Portland General Electric
121 SW Salmon Street • Portland, OR 97204
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July 29, 2022

Public Utility Commission of Oregon
Attention: Filing Center
P.O. Box 1088
Salem, OR 97308-1088

Re: UM 2165 Portland General Electric's Proposed Monthly Meter Charge Budget for 2022 and Municipal Charging Collaboration Pilot Proposal

In accordance with the requirements in House Bill (HB) 2165[1] that electric companies collect a monthly meter charge to support transportation electrification (TE), PGE submits this budget for its 2022 monthly meter charge implementation. PGE is also submitting a Municipal Charging Collaboration Pilot proposal pursuant to Oregon Administrative Rules (OARs) 860-087-0001 through 860-087-0040 as part of the 2022 monthly meter charge implementation plan. PGE seeks the Commission approval for both filings.

The 2022 Monthly Meter Charge Budget was developed under HB 2165, the Staff guidance regarding the implementation of the Monthly Meter Charge issued on November 24, 2021[2] and a Staff Report for a special public meeting on December 7, 2021.[3] This budget contains the detailed TE activities descriptions and expenditures broken down by incentives, program costs, O&M on investments, evaluation, marketing and administration costs, and their corresponding percentage contributions to the underserved communities. All the activities proposed in this budget refer to PGE's 2019 TE plan accepted by the Commission on February 13, 2020.[4] Prior to filing this budget, PGE engaged stakeholders through multiple venues over multiple years. All stakeholder feedback is provided in the budget Appendix.

Combining the lessons from PGE's Right of Way demonstration and collaboration with municipalities and communities, PGE identified a new opportunity to provide more public charging to underserved communities through Municipal Charging Collaboration Pilot as one of the new programs proposed in the 2022 Monthly Meter Charge Budget. In this application, PGE proposes to build, own and operate 60 pole-mounted charges near multi-family housing, neighborhoods with high levels of renters, and where homes lack driveways and garages by end of Q2 of 2023.

[1] HB2165 (oregonlegislature.gov)
[2] OPUC Staff Report dated Nov. 24, 2021, UM 2165, https://edocs.puc.state.or.us/efdocs/HAU/um2165hau1331.pdf
[3] OPUC Order No. 21-484, incorporating Staff Report dated Dec. 7, 2021, https://apps.puc.state.or.us/orders/2021ords/21-484.pdf
[4] See OPUC Order 20-047 at https://apps.puc.state.or.us/orders/2020ords/20-047.pdf

PGE is developing the next TE plan and will submit later this year. This Monthly Meter Charge Budget will infuse funding to strengthen existing programs, help to launch new programs that will allow PGE to move quickly in the near term, and build capacity and momentum so that PGE can have immediate impact in 2023 when the programs in our next TE Plan are launched.

The following attachments are included in this filing:

- Attachment A PGE 2022 Monthly Meter Charge Budget
- Attachment B Municipal Charging Collaboration Pilot Proposal

If you have any questions or require further information, please contact Teresa Tang at teresa.tang@pgn.com. Please direct all formal correspondence and requests to the following e-mail address pge.opuc.filings@pgn.com.

Sincerely,

\s\ Robert Macfarlane

Robert Macfarlane
Manager, Pricing and Tariffs

Enclosures

cc: UM 2165 Service List
Eric Shierman, OPUC Staff

UM 2165
PGE's Proposed Monthly Meter Charge Budget for 2022 and Municipal Charging Collaboration Pilot Proposal

Attachment A
PGE 2022 Monthly Meter Charge Budget

Oregon HB 2165
2022 Monthly Meter Charge Budget

Portland General Electric
July 2022

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Charts, Figures, Tables

Chapter 1 Introduction

Oregon House Bill 2165 (HB 2165) requires electric companies with more than 25,000 customers in Oregon to collect a Monthly Meter Charge from all customers and expend the revenues from this charge to support transportation electrification (TE) in accordance with a budget approved by the Public Utility Commission of Oregon (OPUC or Commission). PGE submits this budget for its 2022 Monthly Meter Charge revenues for consideration and approval by the Commission, in accordance with OPUC Staff's guidance.

Chapter 2 Background

2.1 Oregon House Bill 2165

In May 2021, the Oregon Legislature enacted HB 2165, introduced by Governor Kate Brown, to support utility investment in electric vehicle infrastructure and extend and improve Oregon's electric vehicle (EV) rebate. Among other provisions, Section 2[1] of HB 2165 requires PGE and Pacific Power to collect a Monthly Meter Charge from all customers beginning in 2022, set to 0.25% of total revenues.

Funds collected under the Monthly Meter Charge must be:

- Expended by the utility to support and integrate Transportation Electrification (TE);
- Consistent with a budget approved by the Commission; and
- Expended on elements contained within the utility's Transportation Electrification Plan accepted by the Commission.

This charge is a minimum investment in transportation electrification and does not limit the amounts that may otherwise be collected for utility investments or expenses related to transportation electrification. The utility must make reasonable efforts to spend not less than half of the amount collected through this charge on TE in underserved communities.

On January 1, 2022, as directed by HB 2165 and approved by the Public Utility Commission of Oregon (OPUC or Commission) in Docket No. ADV 1325,[2] PGE began collecting the Monthly Meter Charge in supplemental Schedule 150. In 2022, the revenues from the Monthly Meter Charge are forecasted to be $5.2 million.

2.2 OPUC Staff Interim Guidance

On November 24, 2021, the OPUC Staff issued more detailed guidance regarding the implementation of the Monthly Meter Charge, through a Staff Report.[3] In their Report, OPUC Staff stated, "For the immediate implementation of HB 2165, Staff recommends that a budget for the monthly meter charge expenditures in calendar year 2022 is a minimum requirement because of the bill's requirement to spend a minimum of fifty percent of the charge on underserved communities each year. Staff recommends that the budget for 2022 include an annual estimate of spending by program, and an annual forecast of spending on underserved communities."[4] In the November 2021 Staff Report and again in the Staff Report for a special public meeting on December 7,

[1] Oregon Laws 2021, Chapter 95, Section 2, https://www.oregonlegislature.gov/bills_laws/lawsstatutes/2021orlaw0095.pdf
[2] OPUC Docket No. ADV 1325, https://apps.puc.state.or.us/edockets/docket.asp?DocketID=23058
[3] OPUC Staff Report dated Nov. 24, 2021, UM 2165, https://edocs.puc.state.or.us/efdocs/HAU/um2165hau1331.pdf
[4] Ibid

2021 (incorporated into OPUC Order No. 21-484 on December 27),[5] Staff anticipated that utilities would file a Monthly Meter Charge Budget for the 2022 calendar year in advance of filing their next TE Plans, and that "After 2022, Staff expects to see the annual HB 2165 Monthly Meter Charge Budget filed as part of [the TE Plan's] portfolio TE Budget, including the minimum of 50 percent of the meter charge to support TE in underserved communities."[6] Draft revisions developed in rulemaking AR 654 regarding the Oregon Administrative Rules (OAR) Chapter 860, Division 87 TE rules reflect this expectation for TE Plans and TE Budgets submitted beginning in 2023.

2.3 Underserved Communities

HB 2165 requires utilities make reasonable efforts to spend no less than 50% of the Monthly Meter Charge to support transportation electrification in underserved communities.[7] The legislation specifies that approaches may include, but are not limited to, programs, infrastructure, rebates, or expenses.

HB 2165 lists the following groups as underserved communities:

- Residents of rental or multifamily housing
- Communities of color
- Communities experiencing lower incomes
- Tribal communities
- Rural communities
- Frontier communities
- Coastal communities, and
- Other communities adversely harmed by environmental and health hazards

OPUC Staff, after consultation with utilities and stakeholders, provided detail regarding their expectations of how utilities will identify underserved communities.

PGE is conducting a mapping project to better understand the presence of these underserved communities within our service territory, and target programs to meet their needs. This includes demographic and geospatial analysis that will produce a map of areas identified as underserved. This work will help PGE understand what proportion of customers, and what proportion of geographic area within our service territory, fall under the HB 2165 definition of underserved. For example, PGE data suggests that over 936,000 people in our service territory live in premises that are renter-occupied; this is 49% of the 1,900,000 total population of our service territory.

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[5] OPUC Order No. 21-484, incorporating Staff Report dated Dec. 7, 2021, https://apps.puc.state.or.us/orders/2021ords/21-484.pdf

[6] OPUC Order No. 21-484, Appendix A, page 21 incorporating Staff Report dated Dec. 7, 2021, https://apps.puc.state.or.us/orders/2021ords/21-484.pdf

[7] Oregon HB 2165, Section 2(6), https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB2165/Enrolled

2.4 PGE's 2019 TE Plan

PGE's most recent Transportation Electrification Plan was filed with the OPUC on September 30, 2019 in Docket No. UM 2033.[8] PGE's 2019 TE Plan was accepted by the Commission on February 13, 2020.[9] HB 2165 requires the Monthly Meter Charge to be spent on elements contained within a utility's accepted TE Plan, and therefore PGE's 2022 Monthly Meter Charge Budget refers to the 2019 TE Plan.

[8] PGE Transportation Electrification Plan (2019), https://apps.puc.state.or.us/edockets/edocs.asp?FileType=HAA&FileName=haa102039.pdf&DocketID=22127&numSequence=1

[9] OPUC Order 20-047, https://apps.puc.state.or.us/orders/2020ords/20-047.pdf

Chapter 3 Stakeholder Engagement

PGE's 2022 Monthly Meter Charge Budget reflects feedback gathered from stakeholders in multiple venues over multiple years. Examples of this include surveys and focus groups conducted in 2018, 2019 and 2022 on the needs of PGE customers generally—and underserved communities in particular—with respect to TE. Other examples of stakeholder engagement include discussions within regulatory dockets such as the UM 1826 Clean Fuels Program proceedings; the UM 2165 TE Investment Framework discussions; and the AR 654 Division 87 rulemaking proceedings. PGE also integrated customer and market insights, and feedback from partners who support our existing programs, in formulating this budget.

On April 28, 2022, PGE hosted a stakeholder meeting to discuss the company's draft proposal for allocation of the 2022 Monthly Meter Charge. PGE subsequently held follow-up meetings with several stakeholders and received written responses from several others. PGE's plans for the 2022 Monthly Meter Charge were also touched on during the company's stakeholder meeting on June 14, 2022, to discuss its upcoming TE Plan.

Specific stakeholder feedback to PGE's draft proposal, and the company's responses, are found in the Appendix.

Chapter 4 Monthly Meter Charge Budget

PGE has prepared the following budget for deployment of the Monthly Meter Charge revenue that will be collected in 2022. While PGE is striving to deploy the 2022 funds as expeditiously as possible, the need to create future certainty for our customers means this portfolio of activities is forecasted to stretch from 2022 through 2024, with the 2022 funds expended across calendar years. Budgets for revenues collected under the Monthly Meter Charge in subsequent years will be reflected in PGE's future TE Plans.

Table 1 - 2022 Monthly Meter Charge Budget

Activity	Total Budget	Incentives	Program Costs	O&M on Investments	Evaluation	Marketing	Admin	Pct. to Underserved Communities
Enhancements to Existing Program Areas	**52%**							**34%**
Business EV Charging Rebates	$ 1,950,000	$1,500,000	$ 200,000		$ 150,000	$ 100,000		30%
Residential Panel Upgrade Rebates	$ 607,500	$ 583,500	$ 4,000			$ 20,000		50%
Trade Ally Network	$ 130,000		$ 130,000					25%
New Program Areas	**29%**							**93%**
Affordable Housing EV-Ready Funding	$ 1,000,000	$ 900,000	$ 100,000					100%
Municipal Charging Collaborations Pilot	$ 500,000		$ 150,000	$ 213,000	$ 12,000	$125,000		75%
Education and Outreach	**11%**							**80%**
Ride and Drives	$ 50,000		$ 50,000					Not specified
Web Education	$ 60,000		$ 35,000			$ 25,000		Not specified
Statewide Education Campaign	$ 445,000		$ 445,000					100%
TE Plan Enablement	**9%**							**36%**
Community Engagement	$ 150,000		$ 150,000					100%
Product Development	$ 132,500						$ 132,500	10%
Project Management	$ 175,000						$ 175,000	Not specified
Total	**$5,200,000**	**$2,983,500**	**$1,264,000**	**$ 213,000**	**$162,000**	**$270,000**	**$ 425,000**	**$ 2,904,500**
Percentage of Total	100%	57%	24%	4%	3%	5%	8%	56%

As identified above, PGE estimates that 56% of this portfolio will help meet the needs of underserved communities in the form of rebates, incentives, outreach campaigns, engagement reimbursement, and program operations for these activities.

While some items are not designed to exclusively meet the needs of underserved communities (those listed as "not specified" in Table 1, above), PGE estimates that at least 49% of our customers are members of underserved communities as defined by HB 2165 and expects that at least some of these customers will be supported by these programs. Therefore, while 56% of the budget is targeted to meet the needs of underserved communities, this budgeted amount is an estimated floor, not a ceiling.

Chapter 5 Program Area Detail

5.1 Enhancements to Existing Program Areas

PGE's most straightforward and expedient way of deploying Monthly Meter Charge funds is to support existing program areas. PGE would use the Monthly Meter Charge funding to add new complementary programs to enhance the value proposition for customers enrolling in these programs and introduce more equity. We propose allocating 52% of the 2022 Monthly Meter Charge to adding complementary programs to enhance our Business EV Charging Rebates and Residential Smart Charging Pilots.[10]

5.1.1 Business EV Charging Rebates

5.1.1.1 Background

PGE's Business EV Charging Rebates Pilot, Schedule 52, launched on December 18, 2020.[11] This pilot is available to all non-residential customers who install qualified Level 2 EVSE at their premises. The pilot launched with a standard rebate of $500 per port (increased to $1,000 per port in July 2021) and an income-qualified multifamily rebate of $2,300 per port. In exchange for the rebate, customers agree to keep the EVSE operational and on a PGE cost-of-service rate for 10 years and release the charger data to PGE for analysis and reporting purposes.

The pilot launched with three software providers, and 10 EVSE hardware models, on the qualified product list. PGE continues to add products to the list as vendors are engaged and data sharing agreements are signed; as of June 1, 2022 the list contains four software providers and 18 EVSE hardware models.

The budget for this program was set at $1 million of nominal O&M in an amended stipulation among parties in Docket UM 1811, approved by the OPUC in Order No. 19-385 on November 7, 2019.[12] In its application to increase the rebate amount in mid-2021, PGE identified that the budget was projected to support the issuance of 588 rebates, and last through the end of 2023.[13]

As of June 1, 2022, halfway through the pilot's projected timeline, PGE had issued 58 rebates through this program, or slightly less than 10% of the total number of projected rebates. No rebates have been issued to income-qualified multifamily residences.

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[10] Due to the complexities of adding budget to current programs, PGE will instead propose new complementary programs that are intended to dovetail seamlessly with the existing Pilots.

[11] PGE Schedule 52, https://assets.ctfassets.net/416ywc1laqmd/4kQwkhxFjQiA3zg1zFbWGI/70b713aa73ffaae5f60127e93d64a0de/Sched_052.pdf

[12] OPUC Order No. 19-385, https://apps.puc.state.or.us/orders/2019ords/19-385.pdf

[13] PGE Advice 21-15, Schedule 52, https://edocs.puc.state.or.us/efdocs/UAA/uaa115634.pdf

5.1.1.2 Key Challenges

The program team has worked with customers, PGE's key customer management and technical sales teams, and EVSE vendors to better understand the slower-than-anticipated adoption within this program. The challenges are summarized here:

Current EVSE rebate is insufficient to incentivize installation of EVSE

A stated goal of the pilot is to ensure adequate charging infrastructure is available to meet customers' charging needs. However, feedback indicates that the $1,000-$2,300 rebate is not enough to encourage non-residential customers to install EV chargers. Customers remain responsible for the costs of the make-ready infrastructure and the charger's installation, which can comprise 60-80% of a project's cost. For comparison, National Grid offers rebates of $1,700-$3,400 per L2 port for EVSE *in addition to* rebates of $5,000-$6,000 per L2 port for electrical service and installation.[14]

Current EVSE rebate is insufficient to incentivize installation of networked EVSE

A second goal of the pilot is to create a network of demand-side resources in the form of networked chargers which are ready to participate in future flexible load programs. However, customers and sales teams note that the $1,000-$2,300 incentive is not enough to cover the cost difference between a networked charger (as required by the qualified product list) and a non-networked charger. PGE finds that cost-conscious customers elect to install non-networked chargers, which begin at around $600 per port; have no software fees; and have lower maintenance costs. For comparison, Pacific Gas and Electric Company offers EVSE rebates of $11,500 per Level 2 port to customers for whom they intend to cover the all-in cost of the EVSE, its installation, and maintenance and software fees for 8 years[15] (note that PG&E's rebate is *in addition to* the cost of the make-ready infrastructure, which the company covers).

Income qualification requirement for multifamily is logistically challenging

A substantive proportion of the queries PGE receives about this program are around the income qualification for multifamily sites, which was intended to offer a higher incentive for underserved communities. Unless a multifamily site is designated as Section 8 housing (PGE has not been contacted by any such sites), the income qualification process requires that sites provide rent rolls for the

[14] National Grid, *Electric Transportation and Charging Programs.* Retrieved from https://www.nationalgridus.com/MA-Business/Energy-Saving-Programs/Electric-Vehicle-Charging-Station-Program

[15] PG&E, *EV Charge Schools*. Retrieved from https://www.pge.com/pge_global/common/pdfs/small-medium-business/energy-alternatives/clean-vehicles/ev-charge-network/electric-vehicle-charging/EVChargeSchools_FactSheet.pdf

entire multifamily complex. This invasive and laborious process, with an uncertain outcome, has proven to be a deterrent to likely-to-qualify multifamily sites from applying for the higher rebate.

Limited qualified product list

PGE has been contacted by customers who were interested in specific charging equipment that was not on the qualified product list at the time of the inquiry. As noted, PGE has responded to this feedback by opening the qualification process for additional hardware and software options, and this has helped encourage additional adoption. PGE plans to continue qualifying hardware and software packages, and is now using this qualification process to qualify equipment for all PGE programs.

Lack of rebates for DC fast charging (DCFC) sites

Currently, the pilot provides rebates for L2 chargers only. Throughout the pilot's operation, PGE has had inquiries from both fleet and non-fleet customers regarding a corollary rebate for the installation of DCFC equipment.

5.1.1.3 Changes to Current Pilot

PGE proposes to drop the income qualification requirement in the existing Business EV Charging Rebates Pilot for the multifamily rebates, and instead offer the higher $2,300 rebate to all multifamily sites located within underserved communities (geographically defined). This both removes a disincentive to participation on the part of the multifamily site and better aligns the program with HB 2165's definition of underserved communities. PGE forecasts that this change will reduce the total number of L2 EVSE rebates to 500 within the existing Business EV Charging Rebates Pilot budget.

Following OPUC approval of this 2022 Monthly Meter Charge Budget, PGE would propose updates to Schedule 52, reflecting this program change.

5.1.1.4 Proposed Complementary Program

PGE proposes allocating nearly $2 million of the 2022 Monthly Meter Charge to enhance our suite of business EV charging rebates, a sum that would nearly triple the portfolio budget for such rebates. Funds would be allocated to a new complementary program that would provide the following enhancements:

Introduction of rebates for make-ready infrastructure and EVSE installation

PGE proposes rebates to cover make-ready infrastructure and EVSE installation. These make-ready rebates would cover 80% of the customer's make-ready and installation costs, up to a maximum of $6,000 per L2 port and $36,000 per site. This rebate structure removes additional barriers to adoption, yet still incentivizes the customer to be cost-conscious in their site design, as they

remain responsible for a portion of the installation costs. It is also designed to be most generous for small sites (6 or fewer ports); these sites are unlikely to be good candidates for other current or envisioned PGE programs that that might offer utility-owned make-ready infrastructure, like Fleet Partner. Customers who enroll in such programs would not be eligible for the make-ready rebates, but would remain eligible for the existing EVSE rebates, as they are today.

Introduction of DCFC rebates

PGE proposes DCFC rebates of $350 per kW (e.g., a $10,500 rebate for a 30 kW DCFC; a $17,500 rebate for a 50 kW DCFC), up to a maximum of $25,000 per DCFC port. DCFC rebates would have the same requirements as L2 EVSE rebates do today; the customer would select from a qualified product list, keep the charger operational and on a PGE cost-of-service rate for 10 years, and authorize the software provided to release charging session data to PGE. DCFC would not be eligible for make-ready rebates unless the customer paired DCFC with L2 chargers.

PGE forecasts that this new complementary program 250 L2 make-readies and 20 DCFC ports by the end of 2023.

PGE will file a new program application with these program elements. Upon approval of that program, PGE will endeavor to make the entire suite of business rebates (existing pilot and proposed complementary program) look and feel seamless to the customer.

2019 TE Plan reference: Pg. 118, Table 45 – Summary of TE Activity Outlook; references business charging rebates

5.1.2 Residential Panel Upgrade Rebates

5.1.2.1 Background

The Residential EV Smart Charging Pilot, Schedule 8, launched on October 23, 2020.[16] This pilot is available to up to 5,000 eligible residential customers. These enrolled customers remain on Schedule 7, PGE's residential rate, for their energy costs. The pilot rewards residential customers for shifting or reducing their home EV charging at peak times. Enrolled customers are eligible for a $25 seasonal reward by participating in flexible load events. During these events, PGE sends a signal to automatically curtail customers' charging--either through their qualified charger or through cloud-based

[16] PGE Schedule 8, https://assets.ctfassets.net/416ywc1laqmd/2CrkwfPNPaDoM1tiVX68k0/fdffab386864f93ab7362909186fceaa/Sched_008.pdf

vehicle telematics. This pilot is intended to explore how PGE can use flexible load from residential EV charging.

Customers have three ways to enroll in the pilot:

- Customers receive a $500 rebate ($1,000 for income-eligible customers) for the purchase and installation of a qualified Level 2 charger at their home;
- Customers receive a $50 rebate if they purchased and installed a qualifying Level 2 charger prior to it being added to the Qualified Products List; or
- Customers that drive a qualified vehicle but have a non-qualified EV charger can enroll through vehicle telematics and receive a $50 rebate.

Once the customer is accepted into the Pilot, they are enrolled and participate in Smart Charge events that curtails the Level 2 charger during event windows. Once the event ends, the customer's car resumes charging.

Following a successful trial of the approach through PGE's Smart Grid Test Bed, PGE added vehicle telematics to the Residential EV Smart Charging Pilot. Here, Smart Charge event signals are sent directly to the vehicle rather than to the charger. The vehicle telematics option of this pilot is available to PGE customers with a qualified vehicle (currently, the telematics vendor is only integrated with Tesla vehicles), but have an EV charger that is not eligible for the PGE residential charger rebate. This program option is called evPulse.

As of June 2022, there are over 1,100 customers enrolled in the pilot. On June 1, 2022, PGE filed Advice No. 22-09 to remove the Schedule 8 cap on participants in the vehicle telematics option and to extend the end date of the pilot from February 22, 2024 to December 31, 2024.

After the first Demand Response season ended on March 31, 2022, PGE found that over 80% of evPulse customers participated in the Smart Charge events and about 70% of other customers participated. By the end of the Pilot, PGE anticipates the pilot will have 2.25 MW of enrolled capacity.

5.1.2.2 Key Challenges

As expected, PGE has encountered successes and challenges in the deployment of this pilot; these will be summarized in upcoming program evaluation filings. However, some of the challenges PGE and customers have faced lend themselves to near-term solutions; PGE proposes to use funding from the 2022 Monthly Meter Charge to support these solutions and explore their efficacy in removing remaining barriers to adoption.

Some customers need a home electric panel upgrade

To install L2 chargers and participate in Smart Charging, many customers require a panel upgrade, which can cost $1,000-$5,000 or more. There are

several factors that may cause a panel upgrade requirement, including an older home with insufficient electric capacity. With customers already investing significant money towards the purchase of the EV itself, the additional costs of a panel upgrade can be significant enough to convince customers to not install a Level 2 charger.

5.1.2.3 Changes to Current Pilot

PGE proposes to change the income qualification threshold for this pilot from 80% of area median income to 120% of state median income, to align it with Staff's guidance on HB 2165 and PGE's planned portfolio of other TE programs. This change would bring the forecasted number of income-qualified customers from approximately 130 customers to approximately 430 customers, out of a forecasted 5,000 total customers participating by the end of 2024, within the existing budget.

Following OPUC approval of this 2022 Monthly Meter Charge budget, PGE would propose updates to Schedule 8, reflecting this program change.

5.1.2.4 Proposed Complementary Program

PGE proposes allocating roughly $600,000 of the 2022 Monthly Meter Charge to a new complementary program that would enhance the Residential Smart Charging Pilot to address some of the challenges cited above.

PGE proposes to offer home panel upgrade rebates for customers enrolling in Residential Smart Charging. PGE conducted customer focus groups to assess the level of the rebate, and proposes a standard panel upgrade rebate of up to $1,000 for all customers, and up to a $5,000 income-qualified panel upgrade rebate for low-to-moderate level income-qualified customers. Application for these rebates would take place seamlessly within the Residential Smart Charging enrollment process, and customers not enrolling in Residential Smart Charging would not be eligible for panel upgrade rebates. Customers would submit paperwork from an electrician verifying their current electric panel lacks capacity to handle the additional electric load from an L2 charger. They would then be required to upgrade their panel to at least 200 amps to future-proof for the higher-powered L2 charger, and the potential for additional home electrification in the future.

In a customer conversation forum with 17 PGE customers that are EV drivers or EV intenders, PGE learned that the idea of home electric panel upgrade rebates was supported by a majority of customers who took part in the forum. A majority of these survey participants also support a two-tiered rebate structure wherein low-to-moderate income earners receive a higher rebate. In the same customer forum, many of these customers said they believe a rebate for electric panel upgrades was necessary to make purchasing an EV or a Level 2 charger more feasible.

PGE is optimistic that this new complementary program will continue to lower customer barriers to adoption and allow more income-qualified customers to participate in Residential Smart Charging.

PGE will file a new program application for these rebates.

2019 TE Plan reference: Pg. 118, Table 45 – Summary of TE Activity Outlook; references home smart charging rebates

5.1.3 Trade Ally Network

To facilitate smoother and simpler EVSE installation for both residential and commercial chargers, PGE is developing a trade ally network that can provide electrician quotes and, ideally, instant rebates directly to customers. A trade ally network will allow customers to save time and effort by gathering qualified electrician information from PGE's website. It would also allow PGE to explore an instant rebate approach. In such an approach, a customer's electrician would discount the installation by the amount of the rebate, so that the customer would not need to pay up front; the electrician would then claim and receive the rebate directly from PGE. This process would avoid the need for the customer to front the amount of the rebate; it would also streamline program enrollment and reduce the amount of paperwork that the customer is obligated to provide.

PGE has learned from our experience with operating an HVAC trade ally network that these networks are valuable to customers and ease the complexity of home device installations.

In a small customer forum with EV drivers and those intending to purchase an EV, the idea of a PGE-sponsored trade ally network was popular. A majority of focus group participants said it would be helpful if PGE assisted with the search for an electrician to install the EVSE. Overwhelmingly, these customers said they would appreciate this service and they would be grateful for a place to start.

PGE is still assessing the costs and benefits of developing an in-house solution or outsourcing a trade ally network; the budget for this project is anticipated to cover either one of these options.

2019 TE Plan reference: Pg. 30, Table 10 – Market Barriers that PGE can Address; references programs to reduce the cost to procure and install charging equipment

5.2 New Program Areas

PGE also plans to use the 2022 Monthly Meter Charge to launch into two new program areas, both focused on meeting the needs of underserved communities. We propose allocating 29% of the Monthly Meter Charge toward these programs. The goal of these programs is to support EV readiness and EV charger deployment in communities where charging options are limited today.

5.2.1 Affordable Housing EV-Ready Funding

Also in 2021, the Oregon Legislature enacted HB 2180, which requires that all new multifamily buildings (5 units or more) and new commercial buildings be made EV-ready. EV readiness is defined by the installation of service capacity (or space to provide additional future service capacity) as well as installed conduit for Level 2 EVSE at 20% of the building's parking stalls. The bill allows local governments to require a greater percentage of parking spots be made EV ready, and the Oregon Land Conservation and Development Commission adopted a temporary rule in June 2022 that requires cities within metropolitan areas to do so.

PGE recognizes the importance of making electric vehicle ownership attainable to underserved communities, including residents of multifamily housing. PGE is also aware of the lengthy process for developing and constructing affordable housing, and the array of funding sources that developers must rely on. Stakeholders alerted PGE to the prospect of affordable housing projects in the pipeline today that may have secured fixed funding, but have not yet submitted permit applications, and will face the need to meet the new building code by the time they do so. This may add costs to the project, and impact timelines of deploying this critical community resource.

To assist these projects, PGE will make $1 million of the 2022 Monthly Meter Charge funds available to affordable housing developers to meet the state and local jurisdictional requirements of HB 2180. PGE proposes funding of $2,500 per parking stall that the developer makes EV-ready, up to 50% of the project's parking stalls. Funding will be first-come, first-served. Presuming an administrative allocation, this program will provide funding for approximately 360 EV-ready parking stalls at affordable housing developments in PGE's service area. We plan to issue an RFP to solicit interest from community-based organizations and/or community development financial institutions to manage the program funds and distribution.

2019 TE Plan reference: Pg. 118, Table 45 – Summary of TE Activity Outlook; references make-ready for multifamily

5.2.2 Municipal Charging Collaborations Pilot

Municipal Charging Collaborations is a platform approach wherein PGE will propose to design, own, operate and maintain EV chargers in the right-of-way (ROW; such as on utility poles or curbside) and on public property such as schools, parks, libraries, city halls, etc. PGE will collaborate with public entities—such as municipalities, regional governments, school districts, counties, and state government—to deploy this infrastructure.

This program concept stemmed through discussions with multiple municipalities and lessons learned from PGE pilots, such as PGE's pole charging demonstration, Electric Avenue network, and Oregon Electric Byways network. In our conversations with these key stakeholders, we have found that the ROW and public property is an ideal way for

PGE to collaborate with municipalities on transportation electrification and better meet the anticipated charging needs of underserved communities, including those who rent, live in multifamily dwellings, or lack off-street parking at home. This program approach helps streamline site host agreements, keeps costs low by leveraging existing assets, and helps municipalities meet their climate action goals. It makes public charging available at equitable prices by using PGE's Schedule 50 rates.[17]

In this pilot version of this approach, PGE will install 60 utility pole-mounted Level 2 chargers throughout its service territory. PGE will collaborate with public entities and communities in its service territory to identify the best locations to install chargers. PGE's priority is to install chargers within underserved communities, as these communities are least served by the existing market and would benefit the most from the switch to electric transportation. PGE aims to have all chargers installed under this pilot by end of 2023.

PGE is filing a TE program application for this pilot concurrently with this 2022 Monthly Meter Charge Budget filing. Pending approval of that application by the OPUC, capital for the pilot will be allocated through PGE's 2022 capital budget. Funding from the 2022 Monthly Meter Charge, meanwhile, will support standards development, outreach and education work, data analytics and startup O&M costs as PGE gets this program off the ground.

The company also plans to propose a scaled version of this program in its 2022 TE Plan.

2019 TE Plan reference: Pg. 118, Table 45 – Summary of TE Activity Outlook; references distribution pole charging

5.3 Education and Outreach

PGE also proposes to use 11% of the 2022 Monthly Meter Charge to support emerging education and outreach needs. These projects also receive funds from PGE's Clean Fuels Plan.

5.3.1 Ride and Drives

PGE is pleased to once again partner with Electric Car Insider to host a two-day Ride and Drive called the Electric Car Guest Drive (ECGD). This will be PGE's first Ride and Drive event since the beginning of the Covid-19 pandemic.

The ECGD is a EV Ride and Drive that allows prospective EV buyers to learn everything they need to know about operating and acquiring (purchasing or leasing) an electric vehicle. The ECGD is designed specifically for utilities for attendance by their key accounts, commercial accounts, and residential customers. This year the ECGD will

[17] PGE Schedule 50, https://assets.ctfassets.net/416ywc1laqmd/2hNjMQ203TEcCmZttyKCTt/17ad2b74fce656f4ccd4b516c18e3862/Sched_050.pdf

also feature an EVSE exhibit for customer education. The exhibit will showcase six residential and six commercial grade EVSEs, with accompanying original poster exhibits and literature.

We have partnered with Portland Community College to host the ECGD at the PCC Sylvania campus this year. The event will be August 12th and 13th, with the first day focused on commercial customers, and the second day designated for residential customers. We will focus on outreach to likely EV adopters or intenders, as well as businesses and municipalities exploring vehicle electrification. Monthly Meter Charge funds will provide funding for the event day focused on commercial customers, since Clean Fuels Program funds are limited to activities that support the needs of residential customers.

2019 TE Plan reference: Pg. 96, 2.1.1.2.1 Ride & Drive Events

5.3.2 Web Education

PGE proposes to allocate a portion of the 2022 Monthly Meter Charge to support web education about TE for customers. This funding will support the ongoing maintenance of PGE's online EV Costs and Savings Calculator for residential customers, which launched in June 2022. It will also support the costs of a contract-based content strategist and copywriter to further develop PGE's suite of web pages addressing TE topics and targeted at various customer segments such as residential EV considerers, intenders, and drivers; non-residential customers interested in installing charging; and customers looking to electrify their fleets. This work will help PGE identify each customer's web journey, select the right calls to action, anticipate the questions the customer may have, and provide the right amount of information at exactly the right time. This type of content work and education is beyond the scope of PGE's typical web work, as TE and EV topics are complex and numerous. It is also beyond the scope of the statewide education campaign discussed below, as some of this web content is targeted at the information needs of non-residential customers. Thoughtful, meaningful web education resources must be a pillar of how PGE shows up for its customers with respect to TE.

2019 TE Plan reference: Pg. 27, Table 8 – Customer Considerations Regarding EV Adoption (LDV); references influencing how customer learn and communicate about EV fueling

5.3.3 Statewide Education Campaign

PGE will continue working with PacifiCorp to build Oregon' Electric, a brand-neutral statewide transportation electrification campaign kicked off as part of the 2020 Clean Fuels Program portfolio. The goals of the campaign are to engage and educate all Oregonians on transportation electrification and accelerate transportation electrification in the state.

2022 Clean Fuels Program funds cover the creation of a statewide website that is meant to be a central hub for transportation electrification in Oregon. Additional funds from the 2022 Monthly Meter Charge will cover purchased media, earned media outreach, narrative development, storytelling, creative assets, social media management, and dealership engagement. The campaign will continue to deliver the following messages:

- Electric transportation is available today for everyone (in multi-modal applications that meet a variety of transportation needs including rural, urban, on-road, off-road, micromobility and public transit applications)
- Transportation electrification is a critical piece of meeting the state's environmental and climate goals

The 2021 campaign developed messaging focused on reaching underserved communities, including non-English speaking, rural, and BIPOC communities. It highlights real stories, quotes, and members of the community, sharing their reasons for choosing electric.

Where possible, we will continue to work with industry, dealerships, advocacy groups, state agencies and other utilities to add to the overall budget and extend the reach of the campaign.

2019 TE Plan reference: Pg. 30, Table 10 – Market Barriers that PGE can Address; references customer education on how to simplify the concept of electricity as a fuel

5.4 TE Plan Enablement

Lastly, PGE proposes to allocate 9% of the 2022 Monthly Meter Charge toward enablement for our 2022 TE Plan. The scope and scale of 2022 TE planning far outstrips that of the company's 2019 TE Plan. PGE has identified several areas where additional resources will allow us to better engage with communities, respond to stakeholder feedback in the product development process, and deliver a high-quality, timely TE Plan as we move toward 2023.

5.4.1 Community Engagement

PGE views the significant federal, state, utility, and private market investment that will need to be made in transportation electrification over the coming years as an opportunity to help heal the historic inequities in our transportation system. To that end, PGE is working toward deeper community engagement on TE, with the dual objectives of (1) enhancing the equity commitments within our forthcoming TE Plan; and (2) forging lasting connections with community groups to meet their transportation electrification needs and shape the design and deployment of our TE investments going forward.

To improve and keep current PGE's understanding of the needs of our customers in underserved communities related to transportation electrification, we contracted with

Espousal Strategies, LLC, a consultant with expertise in collaborative problem solving, equity & inclusion, and community engagement, to conduct a needs assessment focusing on community-based organizations and direct outreach to members of underserved communities. Espousal Strategies has conducted this research through focus groups and surveys and will deliver a final assessment in August 2022, providing valuable insight and establishing a starting point to plan for more comprehensive engagement with communities related to transportation electrification going forward. This approach complements PGE's existing engagement with these communities through the Distribution System Plan Community Partners workshop series and our stakeholder engagement workshops for our TE Plan, where we are presenting its TE roadmap and soliciting feedback.

PGE also plans to put some of this designated 2022 Monthly Meter Charge funding toward longer-term engagement and capacity building with underserved communities on TE, looking to the equitable mobility and community engagement principles outlined in the City of Portland's Pricing Options for Equitable Mobility[18] work and the Greenlining Institute's Mobility Equity Framework[19] for guidance. Should the full sum of the designated funds not be required for engagement work, PGE will strive to put the balance of funds toward program ideas generated within these conversations.

2019 TE Plan reference: Pg. 153, Table 62 – Summary of Key Customer Engagements related to TE; references engagement with underserved communities and ongoing evaluation of needs

5.4.2 Product Development

Given the anticipated changes to the Division 87 rules that govern TE plans and programs in 2022, PGE is in the midst of developing a comprehensive TE portfolio and plan for filing later this year. Because this new TE Plan framework includes filing program applications as appendices to the TE Plan, this undertaking requires a significant amount of near-term product development work, including rates development; retail charging strategy and customer experience; micromobility strategy, operational readiness for infrastructure measures; and expansion of the portfolio more broadly.

2019 TE Plan reference: Pg. 118, Table 45 – Summary of TE Activity Outlook; references network expansion (charge rate, number of chargers per site, additional sites)

[18] City of Portland, Oregon, *Transportation Planning – Pricing Options for Equitable Mobility*, https://www.portland.gov/transportation/planning/pricing-options-equitable-mobility-poem

[19] Creger, Hana; Espino, Joel; Sanchez, Alvaro S. (March 2018) *Environmental Equity – Mobility Equity Framework*. The Greenlining Institute. https://greenlining.org/wp-content/uploads/2019/01/MobilityEquityFramework_8.5x11_v_GLI_Print_Endnotes-march-2018.pdf

5.4.3 Project Management

Similarly, delivery of an on-time TE Plan requires significant project management work and expertise. PGE has contracted with a project manager to facilitate the development of the TE Plan, including planning stakeholder engagement sessions, coordinating across the group of product developers who are working on pieces of the TE Plan, and coordinating within PGE with other planning processes and documents such as the Distribution System Plan, Integrated Resource Plan, and Clean Energy Plan.

2019 TE Plan reference: Pg. 13, Figure 2 – Relationship between PGE planning and operations initiatives; discusses the integration and development of the TE Plan.

Chapter 6 Conclusion

PGE acknowledges the somewhat discordant timing of this 2022 Monthly Meter Charge budget, which is filed as we move toward a new framework for utility investments in TE, but in advance of PGE filing a comprehensive TE Plan and sharing its broader portfolio more formally. We are pleased nonetheless at the opportunity that this Monthly Meter Charge Budget presents: to infuse funding to strengthen existing program areas; to launch new programs that will allow us to move quickly in the near term; and to build capacity and momentum so that we can have immediate impact in 2023-25 when the programs in our next TE Plan are launched. We have endeavored to provide context for this Monthly Meter Charge Budget through the stakeholder workshops about our larger TE roadmap and portfolio. We appreciate the feedback we have received regarding our Monthly Meter Charge Budget so far, and we look forward to continuing the conversations with stakeholders as we move toward budget approval.

Chapter 7 Appendix: Stakeholder Feedback

Table 2 - Record of Stakeholder Feedback

Stakeholder Feedback	PGE Response
New Program Areas	
Interest in seeing funds spent on charging at multifamily dwellings, and for multifamily charging stalls to be shared by all residents, not allocated to specific individuals.	PGE is pleased to propose several programs designed to meet the needs of multifamily residents in this budget (Business EV Charging Rebates, Affordable Housing EV-Ready Funding, and Municipal Charging Collaborations Pilot are all aimed, at least in part, toward meeting the needs of multifamily residents). Where appropriate, PGE will encourage multifamily applicants to make chargers available to all residents.
Where there are no plans for affordable housing to have parking, can PGE work with the developer for street pole charging?	Within the Municipal Charging Collaborations Pilot, PGE will examine the possibility of partnering with municipalities with high rates of affordable housing that lacks dedicated parking and installing pole or curbside chargers in those neighborhoods.
Interest in better understanding PGE's approach to payment methods for customer-owned and utility-owned public chargers.	PGE is looking to regulatory processes in California, Washington and nationally to understand the payments landscape for public EV charging. We will look to strike a balance between cost and equitable access, and note that our approach may diverge for PGE-owned charging versus customer-owned charging, or Level 2 versus DCFC.

Stakeholder Feedback	PGE Response
New Program Areas (continued)	
Emphasis on the importance of ensuring charging affordability for EV drivers. Desire for more detail on Schedule 50, and to understand whether it includes providing lower rates to PGE customers that are in PGE's Income-Qualified Bill Discount program.	PGE's Schedule 50 rate is designed to offer cost parity with home charging. The pricing structure is a $5 flat fee for a DCFC charge; a $3 flat fee for a L2 charge; or a $25 per month subscription. On top of each of these fees, a $0.19 per kWh surcharge applies during peak hours (3-8 pm). PGE is examining Schedule 50 to ensure that meets the needs of our portfolio going forward. PGE's priorities with Schedule 50 will remain that it is flexible, equitable, grid-friendly, and simple to understand. At present, due to software integration limitations, PGE does not have the ability to offer lower retail EV charging rates to customers enrolled in our Income-Qualified Bill Discount program. However, we are working to understand what it would take to offer something like this in the future.
It is important to include thinking about access to chargers in a transportation planning way and ensure that the safe and accessible infrastructure is included in the buildout of a community charging hub so that it is accessible by public transit, has safe crossings, sidewalks etc.	PGE will consider this comment as we establish charger locations chargers in our Municipal Charging Collaborations Pilot.
The neighborhood chargers could also be designed such that so that community members are engaged from the beginning in determining their needs and shaping the project so that it is best suited for their community. Recommend that PGE sets requirements for municipalities to engage with selected neighborhoods from the beginning of the process.	PGE is leveraging GIS mapping to identify utility poles within underserved communities that are strong candidates for charger placement. We will also work directly with municipalities to conduct thorough outreach within the communities where chargers are proposed.

Stakeholder Feedback	PGE Response
Education and Outreach	
All education and outreach programs should have a component specifically geared to underserved communities.	The Oregoin' Electric statewide campaign is currently dedicated to outreach to underserved communities. PGE has also worked to integrate low-income customer needs into its Total Cost of Ownership tool as available (highlighting used EV dealers, the availability of low-cost public charging, and income-qualified state rebates).
General Feedback	
Why is the Monthly Meter Charge all spent as operations expenditures rather than capital expenditures?	PGE's 2022 Monthly Meter Charge budget is focused primarily on enhancing existing programs that are comprised of O&M funding. This enables us to most expeditiously move funds to meet customer needs, leveraging existing program operational flows without standing up new complex programs in advance of the acceptance of our forthcoming TE Plan. It's important to remember O&M includes rebates and other incentives that directly benefit customers and support TE, and in that sense support customer-side capital investment as well as utility program administration and outreach/education efforts.
We encourage PGE to consider using Monthly Meter Charge as capital to bring overall costs to customers of PGE's TE Plan portfolio down.	PGE is working to limit the price impact to customers of its TE activities and sees opportunity to reduce the near-term rate impact of its broader TE portfolio by using existing funding sources (including the Monthly Meter Charge) to offset O&M costs, which are recovered from ratepayers over the short term, as opposed to offsetting capital costs which are recovered at a lower rate over longer stretches of time. That said, PGE will more fully assess the ratepayer impact of using the Monthly Meter Charge to offset capital versus O&M after 2022 in its upcoming TE Plan filing, and provide this information to the Commission and stakeholders.
How is PGE integrating demand side management across the Monthly Meter Charge programs?	PGE's Residential Smart Charging program is a direct load control pilot, and chargers enabled through the Municipal Charging Collaborations Pilot will be placed on Schedule 50, which has an aggressive on-peak surcharge to encourage off-peak charging.

UM 2165
PGE's Proposed Monthly Meter Charge Budget for 2022 and Municipal Charging Collaboration Pilot Proposal

Attachment B
Municipal Charging Collaboration Pilot Proposal

Municipal Charging Collaboration Pilot

Portland General Electric
July 2022

Contents

Charts, Tables, Figures

Chapter 1 Introduction

[Note: The Municipal Charging Collaboration Pilot program application is being filed concurrently with PGE's 2022 Monthly Meter Charge Budget filing in order to provide additional context for proposed expenditures within that budget in support of this program. See pages 18 and 19 of the budget filing for further explanation. Pending approval of the Monthly Meter Charge Budget and the Municipal Charging Collaboration Pilot program application, capital for the pilot will be allocated through PGE's 2022 capital budget. Funding from the 2022 Monthly Meter Charge will support standards development, outreach and education, data analytics, and startup O&M costs for program launch. The company plans to propose a scaled version of this program in its 2022 TE plan, to be filed later this year.]

The State of Oregon has a goal of growing zero emission vehicle (ZEV) adoption to 250,000 registered vehicles by 2025.[1] Portland General Electric Company (PGE) forecasts that approximately 115,000 of those light duty vehicles (LDV) will be registered in PGE's service territory (up from 31,000 in 2021). Electric Vehicle (EV) drivers who own their homes and have access to off-street parking are likely to do the majority of their vehicle charging at home overnight. However, many potential EV drivers—such as those who rent their home or who live in multi-unit dwellings (MUD)—lack dedicated off-street parking at their current residence and cite this as a main concern in getting an EV.

In a recent PGE survey, 44% of MUD renters and 32% of single-family housing renters responded that they were more likely to consider an EV or Plug-in Hybrid Electric Vehicle (PHEV) if they had access to a utility-pole mounted charger in their neighborhood. Further, 55% of MFH residents who only had street parking and 48% of single-family housing dwellers, also only with access to street parking, mentioned they also would be much more likely to consider an EV if they had access to utility-pole mounted charging infrastructure in their neighborhoods.[2]

Forty-nine percent of residents in PGE's service territory currently live in renter-occupied dwellings. Black, Indigenous and People of Color (BIPOC) communities and/or traditionally underserved communities disproportionately rent their residence.[3] Oregon Department of Transportation's (ODOT) Transportation Electrification Infrastructure Needs Analysis (TEINA) mentions that overnight home charging is the highest importance for widespread and equitable adoption of EVs,

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[1] Oregon Revised Statutes, Volume 7, Title 26, Chapter 283 (ORS 283.401), https://oregon.public.law/statutes/ors_283.401

[2] PGE Transportation Electrification Pilots (UM1811), 2021 Evaluation Findings, Opinion Dynamics

[3] *State of Housing Report (2020)*, Portland Housing Bureau, https://www.portland.gov/phb/state-of-housing-report

and that a four-fold increase is needed in total number of charging ports over 2020 levels by 2025 to support urban LDV requirements, especially in areas of high populations of rentals and MUDs.[4] ODOT's TEINA study states that vehicle registrations are 26% lower in underserved communities, and these customers currently have no way to charge an electric vehicle near their home and therefore are unlikely to consider acquiring one.[5] This means these customers are unable to enjoy the benefits of owning an EV, including but not limited to decreased maintenance costs, better air quality, and the convenience and cost savings of electric fuel.

With the accelerating transition to electric fuel and to ensure that all residents enjoy the benefits of driving an EV, customers must have reliable access to public charging infrastructure close to their residence, in locations where their vehicles are likely to dwell for long periods of time, at a price that is comparable to what they might pay to charge at home. To help address these needs, PGE proposes installing Level 2 chargers in the right-of-way (ROW) near multi-family housing, in residential neighborhoods with high levels of renters, and where homes lack driveways/garages. This strategy was first tested with PGE's Right Of Way (ROW) charger demonstration in southeast Portland, where chargers (or electric vehicle supply equipment (EVSE)) were mounted onto PGE-owned utility-poles under Schedule 16. A white paper on this demonstration was filed in November 2020 as part of advice no. 20-32.

Based on utilization data[6] and public scores, the demonstration has proven popular and well utilized.[7] In collaboration with municipalities and communities, PGE developed a concept that builds on pole mounted charging: the new Municipal Charging Pilot would allow for chargers to be built, owned, and operated by PGE on any public property maintained by the municipality or public entity. For the purpose of this application, this would be pole-mounted L2 chargers. In this application, PGE proposes to pilot 60 utility pole-mounted chargers by end of Q2 of 2023, in preparation for deploying this new technology at scale in our 2022 TE Plan Filing.

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[4] *TEINA Final Report,* Oregon Department Of Transportation, https://www.oregon.gov/odot/Programs/Pages/TEINA.aspx
[5] Supra note 3.
[6] Pole-Mounted EV Charger White Paper, PGE, November 2020
[7] Table 1

Chapter 2 Pilot Description

2.1 Pilot Objectives

This Pilot aims to:

- Increase charging adequacy for PGE's customers
- Provide affordable and equitable pricing at EVSE so customers who rely on public chargers are not paying a premium over what they would pay if they were able to charge at home
- Help underserved communities gain access to EVSE near their residence by targeting areas of high density of rentals, multi-family housing, low-income families, BIPOC communities and other traditionally underserved communities as defined by HB 2165
- Help municipalities reach their climate action and sustainability goals

2.2 Pilot Elements

From the perspective of a municipality or public entity, key features of the Pilot include:

- Close collaboration to determine the best locations to help underserved communities
- PGE ownership and maintenance of EVSE, as well as make-ready equipment
- Affordable and equitable pricing for all customers
- Well-placed public charging infrastructure

For this Pilot, PGE will deliver electricity directly to the EV driver per Schedule 50.[8]

As key collaborators in this Pilot, PGE will ask municipalities or public entities to commit to:

- Allowing use of a parking space located in the ROW to be served by EVSE Expediting permits (if necessary) for different applications of installations
- Providing signage and parking enforcement
- Outreach to communities regarding upcoming EVSE installations
- Notification of vandalism, questions, or concerns they receive around EVSE installed under this Pilot
- Any other mutually agreed upon terms between PGE and municipality or public entity

[8] PGE Schedule 50, https://assets.ctfassets.net/416ywc1laqmd/2hNjMQ203TEcCmZttyKCTt/17ad2b74fce656f4ccd4b516c18e3862/Sched_050.pdf

PGE will commit to:

Site Selection. PGE will work with internal and external stakeholders to select locations that help enable charging for underserved communities.

Design and Engineering. PGE will design and engineer sites to ensure conformance with all applicable codes, regulations, and standards.

Permitting and Installation. PGE will permit and install all chargers to meet all applicable codes, regulations, and standards set forth by the authority having jurisdiction.

Operations and Maintenance. PGE will operate and maintain all make-ready and charging infrastructure for the duration of the Pilot. Operations and maintenance tasks include:

- Remote monitoring
- Testing and inspection
- Routine Maintenance
- Emergency Repair

PGE will track the uptime and first pass charge rate of each individual charger. PGE will target 98% uptime and 93% first pass charge rate. PGE will consider replacement of individual units if they are found to consistently underperform on these metrics and have built replacement units into the budget.

2.3 Pilot Timeline

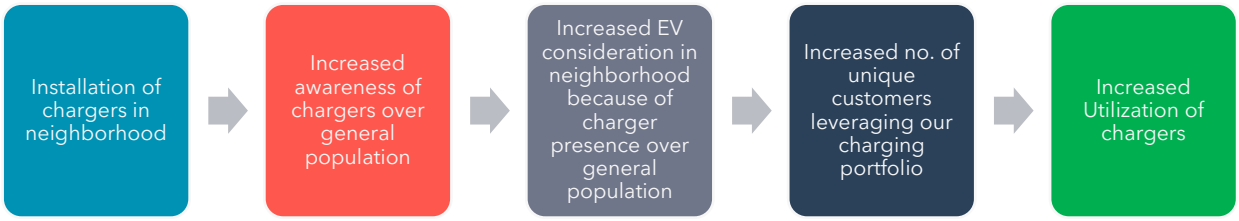
If approved, PGE plans to launch the Pilot in Q3 of 2022, EVSE installations beginning in Q4 of 2022. PGE will reassess public infrastructure needs and conduct surveys on an annual basis of municipalities and of neighborhoods where chargers have been deployed. PGE plans to make this available to all municipalities and managers of public property (e.g. county governments, regional governments, school districts, state agencies, etc.).

2.4 Expected Outcomes

PGE expects this Pilot to support Transportation Electrification (TE) in our service territory, especially amongst underserved communities.

Our logic model and outcomes are shown in Figure 1 below:

Figure 1 - Logic Model



Additional outcomes expected are:

- Reduction in greenhouse gas emissions and local criteria air pollutant emissions in PGE's service territory and beyond
- Beneficial collaboration between PGE and municipalities to help meet climate goals
- Streamlined data collection from EVSE to better understand customer charging

2.5 Market Baseline Assumptions

As of 2021, PGE serves 31,000 Light Duty BEVs/PHEVs in its service territory. This number is forecasted to grow to roughly 115,000 by 2025. Currently there are 1,703 L2 public ports and 544 public DCFC ports serving those vehicles in PGE's service territory. Using AdopDER forecasting, PGE estimates that 5,220 public L2 ports and 2,228 public DCFC will be needed by 2025 to serve the increased EV count by 2025.

PGE recognizes that to increase adoption of EVs, charging equipment must be installed where the vehicles park today and park for long periods of time. PGE plans to focus on underserved communities with this pilot, including areas that may be less likely to be served by private investment. Installing charging in these areas of high density of MUDs and rentals, could help underserved communities gain access to the myriad of benefits owning an EV would offer them.

In Table 1 below, we can see how our demonstration pole chargers are utilized in comparison to chargers located at PGE's Electric Avenues. PGE notes that not all pole chargers it installs will have this high of utilization due to installations in areas that might not have as high EV adoption rates.

Table 1- PGE Public L2 Usage Data (Q1 2022)

Station Name	Usage (kWh)
Pole Charger 29th Ave.	5,241
Pole Charger 35th Ave.	4,893
Electric Avenue - World Trade Center	4,050
Electric Avenue - Hillsboro	69
Electric Avenue - Eastport Plaza	1,791

Electric Avenue - Wilsonville	221
Electric Avenue - Beaverton	1,211

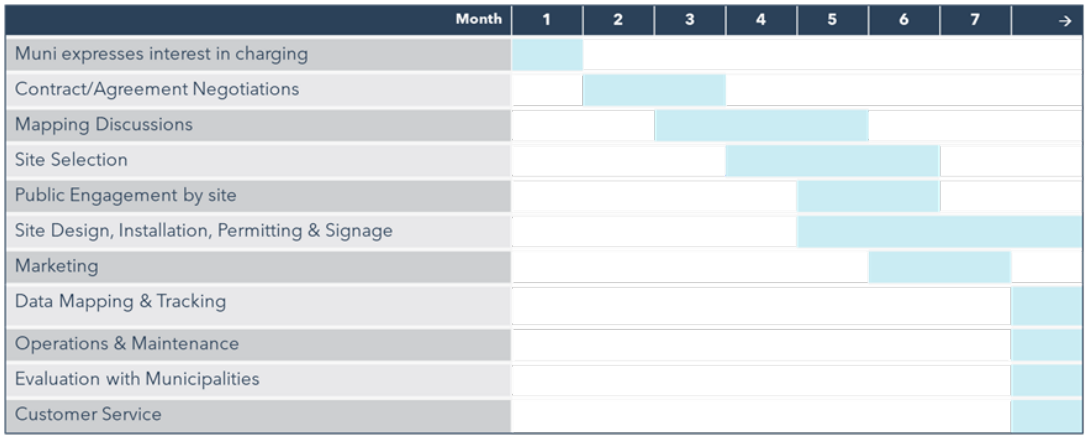
2.6 Performance Milestones

Milestones are as follows:

- Municipality expresses interest in collaboration
- PGE begin negotiations with a municipality
- Mapping commences and sites selected
- Neighborhoods engaged on Pilot
- PGE installs chargers on utility poles

Figure 2 shows the process flow for each municipality:

Figure 2 – Municipal Charging Product Process Flow



2.7 Eligibility, Adoption, and Incentives

Municipalities and public entities that manage or own public property are eligible to collaborate with PGE on the deployment of this product. This includes cities, counties, regional government, school districts, state agencies and regional agencies.

Any municipality or public entity in PGE's territory is encouraged to express interest in collaborating, and in this pilot phase PGE targets working with a minimum of 3 municipalities or public entities. PGE will use geospatial analysis to highlight historically underserved communities most in need of access to EV charging infrastructure. Public property managed by the municipality will be overlaid on this map along with data on PGE's infrastructure and assets, and PGE's team will evaluate key areas to determine the best locations to place EVSE.

2.8 Market Barriers and Solutions

PGE found that current EV owners have a higher level of home ownership, with 94% owning their own home compared to 67% of all respondents.[9] Only 3% of current EV owners surveyed lived in multifamily housing compared to 22% of all respondents.[10] These data points indicate an issue with equitable access for non-homeowners, as 63% of vehicle purchasers surveyed reported the ability to charge at home as a major barrier.[11]

Additionally, we found that current EV owners reported higher household incomes, with 59% of reporting household income of over $100k compared to 25% of all respondents.[12]

ODOT's TEINA study identifies the following as additional barriers to light-duty vehicle charging in Table 2 below:

[9] Figure 31. Respondent Housing Tenure, by Survey Wave and Segment. Page 49 UM1938 Evaluation of PGE's Transportation Electrification Pilot, filed May 19th, 2022.
[10] Figure 32. Respondent Housing Type, by Survey Wave and Segment. Page 50 UM1938 Evaluation of PGE's Transportation Electrification Pilot, filed May 19th, 2022.
[11] Figure 14. Prompted Barriers Mentioned to Purchasing or Leasing an EV/PHEV, by Survey Wave and Segment, by Survey Wave and Segment. Page 38 UM1938 Evaluation of PGE's Transportation Electrification Pilot, filed May 19th, 2022.
[12] Figure 34. Respondent Household Income, by Survey Wave and Segment. Page 51 UM1938 Evaluation of PGE's Transportation Electrification Pilot, filed May 19th, 2022.

Table 2 –Barriers to Light Duty Vehicle Charging (TEINA) and how PGE can address

Barrier	How PGE Addresses the Barrier
Cost of electric power upgrades and charging port installation	Costs for electric upgrades for public charging are covered by the utility.
Inconsistent fees and/or rates for public charging	Chargers installed under this Pilot will be subject to PGE's Schedule 50 pricing. Schedule 50 is designed to be easy to understand, equitable and grid friendly
Limited multi-unit dwelling and workplace charging	Siting work will take proximity to MUD's and Rentals in mind as PGE works with municipalities and communities to select the best locations to install chargers
Limited EV focused government planning, programs, policies, and resources	PGE can leverage its expertise in charger ownership and management, and use existing assets to keep complexity low for municipal collaborators
Limited government planning or guidance for EV infrastructure needs	Local governments do not necessarily have the resources to assess and plan EV infrastructure needs. PGE is doing this work already, and can share results with municipalities.
Limited venues that can support power, safety, and amenities	Utilizing utility poles to place chargers means that charging infrastructure can be put in areas where they benefit customers the most, at/or near their homes.
Demand charges and low utilization that reduce cost effectiveness	PGE's existing pole charging demonstration project demonstrates that neighborhood pole chargers have higher utilization rates than centrally-located public charging.
The following are identified as further barriers for Disadvantaged Communities:	
Need for Direct Current Fast Charge (DCFC) charging in areas of high transportation network company use; driver's homes	Future phases of this pilot will take into consideration the placement of utility-owned DCFC on public property
Economics of installing and operating charging ports (upfront, demand charge costs)	PGE will own, install, maintain and operate these chargers, leveraging existing assets to keep costs low and capturing economies of scale.

The above barriers result in charging deserts, especially in Black and Brown communities.[13] Lack of infrastructure was also cited as a reason for 45% of customers surveyed for not considering an EV/PHEV in PGE's own study.[14] This Pilot seeks to address this barrier by focusing deployment in underserved communities; accessing

[13] Englund, Will (December 2021) *Without access to charging stations, Black and Hispanic communities may be left behind in the era of electric vehicles.* Washington Post. http://www.washingtonpost.com/business/2021/12/09/charging-deserts-evs/

[14] Ibid

public property for charger placement; providing a skilled owner/operator in the form of the local utility; and helping local governments plan for and deploy chargers in their community.

PGE will collaborate with municipalities to help engage selected neighborhoods in the future, gaining community input in determining their needs and helping shape the project so that it is best suited for their communities.

2.9 Pilot Implementation Barriers and Solutions

Initial barriers to implementation are establishing and resourcing internal processes to manage the EVSE installation. To address this, PGE is able to leverage many of the processes, procedures, standards, job aids and more from other utility programs and pilots already in operation. The following table lays out the Pilot implementation barriers and solutions:

Table 3 – Program Implementation Barriers and Solutions

Barriers	Solution
Supply Chain Delays	Global supply chain issues have impacted the market and delivery times for EVSE as well as more basic utility equipment such as meters. The program team has worked closely with supply chain and vendors to determine alternatives and multiple sources for equipment to be supplied for this pilot.
Identifying Municipal Collaborators	Multiple municipalities have approached PGE about installing utility-pole mounted chargers in their municipalities, following the success of the original pole charging demonstration. PGE anticipates a robust pipeline of municipal collaborators for this pilot phase of the program.
Siting	PGE has worked closely with its utility asset management and data sciences team to determine criteria for poles that are good candidates for siting EVSE. These criteria include factors such as age, height, location within the right of way, presence of risers, etc. Candidate poles have also been cross-referenced with maps of underserved communities.
Design Requirements	Equipment installed on a PGE utility pole must undergo strict internal standards for safety, integrity and other factors. In addition, PGE follows National Electric Code (NEC) and National Electric Safety Code (NESC) guidance for devices installed on its utility poles. PGE has worked internally to develop design standards for pole chargers that accommodate these guidelines and requirements.
Resourcing	In order to accommodate efficient installation of EVSE, PGE plans to leverage many of the internal processes, procedures, standards, job aids and more from other programs and pilots already in operation.

2.10 Utility Role

Utilities play a central and critical role in advancing transportation electrification. PGE owns infrastructure in public rights of way that can serve as the location for public charging or home charging for those without off-street parking. Utilities have the responsibility to serve all customers, not just the most profitable use cases, and we apply an equity lens to all of our customer programs, including our TE programs.

The Oregon Legislature has found that "widespread transportation electrification requires that electric companies increase access to the use of electricity as a transportation fuel in low- and moderate-income communities".[15] Utilities are well positioned to provide public charging based on where communities will need it and where customers park their vehicles overnight today, rather than where usage will be maximized. Private charging business models may depend on high utilization and therefore may leave behind underserved communities where EV adoption will be slower and later. Currently, no other entity can install charging in the right of way on utility poles, giving PGE the best opportunity to install affordable and equitable charging where it is needed for customers in underserved communities. EV adoption in these communities is still dependent on charging availability as a key part of the decision to drive electric. To choose charger locations, PGE will use in-house mapping of underserved communities and work with municipalities and their communities, who are also the customers we serve.

PGE's role in the Pilot includes supporting municipalities in:

- Planning for public charging infrastructure
- Public outreach to neighborhoods identified through mapping
- Designing, owning, maintaining EVSE in service to local climate and transportation electrification goals
- Other technical services

While utilities play a central role in transportation electrification, the breadth and speed required for the EV transition requires this collaborative approach.

PGE does not expect the Pilot of 60 chargers to trigger any significant distribution system upgrades. However, part of our data gathering work will monitor transformers and substations to identify any needed upgrades early.

2.11 Ownership Structure

PGE will own the make-ready infrastructure and the EVSE. PGE will procure, install, operate, and maintain any EVSE installed under this Pilot.

In discussions with municipalities, many have emphasized the importance of public charging to help their community's transition to electric vehicles. In further discussions, PGE has learned, while many municipalities want to provide public charging for their constituents, they do not believe they are well-suited to own and operate the equipment and look for PGE to help fill this role.

This approach, especially with ROW charging, allows PGE to take the burden off municipalities who may not have the resources, experience nor desire to own and operate EVSE. This also allows PGE to offer a consistent user experience with

[15] Oregon Revised Statutes 757.357.

equitable, affordable and easy-to-understand pricing across its entire service area for all local and visiting customers, and to take advantage of existing assets in the public right of way. PGE owning, operating and maintaining EVSE in the ROW in collaboration with cities helps ensure that chargers are located strategically and thoughtfully to provide an equitable transition to electric vehicles.

2.12 EVSE and Network Management System Requirements

PGE proposes to qualify up to two Level 2 EVSE models that meet the following technical requirements:

- Equipped with a Society of Automotive Engineers (SAE) J-1772 standard connector that is compatible with all road-legal EVs for sale in the United States, including plug-in hybrids (PHEVs) and battery electric vehicles (BEVs)
- Open Charge Point Protocol (OCPP) v1.6 compliant (and remotely upgradable), enabling the flexibility to operate with a variety of network service providers.
- Internal metering accuracy within +/- 1.0%
- Capable of responding to utility demand response signals through OpenADR 2.0b (or equivalent)
- Capable of pole-mounting on an electric utility pole in accordance with National Electric Code (NEC) and National Electric Safety Code (NESC), while remaining compliant with the Americans with Disabilities Act (ADA)
- Minimum rating of NEMA 3R (or equivalent), to ensure functionality in adverse weather conditions
- Listed by a nationally recognized test lab to the requirements of UL 2251 and UL 2594
- Ability for EV driver to start charging session without charging network user account (via mobile app, mobile payment, credit card, Plug&Charge, or other means)

At present, only one EVSE model available on the market meets these qualifications. PGE remains open to qualifying up to one more EVSE model for this Pilot, if additional market options become available. PGE will offer the municipality a choice in the selection of the type of EVSE to be installed, if and when such a choice is available.

Chapter 3 Pilot Coordination

3.1 Stakeholder Engagement

PGE has been in close contact with municipalities in the process of developing this product and appreciates their support for ROW charging. Multiple municipalities have expressed interest in ROW charging, especially around utility pole mounted charging, as an essential element of a timely and equitable way transition to electric vehicles.

In addition to developing this concept with municipalities, PGE presented on its municipal charging collaboration concept at the April 28, 2022 workshop on PGE's TE Plan. PGE has also spoken directly with a range of stakeholders about a PGE collaboration with municipalities to deploy public charging.

Stakeholders have raised questions about the appropriate program scope and how this Pilot fits into PGE's broader TE Plan. PGE has taken these concerns into consideration, carefully scoping out a smaller Pilot that enables PGE to quicky capture additional learnings required for a scaled-up program to be proposed in the 2022 Transportation Electrification Plan.

3.2 Coordination with Related State Programs

This Pilot is consistent with state goals supporting transportation electrification:

- ORS 757.537 states that "Widespread transportation electrification requires that electric companies increase access to the use of electricity as a transportation fuel in low and moderate income communities;" and provides for utilities to invest in "infrastructure measures to support transportation electrification."
- Executive Order 20-04 (2020), which encourages electric utilities 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."
- The Oregon Clean Fuels Program will provide clean fuels credits for EV charging at chargers installed under this Pilot, which PGE will claim and monetize to help offset Operations & Maintenance (O&M) costs.

3.3 Coordination with Other Market Actors

PGE has coordinated closely with a variety of market actors, including network service providers, EVSE manufacturers, and other utilities to better understand the most promising technology and strategies used in ROW charging. This has helped inform PGE's requirements for EVSE technology and program designs. Currently, there is

only one manufacturer that creates a unit that meets is capable of pole-mounting on an electric utility pole in accordance with National Electric Code (NEC) and National Electric Safety Code (NESC), while remaining compliant with the Americans with Disabilities Act (ADA)

Both Los Angeles Department of Water and Power (LADWP) and National Grid have piloted EVSE on their utility-owned poles in the right of way. LADWP has deployed over 400 of these chargers on light poles throughout the city of Los Angeles and National Grid has deployed 16 on utility poles in Melrose, Massachusetts. Both utilities were able to share engineering standards with PGE that helped inform how PGE would mount chargers on our own utility poles. PGE has also been part of the World Research Institute (WRI)'s working group on pole mounted charging, where we shared program design and strategies with other utilities looking to start something similar.

Since 2020, PGE has operated a pole charging demonstration project on two utility poles in the SE Clinton neighborhood in Portland, OR. PGE has been in discussion with two well established network service providers and one start-up to discuss how we can improve the technology and user experience for this demonstration.

Chapter 4 Strategy Alignment

4.1 Current TE Market

PGE has approximately 30,000 EVs in its service area, representing roughly three out of every five EVs in the state of Oregon[16]. These EVs are served by approximately 2,347 public charging ports operated by seven public charging networks, in addition to home charging[17].

Customers charging on these public chargers pay an average $0.39 per kWh, compared to $0.12 per kWh if these vehicles were to be charged on a residential home charger on PGE's Schedule 7 tariff[18]. In contrast, PGE's Schedule 50 provides Level 2 charging at a flat fee of $3.00 per session[19]. In 2021, the average Level 2 charging session on Schedule 50 dispensed approximately 8.7 kWh, resulting in an approximate average energy cost of $0.22 per kWh.

4.2 Market Barriers

In Section 1.2 of its 2019 TE Plan, PGE discusses market barriers to EV adoption. For the residential segment, PGE identified seven market barriers:

- First cost (including vehicle cost and charging infrastructure cost)
- Model availability
- Model functionality
- Awareness and knowledge
- Total cost of ownership
- Fueling infrastructure availability
- Equitable access to all segments

This Pilot is best designed to best help with the last four barriers as well as partially address the first barrier of charging infrastructure costs.

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[16] *Oregon Electric Vehicle Dashboard*, Oregon Department of Energy, https://www.oregon.gov/energy/Data-and-Reports/Pages/Oregon-Electric-Vehicle-Dashboard.aspx
[17] Get Charging, Go Electric Oregon, https://goelectric.oregon.gov
[18] PGE Schedule 7, https://assets.ctfassets.net/416ywc1laqmd/6RgTNk5RU1bldl0LdPpIY9/798481eb9f1171e4ec8ce5ce648bc47f/Sched_007.pdf
[19] PGE Schedule 50, https://assets.ctfassets.net/416ywc1laqmd/2hNjMQ203TEcCmZttyKCTt/17ad2b74fce656f4ccd4b516c18e3862/Sched_050.pdf

4.3 Opportunity for Grid Impact

PGE will ensure the charging infrastructure in this Pilot provides grid benefits through the peak time pricing signals in Schedule 50. These pricing signals have proven to be effective in PGE's Electric Avenue Network, showing a decrease in utilization during peak hours (3 – 8 PM on weekdays) at all Electric Avenue locations[20].

Additionally, PGE requires all EVSE to be demand-response ready to support future demand response programs.

[20] PGE Transportation Electrification Pilots (UM1811), 2021 Evaluation Findings, Opinion Dynamics

Chapter 5 Pilot Costs

PGE proposes beginning work immediately on a small number of utility pole mounted chargers and scale appropriately. Customer use of these pole chargers would be billed under Schedule 50.

Leveraging the company's expertise in installing, owning and operating public EV charging (pole charging demonstration project; Electric Avenue; Oregon Electric Byways), PGE has developed robust estimates for the cost to install, own, operate and maintain the charging stations proposed under this pilot. PGE estimates the total costs for an immediate deployment of an additional 60 chargers will cost roughly $1.23M. This represents $0.71M in capital costs and $0.5M in O&M costs covered by the 2022 HB 2165 Monthly Meter Charge.

Table 4 - Application Budget ($)

	2022	2023	2022-2023
Capex	709,970	-	709,970
Program Delivery	150,000	-	150,000
Administration	-		
O&M on Investments	20,000	213,000	233,000
Evaluation	-	12,000	12,000
Marketing	-	125,000	125,000
Other	-	-	-
Total	909,970	370,000	1,229,970

PGE proposes to recover the cost of this pilot through subsequent general rate cases.

Chapter 6 Pilot Benefits

6.1.1 Current and Future EV Driver Benfits

- Lower total cost of ownership for underserved populations
- Decreased range anxiety with increased number of public charging infrastructure
- Equitable and affordable pricing for PGE customers

6.1.2 Community / Municipality Benefits

- Support municipalities on reaching climate action goals

6.1.3 Grid & Utility Benefits

- Revenue from increased energy sales
- Learnings about the costs and benefits of utility ownership and make ready infrastructure
- Additional learnings around customer public charging habits

6.1.4 Societal Benefits

- Increased access to and use of public charging infrastructure
- Increased awareness of TE
- Reduction in greenhouse gas emissions
- Improved air quality
- Access to chargers by historically marginalized and underserved communities

PGE forecasts that the pilot will deliver a 0.29 benefits-cost ratio using the Ratepayer Impact Measure (RIM) test. Due to the locations of the pilot chargers installed in primarily underserved communities, the chargers will most likely see a slower ramp up of usage. This in turn leads to a lower benefits-cost ratio, which is a strictly a cash benefits measure, and is not indicative of all the benefits it will provide the communities where chargers are installed and to the learnings it will provide. PGE staff will work to minimize costs, periodically compare actual costs to budgeted costs, and track the cost effectiveness of the pilot.

Chapter 7 Pilot Evaluation

PGE will design the Pilot evaluation to measure effectiveness in meeting its objectives, identify areas for continuous improvement, and assess energy impacts on PGE's system. The team will focus on building a baseline and then measuring the following:

- Awareness of chargers
- EV consideration in neighborhood
- Unique customers leveraging chargers
- Utilization of chargers

High-level evaluation learning objectives include:

7.1.1 Customer/Market Learnings

- Identify additional customer barriers to TE
- Identify the attractiveness of the Pilot to the municipalities, the ease of working with PGE, the general happiness with the Pilot
- Track driver satisfaction levels with the chargers
- Track impact on underserved communities

7.1.2 Pilot Implementation Learnings

- Document success and challenges of installing pole mounted chargers
- Assess the cost and benefits of utility ownership of EVSE in the right of way
- Identify internal and external implementation success and challenges as well as areas for process improvement

7.1.3 Empirical Data

Develop an empirical data set to:

- Forecast distribution system impacts and infrastructure needs
- Inform future EV rates
- More effectively site future EV charging infrastructure

7.2 Evaluation Methods

7.2.1 Customer/Market Learnings

PGE with its evaluation vendor will conduct Pilot participant in-depth interviews with the different municipalities that take part in the Pilot. Interviews will happen initially after EVSE has launched and will be followed up by surveys annually.

PGE will also survey customers in the areas of the chargers about their awareness of, use of, and satisfaction with the chargers, as well as any impacts to EV consideration within these communities.

7.2.2 Pilot Implmentation Learnings

PGE's team will conduct regular data analytics of the EVSE deployed in this Pilot. Data will include both survey data as well as data from the chargers and meters themselves.

PGE will also conduct interviews of the different municipalities that participated in this Pilot. PGE will look to learn more about process improvement.

7.2.3 Data Evaluation

PGE's data analytics team will constantly monitor session-level charging data in a format so PGE can track charger utilization over time. PGE will also analyze meter data from the chargers to assess load impacts and impacts to PGE's entire system.

7.3 Reporting Timeline

Reports for this Pilot will be conducted on an annual basis.

7.4 Evaluation Costs

The cost of evaluation for the first year is roughly $12,000.

Conclusion

PGE is excited to offer the Municipal Charging Collaboration Pilot that will prioritize installation of L2 chargers for underserved communities. Installing chargers where individuals park their vehicles now, mainly on-street parking, ensures that all communities are able to enjoy the myriad of benefits to owning an EV. PGE is committed to prioritizing equity and ensuring underserved communities' benefit from transportation electrification through this and other program offerings.

Conformance

Table 5 - Transportation Electrification Program Application Requirements Concordance

From OAR 860-087-0030:	Section
(a) A description of the program	Chapter 1 (Pg.4)
(b) Data used to support the description;	Chapter 1 (Pg.4)
(c) A description of program coordination;	Chapter 3 (Pg.14)
(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;	Chapter 4 (Pg.16)
(e) A description of program costs;	Chapter 5 (Pg.18)
(f) A description of how the electric company will evaluate the program; and	Chapter 7 (Pg.21)
(h) A description of how the program addresses the considerations of Oregon Laws 2016, 028, section 20(4)(a)-(f).	Table 6 (Pg.23)

Table 6 - Concordance with ORS 757.357

From Oregon Laws 2021, Chapter 95, Section 6	Section
(a) Are within the service territory of the electric company;	2.1
(b) Are prudent as determined by the commission;	2.2
(c) Are reasonably expected to be used and useful as determined by the commission;	2.4
(d) Are reasonably expected to enable the electric company to support the electric company's electrical system;	6.1.3
(e) 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	2.10
(f) Are reasonably expected to stimulate innovation, competition and customer choice in electric charging and related infrastructure and services.	4.2