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VIA ELECTRONIC FILING

Public Service Commission of Utah
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City, UT 84114

Attention: Gary Widerburg
Commission Administrator

Re: Docket No. 23-035-10 – PacifiCorp’s 2023 Integrated Resource Plan
RMP Reply Comments

In accordance with the Scheduling Order and Notice of Technical Conference issued by the Public Service Commission of Utah (“Commission”) on June 27, 2023, in the above referenced matter, PacifiCorp submits its reply comments.

Informal inquiries may be directed to Jana Saba, Manager, State Regulatory Affairs, at (801) 220-2823.

Sincerely,

Joelle Steward
Senior Vice President, Regulation and Customer/Community Solutions

Enclosures

Table of Contents

I. INTRODUCTION AND SUMMARY	2
II. COMMISSION IRP STANDARDS	4
III. RESPONSE TO COMMENTS	7
<ul style="list-style-type: none"> A. PACIFICORP WAS GRANTED A FILING EXTENSION OF THE 2023 IRP, AND ITS STAKEHOLDER PROCESSES AND IMPROVEMENTS WERE APPROPRIATE..... 	9
<ul style="list-style-type: none"> B. PACIFICORP’S SUSPENSION OF THE 2022 ALL-SOURCE REQUEST FOR PROPOSALS IS NOT A GROUND FOR NON-ACKNOWLEDGMENT OF THE 2023 IRP..... 	15
<ul style="list-style-type: none"> C. PACIFICORP’S MODELING PROCESSES, ASSUMPTIONS, PRESENTATION, AND RESOURCE SELECTIONS ARE REASONABLE..... 	19
<ul style="list-style-type: none"> 1. <i>Modeling Processes</i> 	19
<ul style="list-style-type: none"> A. <i>Reliability and Granularity Adjustments</i> 	19
<ul style="list-style-type: none"> B. <i>Alternative Portfolio Variants, Cluster Resources and Scenarios</i> 	20
<ul style="list-style-type: none"> 2. <i>Presentation</i> 	22
<ul style="list-style-type: none"> 3. <i>Assumptions</i> 	26
<ul style="list-style-type: none"> A. <i>Carbon Assumptions</i> 	26
<ul style="list-style-type: none"> B. <i>Coal-Fueled Generation Units and Gas Conversions</i> 	27
<ul style="list-style-type: none"> 4. <i>Federal and State Incentives</i> 	29
<ul style="list-style-type: none"> 5. <i>Resource Selections</i> 	19
<ul style="list-style-type: none"> A. <i>Carbon Emissions Influence</i> 	30
<ul style="list-style-type: none"> B. <i>Geothermal</i> 	31
<ul style="list-style-type: none"> C. <i>Collocated Resources</i> 	32
<ul style="list-style-type: none"> D. <i>Surplus Interconnection</i> 	33
<ul style="list-style-type: none"> E. <i>Nuclear Resources</i> 	34
<ul style="list-style-type: none"> F. <i>Natural Gas</i> 	37
<ul style="list-style-type: none"> G. <i>Carbon Capture Usage and Storage</i> 	39
<ul style="list-style-type: none"> H. <i>Non-Emitting Peaking Resources</i> 	40
<ul style="list-style-type: none"> D. PACIFICORP’S PROCUREMENT STRATEGIES ARE PROPERLY ALIGNED WITH REGULATORY REQUIREMENTS AND PACIFICORP’S PLANNING EFFORTS. 	42
<ul style="list-style-type: none"> 1. <i>Reliability</i> 	42
<ul style="list-style-type: none"> 2. <i>Regional Market Participation and Planning</i> 	45
CONCLUSION	47

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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

**IN THE MATTER OF PACIFICORP'S
2023 INTEGRATED RESOURCE PLAN**

DOCKET NO. 23-035-10

PACIFICORP'S REPLY COMMENTS

In accordance with the Utah Public Service Commission's ("Commission") Scheduling Order and Notice of Technical Conference, PacifiCorp d/b/a Rocky Mountain Power ("PacifiCorp" or the "Company"), by and through its counsel, provides these Reply Comments to the comments received by the Commission from the Division of Public Utilities ("DPU" or "Division"), the Office of Consumer Services ("OCS" or "Office"), Utah Association of Energy Users ("UAE"), Western Resource Advocates ("WRA"), Utah Clean Energy ("UCE"), Sierra Club, and Interwest Energy Alliance ("Interwest").

INTRODUCTION AND SUMMARY

PacifiCorp's 2023 Integrated Resource Plan ("IRP"), filed on May 31, 2023 ("2023 IRP"), complies with the Commission's 1992 Report and Order on Standards and Guidelines for Integrated Resource Planning in Docket No. 90-2035-01 ("Commission's Report and Order"), and adequately addresses the requirements from the Commission's Report and Order in the 2019 IRP¹

¹ Docket No. 19-035-02.

(“2019 IRP Order”) and the Commission’s Order in the 2021 IRP² (“2021 IRP Order”). To be acknowledged, the plan must be deemed reasonable at the time it is presented. As part of its review, the Commission determines whether the IRP adequately adheres to the Commission’s Report and Order and takes into consideration the merit and applicability of public comments. Appendix B of the 2023 IRP lists each of the applicable IRP requirements and provides a reference to where the requirement was met.

The 2023 IRP was developed after substantial stakeholder input. The stakeholder process for the 2023 IRP began in February 2022, with the first public meeting informing updates to the Supply-Side Resources (“SSR”) table and Conservation Potential Assessment (“CPA”), updating progress since the 2021 IRP, and outlining the IRP development schedule which unfolded over the following year. Subsequent public input meetings addressed a range of topics describing PacifiCorp’s modeling methodology, inputs and assumptions for the 2023 IRP. Agenda topics included, but were not limited to, resource cost-and-performance assumptions, model function and overview, load forecast, price-policy assumptions, supply-side resource cost and performance assumptions, market price assumptions, and transmission options. PacifiCorp held eleven public-input meetings and six state-specific input meetings. The 2023 IRP public-input process presentations and discussion covered various issues regarding inputs, assumptions, risks, modeling techniques, and analytical results. Public-input meeting materials, supporting studies, and stakeholder feedback forms can be found on PacifiCorp’s IRP webpage.³

² Docket No. 21-035-09.

³ See <https://www.pacificorp.com/energy/integrated-resource-plan.html>; See also the 2021 IRP Volume II, Appendix C – Public-Input Process for more detail.

The resulting 2023 IRP and action plan⁴ provides a roadmap to ensure PacifiCorp will provide adequate and reliable electricity supply to its customers at a reasonable cost. PacifiCorp's selection of the 2023 IRP preferred portfolio is supported by detailed data analysis using five fundamental steps: (1) development of key inputs and assumptions to inform the modeling and portfolio-development process; (2) development of a wide-range of resource portfolios; (3) targeted reliability analysis of the portfolios to ensure sufficient flexible capacity resources to meet reliability requirements; (4) analysis of the resource portfolios to measure comparative costs, risks, reliability and emission levels that inform selection of a preferred portfolio; and (5) development of the near-term resource action plan required to deliver resources in the preferred portfolio.⁵ Each of these steps in the 2023 IRP development process are presented in greater detail in the Company's filing, including the supporting work papers that present the underlying data for each of the portfolios analyzed by PacifiCorp.

In these Reply Comments, PacifiCorp describes how the 2023 IRP and the associated action plan comply with all Commission requirements. The Company considered and implemented the Commission's direction in developing the 2023 IRP and believes it complies with all Commission directives. Therefore, the Commission should acknowledge the Company's 2023 IRP.

COMMISSION IRP STANDARDS

The IRP is a 20-year long-term resource plan intended to identify the least-cost, least-risk portfolio of generation and transmission resources needed to meet the Company's obligation to reliably serve its customers. Under the Commission's Report and Order, "The Commission will

⁴ 2021 IRP, Chapter 1 – Executive Summary, Table 1.2 at 23. The 2021 IRP action plan identifies specific resource actions PacifiCorp will take over the next two-to-four years to deliver resources included in the preferred portfolio.

⁵ 2021 IRP, Chapter 1 – Executive Summary at 7-8.

require PacifiCorp to pursue the least cost alternative for the provision of energy services to its present and future ratepayers that is consistent with safe and reliable service, the fiscal requirements of a financially healthy utility, and the long-run public interest.”⁶ The Commission outlined the following standards and guidelines (“Guidelines”) regarding PacifiCorp’s IRPs:

- (1) Integrated resource planning is a utility planning process which evaluates all known resources on a consistent and comparable basis, in order to meet current and future customer electric energy services needs at the lowest total cost to the utility and its customers, and in a manner consistent with the long-run public interest. The process should result in the selection of the optimal set of resources given the expected combination of costs, risk and uncertainty;
- (2) The Company will submit its IRP biennially;
- (3) The IRP will be developed in consultation with the Commission, its staff, the Division of Public Utilities, the Committee of Consumer Services, appropriate Utah state agencies and interested parties;
- (4) PacifiCorp's future IRPs will include:
 - a. A range of estimates or forecasts of load growth, including both capacity (kW) and energy (kWh) requirements;
 - b. An evaluation of all present and future resources, including future market opportunities (both demand-side and supply-side), on a consistent and comparable basis;
 - c. An analysis of the role of competitive bidding for demand-side and supply-side resource acquisitions;
 - d. A 20-year planning horizon;
 - e. An action plan outlining the specific resource decisions intended to implement the IRP in a manner consistent with the Company's strategic business plan;

⁶ *In the Matter of Analysis of an Integrated Resource Plan for PACIFICORP*, Docket No. 90-2035-01, Report and Order on Standards and Guidelines, ¶ 1 (June 18, 1992).

- f. A plan of different resource acquisition paths for different economic circumstances with a decision mechanism to select among and modify these paths as the future unfolds;
 - g. An evaluation of the cost-effectiveness of the resource options from the perspectives of the utility and the different classes of ratepayers;
 - h. An evaluation of the financial, competitive, reliability, and operational risks associated with various resource options and how the action plan addresses these risks in the context of both the Business Plan and the 20-year Integrated Resource Plan;
 - i. Considerations permitting flexibility in the planning process;
 - j. An analysis of tradeoffs;
 - k. A range, rather than attempts at precise quantification, of estimated external costs which may be intangible;
 - l. A narrative describing how current rate design is consistent with the Company's integrated resource planning goals and how changes in rate design might facilitate integrated resource planning objectives;
- (5) PacifiCorp will submit its IRP for public comment, review and acknowledgement;
 - (6) The public, state agencies and other interested parties will have the opportunity to make formal comment to the Commission on the adequacy of the Plan;
 - (7) Acknowledgement of an acceptable Plan will not guarantee favorable ratemaking treatment of future resource acquisitions; and
 - (8) The IRP will be used in rate cases to evaluate the performance of the utility and to review avoided cost calculations.⁷

The Company has met these Guidelines, has also complied with the Commission's directives from the 2019 IRP Order and addressed the deficiencies identified by the Commission

⁷ *Id.* at 16-34.

in its order declining to acknowledge the 2021 IRP. Specifically, Appendix B of the 2023 IRP lists the requirements included in the 2019 IRP and 2021 IRP Orders and provides a reference to where the requirement was met.⁸ Compliance with these Commission requirements is explained in more detail in the Company's response to comments below. The Company respectfully requests that the Commission acknowledge the 2023 IRP.

RESPONSE TO COMMENTS

Overall, the Company represents that PacifiCorp's 2023 IRP:

- Complied with the modified filing deadlines approved by the Commission.⁹ As part of this arrangement an extended comment period was adopted to ensure the opportunity for stakeholder feedback to not only the preferred portfolio but also a complete IRP document, something not previously available during an IRP cycle.
- Fully incorporated stakeholder feedback, including feedback pertaining to the preferred portfolio. To facilitate this effort, the Company also conducted a stakeholder meeting on April 13, 2023, to discuss the development of the preferred portfolio. The timing and execution of this process was consistent with the modified schedule as approved by the Commission.
- Addresses concerns raised by the inclusion of developing technologies critical to future development. The inclusion of nuclear and non-emitting peaking resources, as well as considerations of offshore wind and long-term storage, are appropriately addressed through active monitoring, restricted implementation timelines, and based on the best currently available data. The IRP appropriately considers these types of technologies that would be required to lower Greenhouse gas (“GHG”) emissions, and provides alternative acquisition path analysis to ensure that long-term planning remains flexible and effective.
- Appropriately evaluated resources on a consistent and comparable basis. There are clearly risks to adding new natural gas and Carbon Capture Usage and Storage (“CCUS”) resources to the company system in a period where ongoing negotiations as part of the multistate process (“MSP”) have not reached formal determination beyond the extension of the 2020 Protocol.¹⁰ It is possible that these resources will ultimately not be eligible to be allocated to all states, and that additional pressures on CO2 emissions will impact their

⁸ 2021 IRP, Appendix B – IRP Regulatory Compliance at 40-42.

⁹ Docket No. 23-035-10 Order Granting Request for Extension to File (Mar. 28, 2023).

¹⁰ The 2020 PacifiCorp Inter-Jurisdictional Allocation Protocol (2020 Protocol) describes a multi-jurisdictional cost allocation methodology for PacifiCorp to allocate costs and benefits associated with system resources across its six-state territory. The 2020 Protocol was intended to cover an “interim period” from 1/1/2020 through 12/31/2023 but has since been amended to extend through 12/31/2025 to allow negotiating parties more time to develop a new allocation methodology that will begin 1/1/2026.

potential value. While there are many unknowns, the Company is committed to ongoing monitoring and updating of its data and assumptions and is responsive to feedback for improvement.

- Complied with Commission guidelines and Orders, as represented in the 2023 IRP, and specifically Appendix B, which summarizes how Utah requirements are met in the IRP.
- Properly addressed evolving federal legislation including the Inflation Reduction Act (“IRA”). The Company’s long term resource plan is based on proxy resource selection that does not predetermine the ultimate cost structure of resource acquisitions. To this point, the Company notes that qualifying for additional cost-savings based on an owned-resource deal structure will be determined through actual project implementation and is appropriately considered in the request for proposals (“RFP”) process. These cost-saving opportunities represent potential upside to customers as may manifest through an all-source RFP.
- Remains valid even with the suspension of the Company’s 2022 All-source RFP (“2022AS RFP”). The suspension does not impact PacifiCorp’s ability to meet emissions reduction targets or procurement of sufficient resources to meet these targets. Any impacts of PacifiCorp’s suspension of the 2022AS RFP have not yet materialized, and the Company continues to proactively identify issues for inclusion in PacifiCorp’s off-year cycle resource planning during the preparation of its 2023 IRP Update. PacifiCorp hopes to share updated findings following the finalization of 2023 IRP Update, scheduled to be filed with the Commission on April 1, 2024.

DPU, OCS, UAE, WRA, UCE, Sierra Club, and Interwest filed comments on the 2023 IRP, which overlap in subject matter and recommendations. The DPU, OCS, UAE and Interwest recommend the Commission decline to acknowledge the 2023 IRP. Sierra Club recommends the Commission acknowledge the portions of the 2023 IRP that relate to new renewable resources, but not acknowledge the portion that relates to planned coal retirements, gas conversions or nuclear additions. WRA does not take a position with regards to Commission acknowledgement. Finally, UCE recommends the Commission acknowledge the 2023 IRP.

The sections below respond to the stakeholder comments, including PacifiCorp’s response to stakeholder engagement and IRP process concerns; how the IRP and modeling processes, assumptions, and resource selections are reasonable; and how the Company’s procurement

strategies are properly aligned with PacifiCorp’s planning efforts. The Company appreciates the comprehensive stakeholder feedback regarding these topics.

A. PacifiCorp was granted a filing extension of the 2023 IRP, and its stakeholder processes and improvements were appropriate.

DPU, OCS, and UAE recommend the Commission decline to acknowledge PacifiCorp’s 2023 IRP for several procedural reasons. The DPU claims that the 2023 IRP was filed late, which is enough to warrant non-acknowledgement before any other factors are considered.¹¹ DPU also asserts that stakeholder review and input of the 2023 IRP were insufficient.¹² OCS, UAE, and UCE further contends that the public input meeting process was insufficient due to the perceived failure to provide adequate time for stakeholders to review modeling results in advance of the filing of the 2023 IRP. OCS and UAE argue that this conflicts with guideline 3 which requires that PacifiCorp’s resource plan “be developed in consultation with the Commission, its staff, the Division of Public Utilities, the [Office] of Consumer Services, appropriate Utah state agencies and interested parties.”¹³ Although WRA does not take a position as to whether the Commission should acknowledge the 2023 IRP, it also states that time constraints negatively impacted the IRP in terms of modeling accuracy and stakeholder input.¹⁴ Additionally, UCE requests that the Commission directs PacifiCorp to provide preliminary modeling results to stakeholders to allow for sufficient review of data during the 2025 IRP planning cycle.

In response, the Company would like to note that it requested a two-month extension to the deadline on March 2, 2023, seeking permission to submit the 2023 IRP by May 31, 2023. This extension was requested to allow the Company time to adapt the plan to recent events, including

¹¹ DPU Comments at 2 (December 12, 2023); OCS Comments at 1-2 (December 12, 2023).

¹² DPU Comments at 13 (December 12, 2023).

¹³ OCS Comments at 2 (December 12, 2023).

¹⁴ WRA Comments at 3 (December 12, 2023).

alterations in federal and state law. These changes included the Ozone Transfer Rule, the IRA, rules related to resource interconnection, and other recent state regulatory requirements. In its extension request, the Company asserted that this extension aligns with the Commission’s previous statement that the “most fundamental objective of this process is to obtain an accurate, complete, and useful IRP that is informed by a process of appropriate and thorough stakeholder input.”¹⁵ Although several parties expressed concern over the requested extension, no party recommended that the Commission deny the requested extension and the Commission indeed approved the extension on March 28, 2023, determining that the request was “reasonable and served the public interest.”¹⁶

Despite being granted an extension to adapt the 2023 IRP to recent changes in circumstances, the Company submitted a preliminary IRP on March 31, 2023. The Company then allowed an additional 30-day period for further stakeholder engagement on the preliminary draft, in order to include additional feedback into the final IRP, which was submitted on May 31, 2023. It should be noted that the stakeholders previously requested the Company provide a draft IRP in the previous 2021 IRP comments.¹⁷ This extended stakeholder engagement process enhanced the accuracy and comprehensiveness of the IRP, leading to a significantly improved quality of analysis on the final 2023 IRP. The Company maintains that there is no basis for the Commission to deny acknowledgement on the basis of timeliness, given its prior approval of the adjusted schedule and the steps taken to substantially increase opportunities for stakeholder input.

¹⁵ PacifiCorp’s 2021 Integrated Resource Plan, Docket No. 21-035-09, Order Granting Request for Extension to File issued March 15, 2021, p. 3.

¹⁶ PacifiCorp’s 2023 Integrated Resource Plan, Docket No. 23-035-10, Order Granting Request for Extension to File issued March 23, 2023 p. 3 (“Accordingly, having reviewed the Request, the comments, and the unanimous support expressed therein, the PSC finds and concludes that granting the Request is reasonable and in the public interest.”).

¹⁷ See generally DPU 2021 IRP Comments.

The DPU and the OCS criticize the Company because information about the 2023 IRP was in a news article on March 31, 2023, at 4 p.m. prior to it being posted to the Company’s website and filed with the Commission. On March 31, 2023, the Company’s regulatory staff was preparing IRP filings to be filed with five state Commissions as well as posting the information to the IRP website. The regulatory, IRP and communications staff coordinated the regulatory filings, website updates and press releases for the same day. The press release was issued slightly earlier in the day, prior to the filing in Utah, due to unexpected technical delays experienced during the submission of the filing to the Commission. The Company cannot control the content or timing of news articles, and contrary to the assertions made by the DPU and OCS, the information provided to the news was simultaneous with the information posted to the Company’s website and the Commission filing and was not in advance of the information being provided to stakeholders.¹⁸

PacifiCorp further notes that the entirety of the Company’s public input process is preparatory to the modeling and selection of the preferred portfolio, affording many opportunities for comment in a variety of forums and formats. As provided by the Commission, “[t]he purposes of the process is *not* to allow [stakeholders] an early preview of what PacifiCorp has ultimately elected to do. The purpose is to allow them an opportunity to provide meaningful feedback at each stage of a collaborative process.”¹⁹ Therefore, the argument that the Commission should not acknowledge the 2023 IRP because stakeholders did not receive an earlier preview of the preferred portfolio ought to be afforded minimal, if any, consideration.

PacifiCorp complied Guideline 3 and actively sought and incorporated public input throughout the development of the 2023 IRP. The Company follows an open, transparent, and

¹⁸ Due to the timing of the Company’s 2023 IRP filing in the late afternoon on March 31, 2023, the IRP was not posted to the Commission’s website until April 3, 2023.

¹⁹ PacifiCorp’s 2021 Integrated Resource Plan, Docket No. 21-035-09, Order issued June 2, 2022, at 14 (emphasis added).

inclusive approach by engaging with various stakeholders, including state utility commission staff, state agencies, customer and industry advocacy groups, project developers, and other interested parties. PacifiCorp hosts a series of public input meetings (11 in total for the 2023 IRP) and directly invites the public and its advisory groups to participate and influence the Company's resource planning decisions. The public input meeting materials are posted on PacifiCorp's website.²⁰ This proactive engagement ensures that a diverse range of perspectives are considered in shaping the IRP and helps create a more robust and inclusive planning process. PacifiCorp responds to public comments received and posts these responses on its website.²¹

Moreover, the two-month extension specifically promoted further feedback, which was duly received and addressed. Criticisms concerning the timeliness and sufficiency of the response period generally seem to disregard the fact that the extension approved by the Commission expanded the commentary period and Company responses, and facilitated an additional public input meeting on April 13, 2023, concerning the preliminary IRP. However, OCS does acknowledge that it was able to review the draft of the IRP and preferred portfolio when the Company submitted the Preliminary IRP.²² These all represent additional opportunities for input and discussion that were not explicitly available in previous IRP cycles.

For the 2025 IRP the Company intends to provide a draft IRP on January 31, 2025, ahead of the March 31, 2025, filing, in order to complete the return of the IRP to its expected schedule but also allow for an expansion of opportunities for stakeholder review and input. This improvement to the 2025 IRP process should be considered responsive to the various concerns

²⁰ <https://www.pacificorp.com/energy/integrated-resource-plan/public-input-process.html>

²¹ <https://www.pacificorp.com/energy/integrated-resource-plan/comments.html>

²² OCS Comments at 2 (December 12, 2023).

over the history of delayed IRPs, DPU's expressed desire for a distinct IRP draft document,²³ and UCE's request to be able to review preliminary modeling results.

The original significant disruption to the IRP filing schedule was created by a regulatory requirement to analyze more than 80 additional scenarios in the 2019 IRP pertaining to every PacifiCorp coal unit, which at that time could not be modeled endogenously. As a consequence of this requirement, the 2019 was substantially delayed as there was simply not enough time to explore the numbers of studies within the two-year planning cycle which was already well underway at the time the requirement was assessed.

Considering this expanded coal modeling exercise, PacifiCorp understood that an endogenous methodology had to be created by any means necessary if the IRP were to be timely in any future cycle. The Company pursued this goal aggressively, adopting new premium modeling software and updating its modeling methods. This effort required significant time and resources in the implementation of the PLEXOS modeling suite, ultimately delaying the 2021 IRP.

The Company emphasizes that it has made consistent progress in the return to scheduling normalcy in each IRP since the original disruption occurred and came within sixty days of the normal deadline in the 2023 IRP. Based on experience gained in the 2021 IRP, and operating on a shortened development timeframe, the 2023 IRP was delivered just two months after the original schedule, in cooperation with all states' commissions, including Utah, and including the expansion of the public input meeting series, opportunities for comment, and addressing new regulatory requirements as described above. This was significant, incremental advancement made within a very complex regulatory landscape, given the 2023 IRP is the most intricate IRP

²³ DPU Comments filed March 4, 2022, Docket No. 21-035-09, PacifiCorp's 2021 Integrated Resource Plan, "Solution #5", page 67.

the Company has filed, encompassing hundreds of evolving federal and state regulatory requirements from the Company's six-state service territory. Each IRP is unique and incorporates changes in market conditions and new rules and regulations from federal and state entities that are required to be addressed in the filing. In this regard, while PacifiCorp had intended to file the final 2023 IRP by March 31, the delay of only two months was reasonable. The Company anticipates the 2025 IRP to be filed on time, with the addition of a draft IRP to be provided to stakeholders for review on January 31, 2025. Process improvements have allowed the Company to establish this new timeline and the expectation of a 2025 IRP draft.

As it relates to facilitating a productive stakeholder discussion, UCE also encourages PacifiCorp to provide public input reports like the private generation study further in advance to ensure adequate time for review and feedback before model constraints are completed.²⁴ In response, PacifiCorp will continue to refine the stakeholder feedback process as it enters the 2025 IRP planning cycle to allow for substantive discussions ahead of the filing of the 2025 IRP. The private generation study, as part of the load forecast, is one of the first components necessary for IRP modeling and is due well before the IRP is completed. The Company presented preliminary results and collected feedback for the private generation study as part of the public input meeting series in July, before the study was finalized. Due to the IRA being passed shortly after results were finalized, the study was quickly re-done to meet changing policies and market dynamics. The timing of this necessary post-study change limited additional opportunities stakeholder review. However, updates were discussed during the September 1st and October 13th public input meeting series.

²⁴UCE Comments at 9-10 (December 12, 2023).

It is the assessment of WRA that given the rapidly changing policy landscape occurring in lockstep with IRP planning, that stakeholders must remain apprised of expected delays in order to provide feedback and request additional runs ahead of the filing of the IRP. WRA specifically addresses this concern with the absence of modeling results provided during the public input meetings.

In response, with regard to modeling results not being presented beginning at the September public input meeting, as discussed in the public input meeting process, meaningful model results cannot be made available before inputs and constraints are completed in the model, which is dependent upon the timing of updates. The Company discusses each of the updates in the public meeting series. The Company is in no position to forecast possible portfolio outcomes ahead of this critical work. In order to create a draft of the upcoming 2025 IRP, the Company is committed to accelerating modeling and enhancing processes sufficiently to show preliminary results in that update on January 31, 2025. The draft results will still be subject to stakeholder input and change before final filing.

B. PacifiCorp's suspension of the 2022 All-Source Request for Proposals is not a ground for non-acknowledgment of the 2023 IRP.

The DPU, OCS, WRA, UCE and Interwest express concerns over the suspension of the 2022 All-Source RFP and its potential impact of the 2023 IRP Action Plan, which will be addressed in the subsection.²⁵ OCS further suggests that the Company's suspension of its 2022 All-Source RFP may invalidate the 2023 IRP due to Guideline 4.e. This particular guideline

²⁵ DPU Comments at 22 (December 12, 2023); Interwest Comments at 3-4 (December 12, 2023); WRA Comments at 4.; UCE Comments at 2 (December 12, 2023).

stipulates that the Company is required to submit a four-year action plan detailing specific resource decisions.²⁶

The 2022 All-Source RFP was suspended on September 29, 2023—after the 2023 IRP had already been filed. The decision to suspend was due to multiple reasons, all with the intent to ensure that the Company’s procurement decisions are based on the most up-to-date information and in the best interests of customers, while also considering the evolving market conditions and other pertinent factors: (1) A federal court’s stay of the U.S. Environmental Protection Agency’s proposed ozone transport rule; (2) Ongoing rulemaking by the EPA regarding greenhouse gas emissions, with impacts on our system to be determined; (3) Wildfire risk and associated liability across our six-state service area and throughout the West; and (4) Evolving extreme weather risks that necessitate further decision-making regarding PacifiCorp’s operational and resource requirements.

Contrary to the implications drawn by the OCS, the Company has indeed complied with Guideline 4.e by presenting an IRP action plan. It is understood that circumstances may evolve post-submission, potentially affecting the Company’s near-term procurement strategies. The Company would like to emphasize that IRP action plans are intended to be dynamic, not rigid mandates. They are designed to guide the Company’s procurement strategies while allowing for deviations as circumstances change. Adhering too strictly to an action plan, and not accounting for changes in circumstances, may lead to procurement decisions that do not align with the best interests of ratepayers. Ultimate procurement decisions are then assessed for prudence in appropriate regulatory forums, such as general rate cases or significant energy resource decision proceedings. Therefore, it is essential that IRP action plans maintain flexibility to accommodate

²⁶ OCS Comments at 1-2 (December 12, 2023).

any unforeseen developments that occur after submission. In line with this approach, the Company will file an updated IRP Action Plan on April 1, 2024, to account for changes in circumstances that have arisen since the plan's initial submission.

It is the Company's position that Commission acknowledgement of the IRP must be viewed in context and acknowledges not that the Action Plan or preferred portfolio selections are valid into perpetuity, but rather if the IRP and resulting Action Plan was appropriate given the conditions at the time of filing. Acknowledgement of the reasonability of the IRP is not, in the Company's view, a prudency review or replacement for resource acquisition or ratemaking procedures, but rather lays out a long-term course or forecast to inform downstream processes. Despite the concerns raised, it is also important to note that the 2022 All-Source RFP has yielded extensive insights regarding new generating assets, especially renewable and battery storage options, within PacifiCorp's service area across six states, along with the prevailing market rates for wind, solar, and battery storage. This valuable information has been integrated into the 2023 IRP Update that will be submitted to the Commission in the coming months, which could influence PacifiCorp's strategic approach to future RFPs. Consequently, the Company maintains that the suspension of the 2022 All-Source RFP, along with any subsequent shifts in market conditions or adjustments in federal or state policies post-submission, should not be deemed grounds for the non-acknowledgment of the 2023 IRP.

UCE and WRA propose alternative procedural options. In particular, UCE recommends that the Commission direct the Company to address how it intends to carry out the 2023 IRP Action Plan in the 2023 IRP update due to the suspension of the 2022 All-Source RFP.²⁷ WRA further

²⁷ UCE Comments at 10 (December 12, 2023).

recommends that the Commission consider the IRP Update as a formal process where the Company would seek acknowledgement.²⁸

In response, it should be recognized that the IRP Update serves a fundamentally different role as compared to a full IRP. The intent of the IRP Update, a draft of which is anticipated to be posted to the Company's IRP website on January 31, 2024, is as a checkpoint on the 2023 IRP outcomes, examining the impacts of changes to fundamentals such as load and price. Additional considerations are represented based on the specifics of a given IRP cycle but remain necessarily limited in scope and restricted to updated data points wherever possible. As an update, the development of this document does not seek to re-evaluate IRP methodologies, embedded reports, or assumptions except as necessary to indicate the need for course corrections in the next IRP. Therefore, the Company's position is that the IRP Update should be seen as an extension of the IRP upon which it is based, and not replacement for nor re-run of that IRP. The Company continues to take feedback into account during the development of the IRP Update and on an ongoing basis, including through discussions with stakeholders, IRP data requests, and comments received.

The Company would like to reemphasize that concerns over post-filing changes are precisely why the IRP Update exists, as a checkpoint on the preferred portfolio and action plan occurring at mid-cycle. The Company has incorporated key changes in its 2023 IRP Update analysis, including the modeling of near-term resources and the potential impact on resources over the 20-year modeling horizon. Per its intended purpose, the 2023 IRP Update will provide an important illumination of key changes that have occurred since the filing of the 2023 IRP and indicate any needed course corrections. It is PacifiCorp's view that the suspension of the 2022

²⁸ WRA Comments at 15 (December 12, 2023).

All-Source RFP, occurring after the IRP filing, cannot invalidate the reasonability of the IRP when it was filed.

C. PacifiCorp’s modeling processes, assumptions, presentation, and resource selections are reasonable.

1. Modeling Processes

A. Reliability and Granularity Adjustments

Sierra Club recommends the Company consider several reliability and granularity adjustments, as PacifiCorp’s manual adjustments to ensure reliability “are quite significant and merit particular attention.”²⁹ These include: further clarify its methodology for reliability adjustments, specifically regarding resource additions and modifications to the timeline of optimally selected asset retirements; explain in the next IRP why the long-term model produces significant energy shortfalls in the short-term model, that must be manually addressed; provide opportunity to recommend alternative reliability adjustments to the 2023 Preferred Portfolio, and for PacifiCorp to evaluate those alternatives in the IRP Update; further clarify the Company’s granularity adjustments, especially for coal unit total fuel costs, rather than incremental or marginal fuel costs.³⁰

In response to Sierra Club’s concern, because both the reliability assessment and granularity adjustments are specific measures to address specific enhancement to achieve superior modeling results, there are no logical alternatives as both procedures are dictated by model math. For example, the granularity adjustment is the calculated difference in resource value between the long term (“LT”) and short term (“ST”) models, using the LT initial portfolio.

²⁹ Sierra Club Comments at 14 (December 12, 2023).

³⁰ *Id.* at 14-42.

Because the portfolios are identical, the differences in resource value are driven by differences in the two model's operations (i.e., LT model operates like-kind blocked hours and ST model operates each hour). Chief among the differences, overwhelmingly, is granularity. This difference is applied as an adjustment to the less granular LT model. Any other approach would be a different type of adjustment, not suited to the measured model differences.

The Company acknowledges there is one point of analytical judgement with regards to the most extreme adjustments, which can result from deficiencies in meeting requirements in the initial model run. In cases where the adjustment exceeds $\pm\$100/\text{kW}\text{-year}$, the adjustment is limited to $\pm\$100/\text{kW}\text{-year}$. This prevents the granularity adjustment from overwhelming LT outcomes based on extreme values driven by conditions that will not be relevant in final reliable portfolios. Similarly, regarding the reliability assessment, resource adjustments are made on the basis of measured deficiencies and applying calculated resource values to determine the appropriate action to cover those deficiencies.

While a less direct approach to calculating these adjustments may be envisioned, the approach used is specific to the stated goals and is a direct application of model outcomes to improve results, and not the result of arbitrary PacifiCorp tinkering.

B. Alternative Portfolio Variants, Cluster Resources and Scenarios

Sierra Club recommends PacifiCorp complete model runs of several portfolio variants under each of PacifiCorp's price and policy scenarios. These include P01-JB3-4 GC, P04-Huntington RET 28, and P17-Col3-4 RET25. Sierra Club also recommends PacifiCorp complete portfolio variants that force the model to incrementally select additional cluster study resources from Cluster Areas 1, 2, 4, 12, and 14, and reassess variants P18-Cluster East and

P19-Cluster West by re-optimizing resource selections, portfolio composition, costs, and risks throughout the LT model.³¹

In response, the 2023 evaluates portfolios under five price-policy scenarios with attention to heuristic value and resource availability to name two key factors. As the Company cannot evaluate all studies under all possible conditions, cases are prioritized. At the same time, PacifiCorp has been responsive to stakeholder requests, conducting additional studies as time and resources allow.³² Regarding the three cases named as examples, the results are conclusive enough that only the heuristic value of robustness under a less likely future comes into play. P17, for example, was examined only to determine the cost effectiveness of an early retirement of both Colstrip units over the optimally selected approach of retiring one unit and continuing the other. Given that continued operation of a single unit supported renewables and increased relative benefits in the period most critically related to long-term regulatory compliance, the value of a high gas price, high CO2 price (“HH”) analysis is reduced, and not competitive with the potential value of running other studies.

Likewise, the analysis of P18 and P19 was conducted with the understanding that additional resources would likely result in a higher cost present value of revenue requirements (“PVRR”) outcome. The value of these studies is to assess the magnitude of that PVRR impact for determining possible least-regret paths to consider for the preferred portfolio. The results of these studies supported the selection of the preferred portfolio without the addition of marginal cluster resources in the east or west and indicated that even further additions must further deteriorate benefits. However, incremental additions are a common feature of portfolio analysis, and future filings are expected to continue with this type of analysis.

³¹ Sierra Club Comments at 47-52 (December 12, 2023).

³² E.g., P10-Offshore Wind, P23-RET Coal 30/33, P24-Gas 40-year Life.

For future IRPs, OCS urges PacifiCorp to include scenarios that test the effects of long-lasting extreme weather events in a year where fossil fuel resources are no longer in operation in order to identify potential shortfalls in system reliability.³³ The Company will continue to consider various weather scenarios in forthcoming IRP cycles. In addition to considering climate change within its baseline forecast, the Company also considers alternative weather scenarios within multiple load forecast scenarios. For example, the 1-in-20-year extreme weather scenario evaluates peak weather impacts using the most extreme peak observed over the past 20-years. Additionally, the 20-year normal weather scenario evaluates the weather impacts on load assuming weather is consistent with the average temperatures observed over the prior 20-years.

2. Presentation

OCS claims the Company failed to comply with Guideline 4.g by not presenting a customer rate impact analysis.³⁴ OCS has made similar arguments in past IRPs and the Commission rejected such arguments—ordering that it would not modify Guideline 4.g at that time to require OCS’s request.³⁵ Similar to past IRPs, the 2023 IRP specifically includes an indicator of customer rate pressure over time among the initial portfolios discussed relative to the 2023 IRP preferred portfolio.³⁶ In addition, Volume II, Appendix J, Stochastic Simulation Results show incremental and cumulative indicators of customer rate impacts over the 20-year planning period. The estimated rate impacts apply equitably across all classes of ratepayers,

³³ OCS Comments at 5 (December 12, 2023).

³⁴ OCS Comments at 2 (December 12, 2023).

³⁵ *In the Matter of PacifiCorp 2019 IRP*, Docket No. 19-035-02, Order, at 22 (May 13, 2020). (“We anticipate rate impact information associated with some of the investments identified in the 2019 IRP will be provided in future dockets related to significant energy resource decisions or CPCNs. Additionally, should a party believe that more information or analysis is appropriate during the IRP process, it is free to seek such information through the IRP process, data requests, or to file a request for agency action with the PSC to modify the Guidelines. We decline to modify the Guidelines at this time to make them more specific in connection with these requests of OCS and DPU.”).

³⁶ See Volume I, Chapter 9 of the 2023 IRP, pages 267-309.

which is the most reasonable and useful assumption in the absence of a ratemaking process or instrument. When considering the rate impacts of a preferred portfolio, it is important to note that the IRP is a plan, informed by *proxy resources* among other considerations, where exact costs cannot be known until specific resources are known. Many factors can drive rate impact, notably allocating the actual costs to the different jurisdictions once known. Estimates of rate impacts are merely estimates, and the actual rate impacts should be evaluated in the context of a specific project. Including estimated revenue requirement impacts are not likely to lead to useful information for the Commission's acknowledgement since the IRP considers proxy resources and it does not consider the specific ratemaking mechanisms or cost allocations in each state. The Company sufficiently complied with the Guideline requiring an evaluation of rate impacts.

UAE also recommends changes to the way data is presented in Tables 9.31, 9.32 and 9.33. Table 9.31 report the installed capacity, by year, in the preferred portfolio. Table 9.32 shows capacity load and resource balances for existing and new resources for summer peak. Table 9.33 shows capacity load and resource balances for existing and new resources for winter peak. UAE believes that the categories of resources in Table 9.31 differ from those in Tables 9.32 and 9.33, making it difficult to track how specific preferred portfolio resource types identified in 9.31 flow into the load and resource balances of Tables 9.32 and 9.33. UAE proposes adding additional rows to Tables 9.32 and 9.33 in the existing resource section and adding additional rows to table 9.31 that show when renewable plus storage resources were selected (specifically a row for wind plus storage, and another row for solar plus storage). UAE also requests that the Commission direct PacifiCorp to include this additional information in Tables 9.31, 9.32, and 9.33 in future IRP filings.³⁷

³⁷ UAE Comments at 12-14 (December 12, 2023).

PacifiCorp is open to enhancing the presentation of information in the IRP to improve clarity and understanding. The IRP document itself must balance content and clarity, and is a living document, wherein what works today may not result in an appropriate balance or emphasis in the future. Specific to UAE's request for detail on wind plus storage and solar plus storage, in prior IRPs PacifiCorp modeled fixed storage amounts paired with individual resources, for example 25 percent battery with solar in the 2019 IRP and 100 percent battery with solar in the 2021 IRP, making it easy to identify pairings. However, specified limits reduce the flexibility of the model to optimize around the specific characteristics of resources in an area. Outside of certain near-term resource options that were modeled based on specific pending interconnection requests, the 2023 IRP allowed the model to select hybrid combinations of wind, solar, and storage in whatever ratios the model preferred. While no wind plus storage resources were called out as part of the 2023 IRP preferred portfolio, the preferred portfolio does include simultaneous additions of wind and storage resources at Borah (Idaho) in 2028, and at Jim Bridger in 2037. While there is value in continuing to highlight opportunities to pair resources to reduce interconnection costs and requirements, focusing on "wind plus storage" misses many facets, including: surplus interconnection opportunities at existing facilities, storage located close to load, and storage that supports the transmission system. PacifiCorp looks forward to discussing these aspects as part of the public input process for the 2025 IRP and expects to continue to refine the presentation of materials throughout that process for inclusion in the 2025 IRP.

UAE also recommends changes to the data as presented in Figures 9.60 and 9.62. Figure 9.60 displays how the preferred portfolio resources meet PacifiCorp's capacity needs over time. Figure 9.62 presents the projected capacity mix with preferred portfolio resources. In both of these Figures, UAE observes data for wind and solar and other renewable resources as being

paired together into a single generic “Renewable” category. By contrast, Figure 9.61, which presents the energy mix with preferred portfolio resources, provides broken-out data for separate types of renewable resources (Wind, Solar, and Other). UAE recommends that the Commission direct PacifiCorp to provide detailed data on renewable capacity in Figures 9.60 and 9.62 such as that provided in Figure 9.61.³⁸

PacifiCorp is aware of the different treatment of Figures 9.60 and 9.62 in the IRP. In future IRPs, the Company is committed to improved coordination among internal business units developing each distinct figure.

WRA also notes several discrepancies and data inconsistencies within the 2023 IRP, specifically the comparison of portfolio Variant P05-No Nuclear and P06-No Forward Technology and the P12 and P23 Variants, leading them to question the validity and accuracy of the data provided.³⁹ For case P12, the Company acknowledges that the May 31, 2023, data disk incorrectly provided LT study 11953 instead of providing LT study 23646, which properly aligns to the ST study. In comparing P12 using the corrected study versus P23, the Front Office Transactions (“FOT”) reported no difference in 2023 to 2025. In addition, differences in LT model selections related to market purchases did not impact dispatch in the ST model.⁴⁰ All models had the same levels of market availability, and discrepancies between the reported LT selections do not impact the selection of the least cost, least risk portfolio. This is because final market use is determined and economically evaluated using the finer granularity of the ST model. The LT FOT selected markets were not used in studies P06 and P23 as they reported zero generation so ended up reporting zero from PLEXOS output. By contrast, studies P05 and P12

³⁸ UAE Comments at 13-14 (December 12, 2023).

³⁹ WRA Comments at 12 (December 12, 2023).

⁴⁰ Refer to the model discussion in the 2023 IRP, Chapter 8 – Modeling and Portfolio Evaluation, pp 219-240.

made use of the selected markets in the LT model. The LT portfolios, excluding the FOT reporting, are the same between P05 and P06 for the years 2023 to 2025 and are not a driver in the difference in FOT reporting from PLEXOS output; rather this is a reporting artifact related to the vintage of the studies.

3. Assumptions

A. Carbon Assumptions

Sierra Club recommends the Company increase the medium carbon price policy to reflect recent federal regulations and incorporate these developments in the 2023 IRP Update.⁴¹ Sierra Club misunderstands the function of the CO2 medium assumption cost. This cost does not represent current legislation, which is already modeled as appropriate methodologies and data become available. The medium CO2 policy assumption is a proxy for future drivers, continuing the already strongly established trend of decarbonization into the future. This proxy CO2 cost is therefore a forecast, representing this trend, and properly based on a survey of currently available forecasts. It is not the role of the proxy cost to drive decarbonization, rather its role is to represent drivers that can be reasonably forecast. This is why recent legislation has not replaced or eliminated the need for the medium CO2 proxy cost – the Company is forecasting that the decarbonization trend will continue into the future.

Regarding the elimination of the medium gas price, zero CO2 price (“MN”) price-policy scenario or zero CO2 (“LN”) price-policy scenarios generally, doing so would eliminate a source of information indicating robustness of portfolios and indicate what may occur if the expected case CO2 proxy forecast is not realized. While the Company’s position is that the MM price-policy scenario is the most likely, eliminating alternatives such as the HH or MN scenarios

⁴¹ Sierra Club Comments at 57-58 (December 12, 2023).

seems precipitous and unnecessary. PacifiCorp considers price-policy scenarios over the course of each IRP, and they are an important subject covered in the public input meeting series.

Generally, WRA approves of the significant carbon reduction inroads made by PacifiCorp within the 2023 IRP. Specifically, it acknowledges the deep emissions cuts relative to the 2021 IRP with an increased emphasis on conversion of the Company's existing coal fleet, as well as increased deployment projections for distributed generation and nuclear resources, respectively.⁴²

B. Coal-Fueled Generation Units and Gas Conversions

Sierra Club recommends that PacifiCorp use the base tier coal pricing from the Company's 2023 Jim Bridger Long-Term Fuel Supply Plan for the Jim Bridger plant, as well as reevaluate the economic retirement dates of Jim Bridger, Hunter, Huntington, and Wyodak given Sierra Club's other concerns with PacifiCorp's modeling (high transmission network upgrade costs, reliability adjustments, SCNR installation, inflated granularity adjustments, and low coal prices for Jim Bridger).⁴³ Relatedly, Sierra Club recommends PacifiCorp provide a complete assessment of the availability and cost of firm interstate pipeline capacity that would be necessary to supply the Company's planned coal-to-gas conversions, and this should be completed prior to the IRP Update.⁴⁴

PacifiCorp believes the best place to reevaluate the coal economic retirement is as part of the 2023 IRP Update filing scheduled for April 1, 2024. This provides an opportunity to refresh the key thermal assumptions with the current data for the evaluation. Sierra Club comments did not consider that coal retirements were determined endogenously in the PLEXOS model, a new

⁴² WRA Comments at 2 (December 12, 2023).

⁴³ Sierra Club Comments at 42-45 (December 12, 2023).

⁴⁴ *Id.* at 53-55.

feature for the 2023 IRP. The Jim Bridger coal prices in PLEXOS do not include already incurred fixed costs in prior years, which is a better method to evaluate ongoing operations and retirement decisions. Lastly, the Company is not able to disclose metrics pertaining to firm interstate pipeline capacity for planned conversions as stipulated within the confidentiality agreements between PacifiCorp and third-party entities.

With regard to Sierra Club's comments about coal fuel costs for Jim Bridger, PacifiCorp would highlight that the fixed and variable cost structure assumed in the 2023 IRP reasonably captures the cost of continuing or ceasing coal-fired operation at Jim Bridger 3 and 4. While there are opportunities to optimize coal supply for particular circumstances, they are ill-suited for modeling in the wide-range of cases and conditions contemplated in the IRP, and provide limited incremental benefit. In general, a more optimized fuel supply for Jim Bridger would identify additional benefits from ongoing operations, i.e., it would not result in retirement changes in the action plan window. Note that in light of the significant impact of the Ozone Transport Rule, for the 2023 IRP PacifiCorp did not model take-or-pay coal supply requirements for any of its coal units. PacifiCorp did incorporate significant fixed costs for coal supply to Jim Bridger units 3 & 4. Those costs cease when Jim Bridger units 3 & 4 stop using coal or retire and did not have any minimum volume requirement.

Regarding WRA's comments about the increased emphasis on conversion of the coal fleet, PacifiCorp agrees that the 2023 IRP included additional options, such as multiple options for gas conversion for Jim Bridger units 3 and 4, one of which was selected as part of the preferred portfolio. Modifications to existing units can provide significant value to customers in light of evolving operational and system requirements and PacifiCorp intends to continue evaluating how its existing assets can be best used to serve customers in future IRPs.

4. Federal and State Incentives

Sierra Club recommends PacifiCorp incorporate several opportunities from the IRA. These include financing opportunities from the Energy Infrastructure Reinvestment (“EIR”) program (which can enable closure of coal plants, replacement of fossil fuel resources with cleaner alternatives, and develop transmission infrastructure), that Sierra Club recommends should be included no later than the IRP Update, and should include a transmission network upgrade cost scenario for Cluster Areas 1, 2, 4, 12, and 14 that are reduced by 30 percent, and a scenario where EIR financing assumes the early retirement and replacement of Jim Bridger Units 3 and 4, Huntington, Hunter, and Wyodak.⁴⁵

In response, PacifiCorp will continue to pursue meaningful opportunities to share government funding updates with stakeholders when appropriate. Sierra Club’s comment implies that all resources planned in the 2023 IRP over the 10-year period would qualify for EIR. However, as an example, only company-owned resources would be expected to qualify; this has the effect of excluding non-owned purchase power agreements determined in the RFP process.⁴⁶ The Company’s long term resource plan is based on *proxy resource* selection that does not predetermine an ultimate cost structure for resource acquisitions. These cost saving opportunities are properly handled during the acquisition process and will manifest through an all-source RFP, in which the types, locations of resources are not predetermined by the IRP but rather flow from bids. Currently, the Company does not lead a public forum that is dedicated to the disclosure of grant projects, and instead encourages stakeholders to actively monitor the PacifiCorp press releases page to remain apprised of new funding developments.⁴⁷

⁴⁵ Sierra Club Comments at 5-19 (December 12, 2023).

⁴⁶ Sierra club correctly points out a typo indicating year 2015 instead of year 2025 for the IRP.

⁴⁷ Available here: [News releases \(pacificorp.com\)](https://www.pacificorp.com/news-releases)

PacifiCorp incorporated, at the time of filing, the best of the timely available information regarding IRA legislation, as previously detailed at the Utah technical conference on October 24, 2023. While the publicly posted supply side table does not show all IRA-related ITC and PTC tax benefits, modeling within the PLEXOS database accounted for the above factors as appropriate with the exception of pumped hydro facilities.⁴⁸ The Company also notes that its treasury department is actively pursuing EIR programs, financing it can qualify for, and grant applications. The details of EIR will be communicated in the next IRP as they become known. A variant study can be reported once the EIR details become clear.

5. Resource Selections

Interwest also suggests the cost-effective deployment of renewable resources has provided a host of economic benefits for Utah residents including increased vocational training opportunities for skilled labor, enhanced property values, improved tax revenue and sustained economic development for the region.⁴⁹ The Company agrees and refers to the substantial incremental renewable and non-emitting resources included in the full diversity of the preferred portfolio, of which nuclear and non-emitting technologies are included.

A. Carbon Emissions Influence

UCE recommended that the Commission acknowledges the PacifiCorp 2023 IRP given its selection of renewable resources and storage that represent a least-cost, least-risk preferred portfolio consistent with the long-term interests of ratepayers. While UCE commends the efforts of PacifiCorp to include the social cost of carbon and other carbon variables in the 2023 IRP, it is believed that these modeled scenarios are still not reflected in the preferred portfolio, therefore

⁴⁸ ITCs were mistakenly not applied to pumped hydro resources in the 2023 IRP. For the 2023 IRP Update, the 30% ITC will be applied to pumped hydro resources, along with the 10% energy community credit, where applicable.

⁴⁹ Interwest Comments at 8-9 (December 12, 2023).

increased stakeholder visibility and participation is warranted going forward. Further recommendations also emphasize the desire for PacifiCorp to continuously evaluate Enhanced Geothermal Systems on an equal basis as other emergent non-emitting technologies. Other considerations by UCE are that PacifiCorp must incorporate the future modeling risks associated with increased costs of carbon emissions within the preferred portfolio, and model specific least-cost pathways to decarbonize by 2035.⁵⁰

In response, the Company agrees generally with and appreciates UCE's support of its overall portfolio outcomes, and fully intends to realize continuous improvement in its representation of resources, including geothermal. Regarding least-cost pathways to decarbonization, the schedule for this is largely set by regulating entities, resource costs and legal obligations. That said, PacifiCorp has been on a consistent track toward decarbonization based on economics and requirements since at least the 2017 IRP, which resulted in the economic selection of Energy Gateway 2020 in its preferred portfolio. As expressed in the 2023 IRP Executive Summary, "Our 2023 Integrated Resource Plan is a roadmap for transforming the western grid at scale. It builds toward a truly connected West, where the transition to a net-zero energy system delivers safe, reliable, affordable power now and for years to come."⁵¹ The 2023 IRP action plan reflects this momentum, following a trend that has been present for many years and continues to grow stronger as reflected in recent state and federal legislation.

B. Geothermal

OCS posits that geothermal resources were not given significant selection consideration for the IRP model despite their belief that these resources have established greater market maturity than Natrium and non-emitting hydrogen technology. Further recommendations also emphasize

⁵⁰ See generally UCE Comments (December 12, 2023).

⁵¹ 2023 IRP, Chapter 1 – Executive Summary, page 1

the desire for PacifiCorp to continuously evaluate Enhanced Geothermal Systems on an equal basis as other emergent non-emitting technologies. Although geothermal was studied and updated as an option in the 2023 IRP, geothermal was not selected for the preferred portfolio.⁵² The Company intends to continue to include geothermal options and update cost and technical assumptions in future IRP's. Although geothermal was not selected in the 2023 IRP preferred portfolio, the Company remains open to considering competitive bids in its RFP processes and invites Fervo, and other geothermal developers to submit proposals to the Company's future RFP's.

C. Collocated Resources

UAE recommends changes to the data presented in Table 9.31 to remedy an issue in the 2023 IRP where data regarding supply-side resource costs is presented differently from the way data regarding the preferred portfolio is presented. Tables 7.1 and 7.2 present data regarding the supply-side resources available for selection into the preferred portfolio. These tables include cost data on certain resource types such as renewable resources without storage, renewable resources with co-located storage resources, and standalone storage resources. UAE observes that while table 9.31 presents the resources selected in the 2023 IRP preferred portfolio, it does not provide any detail as to whether the generation and storage resources are co-located or are standalone resources. UAE recommends adding additional rows to Table 9.31 that show when renewable generation resources are co-located with storage resources (specifically a row for wind plus storage, and another row for solar plus storage) and when storage resources are standalone. It is the belief of UAE that this will provide a greater depth of understanding with respect to the resources selected in the preferred portfolio. UAE also requests that the

⁵² OCS Comments at 2 (December 12, 2023).

Commission direct PacifiCorp to include this additional information in Table 9.31 in future IRP filings.

The Company responds that collocation information is supplied and illustrated in the 2023 IRP.⁵³ Figure I.1 lists the portfolio resources selected by location and year, including solar and wind resources that are collocated with storage. Also, please refer to the expansion of collocation opportunities provided in the 2023 IRP discussed in section *III.A.2 - Process Improvements*, above, indicating that collocation options are no longer constrained in the modeling.

D. Surplus Interconnection

Regarding the Company’s modeling of surplus interconnection, Sierra Club requests PacifiCorp allow storage to be paired with not only new renewable resources, but also existing fossil resources. This “hybridizing” of a thermal asset with a storage resource “would increase the flexibility of the asset and provide lower emission reliability services, such as spinning reserve” and likely “reduce operating costs as the storage asset could operate more responsively.”⁵⁴

PacifiCorp believes it has met the aforementioned interests of Sierra Club in its modeling of surplus interconnection in the 2023 IRP, where storage resource options were available to be selected with potentially any technology or combination of technologies, allowing portfolio optimization to recognize the best location, size and timing for storage concurrently with considerations of existing technology profiles, and also in tandem with thermal retirement options. Additionally, storage options that were not part of a cluster study were considered unconstrained by transmission requirements, such that any amount could be placed at any modeled location on the system. The Company’s strategy has exceeded the aforementioned

⁵³ See the 2023 IRP, Volume II, Appendix I – Capacity Expansion Results, Figure I.1, page 183.

⁵⁴ Sierra Club Comments at 56-57 (December 12, 2023).

requests by allowing the model to make the best collocation determinations endogenously. Please also refer to the IRP discussion of expanded collocation opportunities in section *III.A.2 - Process Improvements*, above,

E. Nuclear Resources

UAE, DPU, OCS, Interwest, and Sierra Club all provide various comments surrounding the modeling and risk of nuclear resources in the 2023 IRP. In particular, intervenors have generally commented on their concerns of the selection of the Natrium project in the preferred portfolio. The Company appropriately selected Natrium as part of its preferred portfolio based on numerous factors at the time of modeling, including project specifications and a significant funding source.

TerraPower's Natrium demonstration project is a 500 megawatt ("MW") advanced nuclear resource anticipated to come online in 2030. This non-emitting thermal resource is a molten sodium-cooled nuclear reactor paired with a molten salt thermal energy sodium tank. The reactor and storage generate power through a single turbine. Operating characteristics include: 345 MWs of baseload energy production at a 92 percent capacity factor; maximum output of 500 MWs and minimum output of 100 MWs; a ramp rate of approximately 40 MWs per minute from minimum to maximum; molten salt storage supports maximum output of 500 MWs for a 5.5-hour duration;³⁰ and maximum storage efficiency of 99 percent. The Natrium plant is specifically designed to integrate into the system with high levels of variable renewables. Additionally, the plant's molten salt storage system can store large amounts of energy, far surpassing the capacity of typical battery storage facilities. That energy can be used during times of peak demand when the wind isn't blowing, or the sun isn't shining.

Key factors at the time of modeling such as significant government funding availability, alternative path analysis, existing federal regulatory requirements (such as the Ozone Transportation rule), and the obligation to provide least-cost, least-risk portfolios were taken into consideration when including the Natrium Project in preferred portfolio. The alternative path analysis shows that without the Natrium Project, there would be an addition of 289 MW of non-emitting peaking resource in 2030.⁵⁵ In 2032, the second advanced nuclear plant would be replaced by 303 MW of non-emitting peaking resource and 200 MW of four-hour battery storage. In 2033, 303 MW of non-emitting peaking resources and 200 MW of four-hour battery storage would replace 500 MW of nuclear capacity. These considerations do not impact the 2-to- 4-year action plan period and can be achieved in the mid-to-late term under the same expected conditions as resource acquisition for other variants. In the P05 variant without the Natrium Project, higher costs and emissions result from increased fossil-fueled generation and net market transactions. The Company is revisiting these assumptions for its 2023 IRP Update, scheduled for filing on April 1, 2024, and is open to incorporating further direction from the Commission to create a reference case that provides a meaningful and relevant data point among the Company's available portfolio options.

The Company further responds that PacifiCorp is staying informed of the Natrium demonstration project's progress and continues to update our analysis of future projects in our integrated resource planning to determine if the resource is in the best interests of customers. TerraPower is the developer of the project and is responsible for all development risks. PacifiCorp has not signed any contractual agreements with TerraPower regarding Natrium and PacifiCorp will only move forward with the Natrium demonstration project if it brings value to

⁵⁵ 2023 IRP, Volume I, Chapter 10.

customers. Any agreement is expected to contain numerous conditions, including PacifiCorp obtaining required state regulatory approvals and/or waivers, project offramps and performance related metrics which must be met for PacifiCorp to move forward with acquisition of the Natrium project. Further, TerraPower will be required to meet Nuclear Energy Regulatory Commission requirements and obtaining all required project permits and licenses, which will ensure that it continues to be the best option for PacifiCorp customers. Therefore, the Natrium Project uses proxy values that do not reflect final costs. Variant studies P05 and P06 are sufficient to inform alternative futures for these resources which are not contracted and are only allowed significantly beyond the action plan period. There is no additional basis for specific offramp strategies.

Concerns about the risks associated with permitting requirements, technological development, and fuel development are mitigated because alternatives to Natrium require much shorter lead-times than nuclear projects, and there will be ample opportunities to meet future electric demand, prior to a firm commitment from Natrium. While there are excellent reasons to continue evaluating the promise of Natrium in the near-term, the Company reiterates that the potential realization of the project does not fall within the action plan window. The Company's decision to include Natrium was based in part on the unique opportunities that the project offers, including substantial grants from the Department of Energy and development by TerraPower. Based on these unique attributes, the Company anticipated customer benefits from including the project in the preferred portfolio. Given that the project will not be acquired if it cannot demonstrate benefits to PacifiCorp's customers, the Company will continue to evaluate this project in future IRPs.

To reiterate, nuclear resources considered in the 2023 IRP have been intentionally limited to years outside of the action plan window with the understanding that while nuclear is an existing fuel technology and interesting resource, the Natrium project has a long lead time that requires continued evaluation of its potential. Ongoing negotiations are commercially sensitive, and any future contracts will be structured to minimize risks and costs for PacifiCorp's customers, based on the specific costs and operational details of a potentially binding agreement, once one is available for consideration.⁵⁶

Commercially available alternatives to future technologies were also substantially evaluated, including offshore wind, geothermal and iron-air batteries. Likewise, solar and wind technologies, once considered unproven, are available and are selected in large quantities. The 2023 IRP specifically addresses risks of portfolio change, as detailed in the Company's acquisition path analysis.⁵⁷ This analysis includes the two studies specific to the future of nuclear resources, namely variant cases P05 and P06.^{58,59}

F. Natural Gas

The DPU and OCS provide comments that the Company did not appropriately consider natural gas.⁶⁰ Contrary to this assertion, the Company evaluated new natural gas generation and the conversion of existing coal-fired generation to natural gas. In particular, for the first time in

⁵⁶ The 2023 IRP does not assess commercial structures, or the risks related to specific contractual elements. Such considerations are a critical part of the negotiations, but since the Natrium project is still in active development, such negotiations are ongoing and thus both premature and highly commercially sensitive.

⁵⁷ 2023 IRP, Chapter 10 - Action Plan, pp. 363-385.

⁵⁸ "P05-No NUC". This case removes the NatriumTM demonstration project in 2030, and subsequent 2031 and 2033 nuclear plants using the same NatriumTM technology from the preferred portfolio. The portfolio is then re-optimized to determine a portfolio necessary to maintain reliability. The purpose of the sensitivity is to evaluate possible alternatives in the absence of nuclear resource options. Additionally, this sensitivity seeks to evaluate the potential risk that these projects are unable to achieve online and operating status for any reason.

⁵⁹ "P06-No Forward Tech". This variant removes both nuclear and non-emitting peaking resources to assess the potential for an alternate pathway to reliability.

⁶⁰ DPU Comments at 24-30 (December 12, 2023); OCS Comment at 2 (December 12, 2023).

this IRP, the Company allowed the model to endogenously select natural gas conversion for a broader set of units. The conversion of Naughton Units 1 and 2 and Jim Bridger Units 3 and 4 was chosen for the preferred portfolio, while gas conversion was not selected for Dave Johnston Unit 4 or Wyodak. This enhancement considerably expands the opportunities for natural gas-fired operation, compared to previous IRPs.

Despite the Company's concerns about the regulatory and market price risks associated with new natural gas resources at the time of modeling, unlike the 2021 IRP, the 2023 IRP did permit the endogenous selection of new natural gas resources in all model runs based on assumptions intended to reasonably reflect their benefits and risks. Additionally, for the first time in the 2023 IRP, the Company introduced the endogenous selection of existing natural gas retirements, further expanding its assessment of this important technology type. Acknowledging the range of potential outcomes for new natural gas resources, the Company executed two preferred portfolio variants that incorporated alternative assumptions about new natural gas resources, namely P-11 Max NG and P-24-Gas 40-year Life. These components offer a significantly wider analysis of natural gas options.

The DPU also provides comments that the Company was "pessimistic" about natural gas because it model a 10-year term for new natural gas plants as opposed to a 40 year term.⁶¹ However, assuming a 40-year lifespan for new natural gas resources would have been imprudent, considering the current status of federal regulations when the modeling occurred, like the Ozone Transportation Rule. PacifiCorp notes that ratepayers would have considerable stranded-cost risks associated with planning a system that is reliant on new natural gas resources with depreciable lives ranging between 30 to 40 years (i.e., a new natural gas-fired resource placed in

⁶¹ DPU Comments at 24-30 (December 12, 2023).

service in 2030 would be depreciated as late as 2070) given the status of federal regulations at the time of modeling. Further, when considering current state and federal policies, it is not feasible to assume new natural gas resources can obtain the siting and emissions permits needed to operate such a facility in parts of PacifiCorp's service territory. PacifiCorp has also observed that there is very limited development activity for new natural gas facilities. This was most recently evident in the Company's 2022 All-Source RFP, which did not result in a single eligible bid for new natural gas resources.

Nonetheless, the Company modeled several different variants, including a 40-year natural gas life in portfolio P-24. This portfolio, however, was not determined to be the least-cost, least-risk option. This variant was also assessed using the no CO2 price scenario (MN), with the analysis detailed in rate. Furthermore, as stated above, the Company allowed the model to endogenously select natural gas conversion and conversion of Jim Bridger Units 1 and 2 was selected for the preferred portfolio.

G. Carbon Capture Usage and Storage

DPU further argues that the Company treated CCUS pessimistically because the Company did not choose variant P20 JB3-4 CCUS as the preferred portfolio.⁶² PacifiCorp responds that CCUS technologies have shown significant cost uncertainty, and at the time of filing there were only two major utility-scale CCUS retrofit projects on coal plants in North America that have been operated commercially.^{63,64} As detailed in the 2023 IRP, the Company issued two CCUS RFPs, one for Jim Bridger Units 3 and/or 4, and one for Dave Johnston Unit 4

⁶² DPU Comments at 24 (December 12, 2023).

⁶³ For comparison, as of August 1, 2023, there were 54 commercially operating nuclear power plants with 93 nuclear power reactors in 28 states; U.S. Energy Information Administration, [U.S. Energy Information Administration \(EIA\)](#).

⁶⁴ See 2023 IRP, Volume I, Chapter 7 – Resource Options, pages 204-205.

on November 1, 2022. Proposals were due March 7, 2023, and PacifiCorp was evaluating information newly received leading up to the filing. The Commission approved the Company's initial application on November 29, 2022, and submitted its update to the initial application on schedule, on March 31, 2023. The Company continues to meet its obligations to consider this technology as new information becomes available, as it has via two CCUS RFPs.

The 2023 IRP presented a full assessment of CCUS potential⁶⁵ including a description of updates included in the 2023 IRP, break-even risk factors for both fuel and tax considerations, and a delineation of reasons why CCUS was excluded from the preferred portfolio at that time. A few of the factors for exclusion include: the current reliance on estimates not informed by recent bid data,⁶⁶ the unprecedented scale of the implementation, interdependence with an updated fueling strategy, regulatory risks and uncertainty related to multistate protocol proceedings, and emerging state policies.

As a result of these factors, a CCUS variant was not adopted in the preferred portfolio, and instead, PacifiCorp recommended that additional in-depth analysis specific to the technology, units, geographical location and other factors is needed to support selection of the project. The Company committed in the 2023 IRP to re-examine the costs and benefits of CCUS installation in its 2023 IRP Update, anticipated to be filed April 1, 2024.

H. Non-Emitting Peaking Resources

Interwest suggests that the 20 percent hydrogen blending ratio and lack of sustained green hydrogen supply-chains are inadequate in achieving emission performance requirements with only a marginal decrease of 6-7 percent in carbon emissions at the gas generating unit.

⁶⁵ See 2023 IRP, Volume I, Chapter 9 – Modeling and Portfolio Selection Results, pages 295-298.

⁶⁶ The Company received one proposal in March of 2023, the same month the 2023 IRP was released. At the time of the 2023 IRP filing, a full analysis of the proposal was not available.

Additional recommendations are made by Interwest that include advising that the Commission orders PacifiCorp to perform and utilize an Effective Load Carrying Capability (“ELCC”) study for all system resources, including thermal generation, as these resources are believed to be a significant point of failure for loss of load events.⁶⁷

The Company understands the limited impact to emissions reductions from low blends of hydrogen in gas turbines (or other non-renewable fuel burning resources), particularly when there is a lack of green hydrogen supply. The Company would like to note that although 30 percent hydrogen resources were included in the Supply Side Resource Table, they were not selected in the preferred portfolio.

The DPU believes that PacifiCorp’s projections for the deployment of utility-scale hydrogen peaker plant technology by 2030 (despite the existence of commercially viable natural gas plants) is ambitious given that the production and transportation facilities for hydrogen technology remain largely conceptual.⁶⁸

The Company responds that its primary goal is the selection of a portfolio of resources with the best combination of expected costs and associated risks and uncertainties for the utilities and its customers. Therefore, PacifiCorp’s consideration of resources is not limited only to those estimated to be commercially viable or nearly commercially viable with regard to a twenty-year plan, and rather accounts for the associated risk when including these resource options. As noted in the above discussion of nuclear technologies, the Company anticipates these resources achieving wider commercial use outside of the action plan window and restricts their selection on that basis. Alternative path analysis indicates ample opportunity for adjustment to these proxy resource selections based on future analysis. In the meantime, these future resources, in

⁶⁷ Interwest Comments at 11-12 (December 12, 2023).

⁶⁸ DPU Comments 22-30 (December 12, 2023).

consideration of risks and alternatives, demonstrate the importance of peaking resources in conjunction with the rest of the Company's diverse portfolio. Whether that niche is ultimately met by peaking resources fueled by hydrogen, natural gas, or some other fuel, peaking resources are an important component of a cost-effective and reliable portfolio.

D. PacifiCorp's procurement strategies are properly aligned with regulatory requirements and PacifiCorp's planning efforts.

1. Reliability

On the topic of reliability, Interwest contends that the solar rich regions of PacifiCorp's service territory could provide valued capacity and energy diversity and recommends that PacifiCorp include detailed participation effort updates regarding coordination between NorthernGrid and WestConnect regional planning authorities in the next IRP. Additionally, Interwest suggests that the Commission direct PacifiCorp to participate in and report on other transmission planning efforts such as the Western Transmission Expansion Coalition.⁶⁹ Further, Interwest recommends that PacifiCorp include an analysis of potential interconnection points to other utilities as well as providing selectable upgrades for advanced transmission technologies along with grid-enhancing technologies to minimize the cost of these investments in future IRP's.⁷⁰

OCS believes that the responses provided to transmission concerns expressed in discovery demonstrate inconsistencies in the IRP modeling process as it relates to the evaluation of grid enhancing technologies and more economically viable alternatives than constructing new transmission lines and interconnection facilities.⁷¹

⁶⁹ Interwest Comments at 25-26 (December 12, 2023)

⁷⁰ *Id.* at 29.

⁷¹ OCS Comments at 7 (December 12, 2023).

PacifiCorp acknowledges the importance of participating in regional planning authorities and is an active member of NorthernGrid and also coordinates with WestConnect through NorthernGrid via Interregional Coordination meetings. Reports generated by NorthernGrid can be accessed through their website <https://www.northerngrid.net>. Similarly, reports produced by WestConnect are publicly available.⁷² PacifiCorp is a foundational participant in the Western Transmission Expansion Coalition and is actively participating in development of the governance and technical framework for that effort.

Collaborating with other utilities is a common practice in transmission planning, and where feasible, collaborations with other utilities can be used to inform our integrated resource plan. PacifiCorp takes an active role in regional planning; the 2023 IRP in Volume 1, Chapter 3 - Planning Environment, provides information on the Western Energy Imbalance Market, Extended Day-Ahead Market, the WRAP, “Markets+” a Southwest Power Pool (“SPP”) day-ahead market offering, and other critical developments relevant to the interests of PacifiCorp customers.

With respect to the modeling and evaluation of advanced transmission technologies, grid-enhancing technologies and other economically viable alternatives to new transmission construction, PacifiCorp takes into account the information provided for grid enhancing technologies in Chapter 4 and Appendix E of the 2023 IRP. PacifiCorp reviews the potential for reconductoring with advanced conductors as well as using Grid Enhancing Technologies. PacifiCorp in its transmission planning studies considers and identifies network upgrades using advanced conductors and grid enhancing technologies wherever feasible and the solution provides adequate capacity for the long term. An example of such studies includes the Generation Interconnection Cluster 2 Study Report⁷³, which has identified and will continue identifying

⁷² <http://regplanning.westconnect.com>

⁷³ <https://www.oasis.oati.com/woa/docs/PPW/PPWdocs/2022CA9CS.pdf>

reconductoring of existing transmission lines with advanced conductor such as 1222 ACCC (Aluminum Conductor Composite Core) or 959.6 ACSS (Aluminum Conductor, Steel Supported). Similarly these generation interconnection cluster studies have also identified grid enhancing technologies such as flexible alternating current transmission system (“FACTS”) devices such as static volt-ampere reactive compensators (“SVC”) or static synchronous compensators (“STATCOM”) to enhance reliability of the area.⁷⁴ PacifiCorp continues to enhance the ability to model and evaluate these advanced technologies in each IRP cycle, reflecting the continuing evolution of those technologies.

Lastly, Interwest urges PacifiCorp to study and report in its next IRP the costs of inflexible thermal resources in assigning integration costs.⁷⁵

PacifiCorp’s reported integration costs in the 2023 IRP reflect the incremental cost of holding operating reserves for additional wind and solar resources. As discussed in the Flexible Reserve Study (Appendix F), the number of reserves required is reduced because those wind and solar resources are added to a pool of reserve requirements that includes load, wind, solar, and non-dispatchable thermal and hydro resources. Using a pool of reserves to cover variations reduces the reserve requirement. For example, higher than expected wind output may offset lower than expected solar output, load may drop at the same time as wind output, and both circumstances can result in a reduced need for reserves to be deployed. As part of the 2025 IRP, PacifiCorp intends to develop updated reserve requirements for load, wind, solar, and non-dispatchable resources, and will present the analysis and results as part of the public input process to enable stakeholder feedback. In addition, PacifiCorp notes that as part of model optimization, PLEXOS ensures that

⁷⁴ These reports can be accessed by selecting “Generator Interconnection” in the left sidebar on PacifiCorp’s OASIS website: <https://www.oasis.oati.com/ppw/index.html>.

⁷⁵ Interwest Comments at 30 (December 12, 2023).

these reserve requirements are met by dispatchable resources specific to a given portfolio, where portfolios with more dispatchable resources can fulfill those requirements at lower cost. As a result, integration costs are embedded within the reported cost results. Portfolio results do not have a dollar per megawatt-hour integration cost added for wind and solar generation, as these costs are part of the core optimization calculation and in any case differ widely across portfolios and future conditions.

2. Regional Market Participation and Planning

Interwest commends PacifiCorp for its efforts to participate in regional initiatives to develop day-ahead markets and bolster resource adequacy in the long term. However, Interwest emphasized the need for this market regime to capture a significant portion of the load serving the Western interconnection. Interwest adds that while day-ahead markets provide important operational improvements, they do not offer the transmission planning benefits and eliminate transmission rates that are provided by a full-scale organized whole-sale market. Lastly, Interwest claims that the PacifiCorp 2023 IRP references both CAISO and the Extended Day Ahead Market (“EDAM”) and the Western Power Pool’s Western Resource Adequacy Program (“WRAP”) but lacks specificity on how both programs are reflected in modeling. Specifically, Interwest expresses concern that these resources are being modeled for unnecessary capacity needs due to WRAP participation and recommends that PacifiCorp include significant study updates in future IRP’s regarding regional market participation, including the benefits of a full-scale organized market outlined above. On the topic of market volatility in the natural gas sector, Interwest expressed concern pertaining to the conversion of Jim Bridger Units 1 & 2 to natural gas. Alternatively, Interwest suggests that PacifiCorp use the risk reduction of renewable deployment relative to gas generation provided by Lawrence Berkeley National Laboratory and

analyze any potential methane leakage liability from such facilities as enforced under the Inflation Reduction Act beginning in 2024.⁷⁶

PacifiCorp responds that CAISO's EDAM is building on the existing Western Energy Imbalance Market (“WEIM”) that currently makes up 80 percent of the Western interconnection and has achieved gross benefits reaching \$4.66 billion since its launch in November 2014. Participation in EDAM will allow participants to meet demand at a lower cost to consumers due to the market optimization that takes into account the costs of resources, transmission made available to the market, and a diversity benefit that lowers requirements. Notwithstanding, transmission customers on the PacifiCorp system will retain their ability to use their legacy rights, as done today. Transmission made available in excess of PacifiCorp system needs will receive revenue if transfers require usage of that transmission and eliminates pancaking of transmission rates, thereby reducing costs to serve native load. EDAM participants are required to meet forecasted demand before it can benefit from EDAM market participation which prevents leaning on other market participants. In many ways EDAM participation is closer to the existing PLEXOS modeling than PacifiCorp’s existing operations. For the 2023 IRP, PLEXOS identified optimized hourly market purchases and sales at a range of market points. In current actual operations, PacifiCorp is more heavily dependent on “block” transactions that are typical in existing markets, such as daily heavy-load hour products from 6:00 am to 10:00 pm. In contrast the EDAM will enable hourly supply and demand differences to be settled on a day-ahead basis, which is closer to the hourly optimized market forecasts in PLEXOS for the 2023 IRP.

⁷⁶ See generally Comments of Interwest (December 12, 2023).

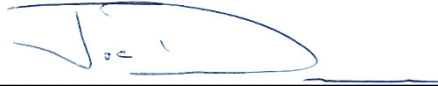
The WRAP establishes the capacity required within its footprint to achieve a certain reliability goal. WRAP participation requires participants to submit a forward showing submittal for Winter and Summer that shows how the Company plans to meet its load obligations during strenuous times of the year. The WRAP Operations Programs looks at the forward showing forecast against a nearer term forecast to ensure there are sufficient resources available going into the real-time timeframe. The program matches participants together based on subregional connectivity, Northwest or Southwest, to cure deficiencies a participant may be experiencing by pooling and sharing resources. Additionally, due to the Public Utility Commission of Oregon Resource Adequacy Rulemaking (AR660), PacifiCorp must comply with a state or regional resource adequacy program. The state led program is designed to be similar to WRAP thereby closing any gaps that could result. The WRAP and EDAM give PacifiCorp a mechanism to meet its demand obligations in a feasible manner and tap into the economic and reliability benefits that come with participating in both.

CONCLUSION

PacifiCorp's 2023 IRP complies with the Commission's Guidelines. The 2023 IRP includes robust and extensive portfolio modeling under a wide-range of price-policy scenarios and other prudent planning assumptions discussed with, and reflective of, stakeholder input resulting in the selection of a least-cost, least-risk preferred portfolio. The 2023 IRP also includes an action plan that is consistent with the long-term public interest, and that is updated on a regular basis consistent with both business and regulatory practice. PacifiCorp appreciates the comments received from an active and engaged stakeholder group and continues to support stakeholder participation throughout the IRP development process to foster constructive dialogue and inform

its long-term resource planning efforts. Therefore, PacifiCorp requests that the Commission acknowledge the 2023 IRP and the 2023 IRP action plan.

Respectfully submitted this 31st day of January 2024.



/Joseph Dallas
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CERTIFICATE OF SERVICE

Docket No. 23-035-10

I hereby certify that on January 31, 2024, a true and correct copy of the foregoing was served by electronic mail to the following:

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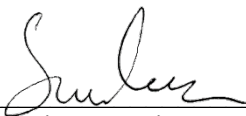
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