ITEM NO. RA2

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: July 12, 2022

REGULAR __X__ **CONSENT** ____ **EFFECTIVE DATE** __July 13, 2022__

DATE: July 5, 2022

TO: Public Utility Commission

FROM: Scott Gibbens and Curtis Dlouhy **SIGNED**

THROUGH: Bryan Conway and Caroline Moore

SUBJECT: PORTLAND GENERAL ELECTRIC:
(Docket No. UM 1728)
Updates to Schedule 201, Qualifying Facility (10 MW or Less) Avoided Cost Information.

STAFF RECOMMENDATION:

Approve Portland General Electric's (PGE or Company) filing to update Schedule 201, avoided cost payments to Qualifying Facilities (QF), utilizing only the standard update factors and require PGE to perform additional analyses related to QF forecasts to inform future planning and avoided cost matters. Deny PGE's request for out-of-cycle updates related to QF forecast and solar generation characteristics.

DISCUSSION:

Issue

Whether the Commission should approve PGE's annual May 1 update to its Schedule 201 standard avoided cost prices, with proposed out-of-cycle updates and require PGE to perform additional analyses related to QF forecasts and solar generation profiles.

Applicable Law or Rule

OAR 860-029-0085(4)(a) specifies that on May 1 of each year, a public utility must file with the Commission annual updates to the public utility's standard avoided cost rates 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 Integrated Resource Plan (IRP) update relevant to the calculation of avoided costs.

OAR 860-29-0085(5) provides:

(A) Upon request or its own motion, the Commission may consider updates to avoided cost rates to reflect significant changes in circumstances including, but not limited to, the acquisition of a major block of resources or the completion of a competitive bid process.
(B) An update under this section may be considered at any time.
(C) Updates to avoided cost rates under this section are subject to review and approval by the Commission and will become effective within 90 days after filing.

Analysis

Background
On May 2, 2022, PGE filed its annual May 1 update to its standard PURPA avoided cost prices. The May update, as filed, incorporated changes to the first two factors listed in OAR 860-029-0085(4)(a) for the annual update, namely the natural gas prices and on- and off-peak forward-looking electricity market prices. In its filing, PGE states that there were no updates to the status of the federal PTC status, and PGE has not had an IRP update acknowledged since it last updated avoided cost prices in 2021.

PGE also states in its May 2, 2022, filing that "in response to feedback from stakeholders, PGE seeks a waiver of OAR 860-029- 0085(4)(a) in order to update two additional components of its avoided cost prices: forecasting for QFs and solar generation profiles for the solar proxy resource."[1] PGE explains that this request stems from the Company's 2021 avoided cost filing. PGE notes that the Commission directed PGE to perform and present additional analyses related to QF forecasts and solar generation profiles in an IRP roundtable as part of its next IRP to inform future planning and avoided cost matters. Subsequently, in November 2021, the Commission issued Order No. 21-422, which granted PGE an extension of time to March 31, 2023 to file the Company's next IRP. PGE states that because any changes associated with forecasting for QFs and solar generation profiles would not be acknowledged in an IRP—and subsequently incorporated into avoided cost prices pursuant to the Commission's

[1] UM 1728, PGE (May 2, 2022).

rules—for approximately two years, PGE proposes to update the QF forecast and solar generation profiles in this filing rather than waiting for an acknowledged IRP.
Staff hosted a stakeholder workshop on May 18, 2022, to discuss the Company's filing and identify any stakeholder concerns. One of the issues raised at the workshop was the date of the natural gas price forecast utilized by the Company. It appears that the Company may not have followed its own standard practice for utilizing a timely forecast. On May 26, 2022, the Company filed replacement sheets for Schedule 201, which included an updated natural gas forward curve dated March 31, 2022, consistent with the timelines of previous PGE avoided cost filings.

On June 28, 2022, the Renewable Energy Coalition, the Northwest & Intermountain Power Producers Coalition, the Community Renewable Energy Association, and Oregon Solar + Storage Industries Association (together the QF Trade Associations) filed written comments. Summarily the comments recommend that the Commission reject the Company's out-of-cycle updates and instead direct PGE to fully complete the analysis required by the Commission as a part of the Company's 2021 avoided cost filing.

Summary of Issues:
Staff's review of the Company's changes related to the annual updates per OAR 860-029-0085(4)(a)(A) and (B) to the Company's updated natural gas price forecast or on and off-peak forward-looking electricity market prices found no errors.

Gas and Electricity Price Forecast:
PGE relies on a third party, Wood Mackenzie, for its long-term gas price forecasts. For this update the Company used their most recent long-term forecast, released in January 2022. Independent forecasting organizations, like Wood Mackenzie typically only update their long-term forecasts a few times a year. Wood Mackenzie provides PGE with long-term natural gas forecasts twice a year, typically in January and June. The Company's short-term forecast is based on PGE's forward AECO price curves, produced on a monthly basis for 2022 through 2026. This curve was updated in the replacement sheets filed by the Company on May 26, 2022.

Staff was particularly interested in the natural gas and electricity price forecast due impacts on these markets from the recent events in Ukraine and the subsequent fallout in fossil fuel markets. Staff generally believes that a standardized process for "pulling" a market forecast is preferable to the potential disagreements that may arise in multiple different filings to make use of more current forecasts in specific requests, particularly for those forecasts past the initial filing date of the Company. The filing process requires substantial work by the Company, and the forecasts must be gathered in a reasonable timeframe such that it balances current information with the time needed to gather, format, and utilize the forecasts in the calculation process. Staff generally believes that the Company's current process of utilizing forecasts and curves which are roughly one month "old" in their calculation is reasonable. Many different forces impact the curves and forecast on a daily basis, and thus the Commission must determine if a forecast sufficiently captures the current information. Staff examined changes in recent forecasts to determine if there were significant enough changes to the forecast to warrant a special consideration of the timing of the forecasts utilized in this avoided cost.

Figure 1

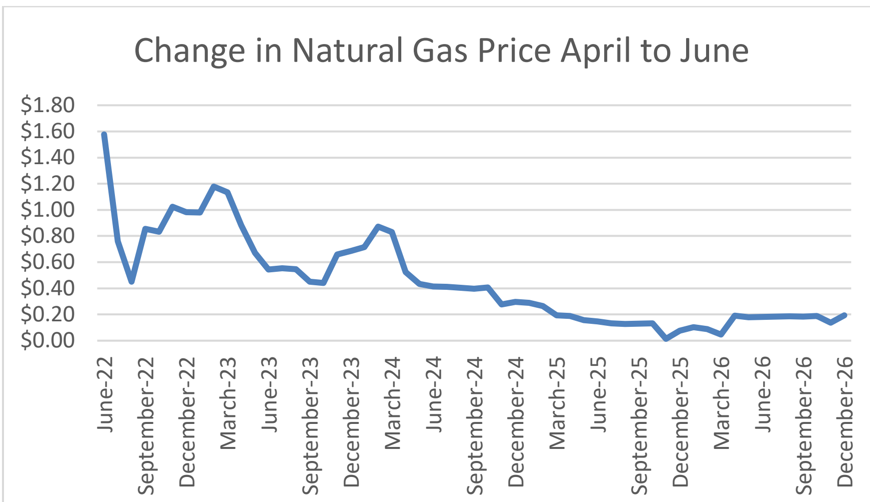
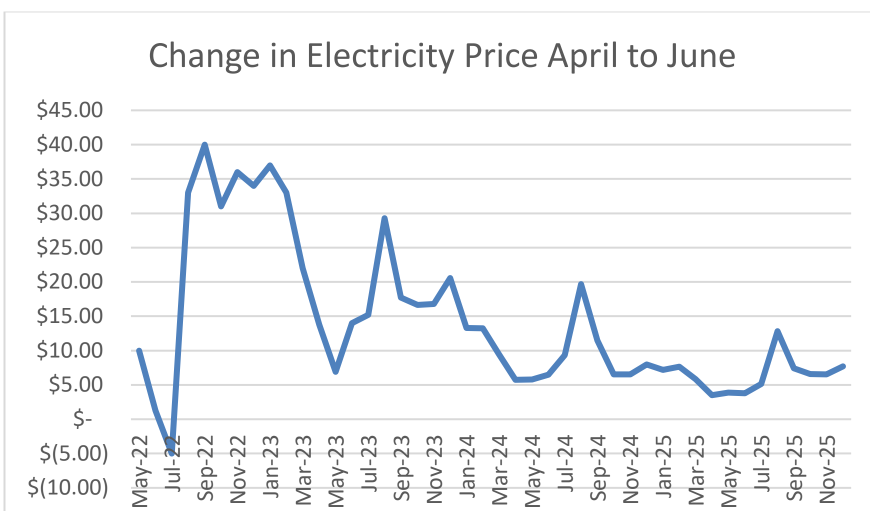


Figure 2



Staff notes that only the short-term forecasts were compared as the Company did not yet possess updated long-term forecasts. Both figures show the change in prices from the curves used in the utility filing and more recent curves. Although differences do exist, Staff notes that the differences between the two time periods diminish over time in both markets. A myriad of factors creates short term shocks in the markets, however any longer term impacts or structural changes to the markets is not apparent from April to June. Updated long-term projections may reveal assumptions about a changed market for gas and electricity, but it is not clear at this point if such changes would be due to a market shock that will moderate over time or a more fundamental shift in the market. Furthermore, the service used by PGE has not produced a more recent gas price forecast than what is used in PGE's avoided cost update. Therefore, Staff agrees with the QF Trade Associations that although potential shifts may have occurred in the market, there is insufficient data to determine the depth or length of the market changes at this time. Thus, Staff recommends that the Commission approve the use of PGE's proposed market prices.

Proposed Out-of-Cycle Updates:
With respect to PGE's proposed updates related to forecasting for QFs and solar generation profiles for the solar proxy resource, Staff believes that PGE's request is properly framed as a request for an out-of-cycle update under OAR 860-029-0085(5). The Commission states that it has approved such an update "based on a showing of extraordinary circumstances, and allowed **updates** where it was demonstrated that values were significantly out of sync with market indicators, as demonstrated by a major resource acquisition or competitive bid."[2]

QF Assumptions in Baseline Solar Forecast:
PGE currently assumes that 100 percent of executed contracts at the time PGE updated its QF snapshot[3] will come online. PGE is proposing to change this assumption so that 50 percent of the QFs under Schedule 201 that have executed contracts but have not yet achieved commercial operation will not come online. PGE proposes to maintain the current assumptions that 100 percent of the QFs under Schedule 202 (non-standard pricing) will come online and there is no assumed renewal rate for current QFs whose renewal may be up for determination over the life of the newly offered QF contract terms. PGE based its proposal on the following analysis:

(A) **PGE has limited historical evidence by which to determine a more reasonable online assumption for new Schedule 202 projects.** The Company has executed 8 Schedule 202 contracts, one which is operational,

[2] *In the Matter of Rulemaking Regarding Power Purchases by Public Utilities for Small Qualifying Facilities*, Docket No. AR 593, Order No. 18-422 (October 29, 2018).
[3] The snapshot refers to the point in time that PGE developed its QF assumptions.

four which have not yet achieved commercial operation, two that were converted to bilateral contracts, and one which was terminated by the Seller. PGE believes that the size of the projects and sophistication of the developers, along with the limited set of data points, results in a reasonable assumption that all four remaining Schedule 202 QFs will come online.

(B) **50 percent assumed success rate for Schedule 201 projects is consistent with historical data.** This is further consistent with the data presented by the Company at its March 14, 2022, IRP Roundtable.

(C) **There is limited historical evidence and a small number of contracts up for renewal prior to 2030.** 6MW currently under contract are up for renewal between now and 2030.

Solar Generation Profiles:
PGE's current avoided cost prices for solar QFs are based on one solar generation profile for a proxy resource located in Christmas Valley based on the solar supply-side proxy resource utilized in portfolio modeling in its acknowledged 2019 IRP. PGE proposes two utilize two additional proxy resources in the ELCC calculation, resulting in three total proxies; two east-side resources (Christmas Valley and Wasco) and one west-side resource (McMinnville). The Company further proposes to utilize an hourly weighted average based on PGE's current and contracted QF projects to calculate the capacity factor.

Other Issues:
During the Staff workshop on May 18, 2022, parties raised additional issues that no party has yet to file written comments on. These include Solar DC/AC ratio, deficiency/sufficiency determination, avoided capacity resource selection, ELCC value, and Hybrid resource rate and methodology.

Position of the QF Trade Associations:
The QF Trade Associations argue that PGE has failed to fulfil the terms of the stipulation it entered into as a part of its 2021 avoided cost filing. PGE agreed to "review the historic percentage of QFs reaching completion and renewals for other utilities."[4] PGE claims that analysis of QF data from other utilities (Idaho Power and PacifiCorp) was not completed due to a lack of publicly available data. The QF Trade Associations states that it possesses a publicly available version of the required data and the subsequent lack of analysis warrants the Commission directing PGE to complete the analysis and reject PGE's proposed out-of-cycle updates. Further, the QF Trade Associations believe that newer, more accurate gas and electricity price forecasts exist, but they do not oppose PGE's proposed forecasts and resulting rates.

[4] Commission Order No. 21-215, Appendix A, page 12.

Staff Analysis

QF Assumptions in Baseline Solar Forecast:

Staff appreciates the efforts made by the Company to improve the accuracy of QF forecast, however two of the three aspects of the forecast were not updated due to insufficient data. Staff agrees with the QF Trade Associations that the Company failed to fully comply with the terms of the stipulation it entered into last year. When the Company identified that no publicly available data was available, it should have reached out to other parties to the stipulation so that an alternative solution could have been identified and brought before the Commission for approval. Of particular concern is that the item which PGE failed to comply with would have directly informed the specific area which hindered further analysis. As such, Staff agrees with the QF Trade Associations recommendation to have the Commission direct PGE to complete the requested analysis by March of 2023, subject to the same data sharing and workshop obligations as set forth in Appendix A of Order No. 21-215.

Solar Generation Profiles:

The 2021 stipulation states:

> PGE will provide ELCC values for multiple proxy solar resources based on geographic locations and other relevant technical specifications. PGE will provide detailed information about the proxy resource characteristics, including outage assumptions. PGE will consider feedback from IRP participants regarding solar resource characteristics. There will be at least one ELCC sensitivity model using location specific forecasts for all QF and GEAR solar resources in the baseline. Location specific will, at a minimum, include delineation between east-side and west-side solar resources.

Staff believes that the Company has dutifully performed this requirement from the stipulation. However, Staff has concerns over the solar resource characteristics selected by PGE. Staff notes that PGE's original proxy, Christmas Valley, has the highest ELCC among the three proxies. Thus, the addition of the other two proxy resources only serves to lower the solar ELCC and depress solar avoided cost rates. As the motive for additional analysis was driven by concerns over unreasonably low ELCC values for the Christmas Valley proxy, Staff believes that further discussion is warranted prior to utilization of the additional proxies in rate making. Staff notes that the stipulation only required PGE to analyze and present its findings, not necessarily utilize the updated analysis in its following avoided cost filing. Due to the fact that the Company has failed to fully perform all of the analysis required by the stipulation, the counter-intuitive results of the analysis that was performed, and the fact that further discussion of ELCC modeling is occurring in UM 2011, Staff recommends the Commission reject the Company's out-of-cycle update for Solar Generation Profiles.

Other Issues:
While Staff appreciates the concerns raised by stakeholders regarding the methodology and assumptions of PGE's avoided cost calculation, Staff notes that the Commission has a high standard for out-of-cycle updates as described in Order No. 14-058 and Order No. 18-422. In Order No. 14-058, the Commission opined that utilities and stakeholders should be aware that the significant change standard is "very high" and the option will be used "infrequently".[5] Staff does not believe that any of the issues raised by stakeholders would qualify as a significant change appropriate for an annual avoided cost update. Although Staff believes that the issues are important and looks forward to discussing them further, Staff believes that other venues such as the IRP and UM 2000 are likely a more appropriate place for consideration. These issues include Solar DC/AC ratio, deficiency/sufficiency determination, avoided capacity resource selection, ELCC value, and Hybrid resource rate and methodology.

Conclusion

In its analysis, Staff finds the updates required for PGE's May 1 annual update to be appropriate and recommends the Commission approve them. Staff finds the proposed out-of-cycle updates do not meet the criteria for approval and recommends the Commission reject them. However, Staff does not believe that the Company has fully performed the analysis it was directed by the Commission to complete prior to March 2022. Staff recommends that the Commission direct PGE to complete the analysis as outlined in Appendix A of Order No. 21-215 and to refile its Schedule 201 rates without any out-of-cycle updates.

PROPOSED COMMISSION MOTION:

Approve Portland General Electric's (PGE or Company) filing to update Schedule 201, avoided cost payments to Qualifying Facilities (QF), utilizing only the standard update factors and require PGE to perform additional analyses related to QF forecasts to inform future planning and avoided cost matters. Deny PGE's request for out-of-cycle updates related to QF forecast and solar generation characteristics.

PGE UM 1728

[5] See *In the Matter of Investigation into Qualifying Facility Contracting and Pricing,* Docket No. 1610, Order No. 14-058, p. 26 (February 24, 2014).