

**PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: December 15, 2020**

REGULAR CONSENT EFFECTIVE DATE June 23, 2020

DATE: December 7, 2020

TO: Public Utility Commission

FROM: Mitchell Moore and Kacia Brockman

THROUGH: Bryan Conway, John Crider, and Matt Muldoon **SIGNED**

SUBJECT: PORTLAND GENERAL ELECTRIC:
(Docket No. UM 1708(5))
Requests reauthorization for deferred accounting related to two Residential Demand Response Pilots.

STAFF RECOMMENDATION:

Staff recommends that the Commission approve Portland General Electric's (PGE or Company) application for reauthorization of deferred accounting for costs related to two Residential Demand Response Pilots (Pilots) for the twelve-month period beginning June 23, 2020, subject to the conditions as outlined in this report's conclusion.

DISCUSSION:

Issue

Whether the Commission should approve PGE's request for reauthorization of deferred accounting for costs related to two Residential Demand Response Pilots for the twelve-month period beginning June 23, 2020.

Applicable Law

PGE submitted its filing pursuant to ORS 757.259 and OAR 860-027-0300 and Commission Order No. 15-203. ORS 757.259 authorizes the Commission to allow utilities to defer expenses or revenues for later amortization into rates to appropriately match ratepayer costs and benefits or to minimize the need for rate changes. OAR 860-027-0300 specifies several requirements related to deferred accounting applications as well requests to amortize the deferred amounts. The Commission

previously approved PGE's original request for deferral of the incremental costs associated with these two pilots in its Order No. 15-203, and it was most recently reauthorized in Order No. 19-313.

Analysis

Background

PGE implemented two residential demand response pilots that the Company believes will best inform development of future demand response (DR) programs to be utilized as dispatchable resources during system peak loads as well as ease the integration of renewable energy sources. PGE began operating the two pilots in the third quarter of 2015.

The goal of the pilots through 2020 is to help PGE achieve at least 77 megawatts of demand response in the winter months and 69 MW in the summer months, while working to reach demand response high case targets of 162 MW (summer) and 191 MW (winter).¹

FLEX 2.0

The first pilot is the Pricing and Behavioral Response Pilot, known as FLEX. The first stage of this pilot, referred to as FLEX 1.0, began by testing 12 pricing design options, all aimed at reducing residential peak demand during summer and winter months. This stage concluded in 2018.

After an independent evaluation of the first stage, PGE proposed moving forward by developing FLEX 2.0 as an opt-in scalable demand response pilot with appropriate Time-of-Use (TOU) prices and Peak Time Rebate (PTR). In response to Staff concern about the TOU rate design discouraging participation by electric vehicle owner, PGE eliminated the TOU rate and moved forward with a PTR-only offering that pays a rebate to customers that reduce their electricity consumption during winter and summer peak demand events.

PGE received Commission approval in April 2019 to update Schedule 7 to include PTR-only FLEX 2.0 pricing in Advice No. 19-03. At the end of 2019, nearly 72,000 residential customers had opted into the FLEX 2.0 PTR offering. PGE has demonstrated customer retention over 95 percent and expects 84,000 participants by the end of 2020. PGE filed the first-year evaluation of FLEX 2.0 August 2020. It determined that FLEX 2.0 provided PGE with demand response capacity of 9.2 MW in the summer 2019 event season and 7.4 MW in the winter 2019/2020 event season.

¹ Order No. 17-386, p. 9.

FLEX 2.0 is an all-inclusive opt-in pilot program, and as such, delivered a lower per-participant, per-event savings than FLEX 1.0, which targeted customers with high savings potential. Cost-effectiveness based on the total resource cost test is currently 0.84.

To increase potential savings and reduce costs, PGE is taking the following actions:

- Leverage customer micro-segment analysis to increase customer engagement, while providing actionable savings tips, and recruit high-impact participants;
- Expand event notification to include week-prior and same-day;
- Negotiate reduction in third-party services cost; and
- Shift summer event window to align with peak load.

The second-year evaluation is due in June 2021.

Direct Load Control Thermostats

The second residential DR pilot in this deferral filing is the Direct Load Control Thermostat (DLCT) pilot. This pilot tests enabling thermostat technology to achieve automated load control among residential customers. The pilot began in November 2015 as a “Bring Your Own Thermostat” (BYOT) that was initially limited to the Google Nest thermostat and later expanded to additional manufacturers. In 2018, PGE expanded the pilot from BYOT to include direct installation of thermostats for eligible residential customers.

In September 2020, PGE received its first evaluation of the DLCT pilot. The evaluation determined that the DLCT pilot provided PGE demand response capacity of 3.7 MW in winter 2018-2019 and 15.2 MW in summer 2019, which is in line with the planning values. PGE expects that by year-end 2020, the pilot will have nearly 28,000 thermostats with aggregate demand response capacity of 8.4 MW in winter and 25.9 MW in summer.

During 2020, PGE has taken the following actions:

- Replaced direct installation with a guided virtual installation due to the COVID-19 pandemic;
- Switched from paying incentives by check to on-bill credits;
- Worked to retain participation by Nest thermostat users after Google discontinued its contract with PGE;
- Improved customer engagement and education; and
- Negotiated reduction in third-party services cost.

The pilot received 90 percent customer satisfaction rates for both BYOT and direct installation channels, and is cost-effective with a total resource cost test of 1.06. Before transitioning the pilot to a program, PGE seeks to stabilize performance, addressing snapback, customer override, savings degradation over event hours, and correlation of participation to weather. The next DLCT pilot evaluation is due in September 2021.

Proposed Accounting

PGE proposes to continue recording the deferred costs as a regulatory asset in FERC account 182.3, with a credit to FERC Account 456, Other Revenue.

Estimated Deferrals in Authorization Period

Cost per Pilot	
Pilot	2019 Estimate
FLEX Pricing	\$2.9 million
DLCT	\$3.2 million
Total	\$6.1 million

Information Related to Future Amortization

- Earnings Review – ORS 757.259(5) exempts amounts collected through an automatic adjustment clause from being subject to an earnings test.
- Prudence Review – No less than 90 days prior to filing to adjust tariff rates, PGE will submit two combined reports on the pilots, which will provide third-party evaluations, cost summaries, estimated curtailments, and results of customer satisfaction surveys.
- Sharing – Staff anticipates that there will be no sharing between PGE and its customers for this deferral.
- Rate Spread/Design – Rate spread/rate design is determined according to the terms set out in Schedule 135.
- Three Percent Test (ORS 757.259(6)) – The three percent test measures the annual overall average effect on customer rates resulting from deferral amortizations. The three percent test limits the aggregated deferral amortizations during a 12-month period to no more than three percent of the utility's gross revenues for the preceding year.

Conclusion

While this application for deferred accounting sees substantial estimated costs in 2019 and 2020, the costs appear appropriate given the increased complexity of the pilots and the forecasted participant growth. Staff concludes the DR Pilots are important to the development of future demand response programs and that granting reauthorization of the deferral will minimize frequency of rate changes and appropriately match the costs borne, and benefits received, by PGE customers.

Staff concludes that the Company's application for reauthorization of deferred accounting for costs related to two Residential Demand Response Pilots is consistent with ORS 757.259 and should be approved, subject to the following conditions:

PGE must:

1. At least annually, and not less than 90 days prior to the filing to adjust schedule 135 tariff rates, submit program costs (including forecasted program costs) to Staff for review of prudence.
2. No less than 90 days prior to filing to adjust tariff rates, hold at least one workshop to present pilot costs, findings, and any design updates.
3. No less than 90 days prior to filing to adjust tariff rates, submit two combined reports on the pilots, which will provide third-party evaluations, cost summaries, estimated curtailments, and results of customer satisfaction surveys.

PROPOSED COMMISSION MOTION:

Approve PGE's application for reauthorization of deferred accounting for costs related to two Residential Demand Response Pilots for the twelve-month period beginning June 23, 2020, subject to the conditions as outlined in this report's conclusion.