Alliance for Transportation Electrification

August 2, 2021

Filed via Web Portal

Mr. Mark L. Johnson, Executive Director and Secretary
Washington UTC
621 Woodland Square Loop SE
Lacey, WA 98503

Re: Docket UE-210191: Comments on the Transportation Electrification Plan (TEP) of Puget Sound Energy, including Addendum filed on July 14, 2021

Dear Mr. Johnson:

The Alliance for Transportation Electrification (ATE) supports Puget Sound Energy's TE Plan, including the Addendum filed on July 14, 2021, and urge the Commission to take timely action to move forward to acknowledge this well-crafted and comprehensive plan to both promote customer benefits and reduce the largest source of GHG emissions in Washington state, the transportation sector. I appreciate the willingness of the UTC to consider these late-filed comments and look forward to participating in the future UTC stakeholder process for TE and the implementation actions for this plan.

The Alliance, a 501(c)(6) non-profit corporation, is led by electric vehicle (EV) infrastructure firms and service providers, automobile manufacturers, utilities, and EV charging industry stakeholders and affiliated trade associations. We started with 20 organizations at the launch just over three years ago and now we have nearly 55 members nationally. We take a "big tent" approach to advance the industry and focus not just on accelerating EV charging deployments—which necessarily requires a strong utility role—but also promoting public accessibility and open standards. We are presently involved in about 25 proceedings in the States before the PSCs, state energy offices, Legislatures, Governors, state DOTs and DEPs, and other agencies.

Overall remarks

The TE Plan of Puget Sound Energy certainly belongs in the top tier of "best practice" for TE plans in the nation. As Legislatures, Governors, and the state regulatory commissions have grappled with the multi-dimensional challenges, and opportunities, related to widespread transportation electrification, the need for regulated utilities to engage in comprehensive and long-term planning has become readily apparent. Good utility planning processes are critical because of the large number of emerging issues and multiple sectors (auto OEMs, transit agencies, local governments, equity and BIPOC communities, school districts, and so on) involved in the process. In fact, the landmark bills related to TE that passed the Legislature, namely HB 1853 and HB 1512 in 2019, both recognized the key importance of the utility role in both long-term planning as well as deployment of EV (electric vehicle infrastructure).

The Alliance believes that the PSE TE Plan belongs in a category of other "best practice" TE Plans that have been drafted, and approved, by Commissions across the country, including the plans of Portland

General Electric (PGE) in Oregon (first version, and next version is being drafted today), Xcel Energy plans in both Colorado (Public Service of CO) and Minnesota (Northern States Power), Avista, and Southern California Edison in California (SCE, both Charge Ready 2 and Charge Ready Transport for medium-heavy duty vehicles). All such plans recognize the important catalytic role that the utility must play in this challenging and long-term market transformation where the key sectors of utilities, energy providers, auto and truck OEMs, and the IT industry intersect (some would say collide) in multiple areas. Hence long-term planning by the utilities as one of the key sectors as both a fuel provider (kwH, instead of gallons of conventional fuels) and grid and system integrator is essential to this effort.

In reviewing this and other Plans, and the Addendum in particular, we urge the Commission to consider the many aspects of this market transformation, and ultimately keep a strong focus on both the economic and environmental benefits that will accrue to the customers of PSE and other utilities. We remind the Commission that electrification has direct economic benefits when EV owners are incentivized to use power off-peak and the fixed costs of the utility can then be spread over greater kWh sales, putting downward pressure on rates. And of course, there are direct and indirect environmental benefits of replacing gasoline with more efficient and cleaner electricity. In addition to these elements of "beneficial electrification" the Commission should also give weight to the potential for system optimization benefits through vehicle to grid (VGI) integration techniques. At the end of the day, all of these significant customer benefits should be given consideration, especially in this era where both energy affordability and system resiliency have taken such prominence in utility regulation.

Specific Comments

1. **Market adoption and vehicle forecasts:**
   We believe that the analytical work that PSE has carried out with Guidehouse (Navigant) is solid and well established, using good data as well as its proprietary modelling. The Alliance reviews market forecasts from several other economic and consulting firms in other jurisdictions, and we are inclined to support the upper end of market forecasts for all vehicle types (light duty, as well as medium-heavy duty, or MHD) such as those nationally of BNEF (Bloomberg New Energy Finance). In this case, we believe that the PSE experts and load forecast planners have worked well to translate the national trends in vehicle types and adoption to the unique aspects of its service territories.

   We wish to emphasize the nature of this rapid hockey-stick type growth over the next ten or fifteen years, and stress that this will not be a straight linear path type of growth. These are large and ambitious vehicle numbers. Washington state is one of the strongest adopters of EVs in the country, but today still only has registered vehicles in the range of 60 to 70,000 statewide (with PSE having the largest share of those vehicles in its service territory, along with high penetration rates for Seattle City Light as well). Yet the PSE forecast in the plan for 2030 is for 320,000 electric vehicles overall just in its service territory, which means planning for the programs, rates, and infrastructure deployments must begin immediately – neither the State nor PSE can wait for the growth to occur. Moreover, the forecast is for about 586,000 vehicles in its service territory by 2035, the year in which General Motors (a member of ATE) has announced that it will produce and sell only electric vehicles.

Washington state's total EV forecasts are even higher under this reasonable scenario, in the range of 700,000 to 1 million vehicles by 2030 depending on key variables and assumptions. Most of these will be light-duty vehicles, but the MHD sector is moving quickly, and fleet electrification is a key issue to consider. Accordingly, we urge you give adequate weight to these ambitious forecasts and keep focused on the key implementation challenges that PSE and other utilities face in coordinating this significant deployment of EV infrastructure.

At these levels of EV penetration in the distribution grid, the development of more granular tools, such as ADMS, conservation voltage reduction (CVR), and AMI, will become critical to maintain a stable and reliable grid (outlined on pp. 9-10 of the Addendum). In particular, we believe that the Company's development of a geospatial forecasting tool by the end of next year to allow better visibility and mapping of load impacts at the circuit level is an important step forward. This is true not only for "pockets" of EVs for circuits and transformers in certain neighborhoods, but also for the fleet electrification at higher voltages that are expected to arrive soon with MHD vehicles. Hence the issues associated with planning for transformer upgrades on heavily impacted circuits and updating transformer kW standards will become more important in planning efforts.

2. Diversity, equity, and inclusion (DEI) issues

The Alliance takes seriously the issues of the highly impacted and vulnerable communities (or BIPOC) especially after the start of the Covid-19 pandemic and recession, which has resulted in disproportionate impacts on these communities. We established an internal task force among our members to review the key issues and develop some key learnings and best practices. Fortunately, PSE had already established a commendable series of pilot EV programs with low-income and BIPOC communities in the last several years. PSE can build on these programs as foundational programs as well as the cooperative relationships that it has established with low-income groups, tribal authorities, and several others in these communities.

Early engagement and listening intently to the concerns of these communities is a key learning from not just Puget's Phase 1 pilots but also from other utilities and states across the country from which PSE has benefited in learning. The Company does an excellent job in setting forth its "Community Engagement Plan for DEI TE Products" in the Addendum (pp. 1-3), in a detailed three-step process that covers most of the potential use cases, and that proposes a third-party facilitator for community engagement. The Company stresses that it will weave the DEI issues and potential TE-related programs and services for impacted communities in every program that it develops, - not just residential programs but also important fleet electrification for cities, NGO's, and small business transportation systems. These are excellent programs and a great expansion on the early pilots, but no one should underestimate the challenges involved in doing this well.

The Alliance believes this to be a sound and holistic approach, and in fact may become a best practice for utilities (and Commissions and state agencies) in other jurisdictions. In many jurisdictions, a separate track for a "DAC" (Disadvantaged Community) or underserved communities is established either by the utility in its stakeholder process, or by the Commission

(note the DAC Advisory process by the California PUC established by statute) to assess these issues. While such a focus in a separate stakeholder group may be commendable, the Alliance believes that it is important to incorporate these DEI issues into the overall program design and implementation process for TE as we approach much greater scale in adoption and infrastructure.

Lastly, as set forth in the Addendum, the Alliance believes that several of these use cases, especially in these early years of market transformation, will argue for an "own and operate" model for Puget in serving these customers, or generally a more robust utility role. As utilities (and Commissions have recognized) in other jurisdictions such as California, Colorado, and Minnesota, the Phase 1 pilots of programs for multifamily, residential, and increasingly fleet electrification have faced some significant challenges from either customers or host sites for a variety of reasons (economics, permitting, lack of interest by landlords and building owners, and so on). Many such customers want to build on the role of the utility as a trusted energy advisor with detailed technical knowledge of EVSE, networks, and the grid, and want the utility to offer end-to-end solutions to meet their needs. While the Commission should give full consideration of the needs of the private EV service providers in this transformation, as stated earlier, the Commission should place the needs of the customers, including host sites, fleet operators, tribes, and BIPOC communities, at the forefront and, at a minimum, allow Puget to submit solid proposals to own and operate the EVSE (likely in a turnkey arrangement with a vendor) in order to meet these market gaps.

3. Timeline for EV Program filings

Since filing its TE Plan in March 2021, the EV market continues to evolve and transform quite rapidly. Many OEMs have announced new vehicles to be introduced in the marketplace in the near future, such as the last two quarters of 2021, or in 2022 and early 2023. While the semiconductor and chip supply constraints have delayed some introductions, the Alliance and most industry observers believe this dynamic market will continue to evolve at a rapid clip. We especially believe that the MHD vehicles will come into the market at increased pace in the next year or two, led by OEMs such as Daimler North America, Tesla Semi, Paccar, Volvo-Mack and others in the Class 6 and 8 categories. Moreover, the light-truck market is expected to evolve quickly in the next few years, led by the announcement of the Ford-150 Lightning but also from OEMs such as Rivian, General Motors, Ford E-Transit Series, Arrival, and others.

At this point, we will just make some general comments on the overall timeline and structure of specific filings in the PSE plan, recognizing that there will be a chance to comment more specifically on the program and rate design when the first three programs are filed in Q4 of 2021. Overall, we believe that the timeline is sound and that the "Phase 1 filings" are a good way to proceed recognizing the urgency of the need to move forward.

- ***Education and Outreach (E&O):*** this is a key activity for the utility for engagement with customers in nearly every end use case proposed. Despite many articles in the lay press in the last several years on EVs, most consumer surveys still indicate a low awareness of the basics of the EV experience even in progressive states like

Washington and California. Consumers simply don't understand some of the key variables such as the number of vehicles, the range among vehicle types, the types of plugs, the prices and rate plans of utilities compared to conventional gas/diesel costs, and so on. PSE has developed an excellent program of customer engagement with its web portal and phone application PSE Up & Go, which includes a substantial email list of its customers interested in EVs and public charging.

But more needs to be done, and allowed by the Commission, to engage with all potential customers. In a changing environment of technology, incentives, and vehicles, the utility can play a role in keeping its customers educated and informed of these trends in its role as a trusted energy advisor. PSE states in the Addendum (p. 4) of some of the increased information it intends to offer in its EV Online Guide, which is an appropriate role for the utility along with auto dealers, NGOs, municipalities with strong climate and ESG goals, and so on.

Just as importantly, it is critical that the PSE develops focused fleet planning or advisory services to help small and large fleet customers in their journeys to electrify their fleets. PSE as a regulated utility, in its planning process (largely the IRP), and the municipal and commercial fleets and OEMs have never really had to plan and coordinate together closely in the past. But now the need is real, and providing a reasonable level of resources of Puget to focus on these fleet electrification needs is a best practice that many other utilities are pursuing around the country in states like Michigan, Maryland, California, and the Carolinas.

- ***Commercial, Public and Private Fleets***
  As stated above, the electrification of fleets is occurring at a rapid pace, and the "Gen 1" vehicles are coming to market soon in the Class 4 to Class 8 categories. As PSE states in its Addendum (pp. 4-5), it expects the auto and truck OEMs will bring these vehicles to market in late 2021 and early 2022, and it has been coordinating early discussions with them. This is true both for commercial fleets, but also for fleets operated by municipalities, NGOs and Chambers of Commerce, and others.

  The Alliance is involved in fleet electrification efforts in several other jurisdictions, and believe that PSE has outlined, at a high level in the Addendum, a sound approach toward these issues. The electrification of fleets will involve new and challenging issues regarding the power level of the chargers, potential distribution upgrades, rate design, and permitting and easement issues on the site. Site assessments need to be carried out soon to identify these needs. Location of the meter, the necessary make-ready (conduit, wiring, switchgear and such) all need to be assessed along with consultations with potential hardware and software vendors.

  Hence, it is reasonable at this stage for Puget to pursue the own and operate option in which the utility will own and maintain the EVSE for the customer, as well as the

make-ready investments in sometimes complex installations. At the same time, it will pursue the make-ready and rebate option for the customer/host site as well, if the customer wishes to pursue that course of action and take on those additional responsibilities in the early phase of development. In other words, it is reasonable for the Commission to recognize the need for both options for the customer, and allow the fleet market to develop in multiple ways.

- ***Residential Multi-family:***
  The multi-family use case for EV infrastructure (largely AC Level 2 in dedicated parking spaces) has proven to have its challenges, and opportunities, with utilities, landlords, and vendors in other jurisdictions. While the opportunities are substantial since a substantial population resides in these facilities, we have learned in the early Phase 1 pilots that additional challenges need to be addressed. For example, in Phase 1 of its pilots in Southern California (where over 40 percent of its customers live in multi-family housing), SCE encountered several challenges with the use of a make-ready and rebate option with the EV service providers taking the lead. In Phase 2 of its programs, it asked for the ability to make the case for owning and operating up to 40 percent of the TE budget allocated to this use case, and the Commission approved it. PSE states that there has been substantial interest in this use case from site hosts, landlords, and tenants, and that it intends to expand its Up & Go Electric Multifamily program. This would involve PSE owning and operating the EVSE at such multi-family dwelling units as well as providing the make-ready investments, and perhaps providing options for e-bicycles and other clean transportation options.

  It is also exploring the modification of Schedule 7 (residential rate design) and perhaps the ability to broaden the accessibility of such services to tenants who live in multi-family units. It is considering providing rebates to such tenants for both the EVSE (AC Level 2 charger) as well as potentially the vehicle itself. These are all worthwhile ideas to explore in a creative way with such customers, and again, the Alliance looks forward to the opportunity to engage in further detailed discussion on program and rate design when Puget files later this year. This use case is attracting substantial attention from utilities, vendors, building owners and host sites in other jurisdictions, and we can bring some of those learnings in the discussion here.

In summary, thank you for the opportunity to submit comments on this excellent TE Plan, and we urge the Commission to acknowledge it in a timely way, and continue with constructive stakeholder talks.

Sincerely,

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