

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UM 2193

In the Matter of

PACIFICORP, dba PACIFIC POWER,

Application for Approval of 2022 All-Source
RFP Scoring and Modeling Methodology.

COMMENTS OF RENEWABLE
NORTHWEST

Feb. 18, 2022

I. INTRODUCTION

Renewable Northwest is grateful to the Oregon Public Utility Commission (“Commission”) for the opportunity to submit these comments regarding PacifiCorp’s 2022 All-Source Request for Proposals (“RFP”).

Overall, Renewable Northwest appreciates and supports PacifiCorp’s 2022 All-Source Request for Proposals (“RFP”) as an important next step in the company’s transition to a reliable, least-cost, least-risk system based on clean, renewable generating resources. In the comments below, we highlight some specific elements of the RFP that represent positive steps toward maximizing the value of this RFP as PacifiCorp works to identify cost-effective opportunities to accelerate decarbonization. Specifically, we support the company’s willingness to consider procuring additional resources to meet state policy objectives and to consider matching customers interested in voluntary renewable products to RFP bids that do not end up on the company’s final shortlist. We then identify several changes to the RFP that could help support state policy objectives and ensure a more robust pool of resources to meet the company’s needs at the least cost and risk to its customers. Specifically, we recommend that the company relax its 2026 commercial-operation-date requirement, relax its requirement that off-system bidders demonstrate long-term firm transmission rights, allow bids from DC-coupled as well as AC-coupled hybrid projects, allow at least one alternative bid (beyond just a bidder’s workforce plan), and replace its output-based performance guarantee with an availability guarantee. Third and finally, we request additional clarity on some of PacifiCorp’s interconnection requirements -- specifically, the requirement of consistency between a project’s nameplate capacity and its interconnection agreement, the eligibility of projects using surplus interconnection service, and the requirement that bid prices include interconnection costs.

We appreciate the Commission’s and the company’s consideration of our comments, reiterate our overall support for this RFP, and look forward to additional engagement in the RFP process.

II. COMMENTS

A. Considering Additional Resource Procurement for State Policy Compliance and Voluntary Programs Will Help PacifiCorp Accelerate Least-Cost Decarbonization

Renewable Northwest has consistently recommended that PacifiCorp use this RFP as an opportunity to identify cost-effective renewable resources beyond the need identified in its IRP in order to meet state policy mandates for clean energy and greenhouse gas reduction. For example, in November 19, 2021 comments to the Commission regarding this RFP and Oregon’s HB 2021, we observed that “[i]t is possible, if not probable, that additional resource additions now will help the company achieve HB 2021’s mandatory emission-reduction targets at the least cost to the company’s customers, and we encourage the company and the Commission not to limit the resources procured in this RFP to the figures identified in the company’s 2021 IRP.”¹ The same is true of Washington’s Clean Energy Transformation Act (“CETA”), as the company’s IRP identifies a 2030 resource to meet a compliance shortfall but earlier procurement may help the company meet that shortfall more economically.²

We were therefore pleased to see that, in this RFP, PacifiCorp explains:

After PacifiCorp selects the least cost, least risk resources on behalf of all system customers consistent with the resource need identified in the 2021 IRP, PacifiCorp may find it requires additional resources to comply with regulations in one or more of its six states. Following the selection of system resources for the final shortlist on behalf of PacifiCorp’s six-state customers, PacifiCorp will consider additional compliance requirements for specific states with clean energy compliance obligations, and potentially add state-specific resources to ensure those compliance obligations are met.³

In the context of Portland General Electric’s (“PGE”) 2021 All-Source RFP, the Oregon Commission supported the utility’s proposal to explore procurement beyond IRP-identified need in order to respond to state policy mandates (while recognizing the need for “robust analysis” to support a future decision to actually procure above need).⁴ In this RFP, PacifiCorp points to HB

¹ Comments of Renewable Northwest, Oregon Public Utility Commission Docket No. UM 2193 (Nov. 19, 2021).

² See PacifiCorp 2021 IRP at 290.

³ RFP at 2.

⁴ Order No. 21-460 at 9, Oregon Public Utility Commission Docket No. UM 2166 (Dec. 10, 2021).

2021 in a footnote as a potential driver of additional procurement in this RFP.⁵ We appreciate and support this reference to HB 2021.

Later in the RFP, the company draws a clearer line between CETA and the possibility that the company may “add ... resources allocated to Washington customers in order to meet CETA goals.”⁶ Just as additional resources in this procurement may be warranted to help the company cost-effectively “use electricity from renewable resources and nonemitting electric generation in an amount equal to one hundred percent of the utility’s retail electric loads” beginning in 2030, as CETA requires,⁷ so might additional resources in this procurement help the company “reduce greenhouse gas emissions ... [b]y 2030, 80 percent below baseline emissions level.”⁸ While HB 2021 is still in the implementation phase at the Commission, its mandate to PacifiCorp kicks in in just eight years and in the meantime the company must “tak[e] actions as soon as practicable that facilitate rapid reduction of greenhouse gas emissions at reasonable costs to retail electricity consumers”⁹; accordingly, we encourage the company to seriously consider how it can use this RFP to achieve its greenhouse gas compliance requirement at the least cost and risk to customers.

Even beyond these state policy considerations, traditional regulatory considerations may counsel in favor of additional near-term procurement of clean-energy resources. For example, Commission Staff recently issued a Staff Report on PacifiCorp’s 2021 IRP recommending that the Commission “acknowledg[e] the preferred portfolio and Action Plan only to the extent that they are consistent with the no-Natrium scenario” -- a scenario that includes significantly more near-term solar and storage, including resources “within the timeline for acquisitions in the 2022 RFP.”¹⁰ The Commission may wish to explicitly hold open the possibility of a larger procurement now pending review of PacifiCorp’s Clean Energy Implementation Plan, especially since the RFP schedule does not call for RFP bids from market until January 2023.

Additionally, PacifiCorp has proposed that it “may conduct a secondary process to match renewable resource bids not chosen to the final shortlist with customers interested in voluntary renewable programs.”¹¹ Renewable Northwest also supports this proposal as a reasonable way to accelerate system decarbonization and achieve state policy objectives by matching non-emitting resources to interested customers.

⁵ RFP at 2, n5.

⁶ RFP at 39.

⁷ RCW 19.405.040(1)(a). Renewable Northwest recognizes that the Commission’s rules regarding utility compliance with this standard are not yet final.

⁸ HB 2021, section 3(1)(a). We note that CETA is specifically called out as an “example” of “state regulatory considerations” in RFP section 6(G), and we encourage the company to consider HB 2021 a similar “state regulatory consideration.”

⁹ HB 2021, section 4(6).

¹⁰ Staff Report [redacted] at 17-18, Oregon Public Utility Commission Docket No. LC 77 (Feb. 11, 2022), available at <https://edocs.puc.state.or.us/efdocs/HAC/lc77hac16942.pdf>.

¹¹ RFP at 2.

B. Changes to Certain RFP Requirements Will Help Ensure A Robust Pool of Resources and a Least-Cost, Least-Risk Procurement

1. Extending the required commercial operation date from 2026 to 2028 for all resources would mitigate interconnection constraints and foster competition.

Renewable Northwest recommends extending PacifiCorp's required commercial operation date -- currently set at December 31, 2026 for most resources¹² -- to December 31, 2028 to ensure robust competition in this RFP. This change would help to ensure a strong bid pool that could otherwise be constrained by PacifiCorp's interconnection process.

Since PacifiCorp transitioned from serial processing of its interconnection queue to a cluster-study approach -- an effort that Renewable Northwest largely supported -- it has proven difficult to align the company's procurement process with its interconnection process. By way of example, one might look to PacifiCorp's 2020 All-Source RFP. In that RFP, a pool of bidders submitted Oregon solar projects, responding to the 500 MW of southern Oregon solar included in the company's 2019 IRP preferred portfolio. But many of those projects received 72-month upgrade timelines from their interconnection-study process, likely in large part because the resources were located within the same study region. Because these resources' upgrade timelines extended past the company's online-date requirement, they were excluded from consideration in the RFP, even though many of the projects were likely tailored to meet needs identified in the company's IRP.

While PacifiCorp indicated in a January 7, 2022 presentation to stakeholders participating in the this docket that its interconnection and online-date requirements will still allow a sizeable pool of projects to participate in this RFP, we expect the circumstances that played out in the 2020 RFP to occur again. That is to say, projects responding specifically to the needs identified in the company's 2021 IRP and this RFP will likely submit requests to enter this year's cluster study, resulting in more crowded study regions and long upgrade timelines for the resources in those regions. Simply extending the commercial operation date in this RFP could allow those projects to continue through the RFP process and potentially be selected as least-cost, least-risk resources to benefit PacifiCorp's customers. Indeed, if some resources within a single study region are selected over others, it is possible that the unselected resources will withdraw their interconnection requests resulting in shortened timelines for the selected resources and allowing them to achieve the company's preferred 2026 online date after all.

¹² See in particular RFP at 20, identifying the 2026 commercial operation date as a minimum eligibility requirement for all but identified long lead-time resources. As an identified long lead-time resource, pumped hydro storage is already allowed a 2028 online date; Renewable Northwest appreciates and supports this element of the RFP.

PacifiCorp could control for the risks associated with a later online-date requirement by adjusting its scoring criteria to establish a preference for bids that are able to achieve a commercial operation date in line with the 2026 need identified in the company's IRP. This approach would eliminate the current blunt binary by which some projects may proceed while others are excluded based on the cutoff date but still honor the company's preference for resources that can commit to be operational by December 31, 2026, in line with the company's identified need.

2. *Allowing off-system bids with conditional firm transmission service would mitigate limited transmission availability in the Northwest and foster competition.*

Renewable Northwest recommends relaxing PacifiCorp's requirement that off-system bids demonstrate long-term firm transmission rights¹³ and instead allow alternative products such as conditional firm transmission. As the Commission is well aware, the region's transmission system is significantly constrained. Relaxing the transmission requirement could therefore allow a more robust bid pool without sacrificing reliability.

There is significant concern among the renewable-energy development community that the availability of long-term firm transmission rights on the existing transmission system in the Northwest is dwindling. In a recent communication to Renewable Northwest, the Bonneville Power Administration ("BPA") summarized the results of their 2021 Transmission Service Request Study and Expansion Process ("TSEP"). Of the 11,539 MW of projects that participated in the 2021 TSEP, to date only 220 MW have emerged with long-term firm transmission rights. These figures suggest that the most recent projects -- projects that may well be designed to respond to needs identified in PacifiCorp's and other utilities' IRPs and that likely have the most competitive economics -- will have difficulty securing the transmission rights needed to participate in this RFP.

Relaxing transmission requirements to include conditional firm transmission rights would allow a broader pool of resources to participate in this RFP and increase the likelihood that PacifiCorp's final shortlist represents a true least-cost, least-risk solution to the company's needs and state-policy obligations. BPA's conditional firm transmission service allows a limited amount of curtailment that historically has not constrained delivery of electricity during times of significant need. In fact, according to BPA, they have not curtailed conditional firm service since 2008.¹⁴ Thus allowing conditional firm transmission service would likely result in a more robust pool of bidders and unlock latent flexibility on the constrained Northwest transmission system while protecting system reliability.

¹³ See RFP at 28, identifying "long-term, firm point-to-point transmission service" as a requirement.

¹⁴ See slide 8, "BPA Long-term ATC Metrics Infographics,"

<https://www.bpa.gov/transmission/Doing%20Business/ATCMethodology/Documents/ATC-Metrics-Infographics.pdf>

3. *PacifiCorp's prohibition against DC-coupled hybrid resources is not supported by current technology or resource economics.*

Renewable Northwest requests that PacifiCorp amend its RFP, or that the Commission direct PacifiCorp to amend its RFP, to allow DC-coupled hybrid renewable-plus-storage resources. Currently the RFP provides that “[a]ll storage bids shall be ... AC-coupled.”¹⁵ In its Q & A document, PacifiCorp explains the rationale behind this requirement:

Due to CAISO metering requirements and the lack of utility-grade, ANSI-approved revenue-quality DC-meters not being available at the current time, potential contractual complications associated with the distributed nature of DC coupled battery systems, and PacifiCorp's goal of managing the dispatch of energy storage, PacifiCorp will accept only AC-coupled collocated battery systems in this RFP. PacifiCorp may lift the restriction in the future as metering technology and standards further evolve.¹⁶

Revenue-grade DC meters will likely be available by the time the Company conducts its RFP modeling and analysis to put forward an initial list of projects. While CAISO metering requirements currently do not identify specific utility-grade, ANSI-approved revenue-quality DC meters, these meters are now readily available on the market -- namely Accu Energy's DC 243 and Itron's ACE6000. These settlement-quality DC meters are capable of providing bi-directional current and voltage measurements (with 0.5% accuracy) in front of solar and battery storage systems. Based on our understanding and conversations with CAISO metering staff, CAISO expects to update its metering requirements and business practice manual over the next few months -- well in advance of the January 2023 deadline for market bids -- to accommodate these updates.

PacifiCorp noted in the Oregon Commission's January 28, 2022 workshop on this issue that the company is currently not capable of executing DC-coupled solar plus storage contracts due to increased complexity and higher “lowest cost of energy (LCOE)” values compared to AC-coupled systems. Since the former is purely a commercial, rather than technical, position from PAC, it does not seem adequate ground to restrict potentially competitive bids from project developers. The latter reason is also questionable since DC-coupled systems, despite increased metering requirements, can provide cost synergies due to i) increased energy from clipping recapture, ii) increased efficiency due to lower conversion losses and iii) capital cost reductions due to a shared DC-AC inverter. Since PacifiCorp did not model DC-coupled solar plus battery

¹⁵ RFP at 5.

¹⁶ Q & A available at

https://www.pacificorp.com/content/dam/pcorp/documents/en/pacificorp/suppliers/rfps/pacificorps-2022-all-source-request-for-proposals/2022_All_Source_RFP_Mailbox_OA_01-26-22.pdf.

storage resources as an explicit supply-side option in its portfolio modeling, we understand there would be additional complexity in integrating these resources' technical characteristics, but that issue could be remedied by consulting external technical experts including national labs such as the National Renewable Energy Laboratory ("NREL").¹⁷ Renewable Northwest would also be happy to assist PacifiCorp staff on this issue going forward.

Accordingly, Renewable Northwest requests that PacifiCorp amend, or the Commission direct PacifiCorp to amend, the RFP to allow DC-coupled hybrid resources.

4. *Allowing bid alternatives would increase the likelihood of identifying a lowest-reasonable-cost final shortlist.*

Renewable Northwest recommends that PacifiCorp consider allowing bidders to submit alternatives to a base bid rather than requiring bidders to submit entirely new bid for the same project with moderately different bid attributes.¹⁸ This approach would provide PacifiCorp with more flexibility to select optimal project configurations in light of the company's needs, ultimately inuring to the company's and its customers' benefit.

PGE's 2021 RFP, mentioned above, provides an example of how allowing alternative bids could work. PGE's RFP provided that:

A bid may consist of one base proposal in addition to two alternatives for the same bid fee. The alternatives may consist of a different technology, volume, contract term, in-service date, and/or pricing structure for the same resource at the same location.¹⁹

This approach could allow bidders to, e.g., offer alternatively full offtake from a project or lower-cost seasonal offtake that corresponds to periods of greater need, or hybrid resources with different battery sizes with one skewed more in favor of low-cost energy and the other in favor of a higher capacity contribution. That bid flexibility would in turn give the company more options to identify the resource options that meet its needs at the least cost and risk to its customers.

Allowing alternatives to a base bid could also promote administrative efficiency, as the company would not be required to expend resources or staff time vetting those elements that are consistent across multiple bids for the same project multiple times. For these reasons, Renewable

¹⁷ See, e.g., Representing DC-Coupled PV+Battery Hybrids in a Capacity Expansion Model, NREL (Apr. 2021), available at <https://www.nrel.gov/docs/fy21osti/77917.pdf>.

¹⁸ RFP at 17. The one exception to the bid fee requirement for project alternatives is that a bidder may include an alternative "subcontracting and hiring strategy" for no additional cost. *Id.* at 19.

¹⁹ PGE 2021 All-Source RFP at 9, available at https://portlandgeneralrfp2021.com/wp-content/uploads/2021/12/2021-All-Source-RFP-Main-Document_12.16.2021.pdf.

Northwest recommends that the RFP allow bid alternatives for a single project without the need to submit a separate bid fee for each alternative.

5. *The 90% output-based performance guarantee required in the Form PPA poses a barrier to contracting for shortlisted projects.*

Renewable Northwest recommends modification of PacifiCorp’s form Power Purchase Agreement (“PPA”) (Appendix E-2) to avoid placing unreasonable risk on generators associated with the normal variability of renewable energy. Specifically, the proposed Form PPA includes a performance guarantee of 90% of expected output,²⁰ allowing PacifiCorp to terminate the PPA or requiring generators to pay financial penalties if a wind or solar project produces less than 90% of its forecast energy.²¹ Penalties would apply even if the reduced production were simply due to year-to-year variation in the weather. This production guarantee poses challenges for projects and their ability to obtain financing. If a project selected to PacifiCorp’s final shortlist as a least-cost, least-risk resource to serve the company’s customers cannot be financed, then the project will not be built, customers cannot receive its benefits, and PacifiCorp’s transition to a clean grid as required by Oregon state policy may be delayed. For these reasons, Renewable Northwest recommends replacing the production guarantee with an availability guarantee, which would hold generators accountable for factors within their control.

C. Renewable Northwest Requests Additional Clarity on Some Interconnection Requirements

Three elements of PacifiCorp’s interconnection requirements could benefit from additional clarity to ensure that bidders are not inadvertently disqualified:

First, the RFP generally requires “consistency” between the nameplate capacity of a project bid and the interconnection agreements associated with that bid. Does this “consistency” requirement allow bids from projects that are oversized relative to their interconnection limit? If so, this could limit resources such as solar-plus-storage for which it may make commercial sense to develop a project with a nameplate capacity larger than the project’s interconnection limit.

Second, the RFP generally requires “a completed interconnection study” and indicates certain studies that satisfy that criterion but does not specify whether a completed study under the company’s Surplus Interconnection Service process would also be satisfactory. Will PacifiCorp accept a completed Surplus Interconnection Service study?

²⁰ See RFP, Appendix E-2.1 at section 6.14 and Exhibit F.

²¹ NIPPC raised this issue in comments on PacifiCorp’s 2020 All-Source RFP. See Comments of the Northwest and Intermountain Power Producers Coalition at 9, Oregon Public Utility Commission Docket No. UM 2059 (May 22, 2020). Renewable Northwest understands that the production guarantee has posed challenges for developers negotiating contracts with PacifiCorp following selection to the final shortlist in that RFP.

Third, the RFP indicates that a “completed PacifiCorp Transmission cluster study” will meet the “completed interconnection study” requirement²² and that “bidders shall document in their bid and otherwise provide all estimated interconnection costs identified in their interconnection studies”²³ -- but it does not clearly indicate whether and how bidders may reflect costs identified in a facilities study after initial bid submission. Will PacifiCorp consider clarifying how those costs should be included up front or providing an opportunity for a bid refresh following receipt of a facilities study from PacifiCorp transmission?

III. CONCLUSION

Again Renewable Northwest appreciates the Commission’s and the company’s attention to these comments. We encourage the Commission and the company to maintain flexibility as to the scale of this procurement opportunity, bearing in mind state policy objectives and the benefits of early action on decarbonization and the clean energy transition. Changes and clarifications to the RFP in line with the remainder of our comments will help the company identify a final shortlist that meets the company’s needs at the lowest reasonable cost to customers. We look forward to continued engagement with this RFP, and ultimately to the company’s identification of a cost-effective portfolio of new clean-energy resources.

Respectfully submitted this 18th day of February, 2022,

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²² RFP at 3.

²³ *Id.* at 27.