Drive Oregon
Innovation in Electric Mobility

March 31, 2017

Mr. Steven V. King
Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 South Evergreen Park Drive
Olympia, WA 98504-7520

Re: UE-160799 Drive Oregon Comments

Dear Mr. Steven King,

Drive Oregon appreciates the opportunity to provide comments on docket UE-160799, rulemaking to consider policy issues related to electric vehicles and electric vehicle supply equipment.

Drive Oregon is a nonprofit organization working to accelerate the growth of the electric and "smart" mobility industry and promote greater adoption of these technologies. We have over 120 members representing auto makers, EVSE suppliers, industry partners, utilities, local governments, nonprofits, and many other stakeholders within the transportation electrification "ecosystem." This allows us to speak with a broad, industry-wide perspective.

Drive Oregon was a partner in crafting SB 1547 in Oregon, and has been deeply involved in working with the state's utilities to develop transportation electrification plans. We also host a Utility Working Group, which includes Oregon and Washington utilities, to discuss various program and policy issues related to transportation electrification.

Drive Oregon is currently expanding its work into Washington State, and will be rebranding at the end of April with a new name to better reflect this larger scope.

Drive Oregon appreciates the Legislature's and Commissions efforts to investigate policy options that will reduce barriers to investments in the infrastructure necessary to expand penetration for transportation electrification. In the following comments, we respond to the questions posed by the Commission in the Notice of Rulemaking and Opportunity to File Written Comments on 01/13/2017.

<u>Portfolio approach to EV Charging Services:</u>

1. What is the definition of "Electric Vehicle Supply Equipment," and how should the Commission consider ownership of EVSE as a factor to determine whether a utility serves as a "provider," or "manager" of EV charging services?

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We believe it may be difficult for the Commission to make this determination as it will change over time. For example, the Commission refers in passing to "DC Fast Charging and other commercial public charging applications that do not lend themselves to load management." Today, a number of DCFC installations are increasingly including battery storage and buffering that may make them extremely valuable for load management – much more so than residential charging where a single vehicle provides relatively small marginal benefits unless aggregated with thousands of other such vehicles.

The Commission's focus on load management in this section may overlook a few other issues. Any electric vehicle is more energy efficient than any gasoline vehicle, and will reduce air pollution and climate pollution, providing benefits to all Washingtonians. In this regard, requiring all utility programs to have active load management is a bit of a non-sequitur, a bit like requiring time-of-use rates before utilities could incent efficient appliances. Virtually every electric vehicle has within it the ability to time charge to manage load, so this functionality does not necessarily need to be built into the charging equipment or the utility program. Automakers tell us that between 20%-50% of EV drivers use no special equipment at all to charge their vehicles, simply plugging in with the "Level 1" charging cord provided. This is less energy efficient than L2 charging and provides virtually no opportunities for load management; the Commission should consider supporting simple programs and rates that encourage L2 charging, particularly in this early market period.

2. What criteria should the Commission use to determine whether a portfolio is "balanced"?

We believe it is desirable for utilities to offer a mix of programs that include both "providing" and "managing" charging, but we believe it will be exceptionally difficult to determine criteria for determining whether a portfolio is appropriately balanced. Stakeholders will doubtless make arguments on both sides. It may be helpful to consider whether utilities are excluding programs of either kind, that are recommended by stakeholders, without good cause, and thereby creating "imbalance."

<u>Interoperability:</u>

3. What specific policies should the Commission adopt regarding interoperability of utility owned charging infrastructure? We expect that both the EVSE hardware developed by the manufacturers and the software and communications components to continue to advance and develop rapidly over time. Accordingly, how should the Commission ensure that EV owners are not locked into a certain type of technology (either hardware or software) as the market develops, and what role should the Commission have in assuring some type of backend interoperability between the EVSE at the hosting site and the operator of the overall EVSE systems?

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From a hardware perspective, the standard J1772 connector already offers widespread interoperability; the more significant hardware issues arise around fast charging, where the SAE and CHAdeMO standards are both still in wide use alongside Tesla's proprietary standard. We believe the market place will resolve the issue. We do recommend that any DCFC supported with public or utility funds should include both nonproprietary standards.

From a software standpoint, we believe that EVSE funded with public or utility dollars should generally be open source following the Open Charge Point Protocol (OCPP). The Commission and utilities should engage with the EVSE industry and other stakeholders that are currently working on developing standards - such as the Open Charge Alliance or the ROEV Association and strongly encourage a more rapid development of interoperability between charging stations. Since these standards will evolve in time, the Commission shouldn't be prescriptive when describing which standards to use.

4. What policy mechanisms or standards are available to promote system-wide interoperability for drivers, such that EV drivers can charge any EV model and pay for the charge without joining a multitude of charging networks? Does the Commission have a role in overseeing the development of these standards or protocols, or should it provide guidance on the characteristics of an open EVSE system or a more common interoperable platform?

Payment interoperability is something that electric vehicle manufacturers and charging companies have been pursuing for several years. It will certainly facilitate more rapid expansion of the EV market, and it has certainly been slower to develop than many of us in the industry would wish. Due to market forces, we believe the Commission's policy leverage could possibly do more harm than good if it seeks too strong a role.

We do believe it is appropriate to expect any EVSE funded with public or utility funds to provide a means of access that does not require a network membership or subscription fee (e.g. a credit card reader, toll free number, etc.)

Stakeholder engagement:

5. The Commission requests feedback on its proposed policy allowing for a single joint stakeholder group to participate in review of utility EV charging service program design and review.

Drive Oregon supports the Commission in convening of a single joint stakeholder group among the three electrical companies for input and information-sharing. We look forward to engaging more fully with the utilities and other stakeholders through that process.

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Other issues:

Our expansion into Washington is quite recent, such that we have not been a party to prior discussions before the Commission. We appreciate the Commissions balanced approach and would like to offer some additional comments that may yet be timely as you finalize your Policy Statement.

Used and Useful

We believe this standard should be very easy to meet for EVSE at this point. It is important to note that increased transportation electrification has many benefits to Washingtonians. First, there can be direct downward pressures on rates paid by all customers due to transportation demand that spreads fixed costs, provides grid services, and lowers the costs of integrating renewables. Second, public charging infrastructure can help drive electric vehicle demand, *even if it is seldom used to actually charge a car*. For example, the US Department of Energy has found that employees at workplaces with charging are 20 times more likely to drive electric. Electric vehicle drivers are more confident buying and driving electric when they see more charging opportunities – even if they never use them. An analogy would be household electrical outlets: many are seldom used, but knowing that there are outlets in every room makes customers very comfortable buying various electrical appliances, lights, etc. Outlets that get little use are not "failed investments" – they are part of the network that makes customers comfortable with electrical appliance technology. Third, more widespread adoption of electric vehicles is critical to meeting Washington's goals for cleaner air and reduced climate pollution; those reductions benefit all Washingtonians.

Two Hour Rule

We understand the underlying statute governing incentive rate of return requires that chargers be "installed and located where electric vehicles are most likely to be parked for intervals longer than two hours." Without having been part of the legislative process, we cannot be certain of the Legislature's intent. We would encourage you to consider that this may have been intended as a test of the equipment's usefulness, and should thus be measured in terms of ***total amount of time there is a vehicle parked there***, rather than the amount of time ***any single vehicle*** is parked there.

Low Income Consumers

We Strongly support the Commission's direction for inclusion for low income consumers. We respectfully disagree with the notion that "low-income customers are less likely to have access to an EV..." Fortunately, many two to three-year old electric vehicles are now on the used market and are extremely affordable. For example, a two to three-year old Nissan Leaf is readily available for $7,500 or less in Washington, and has extremely low maintenance and operation costs.

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Drive Oregon has recently launched the first low income electric car sharing project in the Northwest and are working on a business model to assist in its success and sustainability. We strongly encourage the Commission and utilities to work closely with stakeholders – particularly low income community groups, automakers, car dealers, and mobility providers - in designing programs that will truly benefit low income customers. We are eager to assist with this work.

We hope these comments are useful to your deliberations and we look forward to engaging more fully in the coming months.

Thank you again for the opportunity to provide comments.

Sincerely,

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