BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATIONCOMMISSION

In the Matter of the Petition of PACIFICORP d/b/a PACIFIC POWER & LIGHT COMPANY Petitioner, 2023 Power Cost Adjustment Mechanism Annual Report	DOCKET UE-240461 DECLARATION OF ROBERT L. EARLE

1. I, Robert L. Earle, make the following declaration:

2. I am the owner of Alea IE, LLC, an economic consulting firm. My business address is 1388 Haight St. #49, San Francisco, CA. I have over 20 years' experience working in the electric power and gas industries. I hold M.S. and Ph.D. degrees in operations research from Stanford University, and a B.A. in mathematics from the College of William and Mary. My curriculum vitae is included in the Appendix to this declaration.

3. I have been engaged by the Washington State Attorney General's Office Public Counsel Unit (Public Counsel) to review certain aspects of PacifiCorp's 2023 Power Cost Adjustment Mechanism (PCAM) Annual Report.

4. Washington customers, according to PacifiCorp (the Company), had a shortfall of 531,788 MWh in production and purchases attributed to them to meet its 2023 load.[1] Likewise,

[1] PacifiCorp Petition for Approval, Workpaper *240461-PAC-PCAM-WP3-6-14-24.xlsx*, "Net Position Balancing." (filed June 14, 2024)

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the rest of PacifiCorp had an excess of 531,788 MWh in production and purchases attributed to them. This is because the PacifiCorp system is necessarily balanced. Washington customers need to get 531,788 MWh, and the rest of PacifiCorp needs to get rid of its surplus of 531,788 MWh. The central question is how much Washington customers should pay the rest of PacifiCorp for the 531,788 MWh.[2]

5. Suppose there was a negotiation between Washington customers and the rest of PacifiCorp on the balancing costs. In this situation, any price Washington customers would pay above NPC system costs would benefit the rest of PacifiCorp.[3] So, if Washington customers paid the rest of PacifiCorp 20 percent above system cost for WIJAM balancing,[4] yielding a very nice margin for the rest of PacifiCorp, it would result in a balancing price of $46.99/MWh for Washington customers.[5]

6. In contrast, PacifiCorp proposes that Washington customers give the rest of PacifiCorp a 155 percent markup over their costs, for a balancing price of $105.04/MWh. As detailed below, PacifiCorp reaches this number by taking some of the most expensive power on its system from a relatively arbitrary set of transactions. Rather than simply assigning very expensive power from the arbitrary category of short-term firm purchases to derive a number that provides an incredibly high margin to the rest of PacifiCorp, it would be more reasonable to for Washington customers

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[2] Under PacifiCorp's scheme, PacifiCorp treats the rights to output from its power plants depending on the capital contributions of a jurisdiction despite its high-minded talk of "the benefits of geographic diversity."
[3] The capital costs for the rest of PacifiCorp are fixed, so anything above system costs benefits the rest of PacifiCorp.
[4] To be clear, Public Counsel maintains that even a 20 percent margin is too high.
[5] If there is an objection that the system cost includes costs from coal fired plants, then coal fired plants could be easily excluded.

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to pay a 20 percent margin. Doing so would reduce the Total PCAM Differential from $87 million to $60 million.

7. Along with reducing the markup that the rest of PacifiCorp receives for balancing power, there are two other actions to consider. First, had PacifiCorp heeded the Washington Utility and Transportation Commission's (Commission) remonstrations to reduce Washington's market exposure in its long-term planning, the requested PCAM recovery could have been reduced by as much as $38.2 million. Second, PacifiCorp could have hedged Washington customers separately to reduce their exposure, in addition to its actual, implemented hedging operations. The remainder of this declaration addresses these two issues as well as providing an analysis of the transactions that PacifiCorp uses to derive its 155 percent markup.

Reduction of Washington Market Exposure in Long-Term Planning

8. The Commission recently reaffirmed what it said 10 years ago that PacifiCorp has a "responsibility to manage its power costs using integrated resource planning, carefully structured hedging practices, conservation initiatives, and other means available to PacifiCorp and other utilities."[6] In 2022, the Commission listed numerous warnings to PacifiCorp about risk exposure to market fluctuations and specifically directed the Company to demonstrate that its "portfolio of long-term resources the Company acquired or chose not to acquire" was prudent.[7]

9. In the Power Cost Only Rate Case (PCORC) order, the Commission details how in its acknowledgment letters for the 2011, 2015, and 2017 IRPs, it cautioned PacifiCorp on its

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[6] *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a Pacific Power & Light Co.*, Dockets UE-230172 and UE-210852, Order 08/06, ¶ 402 (Mar. 19, 2024) (citing *Wash. Utils. & Transp. Comm'n v. PacifiCorp*, Docket UE-130043, Order 05, ¶ 172 (Dec. 4, 2013)).
[7] *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a Pacific Power & Light Co.*, Docket UE-210402, Order 06, ¶ 108 (Mar. 29, 2022) (hereinafter *PCORC Docket*). The Commission also stated (¶ 3) that, "We are concerned, however, that the Company may not have prudently managed market risk for its Washington customers."

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reliance on market purchases.[8] The Commission went on to say "PacifiCorp has made significant investments in recent years, but the evidence in this case shows that the Company's continued reliance on market purchases has exposed Washington customers to significant price increases."[9] The Commission concludes "despite these clear indications from the Commission, the Company continues to rely on market purchases to meet Washington customers' load."[10]

10. The cost imputed by PacifiCorp to Washington's net short position has well exceeded the cost of investing in new resources since the inception of WIJAM. From 2021 through mid-2024, Washington's excessive market exposure has cost $220 million ($2023). The weighted average cost (in 2023$) of the 2.3 million MWh exposure was $96.44/MWh. By comparison, the average cost of wind was $33.16/MWh (2023$) in 2019.[11] If PacifiCorp had acquired situs wind for Washington customers, this could have reduced costs by up to $144 million while shielding Washington customers from future unreasonable market exposure.

11. PacifiCorp, of course, did not do this. Indeed, PacifiCorp's Regulatory Projects Director, according to her own testimony in PacifiCorp's 2023 Clean Energy Implementation Plan docket, does not understand how the PCAM works and is not aware of Washington's short position relative to other states.[12]

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[8] *Id.* ¶¶ 142–144.
[9] Id. ¶ 146.
[10] *Id.* ¶ 147.
[11] PacifiCorp, 2019 Integrated Resource Plan, at 141 (Oct. 18, 2019). This is the average cost across five states, Washington, Oregon, Idaho, Utah, and Wyoming. The lowest cost was $20.68 in Wyoming. These costs include the PTC credit. Without the PTC credit the cost was still only $52.00/MWh averaged across states, and $39.51/MWh for Wyoming. The numbers are similar for the 2017 IRP update. https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2019_IRP_Volume_I.pdf
[12] Rohini Ghosh, TR. 286:12–22, *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a Pacific Power & Light Co.*, Docket UE-210829(Vol 6. Oct. 21, 2024). "**Q.** But are you familiar with PacifiCorp's PCAM, how it works? **A.** Honestly, no. **Q.** Okay. Let's ask it this way. Are you familiar that – are you aware that PacifiCorp's six-state system -- pardon me – leaves Washington short on generation relative to its load? **A.** I'm not really aware. I know what the

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Hedging Separately for Washington Customers

12. PacifiCorp claims that hedging separately for its Washington customers (in addition to its system wide hedging, or completely separately) would have resulted in increased costs.[13] Yet, despite various nitpicking of the critiques and counterproposals by Public Counsel and the Alliance of Western Energy Consumers (AWEC) in the 2022 PCAM, PacifiCorp does not provide any examples, scenarios, or any concrete calculations of how hedging separately for Washington customers results in increased costs (other than the fact that hedges over the long run do not beat the market and so hedging necessarily entails costs). As a result, one can only speculate on the reasons PacifiCorp claims that hedging separately for Washington unreasonably increases costs.

13. Perhaps PacifiCorp might claim, given PacifiCorp bombastic repetition of the phrase that it "optimizes the system as a whole," that hedges for Washington would impact system dispatch. However, this is not true apart from some rare edge case. Indeed, neither PacifiCorp nor Staff actually believe this. In their disagreement over Chehalis and Hermiston dispatch,[14] the discussion involves determining the actual cost of dispatch at a given point in time and the correct market price referent. There is no discussion of hedging positions by either party that Public Counsel is aware of, nor should there be any. If a unit is economical to be dispatched with

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WIJAM allocation generally looks like for Washington customers, but I'm not really aware of, you know, Washington's short position relative to other states."

[13] PacifiCorp Reply Brief ¶ 13, *Wash. Utils. & Transp. Comm'n v. PacifiCorp d/b/a Pacific Power & Light Co.*, Docket UE-230482 (July 12, 2024).

[14] Rebuttal Test. of Ramon J. Mitchell, Exh. RJM-3CT at 7:7–10:19, *PacifiCorp Docket UE-230482* (May 2, 2024). PacifiCorp states that "these gas plants are dispatched in accordance with the relevant generator nodal locational marginal prices from the WEIM." Direct Test. of John D. Wilson, Exh. JDW-1CT at 22:12–29:10 *PacifiCorp Docket UE-230482* (Mar. 28, 2024).

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reference to the wider market, it should be dispatched, if it is not economical to be dispatched and power is needed, power should be purchased from the wider market.

14. Another gambit by PacifiCorp might be to argue that adding hedges for Washington would impact market prices. This is akin to arguing that Washington customers could exercise oligopoly/oligopsony power through its hedging. Washington customers' demand is simply too small to have an impact. Washington customers' demand is a mere eight percent of PacifiCorp's load. It does not appear that PacifiCorp maintains that it exercises oligopoly power and therefore separate hedging for Washington is an issue. Any claim by PacifiCorp that Washington customers' hedges could swing the market is baseless.

15. PacifiCorp's assertions that hedging separately for Washington is impractical or expensive have no basis and should be rejected.

16. PacifiCorp's system-wide hedging in 2023 did not meet the needs of its Washington customers. The correlation between PacifiCorp's hedges and Washington customer exposure to spot purchases is -0.53. In other words, PacifiCorp's hedges less than it should when Washington customers most need it, and hedges more when Washington customers need it less.

17. Having established that PacifiCorp should hedge separately for Washington customers, and that there is no reason for it not to do so, a reasonable estimate of how much Washington customers would have benefited from additional hedging can be derived by applying PacifiCorp's hedging policy in a systematic manner using prices that were known at the time. PacifiCorp has complained that this method requires "perfect foresight."[15] PacifiCorp, however,

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[15] Suppl. Rebuttal Test. of Douglas R. Staples, Exh. DRS-4CT at 3:5–4:14, *PacifiCorp Docket UE-230482* (May 9, 2024).

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is mistaken. The prices used in estimating the impact of hedging separately are known. They are derived from the Official Forward Price Curve (OFPC). The hedging policy is known ahead of time and followed. The only variable at play is the amount to be hedged. This amount does not need to be known with the perfection that PacifiCorp demands to show that hedging separately for Washington customers can benefit them by reducing their market exposure. Under-hedging or over-hedging the amount to be hedged still results in Washington ratepayer benefits.

Transactions Used to Balance WIJAM Calculation

18. PacifiCorp uses what it calls Short Term Firm Purchases (STF purchases) to grant a 155 percent markup over system costs to non-Washington customers. However, the file of transactions that PacifiCorp uses to make up the shortfall, although labeled short-term firm transactions, contains many other transactions that boost the cost to Washington ratepayers and lack cost causation.

19. PacifiCorp provided a file (henceforth "STFP File") in response to Public Counsel's data requests containing the Short-Term Firm Purchase transactions[16] it used to perform the WIJAM balancing.[17] These transactions, designated by PacifiCorp as "Short-Term Purchases" consist of a variety of items [redacted]

20. [redacted]

[16] The file provided consists of lines in Excel that include a "deal number." Public Counsel treats a single deal number which may span many lines in the Excel file as a transaction.

[17] *See* Earle, WP-1. I use information from PacifiCorp's Response to Public Counsel Data Request No. 3. The file provided contains both purchases and sales, this Declaration will only discuss the purchases because it is the purchases that PacifiCorp uses to performing the balancing.

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[redacted]

21. PacifiCorp will likely argue as it did in the 2022 PCAM that using the transactions in the STFP File is justified because of "cost causation and the principle that benefits should follow burdens."[19] However, an analysis of the contents of the STFP File show that using it for balancing WIJAM fails cost causation principles and the principle that benefits should follow burdens.

22. PacifiCorp asserts that the balancing adjustment is calculated using actual transaction costs.[20] There are problems with this assertion. First, [redacted]

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[18] [redacted].

[19] PacifiCorp Reply Brief ¶ 20, *PacifiCorp Docket UE-230482* (July 12, 2024).

[20] Id ¶ 21–22.

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[redacted]. Clearly, these fail the cost causation principle. Second, the STFP File contains [redacted]. For instance, transaction [redacted] Third, [redacted]. Arguing cost causation for these transactions is tenuous at best.

23. While the foregoing are important, but relatively minor issues, the fact is that there are other actual transactions that PacifiCorp neglects. If purchases in the STFP File, which as discussed above comprise a variety of types of transactions, are used in the WIJAM balancing, purchases from Washington eligible power purchase agreements (PPAs) should also be included under PacifiCorp's approach. These do not run afoul of PacifiCorp's complaint concerning the

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[21] [redacted]

[22] In addition, there are [redacted]

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capital costs of the coal and gas resources that are excluded from Washington rates.[23] Including them along with the short-term firm transactions results net power costs of $50.13/MWh compared with the $52.44/MWh in PacifiCorp's calculation. By itself this reduces the Total PCAM Differential from $87 million to $81 million.

24. It is possible that PacifiCorp will object that the STF Purchases are the only transactions (or dispatch) caused by the WIJAM shortfall. But this is manifestly not the case. The costs of the WIJAM shortfall are due to the system as a whole. Therefore, all of the system costs, or at least a much broader set of costs should be included in balancing WIJAM. Even if Washington customers are not entitled to some of the sources of power, a reasonable negotiation with the rest of PacifiCorp would result in a more equitable outcome.

I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF WASHINGTON THAT TO THE BEST OF MY KNOWLEDGE THE FOREGOING IS TRUE AND CORRECT.

25. SIGNED at San Francisco, California this 24th day of January, 2025.

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[23] PacifiCorp Reply Brief ¶ 20, *PacifiCorp Docket UE-230482* (July 12, 2024).