup> Kenneth W. Costello, *Multiyear Rate Plans and the Public Interest* at 35, Nat'l Regul. Rsch. Inst. (Oct. 2016), [https://pubs.naruc.org/pub/FA86999D-D03F-2858-7228-A6353560E5B9?\\_gl=1\\*5m84cq\\*\\_ga\\*NTIwMzQ0MDE2LjE2OTQzNTY3ODY.\\*\\_ga\\_QLH1N3Q1NF\\*MTY5NDM1Njc4Ni4xLjEuMTY5NDM1NjgyOS4wLjAuMA](https://pubs.naruc.org/pub/FA86999D-D03F-2858-7228-A6353560E5B9?_gl=1*5m84cq*_ga*NTIwMzQ0MDE2LjE2OTQzNTY3ODY.*_ga_QLH1N3Q1NF*MTY5NDM1Njc4Ni4xLjEuMTY5NDM1NjgyOS4wLjAuMA).

<sup>14</sup> Direct Testimony of Brad D. Richards, Exh. BDR-1Tr at 3:4-10.

1 [REDACTED]

2 [REDACTED]

3 Q. [REDACTED]

4 A. [REDACTED]

5 [REDACTED]

6 [REDACTED] <sup>15</sup> [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED] <sup>16</sup> [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

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<sup>15</sup> Earle, Exh. RLE-5C (PacifiCorp Response to Public Counsel Data Request 84 with Attachment).

<sup>16</sup> Earle, Exh. RLE-6C (PacifiCorp Response to Public Counsel Data Request 192 with Attachment).

1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 Q. [REDACTED]

13 A. [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 Q. What is your recommendation?

1 A. [REDACTED]  
2 [REDACTED]  
3 [REDACTED]  
4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED]

7 [REDACTED]. The resulting disallowances are  
8 \$2,512,499.50 for rate year one and \$735,463.15 for rate year two.

9 [REDACTED]  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]  
13 [REDACTED]  
14 [REDACTED].

15 **IV. MYRP DESIGN**

16 **Q. Please describe the rate updates that PacifiCorp has planned in its MYRP**  
17 **design.**

18 A. PacifiCorp has proposed six different rate updates in its MYRP design. Three of  
19 the updates are an annual review process for provisional capital projects. Table  
20 MD-1 shows the Company's proposed updates for capital projects.

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1 **Table MD-1: PacifiCorp Proposed Capital Project Updates<sup>17</sup>**

<b>Provisional Capital Review Year</b>	<b>Investment Period</b>	<b>Filing Date</b>	<b>Review Period Ends</b>	<b>Rate Effective Date</b>
2023	January 1, 2023, to December 31, 2023	July 15, 2024	November 1, 2024	March 1, 2025
2024	January 1, 2024, to December 31, 2024	July 15, 2025	November 1, 2025	Refund/True-Up will occur either in subsequent rate proceeding or stand-alone rate filing
2025	January 1, 2025, to December 31, 2025	July 15, 2026	November 1, 2026	Refund/True-Up will occur either in subsequent rate proceeding or stand-alone rate filing

2 In addition to the three capital project updates, PacifiCorp has also  
 3 proposed three NPC updates. These are shown in Table MD-2.

4 **Table MD-2: PacifiCorp Proposed NPC Updates<sup>18</sup>**

<b>Compliance Filing Date</b>	<b>Rate Effective Date</b>	<b>Official Forward Price Curve Date</b>	<b>Purpose of NPC Update</b>
February 16, 2024	March 1, 2024	December 2023	Provide most accurate NPC for first rate effective date
January 31, 2025	March 1, 2025	December 2024	Incorporate new resources into the forecast to match costs and benefits for second rate year
October 31, 2025	January 1, 2026	September 2025	Remove Jim Bridger and Colstrip coal facilities from NPC forecast to comply with CETA

<sup>17</sup> Direct Testimony of Matthew D. McVee, Exh. MDM-1T at 26.

<sup>18</sup> Mitchell, Exh. RJM-1T at 38.



1       **Q.     Do you have concerns with PacifiCorp’s update proposal?**

2       A.     Yes. PacifiCorp’s proposal goes against one of the motivations for Washington  
3       Engrossed Substitute Senate Bill 5295 (SB 5295) relating to multi-year rate plans:  
4       to reduce the load of cases. The Senate Bill Analysis stated:<sup>19</sup>

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 work load more predictable and provides more  
11                    certainty for customer rates and allows the UTC to pursue  
12                    performance-based regulation.

13                    Adding additional proceedings is concerning because it imposes additional  
14                    burdens on interested parties and the Commission. In particular, for intervenors  
15                    representing disadvantaged communities, additional proceedings raise concerns  
16                    about equity. If these intervenors lack the staff or budgets to follow Commission  
17                    filings closely and engage in all relevant proceedings, they lose the ability to  
18                    guard the rights of their represented disadvantaged communities. This is even  
19                    more the case if the proceedings involve determinations of prudence. It takes a  
20                    quick reaction time and plentiful resources to analyze and then file arguments for  
21                    opening the process into full adjudication.

22                    Establishing the review of the prudence of power cost updates and capital  
23                    additions in the next GRC would be consistent with the Commission’s Used and

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<sup>19</sup> 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’).

1 Useful Policy Statement<sup>20</sup> 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.<sup>21</sup>

6 Another concern is the length of time given for review in PacifiCorp's  
7 proposal. For the capital reviews, PacifiCorp proposes 3 ½ months. Under any  
8 circumstance, 3 ½ months is too short a period to allow for adequate review. At a  
9 minimum five months should be provided for review if no prudence  
10 determinations are made in these proceedings. However, if prudence  
11 determinations are to be made in these proceedings, the Commission should give  
12 nine months for review.

13 The timing allowed for review in the NPC updates is also too short. For  
14 the first NPC update, it is a mere nine business days (February 19 is Presidents  
15 Day). For the second NPC update the review period is one month. It is unclear  
16 why the compliance filing date for the first NPC update could not be moved to  
17 January 31, 2024, allowing a similar one-month review process for a similar  
18 update as in the second NPC update.

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<sup>20</sup> *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).

<sup>21</sup> 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 prudence reviews to the GRC from the PCAM 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 prudence determinations to the GRC is that it would avoid the need for careful review and requests for adjudication for most PCAM proceedings by interested parties.

1       **Q.    Does this conclude your testimony?**

2       A.    Yes.