



**Portland General Electric**  
121 SW Salmon Street · Portland, Ore. 97204

July 14, 2020

Public Utility Commission of Oregon  
Attn: Filing Center  
201 High Street, S.E.  
P.O. Box 1088  
Salem, OR 97308-1088

**RE: Advice No. 20-17, Schedule 300 Transportation Electrification (TE) Line Extension Allowance**

Portland General Electric Company (PGE) submits this filing to the Public Utility Commission of Oregon (Commission) 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 with a requested effective date of **January 1, 2021**.

Eighth Revision of Sheet No. 300-5  
Seventh Revision of Sheet No. 300-6  
Original Sheet No. 300-7  
Original Sheet No. 300-8  
Second Revision of Sheet No. C-5  
Third Revision of Sheet No. I-2  
Second Revision of Sheet No. I-3

This filing is aligned with and supporting PGE's and the State's commitment to transportation electrification (TE) by providing an incentive to electrify, and therefore, increasingly decarbonize residential load. PGE is committed to leading the transformation to a clean energy future for its customers and region by decarbonizing its energy supply, electrifying customer end uses, and delivering operational excellence. Because the transportation sector is Oregon's largest and fastest growing contributor to state-wide greenhouse gas emissions (GHGs), PGE is taking specific steps to ensure that clean electricity is the fuel source for Oregon's transportation system.

PGE is proposing changes to the line extension allowance (Schedule 300) to address the guidance and actions directed by Oregon Senate Bills 1547 and 1044. In addition, as most recently articulated in Executive Order No. 20-04,<sup>1</sup> Governor Kate Brown calls for substantial reductions in GHG (i.e. reduce GHG emissions to 45% below 1990

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<sup>1</sup> Brown, Kate. "Executive Order No. 20-04." Office of the Governor. State of Oregon. 10 Mar 2020, page 8. Retrieved from <https://drive.google.com/file/d/16isIO3GTqxVihqhhlcjGYH4Mrw3zNNXw/view>

levels by 2035) and there is urgency to act now as they “present a significant threat to Oregon’s public health, economy, safety, and environment” and “the transition from fossil fuels to cleaner energy resources can significantly reduce emissions and increase energy security and the resilience of Oregon communities in the face of climate change.”

As informed by its 2019 TE Plan (UM 2033), PGE identified three goals for 2025 to address critical barriers to accelerating transportation electrification and ensuring efficient integration into the grid:

1. **Charging Adequacy:** Facilitating the pathways for the installation of 5,000 new non-residential ports<sup>2</sup> by 2025;
2. **Fleet Interconnection:** Timely and affordable interconnection to PGE’s electric grid;
3. **Charging Optimization:** Develop grid-connected flexible load through a residential pilot.

Through the modification of this LEA policy, PGE seeks to accelerate the electrification of the transportation sector and efficiently integrate those loads into the system. Specifically:

- **Charging Adequacy:** The transportation line extension allowance (TLEA) will reduce the up-front cost and complexity barriers for business customers deploying electric vehicle (EV) charging infrastructure. Reduced friction in deploying EV charging infrastructure will result in the necessary rapid deployment of EV charging stations to ensure charging adequacy for residential EV drivers;
- **Fleet Interconnection:** Reduced friction in electrifying fleets will result in more electric fleets coming onto PGE’s system faster;
- **Charging Optimization:** Data and site planning will enable PGE to minimize grid integration costs and create long-term flexible loads that reduce the costs of integrating renewable resources.

The purpose of this filing is to add a new LEA section to PGE’s Rate Schedule 300 to provide allowances for electric vehicle charging at businesses and for fleet customers. As identified in the TE Plan, this modification will enable PGE to install electrical infrastructure beyond a customer’s meter to support TE (e.g. conduit, conductor, switch boards). In addition to Schedule 300 changes, PGE is also making updates to Rules C and I that both support the TLEA proposal in Schedule 300 and residential EV charging more generally.

PGE proposes to create two distinct TLEA offerings. The first category is business EV charging for customers who install EV charging equipment for personal and/or light duty vehicles. The associated LEA for business chargers is on a “per charging port” basis, limited to \$10,000 per port. The second new category is for fleet customers,

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<sup>2</sup> The cable and coupler used to transfer energy from the EVSE to the EV. The number of Ports is defined by the number of EVs that can be charged simultaneously by a given EVSE. There are commonly one or two Ports per EVSE.

using a formula based on the rate schedule margin rate multiplied by the forecast usage multiplied by 10, representing 10 years. The proposed changes also provide a pathway that links a customer's usage with their associated line extension allowable amount, to ensure that a customer's incremental revenue pays for their incremental cost over time.

PGE is fully invested in furthering Oregon's decarbonization goals, which align with our own decarbonization strategy to invest in clean, renewable energy and green technologies, while offering innovative product options to customers who want to go further and faster to decarbonize. Providing a new structure for PGE's LEA unites the decarbonization goals of customers, Oregon, and PGE.

The proposals made in this filing are only a few of the many pathways to TE and EV charging infrastructure adoption. As PGE integrates the TLEA mechanisms over time, it will closely monitor the adoption of TE more generally and expects those metrics to drive the adoption of a possible new rate class, rate design, and consequently, updates to the TLEA over time.

A courtesy redline version of Rules C and I are attached.

To satisfy the requirements of OAR 860-022-0025(2), PGE provides the following responses:

OAR 860-022-0025 requires that PGE submit a statement of the tariff schedule change, the number of customers affected, the change in revenue, and the grounds supporting the change. The number of customers affected is unknown and this doesn't increase or decrease customer prices.

Please direct any questions to me at (503) 464-8954 or at [Rob.Macfarlane@pgn.com](mailto:Rob.Macfarlane@pgn.com).

Please direct all formal correspondence and requests to the following email address [pge.opuc.filings@pgn.com](mailto:pge.opuc.filings@pgn.com)

Sincerely,

*\s\ Robert Macfarlane*

Robert Macfarlane  
Manager, Pricing & Tariffs

Enclosure(s)

**SCHEDULE 300 (Continued)**

**LINE EXTENSIONS (Rule I)**

Line Extension Allowance (Section 1)<sup>(1)</sup>

Residential Service All Electric <sup>(2)</sup>	\$2560.00 / dwelling unit
Residential Service Primary Other <sup>(3)</sup>	\$1590.00 / dwelling unit
Schedule 32	\$0.1473 / estimated annual kWh
Schedules 38 and 83	\$0.0780 / estimated annual kWh
Schedules 85 and 89 Secondary Voltage Service	\$0.0531 / estimated annual kWh
Schedules 85 and 89 Primary Voltage Service	\$0.0264 / estimated annual kWh
Schedules 15, 91 and 95 Outdoor Lighting	\$0.0850 / estimated annual kWh
Schedule 92 Traffic Signals	\$0.0531 / estimated annual kWh
Schedules 47 and 49	\$0.0336 / estimated annual kWh

Transportation Electrification (TE) Line Extension Allowance (Section 2)

Business Electric Vehicle (EV) Charging:

Business EV Charging Line Extension Allowance:

\$10,000 per qualified Level 2 electric vehicle supply equipment (EVSE) port<sup>(4)</sup> for EV charging to support mass market light-duty vehicles; or  
 \$10,000 per qualified Level 2 EVSE port for EV charging to support fleet vehicles.

Eligibility:

Eligible customers are Nonresidential Customers who own, lease, or manage the Premises where the EVSE(s) are installed. Eligible customers may apply at [PortlandGeneral.com](http://PortlandGeneral.com). Acceptance of the Business EV Charging Line Extension Allowance is not required for the installation of EV charging equipment, and new services that use the Business EV Charging Line Extension Allowance are not eligible for any other Line Extension Allowances. Eligible Schedules include: 32, 38, 83, 85, and 89.

- (1) Estimated annual kWh values used to calculate non-Residential Customer line extension allowances do not reflect onsite generation.
- (2) Residential All Electric Service is a dwelling where the primary heating is provided by an active electric HVAC-system. Common qualifying system include but are not limited to stand-alone ducted heat pumps, ducted heat pumps with auxiliary electric resistant heat strips, ductless mini-splits, packaged terminal air conditioners, electric resistant baseboards, as well as electric resistant in-wall heaters.
- (3) Residential Service Primary Other is a dwelling where the primary heating source is provided by an alternative HVAC-system that uses heating fuels such as natural gas, propane, oil, and biodiesel. Common qualifying HVAC-systems include but are not limited to stand-alone combustion furnaces, combustion furnaces with air conditioners, combustion furnaces with heat pumps, as well as gas boilers. Dwellings heated primarily by passive means also fall into this category.
- (4) Qualified Level 2 EVSE is the device installed for the purpose of transferring alternating current electricity at 208 or 240 volts between the premise electrical infrastructure and the EV. The list of Qualified EVSE is determined by PGE and listed on [PortlandGeneral.com](http://PortlandGeneral.com). Port is the cable and coupler used to transfer energy from the EVSE to the EV (there are commonly one or two Ports per EVSE).

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**SCHEDULE 300 (Continued)**

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LINE EXTENSIONS (Rule I) (Continued)

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Transportation Electrification (TE) Line Extension Allowance (Section 2)

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Conditions:

1. All EV charging load will be separately metered from any other load served at the Premises;
2. The meter must remain on a cost of service rate schedule for a minimum of 10 years; if the customer leaves a cost of service rate schedule prior to the end of the 10 year period, the customer will be subject to return a portion of the line extension allowance;
3. The project must include a minimum of 4 qualified Level 2 EVSE ports at the Premises;
4. Customer must designate PGE as the third-party aggregator of all Oregon Clean Fuel Credits associated with the charging ports from the service;
5. Customer is subject to signing a service agreement prior to service.

Fleet EV Charging:

Definitions:

Load forecast – The load associated with the customer’s electric vehicle (EV) charging demand.

Eligibility and calculation:

Eligible Customers are Nonresidential Customers who own, lease, or manage the Premises where the EVSE(s) are installed. EVSEs must be installed solely for the purpose of charging fleet electric vehicles owned by non-residential customers used for business purposes. Acceptance of the Fleet EV Charging Line Extension Allowance is not required for the installation of EV charging equipment and new services that use the Fleet EV Charging TLEA are not eligible for any other Line Extension Allowances. Eligible Schedules include: 32, 38, 83, 85, and 89.

The calculation of a fleet EV charging allowance will consist of the following:

Estimated annual energy use (kWh) multiplied by the applicable rate schedule margin rate (as identified in Section 1 above) multiplied by 10.

$$TE \text{ Line Extension Allowance} = (\text{Estimated annual kWh} \times \text{margin rate}) \times 10$$

Conditions:

1. All charging load will be separately metered from any other load served at the Premises;
2. The meter must remain on a cost of service rate schedule for a minimum of 10 years if the customer leaves a cost of service rate schedule prior to the end of the 10 year period, the customer will be subject to return a portion of the line extension allowance;
3. The project must include a minimum of 4 qualified EVSE ports at the Premises;
4. If the actual load is materially deficient (over the first 10 years of service), customer will be subject to return of a portion of the line extension allowance;
5. Customer is subject to signing a service agreement prior to service.

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**SCHEDULE 300 (Continued)**

LINE EXTENSIONS (Rule I) (Continued)

Trenching or Boring (Section 3)

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Trenching and backfilling associated with Service Installation except where General Rules and Regulations require actual cost.

In Residential Subdivisions:

Short-side service connection up to 30 feet	\$ 100.00
Otherwise:	
First 75 feet or less	\$ 219.00
Greater than 75 feet	\$ 3.80 /foot

Mainline trenching, boring and backfilling Estimated Actual Cost

Lighting Underground Service Areas<sup>(1)</sup>

Installation of conduit on a wood pole for lighting purposes \$ 75.00 per pole

Additional Services (Section 4)

(applies solely to Residential Subdivisions in Underground Service Areas)

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Service Guarantee	\$ 100.00
Wasted Trip Charge	\$ 100.00
Service Locate Charge	\$ 30.00
Long-Side Service Connection	\$ 120.00

(1) Applies only to 1-inch conduit without brackets.

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**SCHEDULE 300 (Concluded)**

LINE EXTENSIONS (Rule I) Continued

**SERVICE OF LIMITED DURATION (Rule L)**

Standard Temporary Service

Service Connection Required:

No permanent Customer obtained	\$795.00
Permanent Customer obtained	
Overhead Service	\$490.00
Underground Service	\$450.00

Existing service \$260.00

Enhanced Temporary Service

Fixed fee for 12-month period \$430.00

Temporary Area Lights Estimated Actual Cost<sup>(1)</sup>

**PGE TRAINING**

Educational and Energy Efficiency (EE) training available to:

PGE Business Customer	No Charge <sup>(2)</sup>
Non-PGE Business Customer	Estimated Actual Cost <sup>(3)</sup>

- (1) Based on install, removal and energy for pole and luminaire. Energy will be calculated based on burning hours used for Option C Schedule 91, 95
- (2) Charges may be assessed for training courses registered through the states of Oregon and Washington for electrical licensees.
- (3) Based on the cost associated with instructor, facility, food, and materials per attendee.

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4. **Conditions for Receiving Service**

A. **Generally**

This section describes the physical and technical requirements necessary to interconnect the Company's Facilities with the SP.

B. **Rights-of-Way and Access**

The Customer must provide, without cost to the Company, all rights-of-way and easements on the Premises to be served for the construction, maintenance, repair, replacement, or use of any or all Facilities necessary or convenient for the supply of Electricity. The Customer must grant the Company free and unrestricted access to the Premises at all reasonable times for purposes of reading meters, trimming trees, and inspecting, testing, repairing, removing or replacing any or all Facilities of the Company.

C. **Customer-Supplied Equipment**

1) **Customer's Responsibility**

The Customer will, at the Customer's risk and expense, furnish, install, inspect, and maintain in a safe condition all wiring, equipment, apparatus, protective devices, raceways, and enclosures which may be required beyond the SP for receiving and using Electricity. The Company may, at its option, install and maintain Facilities beyond the SP where deemed necessary to provide adequate Electricity Service. For service(s) that relate to transportation electrification (TE) and electric vehicle (EV), the Company may install and operate assets behind the Customer's meter in order to facilitate the expansion of TE across the Company's service territory.

2) **Conformance with Codes**

Before the Company will provide Electricity Service, the Customer's wiring and equipment must conform to applicable municipal, county and state requirements, and to accepted standards of the National Electrical Safety Code, the National Electric Code, the Company's published "Electric Service Requirements and Guidelines," and Company standards and practices. As required by law, the Customer or its agent must obtain a certificate of electrical inspection before the Company will provide Electricity Service.

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2) **Distribution Facilities**

Distribution Facilities are all structures and devices needed to distribute Electricity at any of the primary or secondary voltages listed in Rule C. Distribution Facilities will be installed in accordance with applicable laws, codes and Company standards and practices. It is the Applicant's responsibility to provide the Company with accurate information about their usage including but not limited to nameplate ratings of major installed electrical equipment and the intent to operate equipment above or below the nameplate rating. If damage results to Facilities owned by the Company through failure of the Applicant to fully disclose its load requirement to the Company, the repair and, or replacement costs of such Facilities will be paid by the Applicant.

3) **Line Extension**

A Line Extension is the installation of new, additional or upgraded Distribution Facilities from a point on the Company's existing distribution system that the Company has determined has adequate capacity for the Applicant's planned Electricity needs to the Applicant's Service Point (SP). Where the Applicant is requesting either a new individual residential service or an upgrade to an individual residential service, upgrades to existing primary lines will not be considered part of the Line Extension. Any new primary or secondary Line Extensions, transformer additions or replacements necessary to serve the new load will be considered part of the Line Extension. However, for residential Electric Vehicle charging-related line extensions, transformer additions or replacements necessary to serve that charging load will not be considered part of the Line Extension.

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4) **Line Extension Allowance**

The Line Extension Allowance is the portion of the Line Extension Cost that the Company will provide without charge to the Applicant. Estimated annual kWh values used to calculate non-Residential Customer line extension allowances do not reflect onsite generation.

5) **Line Extension Cost**

A Line Extension Cost is the Company's total estimated cost to install new, additional, or upgraded Distribution Facilities to serve the Applicant's planned Electricity needs. Line Extension Costs are intended to recover the expenses of labor, material and equipment involved in the design, installation and inspection of the Line Extension. Line Extension Costs include, but are not limited to, labor costs, the cost of transformers, primary and secondary voltage conductors, tree trimming or tree removal, Company indirect charges and the cost of any necessary rearrangement of existing Facilities. Where the Applicant is requesting either a new individual residential service or an upgrade to an individual residential service and the transformer requires upgrading, the Line Extension Cost will be credited for the estimated original cost, less depreciation, less removal costs, of the existing transformer. However, for residential Electric Vehicle charging line extensions, any transformer additions or replacements necessary to serve the charging load will not be considered part of the Line Extension. Estimates of Line Extension Costs provided to Applicants are valid for six months from the date of issue. After six months the Company reserves the right to provide a revised estimate. The Line Extension Cost does not include payments to a third party for easements, additional costs associated with Underground Line Extension or other additional costs described in this rule.

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6) **Long Side Service Connection**

A service connection, which runs parallel to the street, rather than perpendicular to the street.

7) **Primary Voltage Project**

A Primary Voltage Project is a planned undertaking of construction, where the Company initially installs only primary voltage facilities. Primary Voltage Projects include large lot residential subdivisions, industrial parks and other similar complexes. It is expected that within the project each Customer will be served from one or more transformers dedicated to that Customer's use.

PGE Advice No. 20-17  
Courtesy Redline of Rule C and I

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