

**PUBLIC UTILITY COMMISSION OF OREGON
REDACTED STAFF REPORT
PUBLIC MEETING DATE: October 12, 2021**

REGULAR X CONSENT EFFECTIVE DATE N/A

DATE: October 6, 2021

TO: Public Utility Commission

FROM: Rose Anderson

THROUGH: Bryan Conway, JP Batmale, and Kim Herb **SIGNED**

SUBJECT: PACIFIC POWER:
(Docket No UM 2059)
Requests acknowledgement of 2020AS RFP Final Shortlist.

STAFF RECOMMENDATION:

The Commission should acknowledge PacifiCorp's 2020AS RFP Final Shortlist, and direct the Company to act in accordance with Staff's recommendations listed in the conclusion of this memo.

DISCUSSION:

Issue

Whether the Commission should acknowledge PacifiCorp's 2020AS RFP Final Shortlist.

Applicable Law or Rule

The Oregon Public Utility Commission's competitive bidding rules in OAR Chapter 860, Division 89 were adopted in August 2018.

The Commission's competitive bidding requirements in OAR Chapter 860, Division 89 apply when an electric utility may acquire a resource or a contract for more than an aggregate of 80 megawatts and five years in length, as specified in OAR 860-089-0100(1).

OAR 860-089-0500 states that, in an RFP:

“acknowledgment” is a finding by the Commission that an electric company’s final shortlist of bid responses appears reasonable at the time of acknowledgment and was determined in a manner consistent with the rules in this division.

Per OAR 860-089-0500(3), requests for acknowledgement must, at minimum, include the independent evaluator’s (IE’s) closing report, the electric company’s final shortlist, all sensitivity analyses performed, and a discussion of the consistency between the final shortlist and the electric company’s last-acknowledged IRP Action Plan.

The IE’s closing report contains an evaluation of the applicable competitive bidding processes in selecting the least-cost, least-risk acquisition of resources and any additional analyses requested by the Commission, under OAR 860-089-0450(9). Additional analyses were identified by the Commission when it acknowledged PacifiCorp’s IRP Action Plan.¹ The IE participates in the final short list acknowledgment proceeding and may be required by the Commission to have expanded involvement through final resource selection.²

Analysis

Background

The 2020AS RFP was filed with the Oregon Public Utility Commission on April 22, 2020 and approved by the Commission on July 16, 2020. The 2020AS RFP Action Item in the 2019 IRP had been acknowledged on June 8, 2020, before the RFP approval.

Staff, Commissioners, the IE, and stakeholders throughout the resource planning and acquisition process have focused on issues including the market price forecast, Production Tax Credit (PTC) expiration, Large Generator Interconnection Agreements (LGIA), and transmission buildout. The IE has placed additional focus on ensuring that the RFP is conducted in a fair and competitive manner, and produced an additional report on the results of sensitivities.

RFP Sensitivities

Staff worked with PacifiCorp and the IE to arrive at a set of sensitivities to help inform resource selection in the 2020AS RFP. These sensitivities are described in PacifiCorp’s presentation filed July 30, 2021, and they focus on changes to market prices, PTC schedules, gas prices, and carbon policy outcomes.³ The sensitivities generally seek to

¹ *In the Matter of PacifiCorp, 2019 Integrated Resource Plan*, Docket No. LC 70, Order No. 20-186 (Jun 8, 2020).

² OAR 860-089-0450(10).

³ PacifiCorp’s presentation of July 30, 2021 in Docket No. UM 2059. Page 9.

evaluate the Final Shortlist under a variety of potential future policy-price scenarios, as well as to explore alternate groups of bid selections that are custom designed for these alternate price-policy scenarios.

As described in Staff's comments on August 19, 2021, the sensitivities performed by PacifiCorp were adequate to assess the impacts of market prices and tax credit extension on the Final Shortlist and other potential groups of bids.⁴ The sensitivities showed generally that the FSL consists of resources that provide a good balance of cost and risk through a variety of scenarios. The FSL was selected by PacifiCorp partially in response to concerns around the potential for market prices to be lower than forecasted by the Company. Several bids were removed from the MM scenario (medium gas prices, medium carbon price) in order to make the FSL less dependent on market sales for its value.

The tax credit extension scenario found that, in a future with medium gas prices and a medium carbon price, the FSL portfolio is valuable to customers regardless of tax credits and market sales revenues. The FSL contributed energy and capacity with enough value for the FSL bids to be selected by the IRP models even if tax credits were extended through 2030 and no market sales were possible.

Transmission and Energy Gateway South

The Final Shortlist includes bids that are dependent on the Energy Gateway South (EGS) and D.1 transmission lines, which connect the system with high-capacity-factor Wyoming wind resources. In the 2019 IRP, Wyoming wind was shown to provide a substantially higher capacity factor and winter capacity contribution than other wind resources.⁵

The Eastern Wyoming wind with EGS has been a major focal point of both the 2019 IRP and the 2020AS RFP. The 2019 IRP Acknowledgement Order stated:

Similarly, we acknowledge the Gateway South transmission line only insofar as it is selected in the RFP docket in connection with generating resource bids, where it will compete with the costs and benefits of almost a dozen other transmission upgrades paired with different generating resources.⁶

The sections that follow explain why PacifiCorp's assumption that the Company would be required to construct a 230 kV line for transmission customers if it did not build EGS

⁴ Staff's comments of August 19, 2021 in Docket No. UM 2059. Pages 11-12, 18.

⁵ PacifiCorp 2019 Integrated Resource Plan. Appendix N. Page 402.

⁶ Order No. 20-186. Page 2.

for electric ratepayers is a logically questionable reason to discount the price of EGS by \$1.4 billion, as PAC has done in this RFP. At the very least, PAC should have made this critical assumption very clear to the IE and Staff during the sensitivity discussion, if not sooner. Instead, this information was not shared with Staff and the IE until August 5th, 2021.⁷ In Staff's view, this unquestioned and untested assumption creates an oversight in the modeling, as more analysis should have been done to determine the value of EGS for electric customers.

To address this oversight, Staff has written the sections below to describe the situation and attempt to evaluate EGS from a variety of perspectives in order to help the Commission consider the value of EGS in facilitating Wyoming wind in the RFP Final Shortlist. Staff crafted the analysis below to share our evaluation as to whether EGS has truly met the condition from the 2019 IRP Acknowledgement Order for the transmission line to be "selected in the RFP docket in connection with generating resource bids."⁸

Obligation to Build Transmission from Aeolus to Mona

In PacifiCorp's August 4, 2021 presentation for the August 5, 2021 public meeting, the Company provided more background for the EGS transmission line, explaining that a project in eastern Wyoming originally requested 500 MW of Long-Term Firm Point-To-Point transmission service from Aeolus to Mona, and the Company responded by issuing a system impact study stating that EGS would be required to grant the request.⁹ Since then, 12 interconnection agreements have been signed by PacifiCorp with parties interested in interconnecting in Eastern Wyoming. EGS has been included as a contingent facility in these requests, with the assumption that the line would be paid for by PacifiCorp electric customers.¹⁰

PacifiCorp has stated that it is obligated to construct transmission upgrades necessary for any party that requests transmission service.¹¹ There is some indication in FERC Orders 890, 890A, 890B, and 1000 that PacifiCorp may indeed be obligated to construct transmission when transmission service is requested. However, Staff is not comfortable with the implication that PacifiCorp is required to place the project in state-jurisdictional rate base with its retail electric customers. In fact, Staff has found evidence from an Indiana proceeding that shows that companies are able to separate certain transmission

⁷ PacifiCorp's Final Shortlist Sensitivities Presentation. Docket No. UM 2059. August 5, 2021. Pages 6 through 9.

⁸ Order No. 20-186. Page 2.

⁹ PacifiCorp's Final Shortlist Sensitivities Presentation. Docket No. UM 2059. August 5, 2021. Pages 8, 10.

¹⁰ See for example the Rock Creek Wind Facilities Study, Page 15. Available at: <https://www.oasis.oati.com/woa/docs/PPW/PPWdocs/Q836FS.pdf>

¹¹ PacifiCorp's Final Shortlist Sensitivities Presentation. Docket No. UM 2059. August 5, 2021.

investments from state-jurisdictional rate base and recover their costs and rate of return through the appropriate FERC tariff, in order to allocate the costs of certain upgrades to the beneficiaries of those upgrades.¹²

Staff finds that the decision to model a \$1.4 billion offset to the costs of EGS was based on an unvetted assumption that electric customers would be required to pay for a 230 kV line from Aeolus to Mona, when it appears that this is not necessarily the case.

With this said, Staff is also aware that many transmission customers are not in a position or are simply not inclined to pay for a large interconnection or transmission investment on their own. This is due to many reasons Staff will not discuss here. Regardless, the Company can be thrust into an awkward position regarding planning: customers request improvements to the utility system for their projects, these are identified in planning as central to meeting future resource needs, but unless ratepayers cover the cost of a system upgrade, the needed upgrade is never accomplished. Staff believe this was the case for EGS. The single 500 MW customer who triggered EGS would most likely not be in the financial position to pay \$1.4 billion upfront for EGS.

Regardless, the timing of both the revelation regarding EGS and the rushed RFP process in UM 2059 did not leave the IE and Staff time to explore how EGS should be modeled if ratepayers did not cover the \$1.4 billion investment.

In the case of the 2020AS RFP, developers including NextEra and Invenergy are among those who wish to utilize the EGS line. The Company could conceivably have directed these developers, with companies valued at over \$210 billion collectively, to fund the Energy Gateway South project upfront and receive re-payment, with interest, from PacifiCorp over, at most, twenty years.¹³ Staff hypothesizes that, in this way, PacifiCorp could have met any obligation to construct transmission without needing to involve electric ratepayers. PacifiCorp could then choose whether to procure the resources connected to proposed transmission for electric ratepayers or to allow them to go to other off-takers. To the extent that electric ratepayers ended up utilizing the transmission, they could repay PacifiCorp by sharing a portion of OATT revenues from third-party customers with the Company, or identify another payment method.

¹² Indiana Utility Regulatory Commission. VERIFIED PETITION OF NORTHERN INDIANA PUBLIC SERVICE COMPANY LLC FOR APPROVAL OF REGIONAL TRANSMISSION ORGANIZATION ADJUSTMENT FACTORS TO BE APPLICABLE DURING THE BILLING CYCLES OF MAY THROUGH OCTOBER 2021 PURSUANT TO IND. CODE § 8-1-2-42. Pages 6 - 10. Available at: https://www.in.gov/iurc/files/ord_44156RTO19_042821.pdf

¹³ <https://www.morningstar.com/stocks/xnys/nee/valuation>.

Staff would like to continue a conversation with PacifiCorp about the possibility of asking transmission customers to pay upfront for major transmission upgrades in certain instances, and avoid the need to place the transmission resource in state-jurisdictional rate base. Staff finds that several portions of PacifiCorp's OATT tariff suggest that such financial arrangements should be possible.^{14,15,16} This could provide a natural counterbalance against PacifiCorp electric customers being required to pay for major transmission lines any time that a project at any stage of development requests firm, long-term point-to-point transmission service.

Additionally, modeling should reflect this optionality, when evaluating resources. Staff feels this would be practical and could allow ratepayers to more precisely elect to utilize and pay for portions of future transmission upgrades that PacifiCorp believes it is required to construct under the OATT.

Recommendation:

The Commission should direct PacifiCorp in its next RFP to host a workshop with Oregon Staff and stakeholders to discuss how to model alternate financing of future transmission investments, including transmission customer funding. PacifiCorp should report to the Commission on the discussion at a public meeting within five months of the October 12, 2021 Public Meeting. PacifiCorp's report should include a table of the transmission resources planned over the next 20 years, and which, if any, of them PacifiCorp believes it is obligated to construct for transmission customers.

Tax Credits, Reliability, and Interconnection Opportunities

Given that the modeling of EGS appears to be using a questionable assumption of a \$1.4 billion offset to the cost of EGS, the section below provides an additional assessment of the value of EGS in terms of tax credits, reliability, and the opportunity to connect high-quality renewable resources to the system.

Tax Credits

EGS connects wind projects to PacifiCorp's system that come online by December 31, 2024 and may receive a \$14/MWh PTC for ten years. As currently scheduled, the PTC will be available at the same level in 2025 and expire completely by the end of 2026. Using the weighted average capacity factor of **[Begin Highly Confidential]** [REDACTED] **[End Highly Confidential]** for Wyoming wind resources, and assuming Wyoming wind resources receive a \$14/MWh PTC, the present value of PTCs received by these

¹⁴ PacifiCorp's FERC Open Access Transmission Tariff. Section 13.5. Page 48.

¹⁵ PacifiCorp's FERC Open Access Transmission Tariff. Sections 11.3 – 11.4.1. Page 632-633.

¹⁶ PacifiCorp's FERC Open Access Transmission Tariff. Section 15.4. Page 58-59.

resources would be about **[Begin Highly confidential]** **[End Highly Confidential]**. This would also be equivalent to the value lost if the PTCs expired without building the FSL wind resources connected to EGS.

However, there is some question as to how much of the PTC value the PPA contracts pass on to customers. For the 590 MW of Wyoming wind that will be owned by PacifiCorp, PTC value will be passed to customers directly. For the other 1050 MW of Wyoming wind resources that are PPAs, some or all of this value will be passed to customers over time through the fixed PPA contract price. It is not clear to Staff what portion of the PTC value may have been passed to customers through the PPA price, however, the PPA prices are competitive, ranging from **[Begin Highly Confidential]** **[End Highly Confidential]** with a weighted average of **[Begin Highly Confidential]** **[End Highly Confidential]**.¹⁷ According to NREL data, the weighted average PPA price in the Western United States during 2019 and 2020 was about \$30.80.¹⁸

Staff has investigated whether delaying construction of EGS would potentially benefit ratepayers, while considering tax credit opportunities. Staff estimates that delaying the construction of the estimated \$2.2 billion EGS and D.1 lines until December 31, 2027 would create approximately \$156 million to \$264 million in savings on interest payments for customers (in real 2023 dollars), depending on assumptions about customer discount rates.

However, by 2027, PTCs may expire and the Wyoming wind projects would lose a portion of their value (approximately **[Begin Highly Confidential]** **[End Highly Confidential]** in real 2023 dollars.) Additionally, the wind resources would not be available to contribute to PacifiCorp's energy, capacity, and reliability needs until 2027, with the Company needing to find alternate resources until then.

Reliability

EGS connects a location for high capacity factor Wyoming wind resources to a market hub near PacifiCorp's system. PacifiCorp's filing of July 30, 2021 shows that in 2025, the resources on the FSL would help to fill a 1,172 MW short capacity position that would otherwise need to be filled with Front Office Transactions and/or other near-term capacity products.¹⁹ Market depth has been declining in recent years, and for this

¹⁷ PacifiCorp's Highly Confidential Final Shortlist for the 2020 All Source Request for Proposals and Sensitivity Analysis, Docket No. UM 2059, July 30, 2021 presentation. Page 7.

¹⁸ Data available at <https://emp.lbl.gov/wind-technologies-market-report/>

¹⁹ PacifiCorp's Highly Confidential Final Shortlist for the 2020 All Source Request for Proposals and Sensitivity Analysis, Docket No. UM 2059, July 30, 2021 presentation. Page 7.

reason PacifiCorp's 2021 IRP assumes market depth of only 500 MW.²⁰ There would be substantial reliability risk associated with allowing a large short capacity position in 2025.

Staff estimates that the capacity contribution of the Wyoming wind resources is likely to be about 250 MW on average (1640 MW nameplate capacity times 15 percent average capacity contribution as estimated in the 2019 IRP) and winter capacity contribution would be much higher at 38 percent, or 623 MW.²¹ The FSL is expected to contribute 998 MW to PacifiCorp's 1,172 MW capacity need in 2025, reducing the Company's short position to 174 MW in the near-term.

If Wyoming wind connected to EGS was excluded from the FSL, the Company's short position in 2025 would be approximately 424 MW, increasing to 591 MW in 2026 and 644 MW in 2027, beyond the 2021 IRP market capacity limit.

In addition to meeting capacity needs in 2025, the Wyoming wind resources would help to replace the energy from the expected retirements of coal units at Colstrip (2025), Naughton (2025), Dave Johnston (2027), and Craig (2025, 2028). These units generated approximately 9 million MWh in 2020.²² In comparison, Staff's estimate of expected annual generation from the Wyoming wind resources is **[Begin Highly Confidential]** [REDACTED] **[End Highly Confidential]** MWh per year.

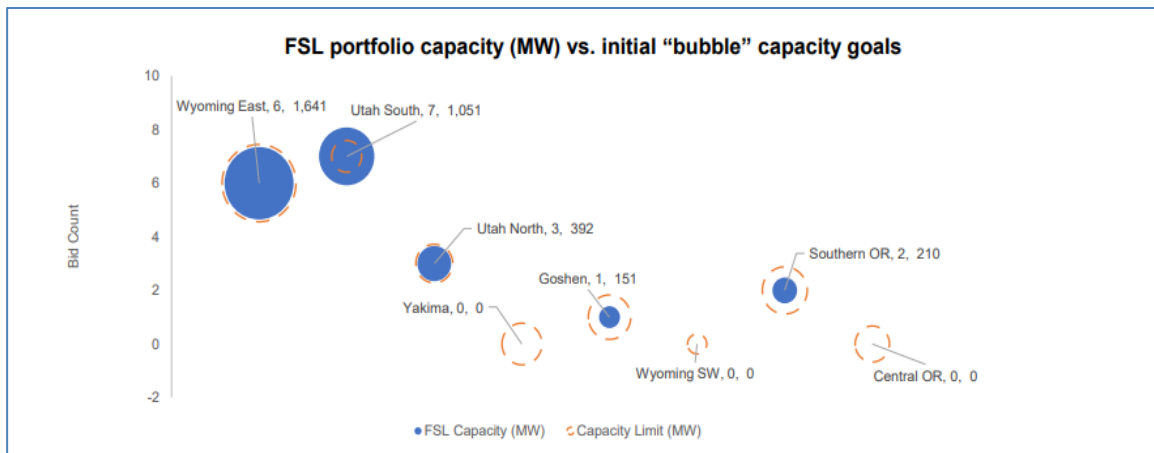
Interconnection Opportunities

There are limited locations to add substantial amounts of new energy to PacifiCorp's system, and this is especially true for renewable energy. As shown in the following chart by the Independent Evaluator, the readily available incremental interconnection capacity on PacifiCorp's system is limited and has largely been spoken for already.

²⁰ PacifiCorp's October 22, 2020 Integrated Resource Plan Public Input Meeting Presentation. Pages 36 - 43.

²¹ 2019 PacifiCorp Integrated Resource Plan. Appendix N. Page 402.

²² PacifiCorp's 2020 FERC Form 1.



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Most large renewable developments in the 2019 IRP preferred portfolio are accompanied by transmission upgrades.²⁴ Energy Gateway South is a long transmission line and represents a significant investment, but it allows for the interconnection of an exceptionally large amount of high capacity factor and capacity contribution wind resources. In the 2021 IRP, the removal of Energy Gateway South results in the addition of an ‘advanced nuclear’ plant in 2033.²⁵ This is the same demonstration Sodium nuclear plant type that the Company proposes to add to the 2021 IRP preferred portfolio by 2028, using as-yet untested cost estimates for this new technology. Over 20 years, carbon emissions are increased by about 47 million tons by excluding EGS, and costs are increased by \$288 million.²⁶ It is apparent from these results that EGS and the associated wind resources represent a unique opportunity to meet system needs without necessarily relying on additional gas or nuclear.

Energy Gateway South’s Value to PacifiCorp’s System

Through the above exploration of the value of Energy Gateway South to the system, Staff concurs with the findings of the NTTG Regional Transmission Plan of 2016-2017 that Energy Gateway South is important to maintaining system reliability needs.²⁷ While the energy and capacity connected to EGS may not be strictly required in 2024, the prospect of delaying the line appears risky, and moving forward without EGS creates significant expenses and complications.

²³ PA Consulting. PacifiCorp AS2020 RFP – Closing Report Workshop presentation. June 17, 2021. Page 6.

²⁴ PacifiCorp 2019 Integrated Resource Plan. Appendix M. Page 279.

²⁵ PacifiCorp’s 2021 Integrated Resource Plan. Page 273.

²⁶ PacifiCorp’s 2021 Integrated Resource Plan. Page 276.

²⁷ 2016-2017 NTTG Regional Transmission Plan. Page 27.

Recommendation:

The Commission should acknowledge the FSL resources associated with EGS, and clearly state that the RFP has met the EGS acknowledgement conditions of the 2019 IRP Acknowledgement Order. Alternatively, if the Commission finds that the 2020AS RFP modeling has not met the conditions of the 2019 IRP Order, that finding should be clearly stated in the FSL acknowledgement Order.

RFP Competitiveness and Transparency

The 2020AS RFP has been conducted in a manner largely consistent with the RFP rules, and the appropriate waivers have been acquired where there is disagreement as to whether PacifiCorp acted consistently with the rules. The IE's closing report presentation summarized the RFP process as, "conducted in a fair and reasonable manner." Additionally, the IE investigated PacifiCorp's bid scoring process and reported no evidence of any bias toward utility-owned resources.²⁸

Staff and the IE found several opportunities for improvement in future RFPs around bid scoring, LGIAs, and RFP timeline and logistics, described in the sections that follow.

RFP Rules

Because the RFP rules in OAR Chapter 860, Division 89 were established recently on August 13, 2018, the PacifiCorp 2020AS RFP is the first RFP to be implemented fully under the new rules.

Because PacifiCorp did not include a thorough description of bid scoring methodology in the 2019 IRP, the Company sought to receive approval of its bid scoring methodology in the IE selection docket through the second track allowed in OAR 860-089-0250.

PacifiCorp received a waiver, at Staff's request, of the requirement for approval of a bid scoring methodology. Staff found that the schedule proposed by PacifiCorp did not leave enough time for a thorough review in compliance with the rules, and that a waiver was necessary.

Recommendation:

In future RFPs, Staff finds that if PacifiCorp continues to utilize the second track for bid scoring methodology review, then a general guideline of allowing more than three months, and ideally six months, for stakeholders and Staff to review the bid scoring methodology will be important under most circumstances.

²⁸ PA Consulting's presentation of June 17, 2021 in Docket No. UM 2059.

LGIA Issue

The issue of RFP competitiveness being impacted by PacifiCorp Transmission's interconnection queue is not new to the 2020AS RFP. PacifiCorp's 2017R RFP Final Shortlist was not approved by the Commission, largely because of the treatment of bids as they related to the PacifiCorp Transmission serial interconnection queue. Staff recommended at that time that PacifiCorp look into a cluster study process for interconnection to help resolve issues around competitiveness in the RFP.

Prior to the 2020AS RFP, PacifiCorp applied to FERC to begin a cluster study process and its application was approved. The 2020AS RFP was the first PacifiCorp RFP to utilize a cluster study instead of serial interconnection queue. The cluster study showed potential to help alleviate constraints associated with queue position. While Staff has confidence that the cluster study process will improve the competitiveness of RFPs moving forward, some issues remained in this RFP. Cluster study participants were given interconnection dates that extended well beyond the timeline of the current RFP, and were eliminated for consideration in the Final Shortlist for that reason.

Staff finds that, while this outcome is not ideal, it is to some extent an expected result of the cluster study process. Projects that receive interconnection dates beyond the current RFP timeline can continue to participate in the interconnection process and can bid into a future PacifiCorp RFP closer to their estimated online date. To the extent that bidders know they will bid into a near-term RFP, they can participate in a cluster study in advance of that RFP in order to better time their interconnection dates with the RFP's required COD.

There is some potential for improvement in the treatment of bidders when they receive cluster study results, as PacifiCorp notes in its reply comments to Staff on September 9, 2021, in which PacifiCorp acknowledged that future RFPs could bring improvements to allow bidders to remain in consideration for the FSL selection pending clarity around their interconnection timelines.

Recommendation:

The Company should report at the October 12, 2021, Public Meeting on any recommendations that it has to allow bidders to remain in consideration for the FSL pending clarity around interconnection timelines in future RFPs.

RFP Complexity and Timeline

Staff's experience with this RFP has been that PacifiCorp's expected dates to provide workpapers and other important information were sometimes delayed multiple times, and the delays did not always leave Staff and the IE with sufficient time to prepare reports and comments on PacifiCorp's modeling results. This had negative impacts on

the quality of work product that the Commission was able to review in making its decisions. In the future, Staff recommends that the dates on which PacifiCorp will provide workpapers and results to Staff and the IE in advance of comment filing dates should be published in the RFP docket as a part of the docket schedule. Any delay in providing this information to Staff and the IE should result in a corresponding delay to the RFP schedule. Maintaining sufficient time for Staff, stakeholders, and the IE to review PacifiCorp's work is crucial for ensuring a fair and transparent RFP. Staff will work with PacifiCorp and stakeholders to implement this recommendation, and recommends the Commission include language in its FSL decision that encourages the Company to ensure that adequate time is provided to parties for review of workpapers and other information.

Recommendation:

Staff recommends that the dates on which PacifiCorp will provide workpapers and results to Staff and the IE in advance of comment filing dates be published in the RFP docket as a part of the docket schedule. Any delay in providing this information to Staff and the IE may result in a corresponding delay to the RFP schedule.

Transmission Costs

In Reply Comments, PacifiCorp agrees to provide a table of interconnection costs associated with each bid in future RFPs. Staff appreciates PacifiCorp's willingness to provide this data and makes two additional requests.

Recommendation:

Staff requests that in future RFPs, PacifiCorp provide up-to-date interconnection costs associated with each bid, as well as up-to-date cost estimates for each transmission project that will be constructed to facilitate RFP projects. Staff requests that this information be included as a part of the Company's Final Shortlist filing with the Commission.

Battery Storage Modeling

Staff appreciates PacifiCorp's willingness to engage with the developers of the StorageVet model regarding the performance of the model in the 2020AS RFP. The appropriate modeling of storage will be crucial to meeting the Company's dispatchable capacity needs at the most reasonable cost.

Recommendation:

Staff recommends the Company provide a stakeholder workshop with technical details of the Company's modeling of energy storage in its 2022 AS RFP. The workshop should walk through the actual use of the model and the interpretation of actual model results.

Rate Impact

Staff appreciates the revenue requirement chart provided by the Company, and notes that the estimated 5.7 percent increase in revenue requirement in 2025-2027 will be potentially affected by future changes to the system, including changes in decommissioning costs and coal depreciation end dates.²⁹

PacifiCorp's total revenue requirement in 2025, 2026, and 2027 will be offset by a decrease in depreciation and interest expense on the Naughton, Dave Johnston, Hayden, Jim Bridger, Craig, and Colstrip plants, which all have Oregon depreciation end dates at or before 2027.

Conclusion

The 2020AS RFP was a reasonable and fair process for moving forward with the Company's resource acquisition process for new generation. Staff recommends approval of the 2020AS RFP Final Shortlist because it is robust to a variety of sensitivities and includes resources that will be needed for energy and reliability purposes in the years immediately following acquisition. Staff has several recommendations for this RFP, and for improving the Company's associated planning processes and RFP process moving forward. They are collected here:

Recommendations:

- The Commission should direct PacifiCorp in its next RFP to host a workshop with Oregon Staff and stakeholders to discuss how to model alternate financing of future transmission investments, including transmission customer funding. PacifiCorp should report to the Commission on the discussion at a public meeting within five months of the October 12, 2021 Public Meeting. PacifiCorp's report should include a table of the transmission resources planned over the next 20 years, and which, if any, of them PacifiCorp believes it is obligated to construct for transmission customers.
- The Commission should acknowledge the FSL resources associated with EGS, and clearly state that the RFP has met the EGS acknowledgement conditions of the 2019 IRP Acknowledgement Order. Alternatively, if the Commission finds that the 2020AS RFP modeling has not met the conditions of the 2019 IRP Order, that finding should be clearly stated in the FSL acknowledgement Order.

²⁹ PacifiCorp's UM 2059 presentation filed August 5, 2021. Page 15.

- In future RFPs, Staff finds that if PacifiCorp continues to utilize the second track for bid scoring methodology review, then a general guideline of allowing more than three months, and ideally six months, for stakeholders and Staff to review the bid scoring methodology will be important under most circumstances.
- The Company should report at the October 12, 2021, Public Meeting on any recommendations that it has to allow bidders to remain in consideration for the FSL pending clarity around interconnection timelines in future RFPs.
- Staff recommends that the dates on which PacifiCorp will provide workpapers and results to Staff and the IE in advance of comment filing dates be published in the RFP docket as a part of the docket schedule. Any delay in providing this information to Staff and the IE may result in a corresponding delay to the RFP schedule.
- Staff requests that in future RFPs, PacifiCorp provide up-to-date interconnection costs associated with each bid, as well as up-to-date cost estimates for each transmission project that will be constructed to facilitate RFP projects. Staff requests that this information be included as a part of the Company's Final Shortlist filing with the Commission.
- Staff recommends the Company provide a stakeholder workshop with technical details of the Company's modeling of energy storage in its 2022 AS RFP. The workshop should walk through the actual use of the model and the interpretation of actual model results.

PROPOSED COMMISSION MOTION:

Approve the 2020AS RFP Final Shortlist and direct the Company to follow the Staff recommendations listed in the conclusion of this memo.