



# Oregon

Kate Brown, Governor

**Public Utility Commission**

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June 28, 2022



BY EMAIL

Portland General Electric Company

pge.opuc.filings@pgn.com

RE: Advice No. 22-09

At the public meeting on June 28, 2022, the Commission adopted Staff's recommendation in this matter docketed as ADV 1393. The Staff Report, LSN, and a receipted copy of the sheets in your advice filing are attached.

Nolan Moser

Chief Administrative Law Judge

Public Utility Commission of Oregon

(503) 378-3098

**PUBLIC UTILITY COMMISSION OF OREGON  
STAFF REPORT  
PUBLIC MEETING DATE: June 28, 2022**

REGULAR \_\_\_ CONSENT \_\_\_ X \_\_\_ EFFECTIVE DATE June 29, 2022

**DATE:** June 21, 2022

**TO:** Public Utility Commission

**FROM:** JP Batmale

**THROUGH:** Bryan Conway and Sarah Hall **SIGNED**

**SUBJECT:** PORTLAND GENERAL ELECTRIC:  
(Docket No. ADV 1393/Advice No. 22-09)  
Schedule 8 - Residential Electric Vehicle Charging Pilot Update.

**STAFF RECOMMENDATION:**

Approve Portland General Electric's (PGE or Company) Advice No. 22-09, authorizing updates to Schedule 8, with Less than Statutory Notice (LSN).

**DISCUSSION:**

Issue

Whether the Oregon Public Utility Commission (Commission) should approve updates to Schedule 8, PGE's Residential Electric Vehicle Charging Pilot, which pilots incentives for telematics-based Level 2 chargers.

Applicable Rule

Under ORS 757.205(1):

Every public utility shall file with the Public Utility Commission, within a time to be fixed by the commission, schedules, which shall be open to public inspection, showing all rates, tolls and charges which it has established and which are in force at the time for any service performed by it within the state, or for any service in connection therewith or performed by any public utility controlled or operated by it.

OAR 860-022-0025(2) specifically requires that each energy utility changing existing tariffs or schedules must include in its filing a statement plainly indicating the increase, decrease, or other changes made with the filing, the number of customers affected by the proposed change and the resulting change in annual revenue; and, the reasons or grounds relied upon in support of the proposed change.

Under ORS 757.357(3), the Commission shall direct each electric company to file applications for programs that would support transportation electrification (TE). Under ORS 757.357(6), the Commission shall consider whether the program's investments and other expenditures are:

1. Within the service territory of the Company;
2. Are prudent;
3. Are reasonably expected to be used and useful;
4. Are reasonably expected to improve the Company's electrical system efficiency and operational flexibility, including the Company's ability to integrate variable generating resources; and
5. Are reasonably expected to stimulate innovation, competition and customer choice in electric vehicle charging and related infrastructure 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).

## Analysis

### *Background*

PGE's residential EV charging pilot was first approved by the Commission on February 16, 2018. In Order No. 18-054, the Commission approved a stipulation whereby PGE

would later file a residential home charging pilot with a rebate program.<sup>1</sup> Following a second negotiated stipulation, Order No. 19-385, PGE's residential EV charging pilot for Level 2 chargers was established, with an optional TOU rate and a mandatory demand response (DR) component.<sup>2</sup> In July 2020, PGE expanded the cap on pilot participants from 3,600 to 5,000.<sup>3</sup> The pilot's launch was delayed initially by six months and then further by the COVID-19 pandemic.<sup>4</sup> As a result, the pilot has had a slow start and the Commission accepted PGE's proposal to move the interim report on the pilot and other TE activities from the fall of 2021 to the end of 2023, with an update to be included in the Company's forthcoming 2022 TE Plan.<sup>5</sup>

Currently the pilot provides a \$500 standard rebate and \$1,000 low-income rebate for customers who purchase a qualified Level 2 home charging station and are automatically enrolled in an EV DR program. The pilot's goal is to sign up 5,000 customers by February 22, 2024. At this time, PGE has 1,120 vehicles enrolled.<sup>6</sup> During this time, PGE expects to sign up an additional 1,340 residential customers in the DR program on a Bring-Your-Own Charger (BYOC) basis. PGE has several research outcomes associated with this pilot, mostly focused on learning how to increase adoption of electric vehicles and grid-connected home charging stations and decreasing the costs to serve EV loads.

PGE estimates that between Q4 2020 and Q1 2023 there will be 17,000 incremental EV sales in the Company's service area. PGE assumes 7,700 will be equipped with EV home chargers that will qualify for participation in this pilot. The total pilot cost was proposed to be approximately \$16,986,000 (nominal) and did not include the participants' cost of approximately \$9,950,000 for the rest of the qualified EV service equipment installation cost.<sup>7</sup>

#### *Proposed Pilot Expansion and Extension*

In this advice filing, PGE seeks to add an incentive to access and use on board telematics-based EV charge management software for Tesla vehicles and extend the pilot by ten months. With regards to the pilot overall, Tesla owners are underrepresented in the PGE residential EV charging pilot, despite the fact that Tesla

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<sup>1</sup> See Docket No. UM 1811, Portland General Electric Company, Application for Transportation Electrification Programs, Order No. 18-054, February 16, 2018, p. 5.

<sup>2</sup> *Ibid* at p. 7.

<sup>3</sup> See ADV 1151/Advice No. 20-18, July 15, 2020 and corresponding Oct. 20, 2020 public meeting memo.

<sup>4</sup> See ADV 1151/Advice No. 20-18 Addendum, Dec. 20, 2021

<sup>5</sup> See ADV 1151/Advice No. 20-18 Letter from Commission Chief Administrative Law Judge, Jan. 5, 2022

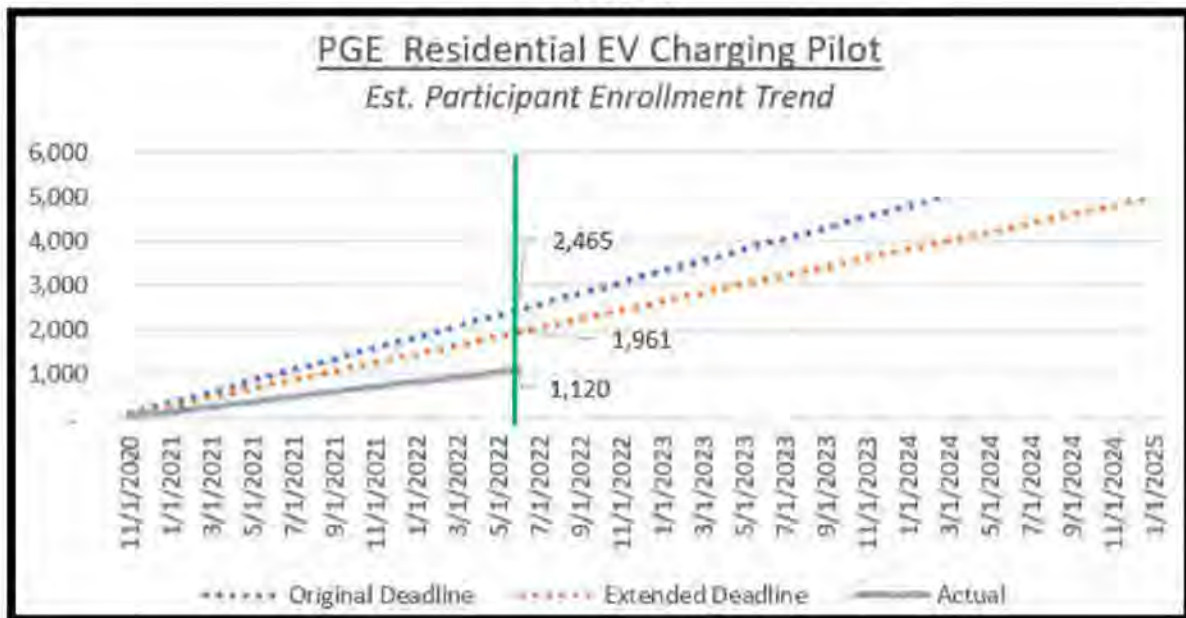
<sup>6</sup> PGE communication with PUC staff, June 6, 2022, Attachment A.

<sup>7</sup> A customer's portion of the installation cost after receiving a standard rebate, amounts to eight percent of the price of a new Chevy Bolt, one of the less expensive electric vehicles.

are believed to represent nearly half of all EV sales in the Portland area.<sup>8</sup> These vehicle owners tend to purchase Level 2 home EV charging equipment that lacks the DR-enabled capabilities necessary to participate in the Schedule 8 pilot.<sup>9</sup> However, PGE has recently determined that Tesla has established a telematics pathway for utilities to control a Tesla vehicle's charging through the vehicle itself, rather than through the EV charger. This pathway would allow PGE to enroll more Tesla vehicles. At this point, PGE reports that 500 Teslas are enrolled in another telematics pilot through the Smart Grid Test Bed. These 500 Teslas represent approximately 45 percent of current participants.<sup>10</sup> PGE believes that by adding an incentive to utilize telematics-based charging, the Company can raise the number of enrolled Teslas to a full 50 percent of forecasted 5,000 participants by the end of 2024.<sup>11</sup>

In addition to the incentive change, PGE is requesting that the tariff be extended from February 22, 2024 to December 31, 2024. The additional ten months would give the Company more time to enroll customers, as the current enrollment trend appears to place the pilot on a path to missing the 5,000 participant goal by February 2024. Staff estimates that participant enrollments will need to nearly double to meet the 5,000 participant goal by the extended deadline of December 31, 2024, shown in Table 1.

**Table 1.**



<sup>8</sup> ADV 1393 / Adv No. 22-09, Initial Filing, May 3, 2022.

<sup>9</sup> *Ibid.*

<sup>10</sup> See June 6, 2022 email communication from PGE staff to PUC staff, Attachment A.

<sup>11</sup> *Ibid.*

The combination of the additional incentive to enroll more Teslas and extending the pilot date could help the pilot meet its goal of 5,000 participants, giving it more data on residential charging to draw meaningful learnings.

#### *Cost-Effectiveness*

Currently, PGE offers a \$50 incentive for telematics under this pilot.<sup>12</sup> In its filing, PGE proposes a new incentive that is up to \$150 for customers who install a telematics pathway to enable their Tesla to participate in this pilot. Customers would receive the new \$150 incentive in lieu of the \$500 incentive PGE would grant for the installation of an eligible Level 2 charger, which can only be used by non-Tesla EV owners as described above. Due to this smaller incentive cost per vehicle, PGE anticipates that the overall cost of the pilot will not change. In theory, Staff believes this change to the program should improve the overall cost-effectiveness of the pilot and associated DR program, which was estimated to be a combined 1.04 benefit/cost ratio using the Total Resource Cost (TRC) test in October 2019, as noted in the final approval memo.<sup>13</sup>

#### *Reason for Staff Recommendation*

Staff believes the low-cost and unique method to better access a larger portion of the EV market, as proposed in this filing, is valuable to the pilot. It also benefits PGE's capacity and the Company's effectiveness at supporting sustainable EV growth in its territory. The ten-month extension could also give PGE enough additional time to make up for the lower level of initial enrollments and achieve its targeted goal of 5,000 participants by December 31, 2024. Staff is hopeful this update to the residential EV charging pilot will enable a more robust set of learnings from the pilot, while potentially lowering the total cost of pilot operation.

#### Conclusion

Staff recommends the Commission approve the update to Schedule 8, PGE's residential charging pilot.

#### **PROPOSED COMMISSION MOTION:**

Approve PGE's filing as described in Advice No. 22-09, with Less than Statutory Notice.

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<sup>12</sup> *Ibid.*

<sup>13</sup> See Staff's Public Meeting Memo, ADV 1151 / Adv. No. 20-18, October 12, 2020.

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## Attachment A – PGE Communication to Staff

**From:** Teresa Tang <[teresa.tang@pgn.com](mailto:teresa.tang@pgn.com)>  
**Sent:** Monday, June 6, 2022 2:47 PM  
**To:** BATMALE JP \* PUC <[JP.BATMALE@puc.oregon.gov](mailto:JP.BATMALE@puc.oregon.gov)>; Rob Macfarlane <[Rob.Macfarlane@pgn.com](mailto:Rob.Macfarlane@pgn.com)>  
**Subject:** RE: Quick Questions for ADV 1393/Advice No. 22-09 Memo  
**Importance:** High

Hello Good Morning JP,

The responses are in Purple. Please let me know if you have any further questions. Also, we will file a second supplemental filing about Schedule 8 tomorrow 6/7 (or Wednesday) to make a clarifying language change in the tariff. The first supplemental was filed last week to extend the effective date to June 29<sup>th</sup>.

Thanks,  
Teresa

**From:** BATMALE JP \* PUC <[JP.BATMALE@puc.oregon.gov](mailto:JP.BATMALE@puc.oregon.gov)>  
**Sent:** Wednesday, June 1, 2022 5:52 AM  
**To:** Teresa Tang <[teresa.tang@pgn.com](mailto:teresa.tang@pgn.com)>; Rob Macfarlane <[Rob.Macfarlane@pgn.com](mailto:Rob.Macfarlane@pgn.com)>  
**Subject:** Quick Questions for ADV 1393/Advice No. 22-09 Memo

**\*\*\*Please take care when opening links, attachments or responding to this email as it originated outside of PGE.\*\*\***

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Teresa and Rob –

Hello. I have a few quick questions on Schedule 8 to round out the memo. I'm sorry to be getting these questions to you so late in the game. Could you answer these?

1. How many customers are currently enrolled in pilot? **Total enrollments to date are 1,120 (that includes 500 Teslas, from the SGTB enrollment. We have another 280 on the waitlist).**
2. Is the \$150/Tesla incentive for telematics in leu of the \$500 installation rebate or in addition to it? **Yes. The incentive will actually be \$50 per connected Tesla.**
3. The Schedule 8 pilot budget will remain the original estimated total of ~\$17 M despite the additional incentive? **That's correct. Schedule 8 budget will remain unchanged.**

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4. How many Tesla's does the pilot hope to enroll by 2024? *We plan to add 2,500 Teslas by Dec 31, 2024. That will represent half of the pilot total. 2,500 level 2 chargers and 2,500 Teslas, for a pilot total of 5,000.*

If you can get the responses to me ASAP, that would be great. Again my apologies for not sending these sooner.

Thanks!

JP Batmale (he/him)  
Division Administrator  
Energy Resources & Planning  
Oregon Public Utility Commission  
201 High St. SE, Suite 100  
Salem, OR 97308-1088  
503.551.9926 (Office & Mobile)



## LESS THAN STATUTORY NOTICE APPLICATION

This document may be electronically filed by sending it as an attachment to an electronic mail message addressed to the Commission's Filing Center at [puc.filingcenter@state.or.us](mailto:puc.filingcenter@state.or.us).

### BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

**ADV 1393  
22-09**

IN THE MATTER OF THE APPLICATION OF  <u>PORTLAND GENERAL ELECTRIC COMPANY</u> (UTILITY COMPANY)  TO WAIVE STATUTORY NOTICE.	) ) ) ) )	UTILITY L.S.N. APPLICATION  NO. <u>2293</u> (LEAVE BLANK)
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**NOTE:** ATTACH EXHIBIT IF SPACE IS INSUFFICIENT.

1. GENERAL DESCRIPTION OF THE PROPOSED SCHEDULE(S) ADDITION, DELETION, OR CHANGE. (SCHEDULE INCLUDES ALL RATES, TOLLS AND CHARGES FOR SERVICE AND ALL RULES AND REGULATIONS AFFECTING THE SAME)  
 Portland General Electric Company (PGE) submits this supplemental filing pursuant to Oregon Revised Statutes 757.205 and 757.210, and Oregon Administrative Rule (OAR) 860-022-0025, for filing proposed tariff sheets associated with Tariff P.U.C. No. 18. PGE initially filed Advice No. 22-09 on May 3, 2022, with a requested effective date of June 10, 2022. PGE then submitted a supplemental filing on June 1, 2022, to extend the requested effective date to June 29, 2022, to allow Staff more time to review the filing. PGE is now submitting this Supplemental Filing to add clarifying language to the Purpose section.

2. APPLICANT DESIRES TO CHANGE THE SCHEDULE(S) NOW ON FILE KNOWN AND DESIGNATED AS: (INSERT SCHEDULE REFERENCE BY NUMBER, PAGE, AND ITEM)  
 Original Sheet No. 8-1  
 Original Sheet No. 8-2  
 Original Sheet No. 8-3  
 Original Sheet No. 8-4

3. THE PROPOSED SCHEDULE(S) SHALL BE AS FOLLOWS: (INSERT SCHEDULE REFERENCE BY NUMBER, PAGE AND ITEM)  
 First Revision of Sheet No. 8-1

4. REASONS FOR REQUESTING A WAIVER OF STATUTORY NOTICE:  
 PGE initially filed Advice No. 22-09 on May 3, 2022, with a requested effective date of June 10, 2022. PGE then submitted a supplemental filing on June 1, 2022, to extend the requested effective date to June 29, 2022, to allow Staff more time to review the filing. PGE is now submitting this Supplemental Filing to add clarifying language to the Purpose section.

5. REQUESTED EFFECTIVE DATE OF THE NEW SCHEDULE(S) OR CHANGE(S): June 29, 2022

. AUTHORIZED SIGNATURE	TITLE Robert Macfarlane Manager, Pricing & Tariffs	DATE June 7, 2022
PUC USE ONLY		
<input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DENIED	EFFECTIVE DATE OF APPROVED SCHEDULE(S) OR CHANGE June 29, 2022	
AUTHORIZED SIGNATURE	DATE June 28, 2022	

**SCHEDULE 8  
RESIDENTIAL ELECTRIC VEHICLE CHARGING PILOT**

**PURPOSE**

This Residential Electric Vehicle Charging Pilot (Pilot) is applicable to Residential Customers who own or lease an Electric Vehicle (EV). The Pilot offers rebates for the purchase, installation, and/or integration of technologies that help manage and increase the flexibility of load associated with residential EV Charging. The Pilot is expected to operate from October 23, 2020 to December 31, 2024.

(C)  
|  
(C)

**AVAILABLE**

In all territory served by the Company.

**APPLICABLE**

This Pilot is available to up to 5,000 eligible Residential Customers that elect to enroll and participate in the Pilot. Qualifying Customers will remain on Schedule 7 and be eligible for rebates and incentives described in this schedule.

**DEFINITIONS**

Active Charging Session – A period of time during which an EV is plugged into an EVSE for the purposes of having electricity supplied to the vehicle through the EVSE.

Direct Load Control – A remotely controllable communication device that allows the utility to operate an appliance/equipment, often by cycling.

(C)

Electric Vehicle Supply Equipment (EVSE) – The device, including the cable(s), coupler(s), and embedded software, installed for the purpose of transferring alternating current electricity at 208 or 240 volts between the electrical infrastructure and the EV.

Event Notification – The Company may issue a notification of a Managed Charging Event to participating Customers. Notification methods may include email, text, auto-dialer phone call, or via mobile app notification.

Holidays – The following are holidays for purposes of the Pilot: New Year's Day (January 1), Memorial Day (last Monday in May), Independence Day (July 4), Labor Day (first Monday in September), Thanksgiving Day (fourth Thursday in November), and Christmas Day (December 25). If a holiday falls on a Saturday, the preceding Friday will be designated the holiday. If a holiday falls on a Sunday, the following Monday will be designated the holiday.

**SCHEDULE 8 (Continued)**

DEFINITIONS (Continued)

Income-Eligible Customer – A verified Residential Customer at 80% or below the area median income as defined by the US Department of Housing Urban Development, or the home qualifies for Section 8 housing.

Managed Charging Event – A period during which the utility will provide Direct Load Control by sending communication signals to a customer’s vehicle or EVSE to adjust the rate or time of charge.

Participation Year – Twelve consecutive months from the anniversary date of a Qualifying Customer’s enrollment in the Smart Charging Program.

Qualifying Customer – A Residential Customer in an existing single-family residence, including separately metered residences with assigned parking, with a Qualified L2 EVSE (excludes new construction or multifamily property).

Qualified Level 2 Electric Vehicle Supply Equipment (L2 EVSE) – A pre-approved L2 EVSE that meets the program’s connectivity and controllability criteria.

Vehicle Telematics - Device installed in a vehicle that allows the sending, receiving, and storing of telemetry data.

(N)  
(N)

**ELIGIBILITY**

Eligible Customers must be a Qualifying Customer with either of the following.

(C)

A. Qualified L2 EVSE and agree to the following minimum participation requirements:

(T)

- (1) the Qualified L2 EVSE is successfully connected to the Smart Charging Program for at least 50% of the participation year,
- (2) the Qualified L2 EVSE participates in six Managed Charging Events, and
- (3) the Qualified L2 EVSE completes 25 Active Charging Sessions.

Or

(N)

B. EV with Vehicle Telematics connected to a vehicle telematics provider and participant agreement to the following minimum participation requirements:

- (1) the connected EV participates in six Managed Charging Events, and
- (2) the connected EV completes 25 Active Charging Sessions.

(N)

**ENROLLMENT**

Qualifying Customers can enroll in the Pilot at PortlandGeneral.com through July 31, 2024. Unless PGE terminates this Pilot, customers will remain enrolled in the Smart Charging Program for the entire Pilot term. Qualifying Customers that reenroll in the Pilot are not eligible for a second payment for installation of a single Qualified L2 EVSE. A Qualifying Customer continuing service at a new residence is not considered a new enrollment.

(C)

**SCHEDULE 8 (Continued)**

**INCENTIVES**

Qualifying Customers with more than one Qualifying L2 EVSE are eligible for the following incentives per each unique EV and EVSE pair during their participation in the Pilot:

<u>Incentive</u>	<u>Description</u>	<u>Amount</u>	
Standard EVSE Installation Rebate	A one-time rebate for the purchase and installation of a Qualified L2 EVSE. PGE will automatically enroll Qualifying Customers into the Smart Charging Program. Qualifying Customers will receive the rebate by check or bill credit from the Company upon approval of rebate qualification.	Up to \$500; capped at price paid	
Income-Eligible EVSE Installation Rebate	A one-time rebate for Income-Eligible Qualifying Customers for the purchase and installation of a Qualified L2 EVSE. PGE will automatically enroll Qualifying Customers into the Smart Charging Program. Qualifying Income-Eligible Customers will receive the rebate by check or bill credit from the Company upon approval of rebate qualification.	Up to \$1,000; capped at price paid	
Bring Your Own Charger Rebate	A one-time rebate for Qualifying Customers with an existing Qualified L2 EVSE at a Qualifying Home, who enroll in the Smart Charging Program.	Up to \$50	
Vehicle Telematics Participation Incentive	A one-time incentive for the integration with a Vehicle Telematics provider. PGE will automatically enroll Qualifying Customers into the Smart Charging Program. Qualifying Vehicle Telematics Customers will receive the incentive by check or bill credit from the Company upon approval of rebate qualification.	Up to \$150	(N)   (N)
Smart Charging Participation Incentive	For Qualifying Customers enrolled in the Smart Charging Program who participate in the minimum number of Managed Charging Events and Active Charging Sessions as described in this schedule. This incentive will be sent by check or as a bill credit within two billing cycles following the end of the interval period.	Up to \$50 per participation year	(C) (C)
Smart Charging Program Reconnection Incentive	A one-time promotional incentive to encourage Qualifying Customers who unenrolled (intentionally or unintentionally) from the Smart Charging Program to re-enroll. This offer is available once per participant and at the discretion of the Company.	Up to \$25	

### SCHEDULE 8 (Concluded)

#### MANAGED CHARGING EVENTS

Customers will be randomly assigned into one of three groups: A, B, or C. Group A will be the control group and will have no demand response tactics scheduled. Group B will participate in load shifting events where charging times will be shifted away from system peak periods. Group C will have their charging slowed or stopped during event periods. The Company will strive to maintain the equal number of participants and EVSE models in each group. Managed Charged Events may be called at any hour and any weekday excluding Holidays. During Managed Charging Events, the Customer will allow the Company to control their Qualified L2 EVSE or connected EV for the duration of the event. The Customer has the option not to participate by overriding via the manufacturer's mobile application.

(C)

(C)

#### SPECIAL CONDITIONS

1. If a Qualifying Customer moves to a different residence, the customer may continue participation in the Smart Charging Program at the new residence if the Customer meets the eligibility requirements.
2. The Company will defer and seek recovery of all Pilot costs not otherwise included in rates.
3. The provisions of this schedule do not apply for any period that the Company interrupts the Qualifying Customer's load for a system emergency or any other time that a Qualifying Customer's service is interrupted by events outside the control of the Company. The provisions of this schedule will not affect the calculation or rate of the regular service associated with the Qualifying Customer's Schedule 7 charges and associated charges.

#### TERM

This pilot began October 23, 2020 and expires December 31, 2024.

(C)