



Plug In America
6380 Wilshire Blvd
Suite 1000
Los Angeles, CA 90048
(415) 323-3329

December 14, 2018

Judith Whitney, Clerk
Vermont Public Utility Commission
112 State Street
Montpelier, VT 05602

Re: Case No. 18-2660-INV Investigation into promoting the ownership and use of electric vehicles in the State of Vermont

Dear Ms. Whitney,

Plug In America appreciates the opportunity to contribute to Vermont's investigation of the issues surrounding the ownership and use of electric vehicles (EVs). Please accept for filing the Comments of Plug In America in response to the Commission's workshop of November 30, 2018.

Supplemental Comments on Consumer Protection and Plug In America/NESCAUM Workshop

Plug In America convened a workshop with the Northeast States for Coordinated Air Use Management (NESCAUM) on November 1-2, 2018. This workshop focused on consumer protection issues, aimed at ensuring that public charging infrastructure is open-access and consumer-friendly. The agenda and materials can be found at <https://tinyurl.com/PIA-NESCAUM>. Because the folder is on a Google Drive belonging to Plug In America, viewers will be required to request permission before accessing files. I will grant permission as soon as a possible when a request is received, and Plug In America has no objection to the State of Vermont downloading and hosting the files.

The topics covered at the workshop included:

- Open Access and Payment Options
- Billing Interoperability and Roaming
- Back End Interoperability
- Uptime and Reporting Requirements
- EVSE Pricing Transparency and the Role of Weights and Measures
- Highway Logo Signage

Workshop participants did not arrive at consensus on model policy language. Plug in America and NESCAUM continue to be involved in resolving these questions and we will have future webinars and events on these topics. NESCAUM is also continuing the discussions in 'states-only' venues.

There were a number of new questions identified, such as the definition of "public EVSE." Some parking spots may be for employees during certain hours, and open to the public in other hours. Would an EVSE in such a parking spot be considered "public"? As well, there are manufacturer-specific networks such as Tesla's that could be available to other automakers with an agreement – an offer that has been extended but not yet accepted.



Plug In America
6380 Wilshire Blvd
Suite 1000
Los Angeles, CA 90048
(415) 323-3329

The scope of “open access” regulations must be considered. Which regulations should apply to publicly-funded EVSE (such as through VW Settlement Appendix D grants), and which should apply to all public EVSE even if third-party funded? Are there different needs for public DC fast chargers along corridors as compared to public Level 2 chargers in a downtown area?

EVSE Pricing

In response to specific Commissioner questions on EVSE pricing, I have submitted as an attachment a survey of EVSE pricing, conducted by Jamie Dunkley of the Electric Power Research Institute (EPRI). Watson Collins of EPRI presented on this research at the workshop. The data is from the fall of 2017. It shows that of the approximately 40,000 EVSE in the survey, 24% had payment information in the PlugShare database, with about 20% charging a fee for access and almost 4% being free (respectively, 83% and 15% *of the stations with payment information*, with 2% ‘other’). Those that charged a fee had a variety of options, being measured by time, by session, by kWh, or by some combination of the above. There were over 350 unique pricing structures employed.

Open Access – Recommended Language

Plug In America supports Vermont adopting language similar to that in New Hampshire. Key elements of the New Hampshire regulations (Sections 236:132, 236:133, and 236:144) are:

- All publicly funded chargers installed after the effective date of this paragraph that are accessible to the public shall be equipped to enable universal access.
- An owner of an electric vehicle charging station shall not be deemed to be a “utility,” “public utility,” or “public service company” solely by virtue of the fact that such an owner is an owner of an electric vehicle charging station.
- All electricity distribution companies shall make available in tariffs terms and rates for electric vehicle charging stations and offer such information to the public.
- The owner or operator of a public electric vehicle charging station¹ that requires payment of a fee shall provide multiple payment options that allow access by the public. [We would support

¹ "Public electric vehicle charging station" means a charging station, electric recharging point, charging point, or electric vehicle supply equipment, which is an element in an infrastructure that supplies electricity for the recharging of plug-in electric vehicles, including all-electric cars, neighborhood electric vehicles, and plug-in hybrids, and which allows any electric vehicle owner or operator to access and use the charging station, located at a publicly available parking space. "Publicly available parking space" means a parking space that has been designated by a property owner or lessee to be available to, and accessibly by, the public and may include on-street parking spaces and parking spaces in surface lots or parking garages, but shall not include: (a) a parking space that is part of, or associated with, a private residence; (b) a parking space that is reserved for the exclusive use of an individual driver or vehicle or for a group of drivers or vehicles, such as employees, tenants, visitors, or residents of a common interest development, or residents of an



Plug In America
6380 Wilshire Blvd
Suite 1000
Los Angeles, CA 90048
(415) 323-3329

amending this as follows "...without incurring excessive fees, inconvenience or delays. Fees must be easy to understand and fully disclosed prior to charging the user. The total actual charges for the use of an electric vehicle charging station shall be disclosed to the public at the point of sale."]

- The owner or operator of a public electric vehicle charging station shall disclose the location and characteristics of each such public electric vehicle charging station, including, but not limited to, the address, voltage, and timing restrictions, to the federal database operated by the United States Department of Energy Alternative Fuels Data Center.
- No person shall park in a space equipped with a public electric vehicle charging station, unless such person is operating a plug-in hybrid electric vehicle or battery electric vehicle.
- The owner or operator of a public electric vehicle charging station may impose restrictions on the amount of time that an electric vehicle may be charged at the charging station.
- Owners or operators of public electric vehicle charging stations that require payment of a fee shall not require persons desiring to use such public electric vehicle charging station to pay a subscription fee or otherwise obtain a membership in any club, association, or organization as a condition of using such public electric vehicle charging station, but may have different price schedules that are conditioned on a subscription or membership in a club, association, or organization.

Note that the New Hampshire definition of "public electric vehicle charging station" refers to those that allow "*any electric vehicle owner or operator* to access and use the charging station" (emphasis added) and so would exclude the Tesla network which that automaker installed at its own expense. Plug In America supports this carve-out. We do hope to see other automakers investing in charging networks but consider this less likely to occur if they could free-ride on Tesla's investments. We do not support an expansive definition of "public electric vehicle charging station" that could intentionally or inadvertently deter Tesla from making future investments in Vermont.

Thank you for the opportunity to provide these comments. Please do not hesitate to contact me with any questions.

Best regards,

A handwritten signature in black ink that reads "Pete O'Connor".

Pete O'Connor
Policy Specialist
Plug In America

adjacent building; or (c) a parking space reserved for persons who are blind and persons with walking disabilities as defined in RSA 259:124.