ITEM NO. CA4

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: April 23, 2019

REGULAR ____ **CONSENT** X **EFFECTIVE DATE** **January 1, 2019**

DATE: April 16, 2019

TO: Public Utility Commission

MM JPB-for TF
FROM: Mitchell Moore and Thomas Familia

EPR JPB
THROUGH: Jason Eisdorfer and JP Batmale

SUBJECT: PORTLAND GENERAL ELECTRIC: (UM 1514(8)) Application for Reauthorization of Deferral of Incremental Costs Associated with Non-Residential Demand Response Pilots.

STAFF RECOMMENDATION:

Approve Portland General's (PGE or Company) application for reauthorization to defer, with interest, the incremental costs associated with the Automated Demand Response Pilot (ADR Pilot) for the 12-month period beginning January 1, 2019.

DISCUSSION:

Issue

Whether the Public Utility Commission of Oregon (OPUC or Commission) should approve PGE's request for reauthorization to defer, with interest, the incremental costs associated with the Automated Demand Response (ADR) Pilot, for later recovery in rates.

Applicable Law

The deferral of incremental ADR costs and recovery through an automatic adjustment clause (Schedule 135) were initially authorized by Commission Order No. 11-182, as part of a two-year pilot program. PGE submitted its deferral application on December 20, 2018, pursuant to ORS 757.259 and OAR 860-027-0300. ORS 757.259 provides the Commission with authority to authorize the deferral of utility revenues and expenses for later Inclusion in rates. OAR 860-027-0300 are the Commission's rule governing the use of deferred accounting by energy and large telecommunications utilities. Previous approval of this deferral was most recently granted by Order No. 17-429.

Analysis

Background
The deferral of incremental ADR costs and recovery through an automatic adjustment clause (Schedule 135) were initially authorized by Commission Order No. 11-182, as part of a two-year pilot program. The Commission has authorized PGE to defer these each year since 2011. PGE seeks reauthorization with this filing for the period January 1, 2019 through December 31, 2019.

Description of Amounts
Amounts requested for deferral include administration, vendor and equipment costs related to the pilot, as well as incentive payments to program participants.

Reasons for Deferral
Pursuant to ORS 757.259(2)(e), PGE seeks to continue deferred accounting treatment for the incremental costs associated with the ADR pilot. The granting of this reauthorization application will minimize the frequency of rate changes and match appropriately the costs borne by, and benefits received by, customers.

Proposed Accounting
PGE proposes to record the deferred costs in FERC account 182.3 (Regulatory Assets), with the offsetting credit recorded to FERC account 131 (Cash).

Estimate of Amounts
PGE estimates the amounts to be deferred in 2019 to be approximately $3.1 million. Prior deferral amounts varied from $3M a year during the first two years of the program, an estimated $1.4M in 2017 - due in large part to lower than expected program participation - to an estimated $2.7M in 2018.

Information Related to Future Amortization

- Earnings review - An earnings review does not apply to an automatic adjustment clause, pursuant to ORS 757.259(5). If the pilot program is deemed successful, PGE proposes to have costs of the ADR program flow through PGE's Annual

Power Cost Update (Schedule 125) and Power Cost Adjustment Mechanism (PCAM) (Schedule 126), and be subject to the earnings reviewed contained within the PCAM.

- Prudence Review - A prudence review should include a verification that deferred amounts are incremental, and verification of the accounting methodology used to determine the final amortization balance.

- Sharing - if the ADR is deemed successful, then the proposal is for subsequent costs to flow through PGE's Annual Power Cost Update (Schedule 125) and Power Cost Adjustment Mechanism (PCAM) (Schedule 126). The PCAM is subject to the dead bands and sharing percentages as specified by Commission Order Nos. 07-015 and 10-478.

- Rate Spread/Design - Per Commission Order No. 11-517, tariff Schedule 135 will allocate the costs of the ADR on the basis of an equal percent of forecast generation revenues.

- 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 (exceptions at ORS 757.259(7) and (8)) 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. Because PGE is an electric utility, ORS 757.259(8) allows the Commission to consider up to a six percent limit.

First ADR Pilot Period
PGE selected a third-party provider based on a combination of good credit, bidding summer and winter events, better technology, and a stronger marketing plan. The provider began its program marketing on September 1, 2011, but failed to meet the initial capacity milestone of 5 MW for the first winter season. The provider then began to experience financial difficulties and failed to meet additional terms of its agreement for the ADR pilot. On April 30, 2012, PGE terminated its contract with the provider.

Second ADR Pilot Period
As discussed in PGE's report submitted with the second ADR evaluation on April 28, 2016, the pilot in its second form fell short of its nomination goal of 25 MW, with 11 MW nominated for the winter of 2016-2017. Additionally, PGE's contract with EnerNOC, the program's third-party provider expired. EnerNOC informed PGE that they were leaving the Pacific Northwest market and they would be terminating their contract to provide the

aggregator demand response (DR) services under the ADR pilot as of September 30, 2017.

Current ADR Pilot Period (2017 - 2020)
In contrast to the first two stages of the ADR program, PGE's current pilots are administered directly by the Company to its customers, with support from a program implementer and a technology integrator/demand response management system (DRMS) provider.

PGE revised the ADR pilot, along with Schedule 77, to create two pilots towards meeting PGE's goals of greater than 27 MW of peak load reduction by 2021 across all nonresidential segments and products. The Non-Residential Direct Load Control (DLC) Pilot, Schedule 25, provides Commercial customers with a more easily deployed DLC program. The Non-Residential Pricing Pilot, Schedule 26, resembles Schedule 77 but offers customers a larger variety of offerings based upon the results of the Energy Partner evaluations conducted by Itron (provided previously under Docket No. UM 1514), market research from Hansa customer interviews, focus groups, and Navigant report.

As provided in the table below, PGE called one winter and six summer non-residential DR events in 2018. As a whole, event performance came in above PGE nominations in the summer and below the nomination in the winter.

Table 1: 2018 PGE Non-Residential Demand Response Events

2018 PGE Non-Residential Demand Response Events		
	Nomination (MW)	Event Performance (MW)
Winter Event	3.4	2.7
Summer Event #1	11.6	13.6
Summer Event #2	11.6	13.2
Summer Event #3	9.9	10.9
Summer Event #4	9.9	11.4
Summer Event #5	9.9	9.4
Summer Event #6	9.9	8.6

Program Evaluations
PGE will submit two pilot evaluations to the Commission and stakeholders:

- The first evaluation will be submitted during the third quarter of 2019, after the first three operating seasons. This will allow for adequate time and events to provide meaningful results.

- A final evaluation will be submitted in the second quarter of 2021, after the next three operating seasons and the anticipated end of the pilots.

The evaluations will include various metrics on customer participation, demand response capacity, and data gaps that emerge from the program. In order to ensure that we have results to evaluate, even during seasons with mild weather or minimal need for DR curtailment, PGE will call a minimum of one event per agreement year.

Staff would note that the most recent results from the two ADR pilots appear to be very promising. After nearly a decade of testing approaches to DR for non-residential customers, this set of DR pilots are maturing into successful programs that are competently executed and well-received by customers (i.e., response rates to events). To this end, PGE will receive a full evaluation of the pilots' first three operating seasons in the fall of 2019. The time would seem to be ripe to discuss how we transition successful DR pilots into full-fledged programs that could be folded into rate base.

Conducting such a transition soon will be important for several reasons. First, PGE has a large portfolio of DR pilots and is making a substantial investment in its innovative DR Testbed. We need to work together to develop a regulatory pathway for successful pilots to become normalized programs. Second, state law requires that PGE treat cost effective DR as a resource to be acquired prior to new generation. The sooner DR is "normalized" and moved beyond the pilot/deferral process, the sooner DR can be equally treated as a resource option. . Lastly, PGE's long-term planning calls for ever increasing amounts of DR. From the draft 2019 IRP and its 200 MW of summer DR to the 2018 decarbonization pathway study which highlighted the need very large amounts of flexible end-use load by 2035, PGE needs DR to become a normal part of business and planning process, much as energy efficiency has become.

Recommended Revisions and Reporting Requirements
Staff recommends the following revisions to the program and recommends the utility submit the following updates to Commission Staff:

- PGE must keep on file, and be ready to submit copies of, all contracts signed by participating customers;

- Each quarter PGE will submit to Staff an informational filing containing a spreadsheet of each participating customers nominated load and event performance. PGE may redact identifying information if necessary or file as confidential.

- PGE will run their loss of load probability, Renewable Energy Capacity Planning (RECAP), model with demand response parameters.[1]
    - Staff suspects that PGE may be overly conservative in the application of their derate factor when calculating program cost effectiveness and believes that such a conservative approach may be hindering PGE's willingness to invest in resources to bring about additional demand response program proposals. To note, as can be seen in Table 1 above, participants outperformed PGE's nominations in two-thirds of 2018 DR events. While clear direction on calculating demand response has not been given to PGE it is important that PGE, the Commission, and stakeholders continue to iterate until such time as the Commission has the capacity to comprehensively address demand response cost effectiveness.
    - On February 13, 2019, in response to Commission Order No. 17-429 in this docket, PGE submitted an informational filing stating that the Company plans to run RECAP in support of its 2019 IRP, with results available by August 8, 2019 as part of its IRP filing. Unfortunately, the timing of the IRP release has changed since PGE's February filing in UM 1514. PGE now plans to release the IRP in June, not August. Staff requests that PGE inform Staff if the RECAP run has already occurred and shared with the IRP team. If so, Staff would like to see the results. If not, Staff would request that the RECAP run take place as soon as possible so as to help inform its 2019 IRP filing.

- Improved communication with Staff relating to this pilot's deliverables, as well as the level of detail provided therein.
    - As an example, while Staff appreciates that PGE has committed to run RECAP in support of its 2019 IRP, the Company's submittal of the informational filing to the Commission delineating the details as such was 1) not provided within the one year timeline as set forth in Commission Order No. 17-429 and 2) as the 2019 IRP results fall outside of the one year timeline, did not provide an alternative methodology for calculating the de-rate factor during the interim.

- By November 1st, 2019 PGE to hold a workshop with Staff and stakeholders to present and discuss the findings of the pilot evaluation and outline a plan for how this nearly decade old pilot could be transitioned into full program.

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[1] For a description of the methodology see UM 1708, PGE's Compliance to Order No. 15-203 (April 28, 2016): Navigant - A Proposed Cost-Effectiveness Approach for Demand Response.

Conclusion

Staff reviewed PGE's application and supporting program work papers. In previous deferral applications, PGE has demonstrated a cost effectiveness score of 1.03 with the revised program structure now internal to the Company.[2] In addition, the requested $3.1M for 2019 appears consistent with the expected participation and costs of operating the program internal to PGE.

The rationale for this deferral is still valid, and the Company's application meets the requirements of ORS 757.259 and OAR 860-027-0300. For these reasons, Staff recommends PGE's application be approved.

PROPOSED COMMISSION MOTION:

Approve Portland General Electric's (PGE or Company) application for reauthorization to defer, with interest, the incremental costs associated with the Automated Demand Response Pilot (ADR Pilot), be approved for the 12-month period beginning January 1, 2019.

PGE UM 1514 Deferral

[2] See UM 1514, PGE's Supplemental Application, Attachment C, Dated 9/21/2017