



Via email: puc.filingcenter@state.or.us

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street SE,
Suite 100 P.O. Box 1088 Salem,
OR 97308-1088

February 12, 2019

RE: AR 609 - Comments of Siemens

Siemens appreciates the opportunity to provide these comments on the Transportation Electrification Plan Rulemaking Order dated December 19, 2018. Siemens supports the proposed TE Plan and looks forward to working with the Commission and Staff on this proceeding.

Sincerely,

A handwritten signature in blue ink that reads "Chris S. King".

Chris King
Chief Policy Officer
Siemens Digital Grid

**BEFORE THE PUBLIC UTILITY COMMISSION
OF THE STATE OF OREGON**

AR 609

IN THE MATTER
OF TRANSPORTATION
ELECTRIFICATION PLAN RULEMAKING

SIEMENS COMMENTS

Siemens hereby submits these comments in the above-captioned proceeding and appreciates the opportunity to comment.

Introduction

Siemens is a global leader in eMobility® and considers eMobility to be a critical element in driving economic benefits from new investments and job opportunities, at the same time achieving the societal benefit of a cleaner environment. Siemens operates through nine locations in Oregon, generating over \$ 98 million in in-state sales.

Background

Siemens wishes to reiterate the critical need of interoperability and standards to ensure cost-efficiencies in the use of public funds for EV infrastructure build-out. We urge the utilities to adopt industry-accepted open standards for the communication of data between EV chargers and the back-end network system or “cloud.” The issue relates to whether EV chargers are inherently dependent on a proprietary communications protocol (i.e. whether the chargers are “interoperable”). If Charger A works only with Network Service A, the risk of stranded assets is increased. This situation locks in the site owner to a single provider of both the charger and the software/network service—with the inherent risk that the provider could exit the market and potentially strand the assets or not continue

to provide the level of service or functionality desired by the site owner. If the communications protocol is open, then any charger is compatible with any network service, virtually eliminating the stranded asset risk. This approach provides the site owner flexibility to move between different chargers and different network service providers in the future for cost-related or any other reasons. For example, virtually all EVSE manufacturers make products that utilize the Open Charge Point Protocol (OCPP), an open standard, between the charger and the cloud. Therefore, the adoption of open communications protocols directly enables *competition and innovation, and therefore greater customer choice, while directly avoiding stranded costs.*

Regarding payment standards, our view is that all publicly funded stations should support payment by credit card, in addition to other payment options that may be offered. Specifically, in ensuring support for credit card payment at these locations, the utilities should consider incorporating a requirement for credit card readers. Visitors would likely expect to be able to pay at these public charging stations just as they would at parking meters or gas stations, and while roaming agreements, proprietary payment cards, or fobs provided by private companies may be suitable for many other locations, the importance of maximizing customer access and the perception of easily available public charging makes it especially important to ensure customers can pay by credit card at these locations. This modification would ensure that the greatest number of customers have access to these public stations and *would enable greater customer choice and access.* We draw the Commission's attention to the New York PSC's Order in which it mandates the use of cash, credit or debit card as a requirement for public DC stations.¹

Smart charging is another item of critical importance. EVs have the potential to be valuable grid assets if charging is done off peak and in a way that does not require reinforcing the grid. Home Level 2 chargers typically add 7.2 kW of load, more than tripling the peak load of a typical home. If done off-peak, this load rarely requires grid upgrades. But in clusters and when turned on all at once – say at 6 pm when EV owners return home from work – this can easily strain the grid. Therefore, it is important that the TE plans consider smart charging as an option, in fact a preferred option.

¹ Order establishing framework for Direct Current Fast Charging Infrastructure program (Issued and Effective February 7, 2019)

Recommendations

We are not recommending in this proceeding that the Commission impose standards or smart charging requirements for the utilities, merely that the utilities consider these critical issues in developing their TE plans. Therefore, for the reasons give above, we respectfully urge the Commission to modify the draft rule for the content of the utility TE plans in accordance with our proposed language, shown as edits in Attachment A.

Attachment A

DIVISION 087

TRANSPORTATION ELECTRIFICATION PROGRAMS

860-087-0020

Transportation Electrification Plan

(4) The TE Plan must include:

(a) Current condition of the transportation electrification market in the electric company's Oregon service territory, including, but not limited to:

(A) A discussion of existing state policies and programs;

(B) Market barriers, which may include charging station development and electric vehicle adoption;

(C) Existing data on the availability of public and private charging stations chargers, including both commercial and residential sites;

(D) Number of electric vehicles of various sizes in the utility service territory, including light-, medium-, and heavy-duty and off-road (e.g. airports) and projected number of vehicles in the next five years;

(E) Payment methods available at public charging sites;

(F) Status of adoption of communications standards used for communicating between the utility and chargers;

(G) Existing data on proportion of "smart" (networked and sub-metered) chargers to non-smart chargers in the service territory;

(H) Other transportation electrification infrastructure, if applicable;

(I) Charging and vehicle technology updates; and

(J) Distribution system impacts;