

PUBLIC UTILITY COMMISSION OF OREGON  
STAFF REPORT  
PUBLIC MEETING DATE: May 18, 2021

REGULAR  CONSENT  EFFECTIVE DATE April 21, 2021

DATE: May 10, 2021

TO: Public Utility Commission

FROM: Mitch Moore

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

SUBJECT: PORTLAND GENERAL ELECTRIC:  
(Docket No. UM 2078(1))  
Requests reauthorization to defer costs associated with Residential  
Battery Energy Storage Pilot.

**STAFF RECOMMENDATION:**

Staff recommends that the Public Utility Commission of Oregon (Commission) approve Portland General Electric Company's (PGE or Company) application for reauthorization of deferral of costs associated with the Residential Battery Energy Storage Pilot (Application), for the 12-month period beginning April 21, 2021.

**DISCUSSION:**

Issue

Whether the Commission should approve PGE's application for deferral of costs associated with the Residential Battery Energy Storage Pilot for the 12-month period beginning April 21, 2021.

Applicable Law

Under ORS 757.259, the Commission may authorize deferred accounting for later incorporation in rates. Specific amounts eligible for deferred accounting treatment with interest authorized by the Commission include:

Identifiable utility expenses or revenues, the recovery or refund of which the commission finds should be deferred in order to minimize the

frequency of rate changes or the fluctuation of rate levels or to match appropriately the costs borne by and benefits received by ratepayers.

In OAR 860-027-0300(3), the Commission has set forth the requirements for the contents of deferred accounting applications. Applications for reauthorization must include that information along with a description and explanation of the entries in the deferred account to the date of the application for reauthorization and the reason for continuation of deferred accounting. OAR 860-027-0300(4). Notice of the application must be provided pursuant to OAR 860-027-0300(6).

Unless subject to an automatic adjustment clause under ORS 757.210(1), amounts deferred are allowed in rates to the extent authorized by the Commission in a proceeding under ORS 757.210 to change rates and upon review of the utility's earnings at the time of application to amortize the deferral.

## Analysis

### *Background*

PGE submitted this filing to the Commission on April 12, 2021, pursuant to ORS 757.259 and OAR 860-027-0300, with a requested effective date of April 21, 2021. In its filing, the Company requests reauthorization to defer for later rate-making treatment incremental operation and maintenance (O&M) costs associated with the Residential Battery Storage Pilot (Pilot).

The Pilot supports PGE's efforts to decarbonize its energy supply in alignment with the State of Oregon's policy direction of decarbonization. The Pilot also furthers PGE's goal of increasing electricity as a share of total energy use, and enhancing operational performance and efficiency.

The Commission opened Docket No. UM 1751 in September 2015 to implement legislation, HB 2193 (2015), which required PacifiCorp and PGE to submit proposals to develop qualifying energy storage systems with the capacity to store at least five megawatt hours of energy. The Commission subsequently opened UM 1856 to investigate PGE's energy storage proposals.

Staff reviewed the Pilot proposal in Docket No. UM 1856,<sup>1</sup> and the Pilot is subject to the conditions set forth in Order No. 18-290.<sup>2</sup>

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<sup>1</sup> Docket No. UM 1856, Staff's Comments on PGE's Revised Residential Storage Pilot Proposal filed April 9, 2020.

<sup>2</sup> See Commission Order No. 18-290, Appendix A, at <https://apps.puc.state.or.us/orders/2018ords/18-290.pdf> for a listing of the stipulated conditions PGE must meet.

The objective of this five-year Pilot is to install and connect 525 residential energy storage batteries, behind the meter, that will contribute up to 4 MWs of energy to PGE. Once installed, these distributed assets will create a virtual power plant of small units, 5 kW – 10 KW per unit. PGE will operate these battery units either individually or in aggregate to provide grid services and thereby add flexibility in support of PGE's transition to a cleaner energy future. In an outage event, the batteries will island from the grid and provide energy for the customer, furthering the customers' resiliency.

#### *Deferral Filing*

Staff reviewed the Company's application for deferred accounting and finds that it conforms to the requirements of OAR 860-027-0300.

Since approval of the Pilot, PGE has undertaken numerous activities both internally and with external partners/vendors to enable the integration and dispatch of residential batteries. These activities and associated costs include:

- Software subscription and customization to enable battery dispatch;
- Operationalizing the partnership between PGE and the Energy Trust to utilize the existing solar trade ally networks, and rebate processing capabilities, and;
- Updates to internal PGE billing and net metering application systems.

The company conducted a soft launch of the Pilot in September 2020 and invited pre-qualified customers to enroll their existing batteries into the Pilot and begin receiving bill credits.

The soft launch enabled PGE to perform safety verifications on existing devices to ensure participants meet code requirements. As of the Pilot launch, 39 customers have been enrolled, and 25 customers have shown interest in enrolling once their battery installation is completed. Currently enrolled customers have been receiving monthly bill rewards for their participation, however, PGE states that no upfront rebates for Test Bed or income qualified participants have been paid to date.

PGE states in its filing that it will continue to grow the Pilot to increase participation as well as the capacity to test grid services and model the flexible load value of distributed residential batteries. The Company is also preparing an experimental dispatch plan that will guide the research to conduct discrete exercises to generate data that will be used for the eventual measurement and verification.

In accordance with Commission Order No. 18-290, PGE has not included administrative or evaluation costs associated with its portfolio of battery storage projects in this deferral.

*Estimated Deferrals in Authorization Period*

PGE estimates total deferrable costs to be approximately \$3.1 million over the Pilot's five-year period. The estimated cost for 2021 is \$860,000.

*Information Related to Future Amortization*

- Earnings Review – An earnings review is required prior to amortization, pursuant to ORS 757.259(5).
- Prudence Review – No less than 90 days prior to filing to adjust tariff rates, PGE will submit a report with detailed demonstration and explanation of the costs it proposes to amortize for Staff review.
- Sharing – Staff anticipates that there will be no sharing between PGE and its customers for this deferral.
- Rate Spread/Design – Rate spread/rate design will be determined during the proceeding to authorize amortization of the pilots' deferred costs.
- 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

Staff concludes that the Company's application for reauthorization of deferred accounting for costs related to its Residential Battery Storage Pilot is consistent with ORS 757.259 and OAR 860-027-0300 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 14 tariff rates, submit program costs (including forecasted program costs) to Staff for review of prudence.

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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.

**PROPOSED COMMISSION MOTION:**

Approve PGE's application for reauthorization of deferral of costs associated with the Residential Battery Energy Storage Pilot, effective April 21, 2021.

PGE UM 2078(1) Battery Storage Pilot Deferral