

PUBLIC UTILITY COMMISSION OF OREGON  
STAFF REPORT  
PUBLIC MEETING DATE: November 20, 2018

REGULAR \_\_\_\_\_ CONSENT X EFFECTIVE DATE December 1, 2018

DATE: November 14, 2018

TO: Public Utility Commission

FROM: George R. Compton, <sup>GRC</sup> Nadine Hanhan <sup>JPB for NH</sup>

THROUGH: <sup>JPB for JE</sup> Jason Eisdorfer, <sup>JAB</sup> JP Batmale, and <sup>Jc</sup> John Crider

SUBJECT: PORTLAND GENERAL ELECTRIC: (Docket No. UE 831/Advice No. 18-11)  
Proposed pricing structure for Schedule 50 – Company Operated Retail  
Electric Vehicle Charging Stations.

**STAFF RECOMMENDATION:**

Staff recommends that the Commission approve Portland General Electric's (also PGE or Company) new Schedule 50 – RETAIL ELECTRIC VEHICLE (EV) CHARGING, effective December 1, 2018.

**DISCUSSION**

Issue

Whether the Commission should approve Portland General Electric's new "Schedule 50 – Retail Electric Vehicle (EV) Charging," with its associated pricing structure, terms, and conditions.

Applicable Law

Energy utilities must file tariffs for services provided to retail customers pursuant to ORS 757.205 and 757.210.

OAR 860-022-0025 sets forth filing requirements for filing tariffs or schedules changing rates. OAR 860-022-0030 provides requirements for filing tariffs or schedules naming increased rates. Schedule 50 does not alter other existing rates.

Analysis

*Background*

With the passing of SB 1547, the legislature authorized Oregon's electric utilities to participate in the electric vehicle (EV) market for the purpose of accelerating "transportation

electrification.”<sup>1</sup> On March 15, 2017, PGE submitted under Docket No. UM 1811 (Transportation Electrification) direct testimony and a supplemental application describing four new program proposals, including the Electric Avenue Pilot. Commission Order No. 18-054 authorized the latter pilot; Schedule 50 comprises the tariff prices, etc., applicable to the PGE Electric Avenue EV charging stations. Seeking Schedule 50’s approval is this Advice Application, filed on September 21, 2018.

The Electric Avenue proposed in Docket UM 1811 consisted of the already existing site located at PGE’s World Trade Center headquarters plus six additional charging stations located within its service territory. Also, PGE has “assumed custodianship” of 13 other stations located between Portland metro area and Marion County that were abandoned owing to bankruptcies of two different providers. Schedule 50 presents the prices applicable to all twenty EV charging stations. The Schedule 50 tariff language also informs prospective customers that “[t]he pricing listed in this tariff is part of a pilot program and is subject to change.”

Commission Order No. 18-054 also ratified clause 26 of the UM 1811 Stipulation, which says, “PGE will collect and report information and data on a yearly basis that includes, but is not limited to, load profiles, utilization, charging frequency, charging duration, voltage and power quality, kWh delivery, insights into price sensitivity of customers charging at the Electric Avenue chargers, revenue generated, types of vehicles customers drive, and any additional insights.

#### *Current Filing*

The key pricing elements proposed for electric vehicle (EV) battery charging at the contemplated Portland General Electric stations are as follows:

Per DC Fast Charging Session: \$5.00

Per Level 2 Charging Session: \$3.00

On-Peak, per kWh: 19 cents, where “on-peak” denotes weekdays 3 pm to 8 pm, excluding holidays.

Off-Peak, per kWh: 0 cents

In addition, customers can avoid the individual per-charging-session fees by paying a monthly membership fee of \$25 per month.<sup>2</sup>

It is noteworthy that PGE’s proposal couldn’t be more different from the recently approved PacifiCorp pricing scheme.<sup>3</sup> PGE proposes a two-part rate involving a per-session charge and a per-kWh charge; PacifiCorp (or PAC) has a one-part, per-minute rate. Apart from the per-session charge, PGE charges nothing for off-peak energy; PAC’s off-peak rate is

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<sup>1</sup> Oregon Laws Chapter 28, Section 20(4)(a)-(f).

<sup>2</sup> If fifty or more membership are purchased together, the unit fee is \$20.

<sup>3</sup> See PacifiCorp’s Advice No. 18-005 – Proposed Schedule 60 – Company Operated Electric Vehicle Charging Station Service.

substantial—about two-thirds of its on-peak rate. PGE proposes a monthly membership fee; PAC has nothing of the sort.

PAC's offering has the advantages of simplicity and the discouragement of patrons who would use the per session fee as a parking charge and leave their vehicle connected to the charger well past when the battery is fully charged. That was PAC's top priority: Getting the customer in and out expeditiously. PGE's top priority was to recover a certain level of fixed costs, including from customers who may want to only "top-off" their battery's charge by consuming relatively few kWh's or expending few minutes at the charger. Another important advantage of the PGE approach is that it provides consumption transparency by using the same pricing units at the station—i.e., per-kWh—as would be found at many competitors' stations and, especially, at the vehicle owner's own home. Also, PGE sends a stronger signal to encourage off-peak station usage.

Were it not for the matter of complexity, there is obvious merit to having a pricing structure that embodies all three of the primary price elements just mentioned. But what we have is a *pilot* operating within a competitive environment. In that light Staff is most reluctant to superimpose its own judgement over that of professionals employed by a private entity—one that is making considerable investment in the EV charging arena. As noted above, PGE's pilot program tariff is "subject to change": If the Company finds too many customers are abusing the flat rate charge by staying connected beyond when kWh's are being placed into their batteries, some form of per-minute charge or time-limit penalty can be introduced into its rate structure.

That leaves Staff with an interest in assuring that PGE is not using its utility-profit-protecting advantages to undercut the market-based pricing offered by other providers—which objective the Company claims to have achieved with the price structure contained in this application.<sup>4</sup> Without contesting that claim, it should be made clear that depending upon a customer's consumption pattern, and depending upon a competitor's price structure, that customer may be paying more or paying less than he would if purchasing from one of PGE's competitors. Obviously a customer who buys a \$25 month's membership and makes frequent visits to PGE's charging stations but only during off-peak periods would end up paying very little on a per-kWh, per-minute, and per-session basis.

A more subtle comparison would be with the dominating competitive rate in PacifiCorp's service territory. It is a flat \$7.50 per session, with neither a per-kWh nor a per-minute additional fee.<sup>5</sup> Combined with PGE's \$5.00 per session charge, at \$0.19 per kWh the PGE customer must purchase 13 kWh to produce a \$7.50 bill. According to that same PAC Exhibit A,<sup>6</sup> the average 2017 West Coast Electric Highway charging session consumption amount was 11 kWh—implying a smaller bill for PGE. Contrarily, Exhibit A also showed

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<sup>4</sup> See UM 1811/PGE/100, Spak – Goodspeed/19.

<sup>5</sup> The provider, AeroVironment, accounts for 15 of the 28 charging station locations depicted in Exhibit A to PacifiCorp's Advice No. 18-005.

<sup>6</sup> *Op cit* Advice No. 18-005.

ChargePoint as having no per-session charge and per-kWh charges ranging from \$0.15 to \$0.20. With the larger, \$0.20 fee, it would take consumption of 25 kWh just to take the customer up to PGE's \$5.00 per session charge, i.e., without adding PGE's \$0.19 on-peak-only per-kWh charge. So in these ChargePoint instances PGE's bill would be expected to be greater than the competitor's.

### Conclusion

Oregon electric utilities have been authorized by statute to participate in promoting greater electric vehicle ownership and use. The Electric Avenue, with its Company-owned charging stations, constitutes one of Portland General Electric's responses to that authorization. New Schedule 50 – Retail Electric Vehicle (EV) Charging is herewith proposed for the purpose of pricing PGE's provision of its Electric Avenue service. The pricing structure proposed by that company is a two-part rate that emphasizes the collection of fixed costs and promotes off-peak consumption by pricing off-peak kWh at zero. An important purpose of a pilot program is the gathering and reporting of information regarding customer behavior and the fundamental economic viability of a commercial charging service. It will be interesting to compare the relative successes of our two major electric utilities, including the degree to which EV charging stations' revenue shortfalls, and associated deferral mechanisms, can be minimized.

### **PROPOSED COMMISSION MOTION:**

Approve Portland General Electric's new Schedule 50 – RETAIL ELECTRIC VEHICLE (EV) CHARGING, effective December 1, 2018.