

MEMORANDUM

Attorney/Client Privilege

TO: John Lowe
Renewable Energy Coalition Members

FROM: Irion Sanger
Ellie Hardwick

RE: Summary of PacifiCorp's 2021 Integrated Resource Plan

DATE: September 24, 2021

I. INTRODUCTION

PacifiCorp filed its 2021 Integrated Resource Plan ("IRP") on September 1, 2021. The IRP is a foundational document that sets avoided cost prices paid to the Renewable Energy Coalition's ("REC") members entering into new contracts with PacifiCorp in Idaho, Oregon, Utah, Washington and Wyoming. How each state commission resolves and addresses issues in the IRP can have a material impact on avoided cost prices. The Renewable Energy Coalition will review PacifiCorp's IRP and recommend changes to more accurately set prices. This memorandum provides a brief summary of the IRP and one of the issues that REC may address.

II. SUMMARY OF PACIFICORP'S 2021 IRP

Long-term, PacifiCorp's 2021 IRP calls for 5,628 megawatts ("MW") of new solar resources, 3,628 MW of new wind resources, and 6,181 MW of battery resources by 2040.¹ Short-term, PacifiCorp's IRP also calls for several acquisitions of renewable energy resources. By the end of 2024, PacifiCorp's preferred portfolio includes the 2020 All-Source Request for Proposals ("RFP") final shortlist that includes 1,792 MW of wind and 1,302 MW of solar.² By the end of 2026, PacifiCorp's preferred portfolio includes an additional 745 MW of wind and 600 MW solar co-located with storage.³ On September 2, 2021, PacifiCorp filed a RFP seeking

¹ *In re PacifiCorp 2021 Integrated Resource Plan*, Docket No. LC 77, PacifiCorp 2021 IRP at 2 (Sept. 1, 2021) [hereinafter PacifiCorp IRP].

² PacifiCorp IRP at 8.

³ PacifiCorp IRP at 8.

1,345 MW of new resources and 600 MW of energy storage resources with a target commercial operation date of December 31, 2026.⁴

PacifiCorp's IRP includes the retirement of 14 of its coal units by 2030 and 19 of its coal units by end of 2040. In the next four years PacifiCorp plans to begin the process of retiring several coal power plants including Colstrip Units 3-4, Naughton Units 1-2, and Craig Unit 1.⁵ By 2040, PacifiCorp also plans to retire Dave Johnson Units 1-4, Hayden Unit 2, Craig Unit 2, Hayden Unit 1, Huntington Units 1-2, Jim Bridger Units 3-4, and Wyodak.⁶ PacifiCorp plans to convert Jim Bridger Units 1-2 into natural gas peaker plants in 2024.⁷ PacifiCorp also plans to retire 1,554 MW of natural gas plants by the end of 2040.⁸ The retirement of all these plants indicates PacifiCorp will need to replace the coal and natural gas plants with other resources.

PacifiCorp also plans to add several transmission lines through 2040.⁹ Notably, PacifiCorp plans to complete the Energy Gateway South transmission line, a 416-mile high-voltage 500-kilovolt line from the Aeolus substation near Medicine Bow, Wyoming to the Clover substation near Mona, Utah.¹⁰ Other notable transmission lines include 59 miles of new transmission from the Shirley Basin substation in southeastern Wyoming to the Windstar substation near Glenrock, Wyoming (Energy Gateway West Sub-Segment D.1) and 290 miles of new transmission from the Boardman substation in north central Oregon to the Hemingway substation in south central Idaho.¹¹ Investment in these various transmission lines will provide new opportunities for renewable energy resource development.

III. QF CONTRACT RENEWALS

It appears that the Company assumes qualifying facility ("QF") contracts will not renew at the end of the contract term.¹² The total contract capacity in MW for QFs steadily decreases from 2021 to 2040. In 2040, it appears there is a very small MW of QF contracts still included in PacifiCorp's capacity and energy requirements. In Appendix B, PacifiCorp states it provides a sensitivity analysis showing the impact if PacifiCorp assumed existing QFs renewed contracts.¹³

⁴ *In re PacifiCorp Application for Approval of 2022 All-Source Request for Proposals*, Docket No. UM 2193, Application to Open Independent Evaluator Selection Docket at 1 (Sept. 2, 2021).

⁵ PacifiCorp IRP at 4, 15.

⁶ PacifiCorp IRP at 15.

⁷ PacifiCorp IRP at 15.

⁸ PacifiCorp IRP at 15.

⁹ See PacifiCorp IRP at 10 for a detailed chart listing the planned transmission expansions including dates, descriptions, locations, and intended resources to use the transmission lines.

¹⁰ PacifiCorp IRP at 9.

¹¹ PacifiCorp IRP at 3.

¹² PacifiCorp IRP at 148, Figure 6.2.

¹³ PacifiCorp IRP, Appendix B at 36.

This sensitivity analysis was required by an Oregon Commission order.¹⁴ However, it does not appear PacifiCorp actually conducted this sensitivity analysis or, if PacifiCorp did, the results are not clear or well-articulated.

IV. IMPORTANCE OF QF CONTRACT RENEWALS

The value that QFs provide to PacifiCorp and treatment of those QFs in the IRP is relevant because QF avoided cost prices often directly flow out of IRP assumptions. When a QF enters into a power purchase agreement with an Oregon utility, there is usually a period of time at the beginning of the contract during which the utility is “resource sufficient.” In other words, a period of time in which the utility does not have an immediate need for resources. PacifiCorp is “resource deficient” during the later years when it needs resources. Generally, this resource need is reflected in avoided cost prices as higher prices in the later contract years because the QF can help defer those future capacity additions.

If PacifiCorp assumes QFs will renew their contracts, then PacifiCorp's IRP will show that the QFs provide capacity value to PacifiCorp, reducing PacifiCorp's resource need. When an existing QF renews its contract, the current structure of avoided costs means that such QFs will *not* be compensated for the capacity value at the beginning of a new or renewed contract. This is despite the QF having previously been providing significant capacity value to the utility and being compensated for that capacity value at the end of their last contract. Essentially, PacifiCorp is getting “free” capacity from QFs that renew their contracts, but not paying for that capacity in all states but Idaho.

PacifiCorp historically assumed that all small QFs renewed their contracts. After PacifiCorp was ordered to pay QFs for the value that they provide if PacifiCorp assumed that they renewed their contract, PacifiCorp changed its IRP assumptions to assume that no QF will renew their contract. PacifiCorp made this change solely to avoid compliance with an order from the Oregon Public Utility Commission's.

This is an important and longstanding issue for REC members. This issue has been before the Idaho, Oregon, Utah and Washington Commissions since August 20, 2015. Since then, REC and other advocates have won the issue in Idaho increasing avoided cost prices, obtained a partial victory in Washington increasing prices, and made progress in Oregon.

In Idaho Public Utilities Commission Docket No. IPC-E-15-01, the Idaho Commission “[found] it reasonable for utilities to establish capacity deficiency at the time the initial...contract is signed. As long as the QF renews its contract and continuously sells power to the utility, the QF is entitled to capacity based on the capacity deficiency date established at the time of its

¹⁴ *In re PacifiCorp 2019 Integrated Resource Plan*, Docket No. LC 70, Order No. 20-186 at 13 (June 8, 2020).

initial contract.”¹⁵ The IPUC reasoned that “[t]his adjustment recognizes that in ensuing contract periods, the QF is considered part of the utility’s resource stack and will be contributing to reducing the utility’s need for capacity.”¹⁶ In other words, this Order ensured QFs selling power to Idaho utilities would be paid for capacity value when the QF renewed its contract.

REC has subsequently addressed this issue in PacifiCorp’s IRP filings in Oregon, Washington and Utah. As mentioned above, in PacifiCorp’s 2019 IRP, PacifiCorp performed an analysis which revealed that by assuming all existing QFs renew their contracts at the end of their current PPAs, PacifiCorp would be able to defer the acquisition of a simple-cycle combustion turbine by three years. PacifiCorp was also directed to perform an additional sensitivity analysis regarding QF contract renewals in its 2021 IRP.¹⁷

In Idaho Power’s 2019 IRP, the Oregon Commission concluded that Idaho Power was not accurately estimating whether certain QFs were renewing their contracts ordering Idaho Power to develop “reasonable assumptions through a sensitivity analysis” and “explain how the sensitivities resulting from the study would affect the IRP’s preferred portfolio and action plan if incorporated” for its next IRP.¹⁸

REC made progress on this issue in PGE’s last IRP and avoided cost filing which resulted in a change in PGE’s avoided cost prices.¹⁹ In the IRP, the Commission ordered PGE to “compute [effective load carrying capability (“ELCC”)] values by year and discuss how ELCC values may vary in different years.”²⁰

Additionally, the Oregon Commission has recognized this issue and started a generic proceeding in Docket No. UM 2038 to address the treatment of QFs in the utility IRP process.²¹ However, the timeline has been slow moving as there has only been one Staff workshop in April 2020. We do not expect any results any time soon, but the resolution of this docket will likely impact avoided cost prices in all states that PacifiCorp operates in.

¹⁵ *In re Idaho Power Company’s, Avista Corporation’s, and Rocky Mountain Power Company’s Petitions to Modify Terms and Conditions of PURPA Purchase Agreements*, IPUC Docket Nos. IPC-E-15-01, AVU-E-15-01, PAC-E-15-03, Order No. 33357 at 25-26 (Aug. 20, 2015).

¹⁶ IPUC Docket No. IPC-E-15-01, Order No. 33357 at 26.

¹⁷ Docket No. LC 70, Order No. 20-186 at 13.

¹⁸ *In re Idaho Power Company 2019 Integrated Resource Plan*, Docket No. LC 74, Order No. 21-184 at 19-20 (June 4, 2021).

¹⁹ PGE proposed a reduction in its avoided cost prices, and REC entered into a settlement with PGE that cut the reduction in half, in part because of more accurate assumptions regarding QF contracting.

²⁰ *In re Portland General Electric Company 2019 Integrated Resource Plan*, Docket No. LC 73, Order No. 21-129 at 4 (May 3, 2021).

²¹ *In re Investigation Into the Treatment of Qualifying Facilities in the Integrated Resource Plan Process*, Docket No. UM 2038, Order No. 19-254 Appendix A at 1 (Dec. 2, 2019).