



Alliance for
Transportation
Electrification

December 10, 2018

Mark Johnson, Executive Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive SW
Olympia, WA 98504-7250

Regarding: PSE Filing for EVSE at Open Meeting (December 13th)
Docket Number: UE-180877 / Advice No. 2018-44 Electric Tariff Filing

Dear Mr. Johnson:

The Alliance for Transportation Electrification wishes to express our support for the filing of Puget Sound Energy (PSE) to deploy six modest pilot programs for various types of plug-in electric vehicle (EV) infrastructure (referred to as Electric Vehicle Supply Equipment or EVSE). This modest filing is overdue and should be approved expeditiously, since the state faces a large and growing EVSE infrastructure gap. Through a comprehensive stakeholder process that incorporates some of the best practices learned from other states, this program was designed to chip away at the infrastructure gap problem. Let me make several high-level points before referring to a more detailed discussion of three of the pilot programs below:

- First, the filing is consistent with the analysis and approach approved by the Commission in the path-breaking UTC Policy Statement (UE-160799). For reasons of consistency and regulatory certainty, the Commission should give considerable weight to the framework of the Policy Statement as it reviews this filing. Furthermore, this filing supports the overall policy goals set forth in ESHB 1853 passed by the Legislature in June 2015 that argues for a strong and robust utility role in the market transformation of electric transportation;
- In particular, the filing refers to the utility role in “jump starting” market transformation efforts in this nascent industry through a variety of approaches, while recognizing that non-utility service providers, commercial host sites, and local government and non-profits have a vital role to play as well;
- Also, the filing incorporates the “portfolio approach” that allows the utility to design a comprehensive program, and as better metrics and CBA’s (cost-benefit analysis) are developed for this emerging electric distribution resource, it allows the utilities to spread the costs and benefits across the spectrum of pilots and charging types, rather than assessing each particular measure on its own. The Commission has recognized this approach in energy efficiency measures over the years, with positive outcomes, and it should welcome the approach here;
- In that regard, the pilots are designed for the various types of charging infrastructure deployed today, from residential off-peak programs to low-income programs, in a way that recognizes that the utility (PSE) collect more data and information on consumer behavior of EV owners before proceeding further. At the same time, the pilots are designed with greater scale in mind; namely, that pilot programs should not be pursued just for the sake of testing certain concepts that “dead-end” after two or three years, but instead should be designed to scale up to accommodate a growing transportation electrification (TE) market that is expected to mature in three to ten years;
- At the same time, however, one of the key assumptions of the program is that these pilots, and TE in general, should offer benefits to all ratepayers in a number of categories: greater utilization of the distribution grid; increased revenues over time (increasing total revenue requirements, or TRR) which

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can be allocated or distributed to all ratepayers; greater out-of-pocket savings for EV owners through the disparity between gasoline and electricity; and of course the environmental benefits of lower greenhouse gas emissions;

- Finally, the pilots recognize the key importance of a transparent and constructive stakeholder process that is being led by Staff and the regulated utilities, with extensive involvement of vendors, non-governmental organizations (NGO's), and others in the EV ecosystem. This stakeholder process is a "best practice" among all State Commissions, and has proven its worth for the earlier Avista EVSE filings, as well as for Pacific Power. The Commission should recognize this process, yet improve it in certain ways in the future, such as requiring a special or recessed open meeting in which Commissioners are updated on a regular basis as well as stakeholders.

Let me offer a few specific comments on several of the pilot programs, as follows:

1. Education and outreach (E&O) pilot:

- a. These utility efforts are an essential part of any good EVSE program, and should be part of a collective and collaborative effort involving auto original equipment manufacturers (OEM's), dealers, NGO's, local governments, and others;
- b. A reasonable amount of these expenses, mainly operations, maintenance, and capital expenses, should be recovered in rates;
- c. Surveys in California and elsewhere demonstrate that the consumer awareness of EV models and what one could call "EVSE 101" (moderately priced EV's, gasoline vs. kilowatt-hour price comparison, off-peak rates, different plug types among SAE J1772, CHAdeMO, and Combined Charging System) is still shockingly low (less than 50 percent), even in relatively high adoption states like California. That is likely that case in Washington state in general, and in all parts of the service territory of PSE;
- d. Going forward, the Stakeholder Group and the Commission should be open to consideration of other innovative approaches to increase consumer awareness, such as the Electric Avenue and retail showcase in Portland, Oregon, the EV discovery centre in Toronto, Ontario, and innovative ways in which utilities can work both with auto OEM's and auto dealers to increase cooperation in this area.

2. Single-family off-peaking charging pilot:

- a. These are modest – only 550 customers overall including the 50 targeted for the OVGIP pilots – in size, but should be scalable to a larger size;
- b. PSE will have access the charging and other data generated through this program without cost, justified by rebates (and 75 percent of the make-ready to the EVSE). In other words, any EVSE provider selected cannot withhold data from PSE or charge royalties or fees for the use of this data. This is a key design consideration for utilities generally;
- c. PSE will conduct in-depth test testing on grid integration of the EVSE assets at the edge of the grid; as stated above, more efficient grid utilization is a key benefit but needs testing;
- d. The level of the proposed rebate, and the level of cost sharing for the make-ready (up to 75 percent up to \$1,000) are sensible and in the range of other utility offerings in other jurisdictions;
- e. For rate design, the Alliance agrees that it is not necessary at this stage of pilot programs to design and implement dynamic pricing or time-of-use rates. We understand the unique circumstances of the hydro-dependent generation system in the Pacific Northwest which dampens the differential between off-peak and peak generation, as well as the potential complexity introduced by time-varying rates. But we believe that over time that this issue of TOU rates will have to be addressed. PSE and other regulated utilities have many TOU rates that could be referenced, such as off-peak and super off-peak rate designs of Georgia Power;

- f. For the EVSE, the utility has proposed a well-designed request for proposal process, which will be overseen by the Commission staff and the stakeholder group, and will select at least two vendors for this pilot program;
- g. For the timeframe of the program, the Alliance believes that four years is almost an eternity in the EVSE space given the pace of technological change, new business models and collaborations being demonstrated, and expected greater EV adoption. We believe that, while this program has scalability designed into it, that more flexibility needs to be built into this component – perhaps through the Stakeholder Group process – so that PSE can offer changes and adjustment after 18 months or two years;
- h. Finally, the Alliance believes that greater attention should be focused on interoperability and open protocols, especially around the back-end of the system from the network management system to the charging station. The industry appears to be moving toward the standards of OCPP, Open Charge Point Protocol. Although there are serious issues involved in compliance and funding along with developing an independent testing organization, coalescing around a standard is essential and becoming more common when deploying large infrastructure projects. For example, Electricity America is requiring each service provider to be compliant with OCPP in its first stage of implementing its national investment plan, including the charging stations being developed in Washington state. PSE offered to conduct workshops at the front end of the process before the RFP commences, but the Alliance suggests that the Commission take a more active role in this area for all the regulated utilities in the state.

3. Public fast charging pilots

- a. Although the survey data indicates the EV owners will do most of their charging at home, hopefully with a grid-connected Level 2 EVSE, one of the major stumbling blocks to greater EV penetration remains “range anxiety.” In short, drivers of existing gasoline or diesel vehicles have accustomed to using a fuel station in every neighborhood, and are reluctant to purchase an EV for fear of being “stranded” on the roadside;
- b. Therefore, although DC fast charging stations (DCFC) may only constitute a small percentage of the overall charging stations by numbers, they fill a vitally important “market gap” in the overall portfolio;
- c. Moreover, the economics of the DCFC business case are challenging in the early years of market development due to low utilization rates and relatively high fixed costs;
- d. PSE should be allowed, as Avista, to own and operate these modest levels of DCFC and gauge how they can provide benefits for all ratepayers both in inter-city corridor and urban locations;
- e. For locations, the pilot usefully commits to locating the first two of the pilots in proximity to multi-family dwellings. Based on learnings, especially from the California IOU’s, this area has proven to be challenging to develop both for the building owner and for the utility or developer. This is clearly a market gap that is not being addressed by the non-utility providers;
- f. In addition, PSE sensibly proposes to reach out and coordinate with both the state agency and the Electric Vehicle Infrastructure Pilot Program (EVIPP) program (WA-DOT) and the Electrify America (EA) programs who have already been engaged in selecting and building out appropriate charging locations for DCFC and Level 2 equipment. The Commission, through its Staff and stakeholder process, should consult and coordinate with these initiatives;
- g. The program is also designed to test the partnership models with shared mobility service providers, such as Maven, Lyft and others. This is a rapidly growing and evolving part of the marketplace, and has the potential to serve lower-middle income (LMI) consumers today who may not wish to purchase even a new mid-range EV or used vehicle;

- h. For pricing, PSE proposes to develop market-based pricing for its charging services (presumably on a per kilowatt-hour basis, and not a charging event basis), by surveying the rates of non-utility providers of DCFC and Level 2 charging services and not undermining such price levels. This is a sensible approach, and one that Duke Energy has proposed in a recent filing (pending) before the South Carolina Public Service Commission. Such pricing levels should be updated on a regular basis (quarterly) and reported to the Stakeholder Group. Unfortunately, cost-based pricing is not possible at this early stage of market development and relative paucity of verifiable data;
- i. For interoperability and open standards, again as stated above, the Alliance believes that this area should be given greater emphasis by the Commission in its oversight of utility funded and operated programs. It is sensible for PSE to reach out in the first stage of the RFP process and discuss this with the vendors and request information. But although the Commission is not and should not be a standards-setting body, and may lack the technical resources to study the many technical details, the Commission should consider requiring OCPP or a similar protocol to be used in the RFP process, and for some type of further discussion or workshop with national and regional experts in the near future.

The Alliance will not comment in detail on the other three pilot programs proposed, namely Workplace Charging and Fleets; Multi-family units; and Low-Income pilots with the CAP agencies. Overall, these programs are well designed and constitute a constructive start toward gauging both institutional and consumer (EV owner) behavior with these types of charging infrastructure in the near term. The Commission should support these innovative pilots, and engage the stakeholder group to monitor their progress in implementation.

In summary, the Alliance supports these pilot programs and urge their immediate approval. Concerning cost recovery, we understand that this has been a sensitive issue for the Commission, especially the Staff, and that no type of cost recovery (such as deferred accounting between rate cases, or another mechanism) has been included in this instant petition. This is a disappointing result, and if carried out, may become a disincentive for further investment by utilities such, as PSE, in EVSE just as the inflection point is occurring in the marketplace with the consequent need for much more infrastructure. Moreover, the ERF (expedited rate filing) mechanism is not appropriate for this type of grid-edge investment since it is a new, emerging program that did not exist five years ago when the ERF was proposed. In short, no ideal and readily available rate mechanism exists other than deferred accounting. The Alliance believes that the investments in EVSE are fundamentally not different from other types of investments in grid modernization, vegetation management, and other sorts of T&D investments to maintain and build out a reliable and efficient distribution grid. Accordingly the Alliance hopes that these issues around cost recovery for EVSE could be re-visited in the near future in an appropriate venue or proceeding.

Sincerely,



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