

**PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: June 1, 2021**

REGULAR X CONSENT _____ EFFECTIVE DATE July 1, 2021

DATE: May 24, 2021

TO: Public Utility Commission

FROM: Eric Shierman

THROUGH: Bryan Conway, JP Batmale, and Sarah Hall **SIGNED**

SUBJECT: PORTLAND GENERAL ELECTRIC:
(Docket No. ADV 1261/Advice No. 21-09)
Staff recommendation regarding new PGE Schedule 56 fleet transportation electrification pilot program.

STAFF RECOMMENDATION:

Staff recommends the Public Utility Commission of Oregon (Commission) approve Portland General Electric's (PGE or Company) filing, Advice No. 21-09, which creates a Schedule 56 for the Company's new fleet electrification make-ready pilot.

DISCUSSION:

Issue

Whether the Commission should approve PGE's Advice No. 21-09, which creates a Schedule 56 for the Company's new fleet electrification make-ready pilot.

Applicable Rule

Under ORS 757.357(3), the Commission shall direct each electric company to file applications for programs that would accelerate transportation electrification (TE). Under ORS 757.357(4), the Commission shall consider whether the program's investments and other expenditures:

1. Are within the service territory of the electric company;
2. Are prudent as determined by the commission;

3. Are reasonably expected to be used and useful as determined by the commission;
4. Are reasonably expected to enable the electric company to support the electric company's electrical system;
5. Are reasonably expected to improve the electric company's electrical system efficiency and operational flexibility, including the ability of the electric company to integrate variable generating resources; and
6. Are reasonably expected to stimulate innovation, competition and customer choice in electric vehicle charging and related infrastructure and services.

Under OAR 860-087-0030, a Company must file an application with the Commission for each program that seeks to accelerate TE. OAR 860-087-0030(1) details what the Company must include in its Program application. Broadly, these requirements include:

- (a) A description of the program;
- (b) Data used to support the description;
- (c) A description of program coordination;
- (d) A description of the electric company's long-term strategy to accelerate transportation electrification in its service territory in an effective and efficient manner and how the proposed program fits within the long-term strategy;
- (e) A description of program costs;
- (f) A description of the expected program benefits;
- (g) A description of how the electric company will evaluate the program; and
- (h) A description of how the program addresses the considerations of Oregon Laws 2016, 028, section 20(4)(a)-(f).

Executive Order 20-04 establishes Governor Brown's new greenhouse gas emissions goals for the State of Oregon and directs state agencies to identify and prioritize actions to meet those goals. Section 5.4(B) of the Executive Order directs the Public Utility Commission to "[e]ncourage electric companies to support transportation electrification infrastructure that: supports GHG reductions, helps achieve the transportation electrification goals set forth in Senate Bill 1044 (2019), and is reasonably expected to result in long-term benefit to customers."

Analysis

Background

On July 14, 2020, PGE filed a proposed transportation line extension allowance (TLEA) in Advice No. 20-17. To modify some of the language of the original filing and add some changes to the Company's Rule I, PGE refiled its TLEA proposal on December 1, 2020. At the January 26, 2021, Public Meeting, Staff recommended that the Commission

suspend the proposal for investigation. Staff made this recommendation based on the current framework for evaluating line extension allowances. The Commission suspended PGE's TLEA January 26, 2021, with Order No. 21-026 which called for a public process to consider a modified TLEA proposal for fleets.

PGE established a process, launched through an initial public workshop on February 3, 2021, that introduced stakeholders to key details about the Company's original filing and provided an opportunity to offer feedback. At a second workshop on February 24, 2021, PGE presented several scenarios for ratepayers to fund fleet electric vehicle service equipment (EVSE) projects. On March 22, 2021, PGE held a third workshop where the Company presented the major components of the fleet make-ready pilot proposal that PGE filed on April 20, 2021. PGE chose to file this proposal as a cost-and-time limited pilot TE Program under OAR 860-087-0030 and included the program application information in its filing as required by Division 87.

Pilot Details

PGE's proposed Fleet Electrification Make-Ready Pilot (Pilot) is for nonresidential customers that use or operate fleets within PGE's service area. To be eligible, a customer must install at least 70 kW of demand capacity charging on a site that the customer either owns or leases. Enrollment will be open for three years or until the \$9 million in funds of the Pilot are fully reserved.

The Pilot will pay up to a multiple of 15 times the applicable commercial line extension allowance for a fleet customer's make-ready - the infrastructure at the site to deliver electricity from the service point to the EVSE(s), including any panels, stepdown transformers, conduit, wires, connectors, meters, and any other necessary hardware. The size of the incentive will be based on a load forecast of the fifth year of annual energy use and will be capped at \$750,000 per site.

PGE will enter into a permanent easement on the commercial property and enter into a customer service contract with the participating customer. PGE will then locate, design, install, own, operate, and maintain the make-ready infrastructure.

EVSE(s) will be separately metered from any other load at the site. This will improve the quality of data collection. The participating customer will authorize and require the qualified electric vehicle service provider to share operational data with PGE, allowing PGE to use data gathered as part of the pilot in regulatory reporting, ordinary business use, industry forums, case studies or other similar activities, in accordance with applicable laws and regulations, and to participate in PGE-led research such as surveys.

The participating customer must maintain the EVSE on a qualified service schedule for 10 years following the activation date of the first qualified EVSE installed at the site, remain operational, and adhere to an energy usage plan. This plan states that the minimum energy usage amount will be no less than the estimated year five energy use, times six. Program participants will be committing to a minimum purchase in the next ten years of at least six times the total amount of energy deliveries forecasted in the fifth year.

In the event the participating customer breaches or terminates the participation agreement, the participating customer will reimburse PGE the pro-rata value of the custom incentive, calculated over the 10-year term. If the site changes ownership or lesseeship, participation in the pilot may be assumed by the new owner or lessee if it is willing to meet the pilot requirements. The participating customer will be responsible for any pro-rata reimbursement for estimated minimum usage deficiencies between the participating customer's original energy usage plan and the new customer's energy usage plan.

The Six Statutory Factors for the Commission

ORS 757.357(4) identifies six factors that the Commission shall consider when approving a transportation electrification program and determining cost recovery. The first consideration is whether or not the investments or other expenditures are within the service territory of the electric company. PGE's Sheet 56-1 limits the availability of this pilot to its service territory.

The second consideration is whether or not the investments or other expenditures are prudent as determined by the Commission. PGE's financial analysis shows this pilot is not expected to be cost-effective. However, Staff finds that the Pilot is likely to result in important learnings about how the electrical system can adapt to increased load from fleet charging. In PGE's program application, the Company stated that the learnings will include:

- Pilot Implementation Learnings
 - Document the successes and challenges of delivering turnkey charging installations
 - Understand impacts on local network of installers for EV infrastructure, assess workforce development needs, and potential economies of scale
 - Assess the costs and benefits of utility ownership of make-ready infrastructure
 - Identify internal and external implementation successes and challenges, as well as opportunities for process improvement

- Empirical Data
 - Develop an empirical data set to:
 - Understand and reduce grid impacts such as coincident peak load or feeder overloading
 - Support fleet managers in adopting optimized charging schedules
 - Forecast distribution system impacts and infrastructure needs
 - Inform future EV rates
 - Inform future flexible load opportunities or offerings
 - More effectively site future EV charging infrastructure.¹

PGE has shown this pilot can be reasonably expected to generate valuable learnings that will benefit ratepayers.

The third consideration is whether or not the investments or other expenditures are reasonably expected to be used and useful as determined by the commission. PGE will require participants in this pilot to enter a ten-year service agreement. The service agreement comes with a prorated claw back provision if these fleet customers fail to use this infrastructure during those first ten years.

The fourth consideration is whether or not the investments or other expenditures are reasonably expected to enable the electric company to support the electric company's electrical system. PGE's modeling indicates that, if the cost of these investments are excluded, these customers are expected to bring in more revenue than the marginal cost to serve the load.

The fifth consideration is whether or not the investments or other expenditures are reasonably expected to improve the electric company's electrical system efficiency and operational flexibility, including the ability of the electric company to integrate variable generating resources. This pilot is intended to promote the procurement of demand response (DR)-enabled EVSE. If this pilot shows these loads to be sufficiently flexible, these fleets might support PGE's electrical system as DR customers.

The sixth consideration is whether or not the investments or other expenditures are reasonably expected to stimulate innovation, competition and customer choice in electric vehicle charging and related infrastructure and services. PGE allows pilot participants to purchase the EVSE the customer chooses. This ensures a competitive market among EVSE manufacturers to foster technological innovation.

PGE's description of its baseline market assumptions describes the nonregulated companies offering EVSE installation service:

¹ See Docket No. ADV 1261, PGE, Fleet Electrification Make-Ready Pilot Proposal, April 2021, p. 17,18.

PGE's market research indicates that multiple third parties (typically, EVSE vendors) are engaged in the "Charging as a Service" (CaaS) space. Under this model, the vendor owns the EVSE at the customer site, and the customer pays for charging service over time as an off-balance-sheet operating expense. Typically in CaaS, the vendor does not own or operate the make-ready infrastructure.

These third parties are beginning to explore and offer financing for turnkey make-ready infrastructure, acknowledging the market gap and significant cost outlay of designing, installing, and maintaining such infrastructure. However, to PGE's knowledge, entrants in this space are either start-ups, or are EVSE vendors working with financing partners that are themselves new to this type of model. Even among the more established EVSE vendors, many remain young companies, some lacking profitability. PGE continues to view these markets as immature, and PGE customers have expressed the need for solutions from trusted partners.²

Companies operating in a competitive market are also unlikely to subsidize these projects and will need to recoup all the cost of the make-ready investment. PGE's subsidy may be necessary to get private sector fleets to adopt EVs. To collect data on private fleet charging behavior before the value proposition of EVs leads to widespread private procurement, PGE may need to bring project costs down with ratepayer subsidies. Otherwise, PGE may not have any private EV fleets to collect data from for several more years. Early data collection may enable PGE to innovate in advance of a future change in EV market share.

Transportation Line Extension Allowance (TLEA)

The Pilot does not require a commercial customer to choose between accepting this make-ready incentive and getting a transportation line extension allowance. At this time, PGE does not have a TLEA.

Residential Line Extensions

Advice No. 21-09 also contains a change in PGE's Rule I that exempts residential EV owners from triggering a liability for a transformer upgrade. Staff has been under the impression this has already been the Company's policy. In our comments on PGE's 2019 Transportation Electrification Plan, Staff asked how EV-related transformer upgrade costs would be recovered.³ In reply comments, PGE stated: "Transformer upgrades (when necessary) will be capitalized and recovered through base rates."⁴ At

² See Docket No. ADV 1261, PGE, Fleet Electrification Make-Ready Pilot Proposal, April 2021, p. 12.

³ See Docket No. UM 2033, OPUC Staff, Comments, December 6, 2019, p. 12.

⁴ See Docket No. UM 2033, PGE, Reply Comments, December 31, 2019, p. 13.

the third UE 386 public workshop, Staff asked the Company if PGE has ever sought cost recovery of transformer upgrade from a residential EV owner. PGE could not cite an instance of this happening. Since the demand capacity of a Level 2 charger is similar to that of a clothes dryer, Staff asked the Company if a residential dryer installation ever caused a residential customer to become liable for a transformer upgrade. PGE could not cite an instance of this either. The proposed change in Rule I appears to merely clarify what has already been the de facto Company policy. Therefore, Staff is supportive of this change.

Conclusion

Staff recommends that the Commission approve Advice No. 21-09 because the Pilot satisfies the requirements of OAR Division 87, Section 30, and with regards to Commission approval, the proposal demonstrates specifically that:

- These services are limited to PGE's service territory;
- The Pilot is limited in cost and duration;
- Most of the investments are expected to be used and useful for at least ten years;
- Fleet customers are expected to offer more revenue than the marginal cost to serve the load and the Pilot offers important learnings for PGE's electrical system;
- The Pilot may lead to DR program participation, and;
- The competitive market is not offering project subsidies to fleet customers that may be necessary to get private fleets to procure EVs.

PROPOSED COMMISSION MOTION:

Approve PGE's Advice No. 21-09, which creates a Schedule 56 for the Company's new Fleet Electrification Make-Ready Pilot.