

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

LC 82

In the Matter of

PACIFICORP d/b/a PACIFIC POWER,

2023 Integrated Resource Plan

Energy Advocates Comments
on Staff's Report

ENERGY ADVOCATES COMMENTS ON STAFF'S REPORT

FEBRUARY 14, 2024

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I. INTRODUCTION

The undersigned organizations, collectively the Energy Advocates, appreciate the opportunity to provide comment on Staff's Report, which incorporated Staff's Round 2 Comments, concerning PacifiCorp's ("Company") 2023 Clean Energy Plan ("CEP") and Integrated Resource Plan ("IRP").¹ The Energy Advocates thank Staff for their thoughtful attention to this proceeding, in particular Staff's further analysis on many issues raised by the parties in Round 1 Comments. In many instances, Staff's review not only confirmed the problems identified by parties but also uncovered further issues with PacifiCorp's approach to both the CEP and IRP.

The Energy Advocates generally support Staff's recommendations, including Staff's recommendation that the Oregon Public Utilities Commission ("Commission") issue a non-acknowledgment order on both the CEP and IRP and that the Commission direct the Company to make meaningful adjustments and improvements in the 2023 IRP Update, expected to be filed April 2024. On January 31, 2024, PacifiCorp issued a "draft" 2023 IRP Update to stakeholders.

¹ For Round 1 comments, Sierra Club submitted comments on its own behalf and joined comments submitted on behalf of the Energy Advocates. Sierra Club's comments on Staff's Report are fully addressed in these comments, and, accordingly, Sierra Club will not be submitting separate comments on its own behalf.

This “draft” did not include any new analysis or modeling, instead only identifying planned changes from the 2023 IRP. This document underscores the importance of Commission guidance. Although PacifiCorp has been aware of concerns in the 2023 IRP and CEP raised by stakeholders and Staff, the “draft” 2023 IRP Update indicates no intention to make many necessary changes to its planning documents. With the suspension of the remainder of the 2023 IRP schedule in favor of a near-term Commission order that can inform the 2023 IRP Update, as well as a CEP Update, our hope is that the Commission will use this opportunity to ensure that PacifiCorp’s planning exercises meaningfully incorporate stakeholder feedback, pursue decarbonization and the transition to an equitable clean energy system with intention and purpose, and swiftly correct obvious and significant errors.

To that end, we urge the Commission to adopt both Staff’s “recommendations” and “expectations” as requirements that the Company must fulfill. The Energy Advocates are not clear on the distinction between these two categories and accordingly urge the Commission to make clear that both recommendations and expectations are adopted via Commission order. As discussed below, some recommendations and expectations would benefit from greater specificity and/or clarity. Accordingly, we have provided suggested modifications. These comments first address responses to Staff’s recommendations and expectations on the CEP before turning to the IRP. Finally, these comments conclude with a general observation on CEP/IRP modeling and makes a recommendation regarding the valuation of energy efficiency, distributed resources, and demand side management not explicitly captured in Staff’s Report.

II. RESPONSE TO STAFF RECOMMENDATIONS AND EXPECTATIONS ON THE CEP

The Energy Advocates support Staff’s recommendation that the Commission issue a non-acknowledgment order on the CEP.² We generally support the CEP improvements that Staff recommends for a resubmitted CEP, and recommend a number of changes to strengthen them. A theme in our recommended changes to Staff’s recommendations and expectations on the CEP is that the Commission directs the Company to engage with Community Benefits and Impacts Advisory Group (“CBIAG”) and with energy justice advocate groups that are not part of the CBIAG. We see tremendous value in the contributions of the CBIAG, and believe that the Company should also incorporate energy justice voices who are not in that group as it works to improve this and future CEPs, indicators, and engagement strategies.

In summary, with regards to Staff’s recommendations and expectations related to the CEP, we encourage the Commission to:

- Adopt Recommendation 5 and direct PacifiCorp to develop proposals for the use of Community Benefits Indicators (“CBIs”) in future procurements and in the Community Based Renewable Energy (“CBRE”) Pilot.
- Adopt Recommendation 6 and direct the Company to provide baseline metrics or a detailed status update prior to its next IRP/CEP Update.
- Include Staff’s CBI expectations in its order on the 2023 IRP and CEP.
- Adopt Recommendation 7 amended as follows: “Direct PacifiCorp to proceed with the CBRE Grant Pilot, contingent on the Company seeking feedback from the CBIAG **and from energy justice advocates** in Q1 2024.”
- Adopt Staff’s CBRE expectations, with the following amendments:
 - CBRE Activities expectation: “Report regularly to the CBIAG **and energy justice advocates** on development including concrete and proactive activities PacifiCorp takes to reduce barriers, accelerate deployment, and expand CBRE potential.”
 - CBRE Program Design expectation: “Engage the CBIAG **and energy justice advocates** on potential program designs that can scale quickly to meet community and system needs.”

² OPUC Staff Round 2 Comments and Recommendations at 14-15.

- Adopt Recommendation 8 with the following amendment: “... If PacifiCorp cannot complete this effort by this timeline, PacifiCorp should provide a detailed status update and explanation of how it will ensure that remaining issues are resolved as soon as practicable, inclusive of the perspectives of peer utilities, **energy justice advocates**, and the utilities’ CBIAGs.”
- Adopt Staff’s Community Engagement expectations, with the following amendments:
 - “Staff expects PacifiCorp’s CBIAG, **energy-justice-advocate outreach**, and CBI activities to better capture and document Environmental Justice community priorities.”
 - “Staff encourages PacifiCorp to report on its Tribal engagement strategy by December 31 of each year to the CBIAG **and energy justice advocates.**”
- Adopt Recommendation 9 that the Commission direct PacifiCorp to incorporate resiliency-related factors into project selection criteria for the small-scale resources request for proposals and the design considerations for the CBRE Pilot.
- Include Staff’s Resiliency Analysis Framework expectations, with the following amendment to expectation 4: “At a CBIAG meeting before the next CEP and prior to any CBRE Grant Pilot project selection, **and at a Clean Energy Plan Engagement Series or other venue where PacifiCorp seeks participation of energy justice advocates**, provide details for how a completed Resiliency Analysis Framework will be used to impact project selection.”
- Include Staff’s Acquisition of Federal Incentives expectations, with the following amendment for expectation 3: “PacifiCorp provides brief update at every IRP public input meeting, **CEP Engagement Series meeting**, and every CBIAG meeting leading up to the 2025 IRP that details the Company’s activities to apply for federal incentives and detailing any funding secured.”

Additionally, and although not addressed in Staff’s Report, the Energy Advocates recommend that future CEPs contain a short chapter dedicated to describing the greenhouse gas (“GHG”) accounting method used for House Bill (“HB”) 2021, including: (1) summarizing how covered electricity generation is identified because renewable energy certificates (“RECs”) are not retired on behalf of customers, (2) that there are no delivery or use claims, and (3) explaining how the utilities report emissions to the Department of Environmental Quality (“DEQ”).

A. Community Benefit Indicators

We share Staff’s desire to see CBIs that offer value when evaluating whether the Company’s IRP and CEP provide tangible benefits to Oregon communities. As a result, we

encourage the Commission to adopt Staff’s Recommendation 5 and direct PacifiCorp to develop proposals for the use of CBIs in scoring in the request for proposals (“RFP”) for small scale resources (“SSRs”), in the design of the CBRE Pilot, and in scoring for the next all-source RFP. Recommendation 5 is crucial to helping the Company meaningfully incorporate CBIs in future procurements and program development decisions. While the current paradigm for portfolio and resource selection remains relevant, community benefits should become an important factor that informs the Company’s decision making. Staff’s recommendation would help the utility get closer to that outcome.

We also encourage the Commission to adopt Staff’s Recommendation 6 and direct the Company to provide baseline metrics on CBIs prior to filing its next IRP Update, as well as Staff’s expectations related to CBIs.

B. Community Based Renewable Energy

The Energy Advocates share many of Staff’s concerns related to PacifiCorp’s approach CBREs. Multiple assumptions by PacifiCorp likely contributed to the small role that CBREs play in the path for HB 2021 implementation that the 2023 CEP outlines.³ For example, PacifiCorp did not account for federal incentives in its CBRE analysis and was not responsive to Staff’s requests that the Company “address CBRE’s role in minimizing costs in Oregon’s load pockets.”⁴ In this section, we organize our feedback on Staff’s recommendations and expectations mirroring the subsections in Staff’s Round 2 Comments.

CBRE Resource Potential: We share Staff’s sense of urgency about the Pilot, and encourage the Commission to adopt the following amended version of Recommendation 7: “Direct PacifiCorp to pursue the CBRE Grant Pilot, contingent on the Company seeking

³ *Id.* at 18.

⁴ *Id.*

feedback from the CBIAG **and from energy justice advocates** in Q1 2024.” CBIAG feedback on this Pilot is crucial. Still, we encourage the Commission to also direct the Company to seek and incorporate feedback from energy justice advocates whose perspectives, in conjunction with CBIAG feedback, would strengthen the Pilot. PacifiCorp should leverage relationships held by CBIAG members and energy justice advocates to engage other stakeholders in shaping this Pilot, and could accomplish that additional outreach while maintaining the sense of urgency by setting up at least one meeting in Q1 2024.

CBRE Activities: We support Staff’s recommendation that PacifiCorp include an acquisition target of CBRE in its 2024 CEP Update Action Plan.⁵ We also support the expectation that PacifiCorp’s outreach on the Pilot be more proactive than simple publication.⁶ However, we recommend the following modification to Staff’s expectation: “Report regularly to the CBIAG **and energy justice advocates** on development including concrete and proactive activities PacifiCorp takes to reduce barriers, accelerate deployment, and expand CBRE potential.” We do not foresee this addition posing significant burdens to PacifiCorp, and suggest that a potential forum for this outreach could be the Clean Energy Plan Engagement Series.

CBRE Inclusion in Preferred Portfolio: We share Staff’s skepticism of the Company’s description of CBREs as uneconomic across the board.⁷ We support Staff’s expectations that the Company includes at least 92 MW of CBREs in the preferred portfolio of the next IRP/CEP Update, and that the Company evaluates the benefits of CBRE in load pockets, quantifies the cost and benefits of CBREs consistently with ORS 469A.415(4)(d), and identifies specific CBRE

⁵ *Id.* at 17.

⁶ *Id.*

⁷ *Id.* at 18.

opportunities in Oregon.⁸ Seeing progress on these expectations is key to CEPs that are consistent with the Company's HB 2021 compliance obligations.

CBRE Program Design: We support Staff's recommendation that the Company consider CBRE program designs that scale quickly and meaningfully across its territory and load pockets.⁹ We propose the following amendment to Staff's expectation: "Engage the CBIAG **and energy justice advocates** on potential program designs that can scale quickly to meet community and system needs." That broader engagement is important to successful program designs that can accomplish the goal outlined in Staff's expectation and should not be overly burdensome.

C. Community Engagement

The Energy Advocates have provided ample feedback on the Company's community engagement efforts and paths to improve them. We value the efforts of community engagement staff within the Company seeking avenues to grow the Company's strategies, and will continue to closely evaluate those strategies, provide feedback, and collaborate with the Company.

We encourage the Commission to adopt an amended version of Recommendation 8 as follows: "Direct PacifiCorp to work collaboratively with Staff, stakeholders, peer utilities, and the CBIAGs in a dedicated working group to develop clear, actionable improvements to community and stakeholder engagement in subsequent IRP/CEPs by December 31, 2024. If PacifiCorp cannot complete this effort by this timeline, PacifiCorp should provide a detailed status update and explanation of how it will ensure that remaining issues are resolved as soon as practicable, inclusive of the perspectives of peer utilities, **energy justice advocates**, and the utilities' CBIAGs."

⁸ *Id.* at 18-19.

⁹ *Id.* at 19.

As we have outlined above, we value the perspective of CBIAG members and believe that the energy justice advocacy voices not represented in CBIAG can be complementary and should be reflected in the status update, should the Company have to provide one.

We also support Staff's expectations for community engagement as they are important guidance for the Company's efforts to strengthen its engagement strategies. Consistent with our feedback above, we offer the following amendments to two of those expectations:

- "Staff expects PacifiCorp's CBIAG, **energy-justice-advocate outreach**, and CBI activities to better capture and document Environmental Justice community priorities.
- "Staff encourages PacifiCorp to report on its Tribal engagement strategy by December 31 of each year to the CBIAG **and energy justice advocates.**"

D. Resiliency Analysis Framework

The Energy Advocates support Recommendation 9 that the Commission direct PacifiCorp to incorporate resiliency-related factors into project selection criteria for the SSR RFP and the design considerations for the CBRE Pilot.¹⁰ Stressors to the system are increasing at a time when our communities are increasingly reliant on electricity for safety and wellbeing. As a result, the Company should consider system reliability and resilience, as well as community resilience, in upcoming programmatic and procurement efforts.

We appreciate Staff's thoughtful approach to resiliency in UM 2225 and in utility CEPs and IRPs. Staff's thoughtful approach has included working to make sure that utilities incorporate in their planning the learnings from the Pacific Northwest National Laboratory's *Considerations for Resilience Guidelines for Clean Energy Plans for the Oregon Public Utility Commission and Oregon Electricity Stakeholders*.¹¹ Staff's expectations reflect those learnings,

¹⁰ *Id.* at 24-26.

¹¹ JS Homer et al., *Considerations for Resilience Guidelines for Clean Energy Plans for the Or. Pub. Util. Comm'n and Or. Elec. Stakeholders*, Pac. N.W. Nat'l Lab'y (Sept. 2022), available at <https://www.pnnl.gov/publications/considerations-resilience-guidelines-clean-energy-plans-oregon-public-utility>.

so we encourage the Commission to adopt them and signal to the Company that they should be part of a responsive resiliency analysis in the upcoming IRP/CEP Update and in the 2025 IRP/CEP. We recommend the following amendment to one of Staff’s expectations:

“At a CBIAG meeting before the next CEP and prior to any CBRE Grant Pilot project selection, **and and a Clean Energy Plan Engagement Series or other venue where PacifiCorp seeks participation of energy justice advocates**, provide details for how a completed Resiliency Analysis Framework will be used to impact project selection.”

E. Acquisition of Federal Incentives

We share Staff’s sense of urgency about the limited window in which PacifiCorp can seek federal incentives, like “secur[ing] low-cost financing for planned investments to replace aging infrastructure.”¹² Given the potential value of current incentives to its customers, the Company’s reluctance to update its modeling as more information on incentives became available is puzzling. Failure to maximize federal incentives as the Company undertakes the transition necessary to comply with HB 2021 would seem inconsistent with customers’ interest. For that reason, we strongly support Staff’s expectation related to federal incentives and the CEP, amended as follows:

“PacifiCorp provides brief update at every IRP public input meeting, **CEP Engagement Series meeting**, and every CBIAG meeting leading up to the 2025 IRP that details the Company’s activities to apply for federal incentives and detailing any funding secured.”

As noted below, we also support Staff’s expectation that PacifiCorp evaluate Energy Infrastructure Reinvestment (“EIR”) financing in the 2023 IRP Update.

F. Greenhouse Gas Accounting to Meet HB 2021 Requirements

Finally, the Energy Advocates recommend that the Commission include in its order a requirement that PacifiCorp's next CEP contain a short chapter dedicated to describing the GHG accounting method used for HB 2021, including: (1) summarizing how covered electricity

¹² OPUC Staff Round 2 Comments and Recommendations at 27.

generation is identified because RECs are not retired on behalf of customers, (2) that there are no delivery or use claims, and (3) explaining how the utilities report emissions to DEQ. Although not addressed specifically in Staff’s Report here, the Commission recognized, when imposing a similar requirement on Portland General Electric in LC 80, that this information is important for the public to understand when reading the utility’s CEP, and the sooner that discussion begins the more beneficial it will be.

Other CEP sections should provide cross-references to the disclosure chapter. OAR 860-027-0400(5) supports this concept, requiring the CEP to be “as clear and simple as possible, with the goal” that it is “understood by non-expert members of the public.” Because the Green Guides are not binding, there is a greater need for the Commission to provide oversight, not less, as the utilities may lose sight of the U.S. Federal Trade Commission’s interpretive rules over time. These recommendations should be the minimum precautions and disclosures necessary to protect customers from misinformation about HB 2021 and the integrity of the RECs generated from renewable energy resources used to comply with the law. Oregon retail electricity customers must—and deserve to—understand that even if HB 2021 was heralded as the “100% Clean Electricity for All” law, it does not provide “clean” electricity.

III. RESPONSE TO STAFF RECOMMENDATIONS AND EXPECTATIONS ON THE 2023 IRP

The Energy Advocates support the vast majority of Staff’s recommendations and expectations concerning PacifiCorp’s IRP and urge the Commission to clearly state in an order that PacifiCorp is required to fulfill these recommendations and expectations. Without explicit Commission direction, the Energy Advocates fear that PacifiCorp is unlikely to meet Staff’s expectations. For instance, despite the fact that Staff’s Round 2 Comments were filed on January 24, 2024 and included an expectation that PacifiCorp will fully evaluate the Energy Infrastructure Reinvestment (“EIR”) program under the Inflation Reduction Act in the 2023 IRP

Update,¹³ PacifiCorp’s “draft” of the 2023 IRP Update, made available to stakeholders on January 31, 2024, makes no mention of the EIR.¹⁴

With this context in mind, the Energy Advocates highlight a select number of priority Staff recommendations and expectations that could be strengthened with more clear and direct language. As discussed below, the Energy Advocates recommend that the Commission adopt Staff’s IRP recommendations and expectations, with the following modifications:

- A. Amend Recommendation 10 to read: ~~Direct PacifiCorp to fix any confirmed analytical errors in the calculation or application of granularity adjustments.~~ **PacifiCorp is ordered, in the 2023 IRP Update and in future IRPs, to produce accurate and complete workpapers detailing granularity adjustments made to specific resources. Additionally, in the 2023 IRP Update, any net revenues used to calculate the granularity adjustment should be calculated based on the resource’s total fuel costs, since this reflects the full economic cost borne by PacifiCorp customers. Starting in the 2025 IRP, PacifiCorp must fully describe its granularity adjustment methodology within its IRP filing.**
- B. Amend “coal-to-gas conversions” expectation to read: PacifiCorp should provide analysis around risk of regret for coal to gas conversions in its 2023 IRP Update. **This analysis should include realistic expectations on current pipeline capacity and the costs necessary to upgrade or build new pipelines to accommodate planned gas conversions. Regarding PacifiCorp’s plan to convert gas units to operate on hydrogen, the 2023 IRP Update should include analysis detailing when gas conversions or new gas can be converted to hydrogen, at what cost, and whether available pipelines can accommodate pure hydrogen or hydrogen blending.**
- C. Amend “coal strategy” expectation regarding pricing at Jim Bridger to read: **In the 2023 IRP Update, PacifiCorp should: Utilize coal prices for Jim Bridger that are reflective of actual costs from the 2023 Long-Term Fuel Supply ~~contract~~ Plan.**
- D. Amend “preferred portfolio modeling process” expectation to read: . . . As part of the next IRP PacifiCorp should: Adjust its modeling approach to better capture resource adequacy needs and the capacity contributions of resource options to reduce the need for and magnitude of reliability adjustments to portfolios **by transitioning away from its**

¹³ *Id.* at 59

¹⁴ PacifiCorp 2023 IRP Draft Update (Jan. 2024), *available at* https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/energy/integrated-resource-plan/2023_IRP_Update_Draft.pdf [hereinafter “PacifiCorp 2023 IRP Draft Update”].

legacy capacity accreditation approach, the Capacity Factor Method, in favor of the Effective Load Carry Capability (“ELCC”) method or something similar.

- E. Amend “candidate resource cost” expectations to read: As part of the **2023** IRP Update and future IRP processes, PacifiCorp should update its renewable cost assumptions based on ~~more~~**the most** recently available information. **Renewable cost assumptions should not include cost escalators that are not clearly supported by third party data, such as cost data from the National Renewable Energy Laboratory (“NREL”) Annual Technology Baseline (“ATB”) forecast.**

A. Recommendation 10: “Direct PacifiCorp to fix any confirmed analytical errors in the calculation or application of granularity adjustments”

The Energy Advocates greatly appreciate Staff’s further investigation of the granularity adjustment issue that Sierra Club raised in Round 1 Comments. As noted in earlier comments, granularity adjustments were made in the long-term (“LT”) model in order to reflect the flexibility value that a resource’s operation may provide to the grid.¹⁵ While this is not an inherently incorrect modeling approach, PacifiCorp applied significant granularity adjustments to its coal units, despite the fact that coal’s flexibility is limited due to operational constraints.¹⁶ Sierra Club’s comments indicated that significant granularity adjustments may have been made for coal—and not other resources—because PacifiCorp used incremental fuel costs, rather than total fuel costs, to calculate net revenues, which are used in the granularity adjustment process. Staff’s review of PacifiCorp’s workpapers confirmed that the granularity adjustments “introduce[d] further subjectivity into the LT modeling and highlight[ed] the broader shortcomings of PacifiCorp’s modeling approach.”¹⁷ Indeed, the granularity adjustments may have extended the operational lives of certain coal units.

¹⁵ Sierra Club’s Round 1 Comments on PacifiCorp’s 2023 Integrated Res. Plan at 38 [hereinafter “Sierra Club Round 1 Comments”].

¹⁶ For further discussion of PacifiCorp’s granularity adjustments, *see* Sierra Club’s Round 1 Comments at 37-42.

¹⁷ OPUC Staff Round 2 Comments and Recommendations at 29.

Accordingly, PacifiCorp’s granularity adjustment methodology deserves further scrutiny, and the Energy Advocates support Staff’s expectation that PacifiCorp work with interested participants to develop and publicly produce a granularity adjustment methodology.¹⁸ This “expectation” should be included in the Commission’s order on the 2023 IRP as a requirement for the Company to fulfill. The Energy Advocates also support Recommendation 10 that the Commission order PacifiCorp to “fix any confirmed analytical errors in the calculation or application of granularity adjustments.”¹⁹ However, Staff’s proposed language is vague and could be rendered unenforceable. For instance, it is not clear what Staff means by “any confirmed analytical errors” or by when the Company should fix these errors. Accordingly, the Energy Advocates recommend that the Commission modify Recommendation 10 to read as follows:

~~Direct PacifiCorp to fix any confirmed analytical errors in the calculation or application of granularity adjustments.~~ **PacifiCorp is ordered, in the 2023 IRP Update and in future IRPs, to produce accurate and complete workpapers detailing granularity adjustments made to specific resources. Additionally, in the 2023 IRP Update, any net revenues used to calculate the granularity adjustment should be calculated based on the resource’s total fuel costs, since this reflects the full economic cost borne by PacifiCorp customers. Starting in the 2025 IRP, PacifiCorp must fully describe its granularity adjustment methodology within its IRP filing.**

B. Coal-to-Gas Conversions Expectation: “PacifiCorp should provide analysis around risk of regret for coal to gas conversions in its 2023 IRP Update”

Oregon’s continued participation in PacifiCorp’s gas fleet is likely to present an obstacle to HB 2021 compliance, due to emission reduction requirements that leave very little room for continued gas operations. As a result, PacifiCorp’s planned coal-to-gas conversions present a challenge for Oregon. Gas operations, without a plan for Oregon’s withdrawal, may only become

¹⁸ *Id.* at 59.

¹⁹ *Id.* at 35.

more of an issue in the 2023 IRP Update because PacifiCorp has identified in its “draft” 2023 IRP Update an intention to change a modeling assumption in the 2023 IRP under which new gas plants were projected to have 10-year operating lives. Instead, PacifiCorp plans to model new gas using “economic and technical lives,” which could be as long as 40 years, based on the unfounded assumption that these gas plants can be converted to hydrogen in the future.²⁰

Staff’s recommendation that PacifiCorp more vigorously analyze the cost and benefits of its planned gas conversions—and potentially acquisitions—is well founded. However, the Commission should provide more specifics to ensure a thorough analysis. As such, the Commission should modify Staff’s expectation stated above to read:

PacifiCorp should provide analysis around risk of regret for coal to gas conversions in its 2023 IRP Update. **This analysis should include realistic expectations on current pipeline capacity and the costs necessary to upgrade or build new pipelines to accommodate planned gas conversions. Regarding PacifiCorp’s plan to convert gas units to operate on hydrogen, the 2023 IRP Update should include analysis detailing when gas conversions or new gas can be converted to hydrogen, at what cost, and whether available pipelines can accommodate pure hydrogen or hydrogen blending.**

C. Coal Strategy Expectation: “PacifiCorp should[] utilize coal prices for Jim Bridger that are reflective of actual costs from the Long-Term Fuel supply contract.”

PacifiCorp’s treatment of Jim Bridger has raised significant concerns over multiple IRP cycles. For instance, in the 2021 IRP, concerns were raised with PacifiCorp’s modeling of a minimum take requirement at the plant, despite no minimum take requirement existing through the IRP planning horizon.²¹ The Commission’s 2021 IRP order noted that “[p]ast IRP and RFP

²⁰ See PacifiCorp 2023 IRP Draft Update at 5.

²¹ See *In the Matter of PacifiCorp, d/b/a Pac. Power, 2021 Integrated Res. Plan*, Docket No. LC 77, Sierra Club Opening Comments at 10-13 (Dec. 6, 2021).

modeling did not incorporate minimum take requirements in the same manner and presented more flexibility in the coal fleet dispatch...”.²²

In the 2023 IRP, PacifiCorp assured stakeholders, during public input meetings, that no minimum take requirement would be assumed at Jim Bridger. Yet, analysis in this proceeding demonstrates that PacifiCorp has continued to tip the scales in favor of continued operations at the plant,²³ including, according to Staff’s analysis, by removing “fixed costs” from the PLEXOS model and adding those costs back in “post-processing.” As Staff notes, this meant that “PLEXOS [saw] only the variable portion of the coal cost[,]”²⁴ which is precisely what assuming a minimum take as a fixed cost would have done. Staff noted that “[u]nrealistic coal prices within PLEXOS may [have made] Jim Bridger 3 and 4 appear more economic than they are in actuality...”.²⁵ It is notable that before PacifiCorp made its subjective reliability adjustments to its “base” portfolios, the PLEXOS model would have economically retired Unit 3 in 2025 and Unit 4 in 2031,²⁶ presumably even without considering the plant’s full fuel costs.

PacifiCorp’s blatant disregard for the Commission’s direction and arguably intentional misleading of stakeholders should be of significant concern to the Commission, and the Commission should put a stop to PacifiCorp’s unreasonable favoring of Jim Bridger. While the Energy Advocates support Staff’s expectation that PacifiCorp “[u]tilize coal prices for Jim Bridger that are reflective of actual costs from the Long-Term Fuel supply [plan,]”²⁷ this

²² *In the Matter of PacifiCorp, d/b/a Pac. Power, 2021 Integrated Res. Plan*, Docket No. LC 77, Order No. 22-178 at 7.

²³ *See, e.g.,* Sierra Club Round 1 Comments at 19-20, 26-28, 45-46 (explaining that PacifiCorp extended the operating lives of Jim Bridger units 3 and 4 for reliability purposes even though the PLEXOS model would have economically retired Jim Bridger earlier).

²⁴ OPUC Staff Round 2 Comments and Recommendations at 37.

²⁵ *Id.*

²⁶ Sierra Club Round 1 Comments at 19 (detailing changes that PacifiCorp made to coal plant operating lives between an “initial” portfolio run and the “base” or “reliable” portfolio run).

²⁷ OPUC Staff Round 2 Comments and Recommendations at 59-60.

requirement should be imposed in the 2023 IRP Update, not wait until the 2025 IRP. The Company has continuously delayed a realistic assessment of Jim Bridger, and the Commission should not grant the Company another year or longer grace period. Accordingly, the Energy Advocates recommend that Staff's "cost strategy" expectation be modified as follows:

In the 2023 IRP Update, PacifiCorp should:

- Utilize cost prices for Jim Bridger that are reflective of actual costs from the 2023 Long-Term Fuel Supply ~~contract~~ **Plan**.

D. Preferred Portfolio Modeling Process Expectation: "PacifiCorp should[] adjust its modeling approach to better capture resource adequacy needs and the capacity contributions of resource options to reduce the need for and magnitude of reliability adjustments to portfolios."

The Energy Advocates agree that both Staff and Renewable Northwest ("RNW") raised legitimate concerns with PacifiCorp's reliability and resource adequacy modeling. Sierra Club's comments also demonstrated that the reliability gaps identified in the PLEXOS LT model resulted in PacifiCorp making "a very substantial number of manual additions, delays, subtractions, and other changes to the resource decisions that the PLEXOS LT optimization model initially elected."²⁸ As Staff noted, "[t]he reliability adjustments substantially change the resources in the preferred portfolio, calling into doubt the extent to which PacifiCorp's capacity expansion is economically optimized."²⁹ Accordingly, Staff's recommendation that PacifiCorp update its modeling approach to better capture resource adequacy needs and the capacity contributions of resource options to reduce the need for and magnitude of reliability adjustments is well taken. The Commission could strengthen this recommendation by adopting the more specific language suggested by RNW regarding adoption of an Effective Load Carrying Capability ("ELCC") method. Although the Commission has, understandably, avoided

²⁸ Sierra Club Round 1 Comments at 16.

²⁹ OPUC Staff Round 2 Comments and Recommendations at 32-33.

prescriptive requirements in order to allow for innovation, history has shown that, without some explicit direction, PacifiCorp is likely to disregard or avoid complying with Commission expectations. Accordingly, Staff's expectation should be modified as follows:

As part of the next IRP, PacifiCorp should:

- Adjust its modeling approach to better capture resource adequacy needs and the capacity contributions of resource options to reduce the need for and magnitude of reliability adjustments to portfolios **by transitioning away from its legacy capacity accreditation approach, the Capacity Factor Method, in favor of the Effective Load Carry Capability ("ELCC") method or something similar.**

E. Candidate Resource Costs Expectation: "As part of the IRP update and future IRP processes, PacifiCorp should update its renewable cost assumptions based on more recently available information."

Staff's Round 2 Comments detail how PacifiCorp unreasonably and inappropriately added price escalations for renewable resources that were not supported by cost data provided by WSP, an engineering and professional services firm that PacifiCorp selected to provide this cost information.³⁰ The result was that the PLEXOS model selected riskier and unproven technologies to meet demand, notably "over a GW of nuclear and non-emitting peaking resources through the years of cost escalations."³¹ Staff rightfully, then, expects PacifiCorp to update its renewable cost assumptions in the 2023 IRP Update and in future IRPs. However, Staff's proposed expectation is not explicit that price escalators, without any supporting data or reasonable explanation, will not be accepted. The Commission should adopt Staff's expectation as a requirement, with the following modification:

As part of the **2023** IRP Update and future IRP processes, PacifiCorp should update its renewable cost assumptions based on ~~more~~**the most** recently available information. **Renewable cost assumptions should not include cost escalators that are not clearly supported by third party data, such as cost data from the National Renewable Energy Laboratory ("NREL") Annual Technology Baseline ("ATB") forecast.**

³⁰ OPUC Staff Round 1 Comments and Recommendations at 41.

³¹ *Id.*

IV. PORTFOLIO MODELING IMPROVEMENTS FOR FUTURE IRPs

As a final matter, the Energy Advocates raise an issue that was not directly addressed in Staff's Report, although many of Staff's concerns and recommendations touch on the same problem: namely, systematic undervaluation of energy efficiency, distributed resources, and demand side management.

In addition to more up-to-date cost and performance data, the current IRP/CEP process suffers from built-in biases in favor of the traditional centralized utility system, with limited and complicated measures to move towards a more distributed and smart system that flattens the load profile rather than designing for infrequent and severe peaks. In addition to Staff's request that PacifiCorp allow optimization of energy efficiency in the CEP, reoptimize the Max DSM scenario, and make improvements in its avoided cost calculation, a broader set of technology options and potential decarbonization pathways should be evaluated. New emerging energy storage technologies should be evaluated and included in the portfolio of options. Also, the analysis of transmission options is dominated by options to build new lines rather than investing in grid enhancing technologies and reconductoring as alternatives to building new lines. Recent research suggests that reconductoring can help to eliminate a substantial percentage of new transmission needed to facilitate the clean energy transition.³² Finally, the PLEXOS modeling should be improved to better represent major congestion points in the transmission and distribution system so that the ability of distributed generation and storage to reduce congestion and improve system performance can be better assessed.

³² Emilia Chojkieqicz et al., *Accelerating Transmission Expansion by Using Advanced Conductors in Existing Right-of-Way*, Energy Inst. at Haas (Feb. 2024), available at <https://berkeley.us13.list-manage.com/track/click?u=ed42abc90348afd39994b0fbb&id=b7003df12a&e=0ba2e63696> (finding that reconductoring in a model of the United States power system can help meet over 80 percent of new interzonal transmission needed to reach over 90 percent clean electricity by 2035).

These concepts deserve further analysis, and the Energy Advocates support a Commission or Company-led workshop in the 2025 IRP stakeholder process to ensure that the Company is incorporating, or at least evaluating, these potential solutions.

V. CONCLUSION

As demonstrated through the hundreds of pages of party and Staff comments in this proceeding, ensuring that PacifiCorp quickly and equitably transitions to a clean energy system that complies with HB 2021's emissions and community benefit requirements will require close oversight. The Commission must ensure that stakeholders are consulted, that their feedback is incorporated, and that PacifiCorp prioritizes and acts upon near- and long-term actions that will lead to deep decarbonization. The Commission's role in this energy transition is crucial. We thank the Commission for their leadership to date and look forward to the Commission's future guidance that will lead PacifiCorp towards a rapid and equitable energy transition.

Respectfully submitted,

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