

**PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: May 16, 2024**

REGULAR X CONSENT EFFECTIVE DATE May 17, 2024

DATE: May 16, 2024

TO: Public Utility Commission

FROM: Ryan Bain

THROUGH: Caroline Moore and Scott Gibbens **SIGNED**

SUBJECT: PORTLAND GENERAL ELECTRIC:
(Docket No. UM 1728)
Update to Standard Avoided Cost Schedule for Qualifying Facilities Post
2023 IRP Acknowledgment.

STAFF RECOMMENDATION:

Approve Portland General Electric's (PGE or Company) post 2023 IRP
acknowledgment update to its standard avoided cost schedule.

DISCUSSION:

Issue

Whether the Commission should approve PGE's post Integrated Resource Plan (IRP)
acknowledgment update of its standard avoided cost schedule.

Applicable Orders and Rules

OAR 860-029-0040(4)(a) states:

In the same manner as rates are published for electricity sales, each
public utility shall file with the Commission, within 30 days of Commission
acknowledgment of its integrated resource plan, standard rates for
purchases from eligible qualifying facilities to become effective 30 days
after filing. The publication shall contain all the terms and conditions of the
purchase.

OAR 860-029-0080(7)(a) specifies that on May 1 of each year, a public utility must file with the Commission updates to the avoided cost information filed under section (2) of this rule to be effective within 60 days of filing to reflect:

- (A) Updated natural gas prices;
- (B) On- and off-peak forward-looking electricity market prices;
- (C) Changes to the status of the Production Tax Credit [PTC]; and
- (D) Any other action of change in an acknowledged IRP update relevant to the calculation of avoided costs.

Commission Order No. 24-096, directing the company to calculate its IRP inputs using an assumption of 75 percent for QF renewals and the QF success rate for Schedule 202 projects.

Analysis

Background

On January 25, 2024, the Oregon Public Utility Commission (OPUC or Commission) acknowledged PGE's 2023 IRP at its special public meeting. In accordance with the above stated rules, statutes, and the March 11, 2024, Administrative Law Judge (ALJ) ruling,¹ PGE filed its Schedule 201, Qualifying Facility Avoided Cost Power Purchase Information for Qualifying Facilities (QFs) 10 MW or Less on March 18, 2024.

This filing includes updates to the Natural Gas Forward Prices, Electric Forward Prices, Deficiency/Sufficiency periods, resource Effective Load Carrying Capability (ELCC) values, and proxy and avoided resource characteristics and costs.

Between March 21, 2024, and April 8, 2024, the Company made three supplemental filings to its March 18, 2024, initial application. The first two supplements corrected for omitted sheets and errata errors in the filing, while the April 8, 2024, supplement corrected for ELCC modelling in the initial application that did not appropriately model a Grant Public Utility District contract extension, resulting in updated nonrenewable and renewable rates. All other inputs from the Company's initial filing remain unchanged.

¹ On March 11, 2024, the Chief ALJ granted Staff's request to extend the Company's prior waiver of OAR 860-029-0040(4) such that the updated rates would be filed no later than March 18, 2024, allowing the filing to be brought before the full Commission at the April 16, 2024 regular public meeting. The Company's waiver of OAR 860-029-0040(4) was requested on February 14, 2024, to allow the Company additional time to comply with Staff's recommendation 9 in docket LC 80, and granted on February 20, 2024. This recommendation, adopted by the Commission, directed the Company to recalculate its IRP inputs using an assumption of 75 percent for the Schedule 202 QF project success rate and QF renewals, which affects QF standard rates.

On April 19, 2024, the Commission issued Order 24-109, waiving the Company’s requirement to submit May 1 annual updates to their avoided cost schedule, and suspending the Company’s Post-IRP acknowledgement avoided cost update to allow Staff and stakeholders additional time to review the Company’s filing and supplements.

Filing Overview

The Company’s filing provides standard avoided cost prices for the 15-year fixed-price period 2025 – 2039. As illustrated in Table 1, the Company’s non-renewable prices increased by an average of approximately 17 percent across resource types, while the Company’s renewable avoided cost rates decreased by an average of approximately 8 percent across resource types. This was primarily driven by updates from the 2023 IRP which included changes to the avoided energy resource cost assumptions for gas plants (increased) and wind facilities (decreased), as well as changes in resource ELCCs.

The most notable changes within resource types include the levelized solar price, which increased by approximately 61 percent and 17 percent for non-renewable and renewable price streams respectively. In addition, for solar + storage resources the levelized non-renewable rate increased by approximately 7.6 percent, and the levelized renewable rate decreased by approximately 10 percent. Staff notes that a main driver of solar + storage change was due to a decrease in the resource’s ELCC of six percent.

Table 1 Current and Proposed 15-year Levelized Avoided Costs (2025-2039)

Standard Fixed Non-Renewable Avoided Costs (\$/MWh)				
	Baseload	Wind	Solar	Solar + Storage
Current	\$ 41.46	\$ 35.69	\$ 31.62	\$ 47.03
Proposed	\$ 46.32	\$ 31.17	\$ 50.77	\$ 50.61
% Difference	11.7%	-12.7%	60.6%	7.6%
Standard Renewable Fixed Avoided Costs (\$/MWh)				
	Baseload	Wind	Solar	Solar + Storage
Current	\$ 50.02	\$ 44.26	\$ 44.09	\$ 58.52
Proposed	\$ 45.57	\$ 30.42	\$ 51.58	\$ 52.69
% Difference	-8.9%	-31.3%	17.0%	-10.0%

Staff has reviewed the Company's application and workpapers and finds that they are in compliance with the Commission approved methodology for PGE's avoided cost rates. Staff finds that, overall, the rates were properly calculated and recommends that the rates be allowed to go into effect. Staff's review included verifying the accuracy of updated inputs, and scrutiny of the workpaper calculations for accurate references and output, as described below.

Deficiency/Sufficiency Period

The Company updated its deficiency period from 2025, established in the Company's 2019 IRP, to now begin in 2026, based upon large cumulative capacity resource additions identified in the 2023 IRP for the year 2026.

Natural Gas Forward Prices

PGE filed their updated avoided costs utilizing the Company's internal PGE Trading Curve, dated January 31, 2024, for years 2024–2028. For years beyond 2029, the Company utilized the Dec 2023 release of Wood Mackenzie's long-term gas price forecast (2023 H2). For the 2029 year only, the Company linearly interpolates between its internal price curve and the long-term Wood Mackenzie gas price forecast.

Staff reviewed the forward gas inputs during its review and believes the vintage used is appropriate and commensurate with previous filings and Commission precedent. In the forecast, gas prices fall for the majority of the forecast horizon, resulting in an average decline of approximately 7.6 percent over the 2024-2040 forecast horizon compared to the Company's 2023 annual update filing.

Electric Forward Prices

PGE updated its Mid-Columbia Forward Power Curves, adjusted for delivery, for their sufficiency period pricing ending December 31, 2025. The forward electric market price in the near term, the 2024 weighted annual average adjusted for delivery, has increased by approximately seven percent since the Company's previous avoided cost schedule update. In the Company's Post-IRP update filing, comparing the 2024 and 2025 sufficiency period weighted annual averages, adjusted for delivery, shows that 2025 forward electric market prices will decrease by approximately two percent compared to 2024 values. Staff notes that the updated electric forward prices only affect sufficiency period pricing in 2024-2025, but do not impact standard avoided cost rates during the 14-year deficiency period.

QF Renewal and Success Rate Assumption

In accordance with Staff's Recommendation 9 in the 2023 IRP, the Company recalculated IRP inputs using an assumption of 75 percent for the Schedule 202 QF

project success rate and QF renewals.² Staff reviewed the Sequoia modeling inputs and outputs to verify the proper implementation of this recommendation and found that the Company's modelling was in accordance with Commission direction.

Effective Load Carrying Capability (ELCC) Values

To align with Capacity Contribution Best Practices adopted by the Commission in Docket No. UM 2011, Order No. 22-468, the Company updated capacity contribution values for proxy resources to values 'tuned' to the 2023 IRP reliability metric using the Company's 2026 preferred portfolio, and additionally updated this modelling to reflect Staff's Recommendation 9 following acknowledgement of the 2023 IRP. The resulting updated ELCC values showed Solar PV increasing from an ELCC of 8.5 percent to 38 percent, Gorge Wind decreasing from 25 percent to 20 percent, and Solar + Storage decreasing from 49 percent to 43 percent.

Updated Proxy Capacity Resource

The Company updated its capacity proxy resource from a SCCT to a four-hour battery, which is the next least net cost capacity resource available to meet near-term capacity needs in the 2023 IRP.³ This change resulted in higher capacity values and lower energy values in the PURPA rates.

While this approach differs from the current Commission guidance to use a SCCT for non-renewable rates and the next avoidable renewable resource for renewable rates, Staff supports the Company's proposal to make incremental improvements in capacity valuation, in line with Staff's UM 2011 Best Practices, while more precise policies for the selection of the avoided resource are being developed in UM 2000. Staff believes that this change is more reflective of the full value that QFs provide to PGE's current resource strategy and is beneficial to QFs.

Other Resource Cost and Performance Assumptions

In accordance with the proxy resource assumptions in the 2023 IRP, the Company's overnight capital and fixed O&M costs for both gas turbines increased, resulting in higher energy values for non-renewable price streams. Overnight capital and fixed O&M decreased for Gorge Wind, resulting in lower energy values in renewable price streams.

The Company updated annual generation and starts values for the CCCT based upon dispatch from the 2023 IRP Update modeling, impacting non-renewable avoided cost prices.

² See Docket No. LC 80, Commission Order No. 24-096, Page 22.

³ See [LC 80 – PGE's 2023 CEP & IRP](#), Chapter 10.6 – Capacity Value, Page 242.

The Gorge Wind flat capacity factor increased by 3.6 percent, and by approximately 6.5 percent on-peak, resulting in lower wind capacity values.

Solar and wind integration costs increased, yielding lower renewable wind, solar, and solar + storage energy values.

Staff confirmed that these changes to the resource cost and performance assumptions accurately reflect the 2023 IRP resource assumptions.

Conclusion

Staff believes PGE followed the requirements for updating its avoided cost rates, updated its methods in a manner that benefits QFs, implemented its methodology appropriately and using appropriate updated inputs, consistent with its obligations under PURPA, ORS 758.505-535, and Commission Order No. 24-096.

PROPOSED COMMISSION MOTION:

Approve PGE's update to its standard avoided cost schedule.