Exh. RG-2T
Docket UE-210829
Witness: Rohini Ghosh

BEFORE THE WASHINGTON

UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PACIFICORP dba PACIFIC POWER & LIGHT COMPANY Respondent.	Docket UE-210829

PACIFICORP

REBUTTAL TESTIMONY OF ROHINI GHOSH

September 2024

TABLE OF CONTENTS

ATTACHED EXHIBITS

I. INTRODUCTION AND PURPOSE

Q. Are you the same Dr. Rohini Ghosh who submitted direct testimony in this proceeding?

A. Yes.

Q. What is the purpose of this testimony?

A. I respond to the testimonies of Staff of the Washington Utilities and Transportation Commission (Staff), the Public Counsel Unit of the Washington State Attorney General's Office (Public Counsel), and Renewable Northwest and Northwest Energy Coalition (RNW-NWEC).

Q. Can you summarize your rebuttal testimony?

A. I continue to recommend the Washington Utilities and Transportation Commission (Commission) approve PacifiCorp's 2023 Clean Energy Implementation Plan (CEIP) Biennial Update (CEIP Biennial Update).

II. STAFF REBUTTAL

Q. What is Staff's recommendation regarding interim targets?

A. Staff recommends the Commission reject PacifiCorp's CEIP Biennial Update and instead require PacifiCorp to adhere to the interim targets from the 2021 Revised CEIP. Staff also proposes eight alternative recommendations should the Commission not reject PacifiCorp's CEIP Biennial Update.

Q. Do you have any concerns with Staff's recommendations?

A. Yes. I am concerned with the potential impacts that Staff's recommendations and conclusions regarding PacifiCorp's interim targets have on: (1) the company's ability to update its long-term modeling and planning as new information becomes available;

(2) least-cost, least-risk planning and resource procurement efforts for Washington customers; and (3) incremental costs to Washington customers as a result of actions that would be necessary to comply with Staff's recommendations.

Q. Can you summarize your rebuttal to Commission Staff?

A. In the sub-sections below, I clarify or correct several statements from the testimony of Commission Staff Witness Jaclynn Simmons. I also discuss why the Commission needs to reject Staff's primary recommendation because it would prevent utilities from updating CEIPs based on changed circumstances—even when Staff has not presented any analysis that contradicts PacifiCorp's updated interim targets.

I also demonstrate that it would have been imprudent and unreasonable to procure resources from the 2022 all-source request for proposals (2022 AS RFP), and as a result PacifiCorp's CEIP Biennial Update demonstrates reasonable progress. I conclude with a discussion on the real cost implications that could result if the Commission holds PacifiCorp to the interim targets from the 2021 Revised CEIP. Conservatively, it could cost an additional $37 million to $113 million to implement Staff's primary recommendation.

A. Clarifications to Staff Testimony

Q. What clarifications would you like to address regarding Commission Staff Simmons' testimony?

A. The company would like to address five statements from Commission Staff:

1. Staff's arguments are focused largely on PacifiCorp's compliance trajectory leading up to 2030, particularly from 2026-2029. From PacifiCorp's perspective, this CEIP Biennial Update is primarily focused on the first progress period for

years 2022-2025. Staff's issues are better addressed in the 2025 CEIP, which will provide additional discussion and procurement plans for the 2026-2029 CEIP progress period.

2. Staff notes that the Public Utility Commission of Oregon (OPUC) rejected a similar filing made by PacifiCorp, the Company's 2023 Integrated Resource Plan (IRP) and 2023 Clean Energy Plan (CEP),[1] and "ordered the Company to start a new RFP."[2]

This is incorrect. While the OPUC declined to acknowledge PacifiCorp's inaugural CEP filing for several reasons, including several that were beyond the company's control,[3] the OPUC explicitly declined to require PacifiCorp to issue an RFP.[4] Instead, the OPUC has asked to receive briefing, first on whether it has the power to direct PacifiCorp to issue an RFP, and second, even if the Commission had that power, whether it is appropriate to use that power in this instance.[5]

This is an important distinction. The OPUC recognized that: "even if we conclude in this new docket that we have the authority to order the company to initiate a procurement process, ordering a utility to actually procure resources is

[1] *Id.* at 3 (citing Exh. JNS-18).
[2] JNS-1HCT, at 3.
[3] *E.g., In re PacifiCorp's 2023 IRP and CEP,* Docket No. LC 82, Order No. 24-073, at 8 (Mar. 19, 2024) ("In saying this, we recognize that not all of these changed circumstances are in the company's control—there are real changes in federal regulations, real operating circumstances and pressures affecting the company, and some inflexibility in PacifiCorp's six-state IRP structure.").
[4] *In re PacifiCorp's 2023 IRP and CEP,* Docket No. LC 82, Order No. 24-297, at 3 (Aug. 28, 2024) ("It is ordered that: The Administrative Hearings Division open a new docket in which the Commission *may* issue an order that PacifiCorp, dba Pacific Power will issue a Request for Proposal with a certain date and scope, to be determined in the docket.") (emphasis added).
[5] *Id.* ("We look forward to an airing of perspectives on whether, in the absence of continual progress, we can and should order a utility to commence a procurement process."

another question—one that upends the traditional regulatory model in which the utility takes action subject to Commission guidance in IRPs and evaluation in rate cases."[6] The OPUC recently opened this docket, and PacifiCorp is currently under no obligation to issue an RFP.[7]

3. Staff includes eight conditions in their alternative recommendations that the company should be required to meet. The first condition discusses PacifiCorp's Public Participation Plan (PPP). While the company generally agrees with Staff's condition, I would like to respond to Staff's statement that the "PPP is also limited regarding inclusivity and outreach, with a primary focus on Spanish-speaking communities and a lack of diversity in cultural partnerships."[8]

The company is surprised by this feedback. To date, we do not believe that Staff has reached out to discuss concerns regarding PacifiCorp's inclusivity and diversity in its outreach and engagement efforts. We are very receptive to including more of this information in the next PPP filing, due May 2025, but I would like to highlight a few of the ways in which we make our engagement efforts inclusive and accessible:

a) All Equity Advisory Group (EAG) and CEIP Engagement Series meetings are open to the public.

b) Meeting resources such as presentations and notes are offered in English and Spanish and can be accessed online or printed.

---

[6] *Id.*
[7] *In re OPUC Investigation of PacifiCorp's Continual Progress,* Docket No. UM 2345 (Aug. 30, 2024).
[8] JNS-1HCT, at 12.

c) We offer and signal the use of interpretation and transcription features offered on Zoom to support individuals in their learning and participation.

d) CEIP Engagement Series meetings are recorded and posted online for individuals to reference and watch at any time and the format of this resource allows for easy sharing of the material.

e) Within Pacific Power's service area, 30.8% of households speak some level of Spanish: based on the American Community Survey, 30.8% of PacifiCorp's Washington service area primarily speaks Spanish at home, whereas within Highly Impacted Communities 48.2% of customers speak Spanish at home.[9]

f) The company has partnered with the Asian Pacific Islander Coalition on various engagement and program activities.

g) The company has dedicated time and effort building "culturally specific partnerships". One such partnership involves a community-based organization that directly serves tribal community members offering low-income program resources and communications.

h) The company makes it a common practice to include tribal (or tribal serving) interested parties and groups in communications that relay broader input opportunities.

i) Within the EAG meeting space there is constant discussion and consideration for equity and access.

---

[9] *In re PacifiCorp's CEIP 2024 Progress Report*, Docket No. UE-210829, Confidential Workpaper "210829-PAC-WP-SpanishResponses 12.31.21 (C).xlsx".

4. When discussing the allocation methodology used in PacifiCorp's 2021 Revised CEIP as compared to its CEIP Biennial Update, Staff states "the allocation of resources to Washington changed from dynamic allocation using MSP [multi-state process] to set a percentage through the WIJAM."[10]

The opposite is true. The assumed allocation methodology in PacifiCorp's 2021 Revised CEIP resulted in fixed allocation factors for generation resources. The CEIP Biennial Update relied on the Washington Inter-Jurisdictional Allocation Methodology (WIJAM), which uses dynamic allocation factors for generation resources, and these factors are calculated annually based on states' load share.

5. Staff states that Company witness Matthew D. McVee incorrectly stated that the modeling and economic analysis underlying the CEIP Biennial Update did not incorporate the federal Inflation Reduction Act (IRA), Infrastructure Investment and Jobs Act (IIJA) and Ozone Transport Rule (OTR).[11]

This is partially correct. PacifiCorp witness McVee stated that the CEIP Biennial Update did not incorporate "financing opportunities from the Inflation Reduction Act."[12] This was an incorrect statement, that should have said "financing opportunities from the IIJA," and was meant to refer to the project-specific financing opportunities that the IIJA provides for, not the general tax credits included in the IRA. McVee also stated that the CEIP Biennial Update did not include consideration of the "litigation" surrounding the OTR.[13] This referred

[10] JNS-1HCT, at 13.
[11] *Id.* at 17.
[12] MDM-1T, at 7.
[13] *Id.*

to the stay of the OTR that occurred in the summer of 2023, not that the CEIP Biennial Update did not include any OTR assumptions. As Staff correctly notes, the 2023 IRP assumed that the OTR would be effective and would apply to coal-fired units in Utah and Wyoming, and also accounted for updated production and investment tax credits from the IRA.[14]

B. Utilities need to retain the ability to update long-term resource planning as new information becomes available.

Q. What are Staff's concerns with PacifiCorp's interim targets?

A. Staff is concerned that PacifiCorp might not achieve the Clean Energy Transformation Act's (CETA) 2030 greenhouse gas neutrality requirement, because the interim targets proposed in PacifiCorp's CEIP Biennial Update "do not represent reasonable progress," and because the company "is making too few verifiable efforts to obtain renewable and non-emitting resources that would mitigate this compliance target gap."[15]

To remedy this outcome, Staff asserts PacifiCorp should be held to its higher, and now outdated, interim targets as proposed in the Revised 2021 CEIP. The recommendation to reject the updated CEIP would result in higher near-term interim targets not only for the first compliance period (2022-2025), but for the second compliance period as well (2026-2029).

Q. Do you have concerns with this recommendation?

A. Yes. Consistent with Washington law, PacifiCorp may update its CEIP, including interim targets to incorporate changes that result from integrated resource planning

[14] JNS-1HCT, at 17-18.
[15] *Id.* at 21 and 42.

processes.[16] PacifiCorp filed its 2021 Two-Year IRP Progress Report with the Commission on March 31, 2023,[17] which serves as the basis for the updated clean energy interim targets in the CEIP Biennial Update. This update reflects changes in PacifiCorp's modeling processes and operational realities, and resulted in lowered near-term interim targets. While PacifiCorp's CEIP Biennial Update demonstrates a slower trajectory in its clean energy interim targets between 2023 and 2030 compared to its 2021 Revised CEIP, the interim targets nonetheless demonstrate compliance in 2030 with CETA's greenhouse gas neutral requirement. PacifiCorp believes this represents reasonable progress, because it is based on PacifiCorp's current operational realities and most recent planning and modeling assumptions.

Said another way, it would be unreasonable to conclude that PacifiCorp's renewable energy targets in the CEIP Biennial are inappropriate, when they are based on PacifiCorp's most recent—and as I discuss below, almost entirely uncontested—integrated resource planning assumptions.

Q. Has Staff presented analysis that refutes PacifiCorp's updated interim targets?

A. No. Staff has not analyzed, nor identified any errors with, PacifiCorp's justifications for its lowered interim targets that are reflected in the 2023 CEIP Biennial Update.[18] Specifically, Staff has not contested PacifiCorp's justifications for lowered interim targets caused by: (1) the use of the WIJAM over a post-MSP allocation;[19] (2) actual, as opposed to planned for, procurement from the 2020 all-source request for proposal

[16] WAC 480-100-640(11) ("In addition to its proposed biennial conservation plan, the utility may file in the update other proposed changes to the CEIP as a result of the integrated resource plan progress report.").
[17] PacifiCorp's 2021 Two-Year Progress Report, Docket No. UE-200420 (May 31, 2023).
[18] Exh. RG-4 (Staff response to PacifiCorp Data Request No. 6 – "Staff did not directly discuss the modeling analysis supporting PacifiCorp's interim targets.").
[19] *Id.* (Staff response to PacifiCorp Data Request No. 1 – "Staff confirms that the Company used allocation percentages from WIJAM in the BCEIP update, filed November 1, 2023.").

(2020 AS RFP);[20] (3) revised load and retail sales data;[21] and (4) revised thermal resource decisions to serve our Washington customers that the Commission recently approved in PacifiCorp's 2023 rate case.[22]

Q. Despite not analyzing PacifiCorp's updated interim targets, Staff nonetheless concludes PacifiCorp is not making reasonable progress to comply with CETA. Do you agree?

A. No. Because there is no evidence to support Staff's conclusion that PacifiCorp's updated interim targets are incorrect, it is inappropriate for Staff to conclude that the company has no plans, nor an identified compliance path, to achieve CETA's 2030 greenhouse gas neutral requirement.

Yet there is a more concerning implication of Staff's recommendation. Staff argues that PacifiCorp should be held to interim targets that were calculated based on data that is over three years old today. If adopted by the Commission, this means that PacifiCorp would be unable to update its long-term planning as new information and data become available.

Utility resource planning requires regular and routine updates, because facts and circumstances always change with each planning cycle. This is the reason why the company conducts regular updates to its IRPs and CEIPs, and these updates are consistent with Washington law which requires PacifiCorp to comply with CETA by applying a framework that achieves a least-cost, least-risk plan.[23] The Commission

[20] *Id.* (Staff response to PacifiCorp Data Request No. 4 – "Staff assumes the Company means the Biennial CEIP update, when referring to CEIP Update, with that assumption, yes."
[21] *See generally* Exh. RG-4 (Staff response to PacifiCorp Data Request No. 6).
[22] Staff Comments, Docket No. UE-210820, at 5, Table 1 (Jan. 11, 2024).
[23] *E.g.*, WAC 480-100-610(5) ("Each utility must demonstrate that it has made progress toward and has met the standards in this section at the lowest reasonable cost.").

needs to reject Staff's attempt to prevent utilities from updating interim targets based on changed facts and circumstances.

Q. Has Staff presented analysis that supports PacifiCorp's interim targets from the 2021 Revised CEIP?

A. No. Staff has not presented any analysis that justifies why PacifiCorp's interim targets, based on analyses from now over three years ago, is reasonable or consistent with least-cost, least-risk planning principles. Staff has conceded that PacifiCorp's interim targets from the 2021 Revised CEIP are outdated.[24] This means that the Commission cannot conclude that PacifiCorp's 2021 Revised CEIP interim targets are reasonable, and must reject Staff's primary recommendation to hold PacifiCorp to the previous interim targets.

C. It would have been imprudent and unreasonable to procure resources from the 2022 AS RFP.

Q. What are Staff's concerns with the cancellation of the 2022 AS RFP?

A. Staff states that the cancellation of the 2022 AS RFP is a significant setback for the company's ability to obtain resources, and "may put CETA compliance out of reach,"[25] and that PacifiCorp's explanation for cancelling the RFP and planning for future procurement efforts are inadequate.

Q. Do you agree?

A. No. As company witness McVee stated in direct testimony,[26] the 2022 AS RFP did not include significant generation resources that were expected to be in service before

[24] Exh. RG-4 (Staff response to PacifiCorp Data Request No. 19(a) ("With this assumption, Staff acknowledges that the 2023 IRP and 2023 IRP Update provide more recent data and updated assumptions, which reflect current market conditions and technological advancements that differ from those in 2020 and 2021.").
[25] Exh. JNS-1HCT, at 21.
[26] Exh MDM-1T, at 23.

2026. This means the 2022 AS RFP was not expected to contribute to meeting interim targets in the current CEIP period from 2022-2025.

While cancelling the 2022 AS RFP has implications for years after 2026, the company has recently procured material battery resources, which will help meet peak load requirements and facilitate the integration of variable resources, helping to meet CETA's 2030 requirements. These battery resources are expected to be online in 2026, just two years after contracts were executed. The company will build on this by proposing additional procurement efforts in the 2025 CEIP as necessary.[27] Based on the range of submissions in the 2022 AS RFP and its knowledge of interconnection and project development timelines, the company expects an RFP initiated in 2025 to result in a wide variety of offers for renewable resources coming online in 2028-2030.

It is unreasonable to conclude that PacifiCorp may not be able to comply with CETA's 2030 requirements, when those requirements are over half a decade away.

Q. Would it have been reasonable for PacifiCorp to procure resources from the 2022 AS RFP?

A. Absolutely not. Staff's argument appears to assume that if PacifiCorp had not cancelled the 2022 AS RFP, and instead procured resources from this effort, that PacifiCorp would have demonstrated adequate reasonable progress. This assumption is incorrect, because PacifiCorp's justifications for cancelling the 2022 AS RFP were based on materially changed circumstances in the planning environment.

Said another way, it would have been imprudent and unreasonable for PacifiCorp to procure resources from the 2022 AS RFP when the company's

[27] *Id.* at 20.

economic analyses no longer supported the need for the significant volume of resources that the RFP called for.

This is especially the case given PacifiCorp's credit downgrades at the time. Additional resource procurements would have likely further impacted PacifiCorp's credit metrics, to the detriment of Washington customers.

Q. Despite cancellation of the 2022 AS RFP, do you remain confident that the company can procure enough resources to comply with CETA's 2030 requirements?

A. Yes. Despite the documented challenges that PacifiCorp has faced in regard to resource procurement since the initiation of its 2020 AS RFP, the company has still contracted to bring 1,900 megawatts (MW) of new renewable energy online prior to 2026. The Washington-allocated share of this generation is estimated to increase PacifiCorp's progress towards its interim targets by roughly 9 percentage points by the end of 2026.[28] And while PacifiCorp cancelled the 2022 AS RFP, recent battery procurement efforts will further support the company's CETA compliance position.

However, despite the company's continued efforts and commitment to bring more renewable and non-emitting resources online, and various challenges that have been documented in this proceeding, PacifiCorp did not expect to realistically or cost-effectively meet the Revised 2021 CEIP targets throughout the first planning period (2022 through 2025). This reality led to PacifiCorp's revised interim targets in the CEIP Biennial Update.

---

[28] Exh. RG-3.

D. Conservatively, it would cost between $37 to $113 million to implement Staff's primary recommendation.

Q. Are there cost implications to customers of Staff's recommendations for higher interim targets?

A. Yes. There will be cost impacts for our Washington customers if the Commission rejects PacifiCorp's CEIP Biennial Update, and holds the company to its Revised 2021 CEIP interim targets through the end of 2025, and from 2026 through the end of 2029.

Q. Can you explain the cost implications for Washington customers if the Commission rejects PacifiCorp's CEIP Biennial Update interim targets through 2025?

A. Yes. In this scenario, where PacifiCorp is held to its Revised CEIP interim targets through the end of 2025, PacifiCorp will need to immediately procure resources to be situs cost-allocated to Washington customers. This shortfall is estimated to be over 1 million megawatt-hours (MWh) of renewable energy credit (REC)-generating energy by the end of 2025.

To estimate how much it might cost to contract for resources for Washington customers to fill that shortfall, I refer to the most recent estimates of the levelized cost of energy (LCOE) presented in PacifiCorp's 2023 IRP Update.[29] In Figure 5.3 in PacifiCorp's 2023 IRP Update, Volume I, the dollar per MWh cost of a Wyoming wind resource with a production tax credit (PTC) in 2024 is 35 dollars per megawatt-

[29] PacifiCorp's 2023 Integrated Resource Plan Informational Update (2023 IRP Update), Docket No. UE-200420 (Apr. 1, 2024) (available at: https://apiproxy.utc.wa.gov/cases/GetDocument?docID=1097&year=2020&docketNumber=200420).

hour (MWh) and in 2025 is 34 dollars per MWh.[30] The 1,092,094 MWh shortfall in RECs for the current CEIP period, 2022 – 2025, to comply with the higher near-term interim target would cost over $37 million.[31] Of course, this estimate does not consider any offsetting power cost benefits, which would reduce the net cost of the resource and reduce the impact on rates. Yet this provides a general estimate of the incremental costs to comply with Staff's primary recommendation.

Q. How does this $37 million incremental cost compare to PacifiCorp's incremental cost in the CEIP Biennial Update?

A. If the Commission accepts PacifiCorp's CEIP Biennial Update, PacifiCorp expects to be able to meet its updated targets by the end of 2025 with only *de minimis* incremental costs for Washington customers. Our CEIP Biennial Update indicates an average $1.35 million revenue requirement impact to comply with CETA through 2025, which would increase customer rates by approximately 0.4 percent.[32] While PacifiCorp has not performed an incremental cost analyses based on the potential $37 million costs to comply with Staff's primary recommendation, it is safe to conclude that this would represent a significant increase to the company's current $1.35 million annual incremental compliance cost estimate.

Q. Can you explain cost implications for Washington customers if the Commission holds PacifiCorp to higher interim targets through the end of 2029?

A. Yes. If the Commission requires PacifiCorp to meet higher interim targets before the end of 2029, the company would also incur additional costs—above system

---

[30] *Id.* at 56.
[31] 210829-PAC-RG-WP-Estimated-Situs-WA-Costs-9-13-24.xlsx.
[32] PacifiCorp 2023 CEIP Biennial Update, at Table 4.3.

procurement costs—to comply. For example, the difference between the interim targets in the Revised 2021 CEIP and CEIP Biennial Update over the 2026-2029 planning period is around 3.4 million MWh of additional renewable and non-emitting energy that would be needed to serve Washington customers. Using the same LCOE dollar per MWh values for a Wyoming wind facility, and after accounting for updated PTCs, the incremental cost would be roughly $115 million to meet those higher targets for 2026-2029 alone.[33] Again, this figure ignores any benefits, but provides an indication of the potential magnitude of cost impacts to customers.

Q. Do you have anything else you would like to say in response to Staff's testimony?

A. Yes. The 2025 IRP and CEIP will be an important update to identify resource needs. The company will continue to identify system resource need and procure on a system basis, but as Staff points out, Washington customers only receive a share of system resources that may be inadequate to reach targets.[34] Some level of situs cost-allocated procurement is expected to be necessary to achieve CETA targets. The expense of situs procurement will likely depend on the timing of procurement efforts that result from the next IRP. As shown in Figure 5.3 in the 2023 IRP Update, resource costs are expected to fall significantly over the next decade, particularly from 2030 onwards.

While the company is receptive to specific interim targets for the next CEIP planning period, I need to stress that any target higher than the least-cost, least-risk identified outcome will likely result in higher incremental costs for Washington customers.

---

[33] 210829-PAC-RG-WP-Estimated-Situs-WA-Costs-9-13-24.xlsx.
[34] Exh. JNS-1HCT, at 30.

III. PUBLIC COUNSEL REBUTTAL

Q. Can you summarize your rebuttal to Public Counsel?

A. Yes. Because (1) prior power cost proceedings and Commission prudency determinations are not relevant to whether PacifiCorp's CEIP Biennial Update interim targets are reasonable or not, and (2) Public Counsel has not substantively contested PacifiCorp's justifications for lowered interim targets, the Commission should ignore Public Counsel's testimony on these points.

A. Rate proceedings from several years ago are not relevant to whether PacifiCorp's interim targets are reasonable.

Q. Can you summarize Public Counsel's arguments regarding higher net power costs (NPC) and long-term planning?

A. Yes. Public Counsel spends significant portions of its testimony discussing how NPC has increased for PacifiCorp customers over the past several years.[35] This testimony is based in part on Public Counsel's perspective of several prior PacifiCorp rate proceedings.[36] Public Counsel argues these prior rate proceedings are relevant, because "both CEIP and IRP planning should be planning the same resources to meet future needs whether they are CETA compliance or least cost provision of power," and because "if CEIP and IRP plans differ in resources planned, there is cause for concern."[37] Public Counsel seems to suggest that because PacifiCorp's customers have had increased NPC over recent years, that this indicates that PacifiCorp has failed to plan to comply with CETA.

[35] RLE-1T, at 3-5.
[36] *Id.* at n. 2-3.
[37] *Id.* at 4-5.

Q. Do you understand Public Counsel's argument?

A. I do not. It is unclear how PacifiCorp's NPC are relevant to whether the Commission should approve PacifiCorp's CEIP Biennial Update. The two categories of proceedings are fundamentally different: NPC proceedings are rate proceedings, while CEIP proceedings are planning proceedings. One seeks to recover prudently incurred, used and useful NPC in a given year; the other seeks to plan for a utility's ability comply with Washington law based on least-cost, least-risk planning principles.

CETA is also transactionally agnostic: It does not matter how PacifiCorp achieves CETA's relevant targets (whether through owned resources, power purchase agreements, or market transactions). So long as PacifiCorp can demonstrate that it has retained adequate nonpower attributes to achieve CETA's relevant requirements (e.g., greenhouse gas neutral by 2030), PacifiCorp is under no obligation to prioritize owned resources or resources contracted under long-term PPAs over shorter-term market transactions.

Q. Can you summarize Public Counsel's argument that PacifiCorp has a long history of ignoring Commission warnings of long-term planning?

A. Yes. Public Counsel believes PacifiCorp's actions, as indicated in several prior rate recovery or planning proceedings, support the conclusion that PacifiCorp was under some sort of obligation to procure Washington-situs resources, and that these resources that PacifiCorp did not procure could have "specifically addressed Washington's market overexposure in its long-term procurement."[38]

[38] RLE-1T, at 7.

Q. Do you understand Public Counsel's argument?

A. I do not. The Company is not aware of any requirement, explicit or otherwise, from prior rate recovery or planning proceedings that obligated PacifiCorp to procure Washington-situs resources.

Q. Do you believe either of these issues are relevant to PacifiCorp's CEIP Biennial Update?

A. I do not. It is tenuous to conclude that PacifiCorp's NPC costs from several years prior to CETA's first relevant planning period (2022-2025), and from several proceedings prior to CETA even becoming law, could be used to collaterally attack PacifiCorp's justifications for lowered renewable energy interim targets for 2023-2029, which is the subject of this proceeding. The Commission should ignore these inartful attempts to relitigate prior PacifiCorp rate proceedings, and ignore Public Counsel's arguments on this point.

B. Public Counsel does not substantively contest PacifiCorp's justifications for lowered interim targets.

Q. What are Public Counsel's concerns with PacifiCorp's interim targets?

A. Public Counsel disagrees with all of PacifiCorp's justifications for lowered interim targets.[39] I respond to each below.

[39] RLE-1T, at 16-18.

Q. Do you have any concerns with Public Counsel's analyses regarding PacifiCorp's changing load and retail sales?

A. Yes. Public Counsel confirms that it did not analyze, nor identify any errors with, PacifiCorp's updated load and retail sales forecasts.[40] Instead, Public Counsel appears to argue that the differences in forecasts would not be relevant if PacifiCorp engaged in Washington-specific planning and procurement efforts.[41]

Because PacifiCorp's forecasts in the CEIP Biennial Update are consistent with current Commission-approved allocation methodologies, and because Public Counsel does not contest that this results in lowered interim targets, the Commission should disregard Public Counsel's arguments on this point.

Q. Do you have any concerns with Public Counsel's analyses regarding PacifiCorp's reflection of actual, as opposed to planned for, procurement from the 2020AS RFP?

A. Yes. Public Counsel does not refute that PacifiCorp's actual procurement from the 2020 AS RFP reflected in the CEIP Biennial Update was lower than what the company had planned for in the 2021 Revised CEIP. Instead, Public Counsel appears to argue that PacifiCorp should have procured more resources from this RFP, as well as the cancelled 2022 AS RFP.

The point of this proceeding is to evaluate PacifiCorp's interim targets to determine if the assumptions that inform the targets are reasonable. It would be unreasonable, as Public Counsel appears to suggest, for PacifiCorp to include more

---

[40] Exh. RG-4 (Public Counsel response to PacifiCorp Data Request No. 2(a) – "Confirmed, though the contention cited by PacifiCorp does not absolve it from its ability and duty to procures situs resources as needed.").
[41] RLE-1T, at 17.

resources than it actually procured to determine interim targets in this proceeding, just because the company theoretically had the opportunity to procure more resources from previous RFPs. Public Counsel's argument would effectively require utilities to procure all short list resources, regardless of the changed circumstances or cost. Because PacifiCorp's CEIP Biennial Update only accounts for resources that PacifiCorp actually procured in the near-term, and Public Counsel does not contest this point, the Commission should disregard Public Counsel on this issue.

Q. Do you have any concerns with Public Counsel's analyses regarding PacifiCorp's thermal resource assumptions?

A. Yes. Public Counsel summarily concludes that PacifiCorp's thermal resource decisions were not necessary.[42]

This is an odd conclusion, because the primary reason for PacifiCorp's changed thermal resource assumptions was to offset market exposure that would have otherwise resulted in higher market purchase costs—the sole issue which Dr. Earle's testimony appears to be focused on. Instead of supporting these revised assumptions to mitigate cost impacts for our customers (and their resulting impact to PacifiCorp's lowered interim targets), Dr. Earle appears to conclude that these thermal resource decisions were unnecessary actions that could have been avoided with better Washington-specific planning.

This is not relevant, because it answers the wrong question: It attempts to relitigate PacifiCorp's decisions that have already been decided in a separate proceeding, PacifiCorp's 2023 general rate case. The question is not whether

[42] *Id.* at 18 ("This was a short-term issue, that as discussed above, had the Company put in the requisite effort and attention to Washington's specific needs, would not have developed.").

PacifiCorp's thermal resource decisions were necessary or could have been avoided with different planning efforts. The question is whether PacifiCorp's justifications for lowered interim targets in this CEIP Biennial Update compared to the 2021 Revised CEIP are supported. Because Public Counsel does not contest the fact that Washington will continue to receive electricity from several thermal resources longer than what the 2021 Revised CEIP planned for, this issue is uncontested and the Commission should disregard Public Counsel on this point.

Q. Finally, do you have any concerns with Public Counsel's analyses regarding PacifiCorp's allocation methodology assumptions?

A. Again, Public Counsel argues the wrong question. The question in this proceeding is not whether PacifiCorp could have developed a better allocation methodology or procured Washington-specific resources over the past several years. The question is whether PacifiCorp's use of WIJAM in the CEIP Biennial Update, which lowered interim targets compared to the use of the Post-Interim Methodology in the 2021 Revised CEIP was supported. The company never claims that the inclusion of WIJAM allocations dictated resource decisions, as Earle suggests,[43] but instead explains that failing to reach an agreement on a Post-Interim Period Methodology between PacifiCorp and all participating parties, resulted in lowered available renewable energy for Washington customers in the near-term.

Because Public Counsel does not contest the fact that PacifiCorp's CEIP Biennial Update appropriately uses the WIJAM, the Commission should disregard Public Counsel on this point.

---

[43] *Id.*

IV. RNW-NWEC REBUTTAL

Q. Do you have any clarifications you would like to make regarding RNW-NWEC's response testimony?

A. Yes. It appears that Renewable Northwest (RNW) witness Katie Ware refers to both PacifiCorp's 2023 IRP and 2023 IRP Update filings, often interchangeably, in testimony. I would like to clarify that the 2023 IRP, filed as the 2021 IRP Two-Year Progress Report with the Commission on March 31, 2023 (and amended on May 31, 2023),[44] was the basis for analysis and updates included in the 2023 CEIP Biennial Update.

PacifiCorp's 2023 IRP Update was filed as an informational filing with the Commission April 1, 2024. Because the 2023 IRP Update was filed six months after the company filed its CEIP Biennial Update, it is not relevant to the determination of the interim targets in this update. For this reason, I will only respond to criticisms regarding the 2023 IRP (not the Update), as this was the basis for the CEIP Biennial Update.

Q. Do you have any concerns with RNW-NWEC's analyses?

A. Yes. I respond to RNW-NWEC's concerns regarding: (1) our renewable cost assumptions; and (2) criticisms of our justifications for lowered interim targets.

Q. What is RNW-NWEC's primary concern regarding the modeling that informs PacifiCorp's CEIP Biennial Update?

A. RNW witness Ware states that PacifiCorp's 2023 IRP included "questionable inputs and assumptions" and specifically, that renewable resource cost assumptions were too

[44] Docket No. UE-200420, 2021 Two-Year Progress Report (Mar. 31, 2023) and Amended 2023 Integrated Resource Plan (May 31, 2023).

high and unsubstantiated.[45]

Q. How do you respond to RNW-NWEC's criticism regarding the renewable cost assumptions that informed the Biennial CEIP Biennial Update?

A. RNW witness Ware states that PacifiCorp "manually inflated" renewable costs with no sufficient explanation.[46]

PacifiCorp agrees that it "manually inflated" renewable costs, but the company was justified in doing so because of the extraordinary circumstances surrounding the COVID epidemic from 2020 through 2022. PacifiCorp has addressed this issue in multiple venues.[47] PacifiCorp's renewable resource costs for the 2023 IRP were originally based on the National Renewable Energy Laboratory's 2022 Annual Technology Baseline (NREL ATB). This baseline generally incorporated historical data through 2020. During this timeframe, COVID was contributing to significant supply chain issues, inflation was at levels not seen in over fifty years, and tariffs on solar equipment were impacting both costs and supply. PacifiCorp's contract negotiations for resources that were selected to the final shortlist in the 2020 AS RFP extended into the summer of 2022, and these factors contributed to all counterparties requesting price increases to continue moving forward. Yet even despite material price increases due to the extraordinary events of 2020-2022, some projects were still unable to secure equipment and execute contracts.

[45] Exh. KW-1T, at 6.
[46] *Id.* at 7.
[47] *E.g.*, 2023 Integrated Resource Plan Public-Input Meeting, slides 3-5 (Oct. 13, 2022) (available online at: https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2023-irp/PacifiCorp_2023_IRP_PIM_Oct_13_2022.pdf).

In light of these real-world increased resource costs and scarcity, the company correspondingly increased wind, solar, and storage costs for the first few years of its 2023 IRP at a level that was consistent with the actual offers it had received, rather than the NREL ATB. The Commission needs to reject RNW-NWEC's advocacy on this point, which in effect asks PacifiCorp to ignore real-world resource costs and scarcity concerns, and instead rely on a dated and stale NREL ATB forecast

Q. Even if RNW-NWEC's renewable cost assumptions were correct, has RNW-NWEC demonstrated that these assumptions would have had any meaningful impact on PacifiCorp's interim targets?

A. No. RNW-NWEC has not quantified any impact to PacifiCorp's interim targets in the CEIP Biennial Update that could result from using their lower renewable cost assumptions.

Q. What are RNW-NWEC's criticisms of PacifiCorp's justifications for lowered interim targets?

A. RNW-NWEC is concerned that: (1) PacifiCorp should rely on the current Commission approved allocation methodology for PacifiCorp;[48] (2) PacifiCorp's thermal resource assumptions are determined "based on market trends rather than allowing its portfolio modeling tool to use revised inputs to determine the most economic outcome;"[49] (3) PacifiCorp may not have selected more competitive bids from the 2020 and 2022 AS RFPs;[50] and (4) PacifiCorp's long-term planning is too

[48] Exh. KW-1T, at 12.
[49] *Id.*
[50] *Id.* at 13.

reliant on small-modular nuclear reactors (SMRs) and non-emitting peaking resources.[51]

Q. How do you respond to RNW-NWEC's criticisms of PacifiCorp's use of allocation methodology assumptions?

A. The Company has no concerns with which allocation methodology assumption should be used to inform CEIP interim targets. The Company only notes that RNW-NWEC does not contest that PacifiCorp correctly applied the WIJAM in the CEIP Biennial Update, which reduced the Company's interim targets.[52]

Q. How do you respond to RNW-NWEC's criticisms of PacifiCorp's thermal resource assumptions?

A. Even though RNW-NWEC asserts that PacifiCorp is making thermal resource assumptions based on "questionable reasoning,"[53] they do not provide any analysis which indicates that our decisions were incorrect, unreasonable, or imprudent. Because this argument is unsupported, the Commission should disregard RNW-NWEC's concern on this point. Instead, consistent with the Commission's decision on PacifiCorp's 2023 general rate case, the Commission should conclude that PacifiCorp's thermal resource assumptions are reasonable and should be used to inform the interim targets in the CEIP Biennial Update.

Q. How do you respond to RNW-NWEC's criticisms of PacifiCorp's resource procurement actions?

A. I do not believe RNW-NWEC's criticisms have merit.

[51] *Id.* at 14-15.
[52] Exh. RG-4 (RNW-NWEC response to PacifiCorp Data Request No. 21 and 22).
[53] Exh. KW-1T, at 12.

First, and most importantly, RNW-NWEC does not contest that we did not procure all of the resources that we had anticipated procuring from the 2020 AS RFP, and that the difference between what we had planned to procure compared to what we actually procured is reflected in the CEIP Biennial Update interim targets.[54] Because RNW-NWEC does not contest this point, the Commission should disregard RNW-NWEC's procurement concerns to the extent they have any impact on PacifiCorp's interim targets for years 2023-2025.

Second, contrary to Ware's testimony,[55] there was no initial shortlist from the 2022 AS RFP, and OPUC Staff was incorrect regarding this conclusion. This means that because the 2022 AS RFP was cancelled before any shortlist was developed, there were no potential resources that could be evaluated, much less acquired, that could have helped move the company toward its near-term interim targets.

For that reason, it is not reasonable to conclude that *if* PacifiCorp hadn't cancelled the 2022 AS RFP, there *could* have been resources that were cost-effective, and *if* PacifiCorp could have procured those resources without further credit downgrades, and *if* PacifiCorp had the capital to do so, that a share of those system resources *might* have come online prior to 2026 to improve PacifiCorp's compliance position. There are just too many assumptions and contingent events that are needed to make RNW-NWEC's counterfactual workable.

Third, I disagree with RNW witness Ware's statement that "effectively, PacifiCorp does not plan to acquire new resources through RFPs before the 2030

[54] Exh. RG-4 (RNW-NWEC response to PacifiCorp Data Request No. 22).
[55] Exh. KW-1T, at 13.

CETA target."[56] If supported by then-relevant modeling, PacifiCorp intends to issue a 2025 RFP based on both system and state-specific needs identified through the 2025 IRP, with resources that can come online before 2030.

Q. How do you respond to RNW-NWEC's criticisms of PacifiCorp's reliance on SMR and non-emitting peaking resource assumptions?

A. RNW witness Ware appears to conclude that PacifiCorp's system-level SMR resource (the Natrium demonstration project) is actually a situs cost-allocated resource for Washington.[57] This is incorrect, because our assumptions in the CEIP Biennial Update reflect that Washington customers would only receive their system-generation (SG) share of the total size of the resource, consistent with the WIJAM.[58] The proposed Natrium demonstration project has a total of 500 MW of generating capacity (345 generator plus 155 storage capacity). Based on the current SG forecast, Washington customers would pay for, and benefit from, only approximately 40 MW from this resource. This means that if PacifiCorp's SMR assumptions are incorrect, our CEIP Biennial Update would only be off by 40 MWs of CETA-compliance capacity by 2030.

Regarding fueling requirements for non-emitting peaking resources, PacifiCorp is not committed to any particular fuel source, such as hydrogen. While hydrogen has the potential to be produced on site, using electrolysis and excess renewable resource output that might otherwise be curtailed, PacifiCorp recognizes

---

[56] *Id.* at 18.
[57] *E.g.*, KW-IT, at 9 ("Renewable Northwest is concerned that the sizable 20% interim target jump from 2029 to 2030 is supported in part by this anticipated Natrium SMR project which OPUC itself notes follows an 'overly optimistic timeline.'").
[58] PacifiCorp's 2023 CEIP Biennial Update, at 9.

that some aspects of hydrogen storage and generation technology have not been demonstrated commercially in the utility sector. That said, nonhydrogen fueled peaking capability exists today, though at higher cost than assumed in the company's planning for a 2030 in-service date. To the extent hydrogen-fueled peakers are unavailable or not cost-effective, many peaking resources can operate with biodiesel, which can count toward CETA compliance, similar to what was identified in Puget Sound Energy's 2023 Electric Progress Report.[59] Furthermore, significant development efforts are underway on sustainable aviation fuel among other possibilities and many peaking technologies can accommodate a range of fuel sources, such that fuel supply determinations can evolve over time.

While the Company appreciates RNW-NWEC's concerns regarding these non-emitting peaking resource assumptions, PacifiCorp will continue to investigate and support new technologies that have the ability to provide firm capacity, and will update its planning efforts based on then-current technological and economic information. PacifiCorp is optimistic that the market for non-emitting peaking resources will continue to mature and provide the needed CETA-compliant firm capacity required for heavy-load hours well into the future.

V. CONCLUSION

Q. Does this conclude your rebuttal testimony?

A. Yes.

[59] Puget Sound Energy 2023 Electric Progress Report, Appendix D, at 23-24 (available at: https://www.pse.com/en/IRP/Past-IRPs/2023-IRP).