



Puget Sound Energy  
P.O. Box 97034  
Bellevue, WA 98009-9734  
PSE.com

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October 26, 2018

***Filed Via Web Portal***

Mr. Mark L. Johnson, Executive Director and Secretary  
Washington Utilities and Transportation Commission  
P.O. Box 47250  
Olympia, Washington 98504-7250

**RE: Advice No. 2018-44 Electric Tariff Filing – Filed Electronically**

Dear Mr. Johnson:

Pursuant to RCW 80.28.060 and Chapter 480-80 WAC, please find enclosed for filing the following proposed revisions to the WN U-60, Tariff G for electric service of Puget Sound Energy (“PSE”).

WN U-60, Tariff G

- Original Sheet No. 551 Schedule 551 – Electric Vehicle Non-Residential Charging Products and services
- Original Sheet No. 551-A Schedule 551 – Electric Vehicle Non-Residential Charging Products and services (Continued)
- Original Sheet No. 551-B Schedule 551 – Electric Vehicle Non-Residential Charging Products and services (Continued)
- Original Sheet No. 552 Schedule 552 – Electric Vehicle Residential Charging Products and services
- Original Sheet No. 552-A Schedule 552 – Electric Vehicle Residential Charging Products and services (Continued)
- Original Sheet No. 552-B Schedule 552 – Electric Vehicle Residential Charging Products and services (Continued)
- Original Sheet No. 553 Schedule 553 – Electric Vehicle Education and Outreach
- Original Sheet No. 554 Schedule 554 – Electric Vehicle Low Income Transportation Service
- Original Sheet No. 583 Schedule 583– Electric Vehicle Charging Products and services
- Original Sheet No. 583-A Schedule 583– Electric Vehicle Charging Products and services (Continued)
- Original Sheet No. 583-B Schedule 583– Electric Vehicle Charging Products and services (Continued)
- Original Sheet No. 583-C Schedule 583– Electric Vehicle Charging Products and services (Continued)
- Original Sheet No. 583-D Schedule 583– Electric Vehicle Charging Products and services (Continued)

The purpose of this filing is to propose new electric services that allow PSE to provide a portfolio of products and services to promote market transformation in electric transportation. The new electric services proposed in this filing focus on the light-duty electric vehicle (“EV”) market, but future products and services may focus on other types of electric transportation, such as buses or other vehicle types. These new electric services are designed to meet the intent of the Washington Utilities and Transportation Commission’s (“WUTC” or “Commission”) Final

Policy Statement<sup>1</sup> on EV charging services under the law of RCW 80.28.360 to promote electric vehicle supply equipment (“EVSE”) on a state regulated basis, in order to accelerate EV adoption to serve multiple public policy purposes<sup>2</sup> (“WUTC Final Policy Statement”).

The proposed tariff schedules for the new electric services for PSE’s portfolio of EV and EVSE products and services are:

- Schedule 583 – This schedule sets the overall terms and conditions for transportation electrification products and services.
- Schedule 551 – This schedule provides for non-residential charging products and services and sets rates associated with public charging. Revenues collected under this tariff schedule will be used to offset some portion of the costs associated with these non-residential charging products and services.
- Schedule 552 – This schedule provides for residential charging products and services and sets rates and credits for changing the time of residential charging.
- Schedule 553 – This schedule describes PSE’s EV education and outreach programs
- Schedule 554 – This schedule describes EV products and services targeted to low income customers.

The following attachments to this filing provide the supporting details about this filing:

- Attachment A to this tariff filing provides the detailed descriptions of these proposed EV products and services (“Attachment A”).
- Attachment B to this tariff filing provides supporting documentation and calculations of the rates for public charging service proposed in Schedule 551 (“Attachment B”).

PSE thanks the stakeholders and other interested parties who have provided comments, questions, and their experience to the development of this filing. PSE’s process to gather this information has included:

- Review of utility and other transportation electrification programs and policies in Washington, California, Oregon, Massachusetts, Nevada, Utah, Hawaii, New York, Maryland, Michigan, Missouri, and Kansas,
- Review of publicly available Statements of Principles from non-governmental organizations involved in transportation electrification,
- Release of draft EV program descriptions to stakeholders and interested parties on June 22, 2018,
- Establishment of an email inbox to capture questions and comments on these draft programs,
- Receipt of 72 written questions and comments on these draft EV program descriptions,

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<sup>1</sup> Policy and Interpretive Statement Concerning Commission Regulation of Electric Vehicle Charging Services, Docket UE-160799.

<sup>2</sup> *Id.*, Paragraphs 4 and 22.

- Presentation and discussion at a Joint Utility Transportation Electrification Stakeholder Group<sup>3</sup> meeting on August 6, 2018, and
- Over 20 meetings and phone calls with interested parties to discuss questions and comments on the draft EV programs.

These questions and input have been incorporated into the proposed tariff sheets and Attachment A and have resulted in improvements to the proposed portfolio of EV products and services.

This letter describes: (1) the Washington state policy context for regulated utility transportation electrification programs, (2) the status of EV market transformation in the state, (3) a business case for PSE's proposed EV and EVSE products and services, (4) PSE's proposed portfolio of EV and EVSE products and services, (5) the costs and benefits of transportation electrification, and (6) PSE's planned ongoing reporting to its advisory group, the Joint Utility Transportation Electrification Stakeholder Group.

### **Washington State Transportation Electrification Policies Related to Regulated Utilities**

Transportation electrification is an area of growing interest globally in order to reduce emissions and improve public health. Internationally, multiple countries have now banned sales of gasoline and diesel vehicles on various timelines from 2025 to 2040<sup>4</sup> to reduce pollution and improve public health. In the United States, a number of states require sales of zero-emission vehicles, which include electric vehicles, in increasing numbers<sup>5</sup>.

In the State of Washington, the Department of Commerce's State Energy Office outlines the state policies<sup>6</sup> related to electric vehicle adoption including incentives for vehicle adoption, policies for use of electric vehicles in state business, and legislative authorization for charging pilot programs for the Washington State Department of Transportation. Washington also has other related policies, including signage and parking regulations, as well as land use and transportation policies related to electric transportation.

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<sup>3</sup> The Joint Utility Transportation Electrification Stakeholder Group includes Avista, Pacific Power, Puget Sound Energy, the WUTC Staff, the Public Counsel Unit of the Attorney General's Office, The Washington State Department of Transportation, and The Washington State Department of Commerce. Also invited to the advisory meetings are all commenters in Docket UE-160799, which includes The Energy Project, Northwest Energy Coalition, Climate Solutions, Natural Resource Defense Council, Washington Environmental Council, EVgo, Chargepoint, Proterra, Greenlots, Puget Sound Solar, the Alliance of Automobile Manufacturers, General Motors, Drive Oregon, Brian Grunkemeyer, and the Industrial Customers of Northwest Utilities.

<sup>4</sup> <https://money.cnn.com/2017/09/11/autos/countries-banning-diesel-gas-cars/index.html>

<sup>5</sup> <https://www.c2es.org/document/zev-program/>

<sup>6</sup> <http://www.commerce.wa.gov/wp-content/uploads/2017/03/Commerce-Biennial-Energy-Report-2017.pdf>

To meeting the state's goal of putting 50,000 plug-in EVs on the road by 2020<sup>7</sup>, the Washington State Department of Transportation developed an Electric Vehicle Action Plan<sup>8</sup>, which was published in February 2015. This state action plan outlined several actions to engage utilities in broader transportation electrification efforts, including:

- Identify barriers and incentives for electric utilities to promote the use and increased use of electricity for transportation;
- Encourage utilities to provide public education about EVs;
- Encourage all utilities to support EVSE installation and rebates;
- Require utilities to establish an electric transportation department;
- Encourage utilities to maximize grid benefits of electric vehicles; and
- Encourage utilities to purchase and redeploy used EV batteries for a secondary use.

In addition to the state goal, the Washington State legislature enacted the Engrossed Substitute House Bill (“ESHB”) 1853 in 2015, which was then codified as RCW 80.28.360. This law requires the Commission to consider and allows it to adopt policies to improve access to and promote fair competition in the provision of EVSE. ESHB 1853 also allows the Commission to authorize an incentive rate of return on capital investment for certain EVSE that is deployed for the benefit of ratepayers.

The Commission held two rounds of comments and issued the WUTC Final Policy Statement in 2017 to assist in implementing RCW 80.28.360. The WUTC Final Policy Statement outlines how the WUTC would regulate electric vehicle charging as a regulated electric utility service and the WUTC policies to improve access to and promote fair competition in the provision of electric vehicle charging services. In developing the proposed EV tariff schedules, PSE followed the WUTC Final Policy Statement. PSE also used information gained from its past EV pilot program under Docket UE-140626, discussions with other utilities, and discussions with stakeholders in the Joint Utility Transportation Electrification Stakeholder Group.

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<sup>7</sup> Washington State Electric Fleets Initiative: [http://www.governor.wa.gov/sites/default/files/documents/ElectricFleetsInitiative12\\_07\\_2015.pdf](http://www.governor.wa.gov/sites/default/files/documents/ElectricFleetsInitiative12_07_2015.pdf) (December 2015). Results Washington – Goal 3.1.1.c. <http://results.wa.gov/what-we-do/measure-results/sustainable-energy-clean-environment/goal-map> (January 2017).

<sup>8</sup> <http://www.wsdot.wa.gov/NR/rdonlyres/28559EF4-CD9D-4CFA-9886-105A30FD58C4/0/WAEVActionPlan2014.pdf>





The Commission recognized the Washington Legislature and other state policies in that these policies “establish a public purpose for investor-owned utilities to pursue electrification of the transportation system”<sup>16</sup>.

### **Business Case and Portfolio Approach to EV Products and services**

The WUTC Final Policy Statement outlines that the utilities should consider a business case in developing EV and EVSE programs and applying for cost recovery.<sup>17</sup> In considering the business case for the proposed EV tariff schedules, PSE evaluated the market transformation needs that it is positioned to address. The design of the proposed portfolio of EV products and services supports market transformation and promotes load shifting.

The Commission identified that “charging and consumer awareness, in particular, are barriers that electric utilities are naturally positioned to address”<sup>18</sup>. The Commission further clarified how it expected the utilities to provide the charging services that support market transformation through a “portfolio approach” that provides customers with “multiple options for EV charging services, designed to service a range of customer types, target multiple customer segments, and evolve as technology changes”<sup>19</sup>. PSE’s proposed EV tariff schedules adopt the market transformation and portfolio frameworks by including a broad set of new electric services: education and outreach products and services that provide direct service to low-income customers; and charging services that serve the needs of multiple customer segments with an emphasis on off-peak charging. In adopting the market transformation and portfolio approach, PSE also recognizes the need to work with the current market status and allow for technology adoption. For these reasons, PSE specifically offers the current portfolio as pilot programs, designed to provide market transformation, but also to develop the market and learnings so that PSE can determine if the benefits support offering additional transportation electrification programs in the future.

The business case for this portfolio of products and services is based on meeting several factors, specifically:

- Addressing market barriers identified in the WUTC Final Policy Statement, including charging availability and consumer awareness;
- Meeting the WUTC Final Policy Statement requirement for a balanced portfolio that is available to different customer types, which includes service to low-income customers and education and outreach programs; and
- Prioritizing load management.

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<sup>16</sup> WUTC Final Policy Statement, Paragraph 60.

<sup>17</sup> Id., Paragraph 93.

<sup>18</sup> Id., Paragraph 66.

<sup>19</sup> Id., Paragraph 74.

Driven by this business case, PSE is specifically proposing a portfolio of products and services that includes the following:

- Education and Outreach;
- Single-Family Residential Charging and Off-Peak Charging;
- Multi-Family Residential Charging;
- Workplace/Fleet Charging;
- Public Charging; and
- Direct Service to Low-Income Customers.

These proposed EV products and services are detailed in Attachment A to this tariff filing. The overall portfolio of proposed EV products and services addresses the business case factor of meeting market barriers, as it focuses on charging availability and consumer awareness. These proposed EV products and services focus on education and outreach and installation of charging equipment, in addition to direct service to low-income customers.

In developing these proposed EV charging products and services, PSE relied on the model of market need for charging services to identify the business case for the proposed EV products and services and the balance of the portfolio of charging services.

Figure 3- Portfolio of EV Charging Programs<sup>20</sup>



The portfolio of programs as shown in Figure 3 provides for charging services in each of the charging areas to ensure the portfolio is available to as many customers as possible, but also that the balance of the portfolio focuses on several factors:

<sup>20</sup> New York State Energy Research and Development Agency, <https://www.nyserda.ny.gov/Researchers-and-Policymakers/Electric-Vehicles/Info/Charging-Station-Hosts>



- Improving access to electric vehicle charging in multi-family homes, workplaces, and fleets; which have been identified as challenging areas of market development that need improved access;
- Focusing on load management in the area where most energy is delivered i.e., single family homes, and building a baseline for potential future load management in multi-family, workplace, and fleet settings; and
- Providing additions to the network of fast charging sites to improve its availability to customers.

The portfolio of PSE's proposed EV products and services prioritizes load management. The proposed Schedule 552 – Electric Vehicle Residential Charging Services and Products focuses on multiple technology channels and residential customer response to load management. This builds on PSE's past pilot project, which established a baseline for residential charging. The proposed Schedule 551 – Electric Vehicle Non-Residential Charging Services and Projects provides for non-residential charging products and services, including public charging, that build baselines of charging behavior in workplace/fleet settings and have the flexibility built into the program technology to test load management if the baseline supports a need for load management.

### **Costs and Benefits of Transportation Electrification**

The benefits of electric transportation are broad, as was recognized by both the Commission and the Washington Legislature, and include better utilization of utility assets and reductions in greenhouse gas emissions and traditional pollutants. Costs of transportation electrification, including costs of energy supply and charging infrastructure are still being developed. In the WUTC Final Policy statement, the Commission identified several issues relating to the costs and benefits of transportation electrification.

The first issue the Commission identified is that the increased electric sales and costs associated with the transportation electrification will need to be considered over time in rate setting, specifically that “absent changes to rates, non-participating customers could end up unduly subsidizing EV charging services, or EV owners may not be fairly compensated for the benefits they provide to the grid.”<sup>21</sup>

The second issue the Commission identified relates to the quantification of benefits that utilities should seek to maximize in program portfolios, specifically:

- Increased revenue from kWh sales to electric vehicle, using a reasonable range of projections of electric vehicle adoption;
- Grid management benefits as a result of influencing charging behavior; and

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<sup>21</sup> WUTC Final Policy Statement, Paragraph 27.

- Any other benefits in the form of environmental attributes – such as emissions reduction units – that are monetized and claimed by the utility.

PSE is specifically proposing pilot programs because these benefits cannot be quantified without further experience of the utilities, such as charging in non-residential settings and grid management benefits, and other benefits that are evolving, such as environmental attributes. The table below outlines the projected budgets for the proposed new electric services of EV products and services.

Pilot Programs	Projected Budget – Capital Costs (Dollars in Thousands)		Projected Budget – Non-Capital Costs (Dollars in Thousands)		Projected Budget – Revenue (Dollars in Thousands)	
	2019	2020	2019	2020	2019	2020
Public Charging	\$1,285	\$891	\$612	\$920	\$37	\$308
Workplace Charging	\$655	\$328	\$605	\$516	\$0	\$0
Residential Charging and Off-Peak	\$1,804	\$380	\$683	\$611	\$0	\$0
Multi-Family Charging	\$527	\$131	\$579	\$491	\$0	\$0
Education and Outreach	\$167	\$0	\$680	\$704	\$0	\$0
Low Income Programs	\$0	\$0	\$241	\$305	\$0	\$0
Total	\$4,437	\$1,730	\$3,400	\$3,547	\$37	\$308

Table 1: Projected First Year Budgets - New EV Products and Services

Through PSE’s recurring reporting as proposed below in the next section, the advisory stakeholder group will be kept informed of benefits and costs of both the new electric services and the status of transportation electrification in PSE service territories. To allow for flexibility in program design and to keep costs in line with anticipated revenues over a short timeframe, PSE has only projected installing infrastructure in these pilot programs through 2020 at this time. PSE has also made the scope of the programs such that the costs for the charging programs, which will only be accessible to EV driving customers, plus the estimated cost to serve electric transportation load do not exceed the incremental revenues from electric transportation in PSE’s electric service territory through 2020. Keeping the costs of the charging pilot programs below the electric transportation revenues ensures that customers who do not drive electric vehicles do not pay for the costs of the charging pilot programs. These transportation electrification related costs will be included in a future request for cost recovery through a petition for accounting deferral, rate case, or other regulatory mechanism.

**Reporting and Stakeholder Engagement**

The proposed portfolio of pilot products and services is designed to be limited in scope and time, and encourage flexibility. To that end, regular reporting on the progress and learnings to the Joint Utility Transportation Electrification Stakeholder Group provides the framework for appropriate adjustments. As outlined in the program descriptions of Attachment A, PSE is

committing to significant stakeholder engagement during the pilot program development and execution, including seeking stakeholder feedback during the request for proposal processes and new tariff schedules implementation progress.

To keep the stakeholder group informed, PSE will report the following measures to its advisory group every six months after the approval of the proposed products and services.

Transportation Electrification Measures:

- Electric vehicles in PSE's electric service territory
- Estimated electric transportation load, as MWh and percentage of PSE's total load
- Estimated coincident peak of electric transportation load, as compared to PSE's system peak

Products and Services Measures:

- Customer participation in pilot programs, in absolute numbers and as a percentage of electric vehicles in PSE's service territory and geographically
- Electric load served through programs
- Program costs
- Load shifted to different times from pilot programs
- Estimated cost savings associated with shifting loads in pilot programs
- Revenues from public charging

Other Measures:

- Carbon Dioxide displaced by electric transportation
- Value of any emissions credits created and monetized

Other measures and general updates on the progress of the implementation of the proposed new EV tariff schedules may also be reported from time to time.

**Conclusion**

PSE thanks the Joint Utility Transportation Electrification Stakeholder Group for their input to these proposed new electric services of EV products and services and look forward to further discussion with the group over the coming years.

The tariff sheets described herein reflect an issue date of October 26, 2018, and an effective date of December 1, 2018. Notice of the proposed tariff changes, as required by law and the Commission's rules and regulations, is being given to the public immediately prior to or coincident with the date of this transmittal letter, through web, telephone and mail access in accordance with WAC 480-100-193(1). Posting of this proposed tariff change will be accomplished in accordance with WAC 480-100-193(1). Notice to the public under the

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provisions of WAC 480-100-195 will be provided to each affected customer after the proposed tariff changes become effective on the requested effective date of December 1, 2018.

Please contact Ben Farrow at (425) 456-2541 or Mei Cass at (425) 462-3800 for additional information about this filing. If you have any other questions, please contact me at (425) 456-2142.

Sincerely,

*/s/ Jon Piliaris*

Jon Piliaris  
Director, Regulatory Affairs  
Puget Sound Energy  
PO Box 97034, EST07W  
Bellevue, WA 98009-9734  
425-456-2142  
[Jon.Piliaris@pse.com](mailto:Jon.Piliaris@pse.com)

cc: Lisa Gafken, Public Counsel  
Sheree Carson, Perkins Coie

Attachments:

Electric Tariff Sheets (13), listed above

Attachment A – Detailed descriptions of proposed EV products and services

Attachment B – Calculations of Schedule 551 rates for public charging service