

# Transportation Electrification Summary Report

Puget Sound Energy (PSE or the Company) has made significant progress towards the launch of the Company's transportation electrification products and services since the acknowledgement of PSE's Transportation Electrification Plan in August 2021. In February 2022, draft tariff sheets for Schedule 553 (Education & Outreach), Schedule 552 (Multifamily Charging), Schedule 555 (Fleet Charging, and Schedule 556 (Load Management) were presented to the Joint Electric Vehicle Supply Equipment (EVSE) Stakeholder Group for comment. Following the completion of the 45-day comment period, PSE filed the electric service tariff schedules for those products with the Washington Utilities and Transportation Commission (UTC) under Docket UE-220294 and received approval in May 2022.

In order to gather feedback and inform tariff design, the Company completed comprehensive community engagement for each of the proposed products. In particular, PSE worked to provide a seat at the design table for customers in highly impacted communities and vulnerable populations, and the community-based organizations, government agencies and tribal entities that serve them. Engagements were structured to learn what barriers customers may face when accessing these products or programs and how PSE can best design solutions to alleviate those barriers and maximize the benefits customers feel are most important. Results of each engagement are outlined in the individual product and service sections below.

Prior to launching the new and expanded products and services, PSE reviewed the electric vehicle (EV) charging market to learn about how it has changed since the launch of PSE's EVSE pilot products and services in 2019. In June 2022, PSE released a Request for Information (RFI) to EV charging network providers, EVSE manufacturers, and other EV charging technology companies. Responses were collected throughout the month and reviewed to determine how PSE would proceed with selecting a service partner for the new and expanded products and services. Currently, PSE is engaged in a competitive bid process with several of the RFI respondents to select the appropriate service provider(s) to provide implementation support for the new products and services.

## Transportation Electrification Reporting Metrics

Future reports will include key metrics for the products, primarily focused on utilization information for installed chargers. Without placing a burden on the customer, and where available, PSE will collect information about additional customers served through any expansion of mobility services, additional EVs served in Named Communities, awareness and changes in adoption levels of EVs, and other non-quantifiable benefits enabled by PSE's EV incentives. PSE will also provide the total revenue of EVSE owned and operated by PSE.

In addition to load profiles of installed chargers per product, PSE will report:

- Total number of charging sessions
- Average kWh used per session
- EVSE uptime percentage
- Total electric consumption (kWh), including peak load (kW)
- Avoided CO2 emissions (estimated)
- Estimated cost savings
- Average cost of ownership
- Average installation timeline
- Average installation cost per port
- Participant satisfaction (%)

These metrics will be displayed in an easily decipherable table and accompanied by any further detail needed to understand the metrics. PSE may also explore ways to create an interactive dashboard as another means to view the metrics described above.

## Electric Vehicle Product and Service Progress – Phase I

The products and services outlined in this section were approved by the UTC in the spring of 2022. Efforts related to these products have primarily consisted of market research and benchmarking, community engagement, and preparation for product launch in early 2023.

### Education and Outreach (Schedule 553)

In 2023, PSE plans on expanding upon the tactics used during the pilot phase, such as webinars, virtual events, and other digital engagement strategies, to reach new audiences. The education and outreach program will focus on engaging customers who face barriers to transportation electrification through a variety of means.

Building on the success of education and outreach content developed for electric vehicle intender (those who wish to purchase an EV) audiences, PSE will adapt, translate/transcreate and extend these materials covering the basics of EV charging, the benefits of electric mobility, guidance on EV models, and best practices for choosing and driving an EV. We will aim to co-create materials with community partners and customers to ensure that the content and delivery are culturally relevant for an expanded audience. PSE will continue efforts to provide hands-on, pressure-free experiences with a variety of EV models, partnering with local dealerships where possible.

PSE will continue to develop customer and community relationships to deploy trusted messenger tactics and provide additional assistance to organizations representing Named Communities. As suggested by PSE's community engagement findings, using community members or trusted organizations to present information about EVs and charging programs is key to engaging customers who face higher barriers to accessing electrified transportation. Tactics PSE will pursue in 2023 include building case studies showing a range of installation and customer types, experiential events with diverse customer representation, and creating opportunities for peer-to-peer networking as more of our customers install charging through PSE electric vehicle charging products. Finally, PSE will assist eligible enrollees with

finding and applying for available grants and incentives to help with reducing financial barriers to electrification.

### Multi-Family Charging (Schedule 552)

PSE plans to expand on the Up & Go Electric pilot launched in 2019 to support the installation of charging infrastructure at multifamily locations. The expanded product will include the turnkey installation service introduced in the pilot and add a new option where customers can select and install their own charger, subject to approval by PSE. This customer-owned option was introduced following direct feedback from customers during the community engagement process.

Fifteen community-based organizations, tribal entities and government agencies and over 100 residents participated in PSE's multifamily product engagement. Those participants highlighted the cost of new electric vehicles as a major barrier to transportation electrification (TE), especially for residents who are low-income with higher energy burdens. The cost of installing charging infrastructure at properties was noted as a barrier as well. A constant concern raised was access to charging and range anxiety, specifically around a lack of nearby charging stations and the fear of not knowing where to charge during longer trips. Tying into the uncertainty around EV range and charging was overall education and awareness. While some participants were already discussing and investigating transportation electrification for their communities, others were new to the topic. Interviewees emphasized that education and outreach around the different types of TE options was needed, especially customized education for multifamily residents and residents who speak languages other than English.

To prepare for the launch of the new multifamily EV charging product, PSE first refined the application used in the pilot to better identify which applicants may qualify for the "equity-focused" customer segment. This included additional questions regarding the type of organization applying, the demographics of the housing provider's tenants and how the project would serve and benefit named communities. PSE also developed a process to issue EV and EVSE incentives to enrolled applicants of the product, which was not something done in the pilots. Finally, PSE is developing a prioritization mechanism to ensure application approval is distributed equitably and that those who have the most resources available to apply are not the first and/or only ones approved to participate. PSE is preparing to open the application to properties in Q1 2023.

### Fleet Charging (Schedule 555)

PSE will introduce a brand-new product to support the growing needs of customers who wish to electrify their fleet. This includes utility- and customer-side programs and incentives, technical advisory, and expanded support for low-income and disadvantaged community partners. These items are further described in this section.

Over 15 community-based organizations, tribal entities and government agencies participated in PSE's fleet product engagement. There were several barriers noted by the fleet engagement participants that were consistent with those raised by the interviewees for the multifamily engagement. Of those shared concerns, cost was the first concern noted – for both the vehicles themselves and the charging stations needed to support an electrified fleet. Second was the availability of electric vehicles and their range,

especially for specialized vehicles like ADA-accessible vans. Education and outreach was also addressed as a barrier, with interviewees emphasizing that targeted, interactive engagement with fleet operators is needed to eliminate myths about electrification.

Fleet operators raised barriers that are unique to their business as well, such as infrastructure improvements needed to support a completely electrified fleet. While this is more feasible for light duty fleets or a few medium-heavy duty vehicles, the burden is greater when considering a large fleet. Fleet operators also stressed the need for leadership buy-in on electrification; leadership teams must be invested and engaged in short- and long-term goals when it comes to electrifying fleets and PSE can support these efforts by offering additional support, advisory or concierge services.

Overall, flexibility of programs and services was underscored by participants. Participants asked for flexible programs and services (e.g., with lease-to-own models) to help overcome the cost barrier and enable them to choose the TE infrastructure that best fit their organization, agency, and tribe.

As discussed previously, the pilot products included limited fleet charging: electrification projects with community-based service providers through Schedule 554 and a fleet charging offering in the Workplace & Fleet (Schedule 551) pilot. However, installations were limited to Level 2 charging and the electrification projects only consisted of single vehicles. PSE conducted a thorough market analysis and utility benchmarking effort in order to inform the program design, customer journeys, and participation goals. To prepare for the product launch, the team developed an application process in which the electrical capacity at the site location is reviewed before the customer proceeds to the next stage of the process. Following the review of the electrical capacity, customers are provided an estimate of the incentive amount and what they may expect their contribution to be based on the existing electrical capacity and average charger installation costs. After this initial estimate review, participants are given the choice to proceed with a complete application to the program or postpone their participation. PSE plans to open initial applications to the program in the first quarter of 2023.

After a comprehensive review of companies who provide a variety of self-service digital fleet advisory tools, PSE identified a Software as a Service partner to develop an online fuel savings calculator to assist customers in estimating the financial and greenhouse gas impact from electrifying their fleet vehicles. Additionally, PSE will provide access to a commercial vehicle catalog that helps customers identify available vehicles by weight class along with the specifications and manufacturer's suggested retail price data (if available). Once launched in the first quarter of 2023, fleet operators will have access to these self-help tools to aid in their decision-making process and electrification journey. By the third quarter of 2023, PSE plans to also deploy an online total cost of ownership calculator along with a rebate & grant finder tool to help customers assess and identify additional cost saving opportunities.

Aside from the web-based fleet electrification tools, PSE will offer one-on-one technical advisory services to all prospective fleet customers interested in electrifying their vehicles. PSE representatives will be available to assist fleet customers who may need additional support throughout the process. Qualified, equity-focused fleets will be eligible to receive a concierge fleet advisory service which includes a more comprehensive fleet conversion assessment and a written plan with recommendations for prioritizing vehicle conversions, charging requirements, and infrastructure or electrical upgrades.

## Electric Vehicle Product Progress – Phase II

PSE is currently finalizing its Phase II tariff proposal strategy, consisting of expansions of workplace charging, single family residential charging, and public charging products as well as a new category called “New & Innovative.” Programs are still in development with plans for draft electric service tariff schedule submissions in the first quarter of 2023. Initial descriptions of these products are further described below. As with the multifamily and fleet tariffs, PSE prepared for the tariff development and program design of the remaining products by first engaging with highly impacted communities, vulnerable populations and the community-based organizations, government agencies and tribal entities that serve them to better understand barriers and benefits related to these products. This work was completed in October 2022. The results of the engagement are currently being analyzed and consolidated, and the report will be provided to all community engagement participants and other interested persons in the first quarter of 2023.

### Workplace Charging (Schedule 551)

PSE plans to expand on the Workplace Charging pilot launched in 2019, continuing to offer a PSE-owned and installed charger option in addition to a new, customer-owned charger incentive similar to the Phase I charging products. Anticipated updates include the introduction of customer-owned charger options and refinement of tariff language and program requirements.

### Residential Charging (Schedule 552)

The goal of the residential charging product is to provide an easy and cost-effective way for customers to install a Level 2 charger at their home to enable faster battery charging, while empowering customers to engage in PSE-managed charging initiatives. For those customers who may already have a Level 2 charger in their home, PSE is exploring new features such as customer choice for enabling access to vehicle charging data (e.g. vehicle telematics) to earn incentives to shift their charging to off-peak hours. Enhanced incentives and support will be available for qualified customers in Named Communities.

### Public Charging (Schedule 551)

PSE will provide customers with solutions to address equitable access to public EV charging in areas that are not adequately served by third-party EV charging network providers. The lack of EV charging options in some areas offers PSE an opportunity to deliver greater value to our customers and communities. PSE plans to continue installing Level 2 and DC Fast Chargers at select sites throughout PSE’s service area, particularly in locations demonstrating the greatest need. In addition, PSE will partner with municipalities to install streetlight or pole mounted Level 2 chargers in the right-of-way.

### New and Innovative Projects

As electric vehicle and charging technologies continue to evolve, innovative technology demonstrations will enable PSE to adapt and prepare for increasing adoption of both EVs and distributed energy resources in support of Washington State’s Clean Energy Transformation Act. The New & Innovative transportation electrification tariff will give PSE the ability to conduct research and development of

cutting-edge EV supporting technologies including vehicles, charging infrastructure, data management, and vehicle-to-grid integration. PSE will use the results and learnings from these projects to continue to design offerings and test technologies as they come to market.

## Transportation Electrification Products and Services Costs

Since the acknowledgement of its Transportation Electrification Plan in August 2021, PSE has incurred \$734,442 in operating costs. These expenses primarily include staff labor and outside services support to develop tariffs and design products, conduct market research and benchmarking, and complete load forecasting.