



ELECTRIC DEPARTMENT

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February 15, 2019

Ms. Judith Whitney, Clerk
Vermont Public Utility Commission
112 State Street
Montpelier, VT 05620-2701

Re: Case 18-2660-INV – Response to Commission Information Request

Dear Ms. Whitney,

The Town of Stowe Electric Department (“Stowe” or “the Utility”) submits the following informational filing in response to a request from the Public Utility Commission (“PUC” or “Commission”) dated February 4, 2019 in relation to potential methodologies to collect funds from EV drivers which will be paid towards the cost of maintaining Vermont’s transportation infrastructure. Each of the Commission’s questions are answered in turn below.

- 1. The costs and requirements that are expected to be incurred by Vermont distribution utilities if the State of Vermont were to impose a tax or fee on EV charging on a kWh basis and if Vermont distribution utilities were required to calculate, bill, and collect that tax or fee.*

Requiring a distribution utility (“DU”) to collect and remit an EV fee would certainly have cost implications. Many Vermont DUs do not currently have the capability to capture the kWh used to charge an EV at a customer’s premises because the electric vehicle supply equipment (“EVSE”) is located behind the customer meter. The DU would also be constrained if it does not have an EV charging tariff approved by the PUC for that particular type of service. The DU would then need to develop and implement a PUC-approved tariff specific for EVSE services and ensure that the kWh delivered for that

purpose would be easily broken out from other consumption at the customer premises to facilitate proper billing.

Stowe is currently unable to collect such a per kWh fee for both of the reasons stated above. All residential EV charging is conducted behind the existing utility meter, as is any charging at commercial locations using privately-owned EVSE. Stowe can only currently track EV charging if it occurs at one of the Utility's public charging stations. In that case, the customer is billed under Stowe's public EVSE tariff based on the length of time that the EVSE is in use. Neither scenario lends itself to the imposition of a new EV fee as envisioned in this case as they do not measure the kWh delivered to the EVSE. Implementing a per kWh fee would therefore require Stowe and other DUs to research and develop a new EVSE rate and then obtain PUC approval for the new tariff. Both of these steps have inherent costs that are as of yet unknown. Following approval from the Commission, the DU would then have to modify billing and other systems to implement the necessary modifications to apply the tariff and the associated EV fee. Finally, Stowe would also need to develop new accounting policies to collect, manage, and remit the funds collected through this new fee structure. Each of these steps may require considerable staff time, consultant fees, legal fees, and labor costs for work performed by system vendors. This process may also need to be duplicated for the purposes of developing tariffs for residential, commercial, and public EV charging applications as the load profiles and installation costs are inherently different in each case.

There are also operational costs which would stem from the implementation of this new rate and per kWh fee. As stated, EV charging at residential and commercial locations in Stowe is currently performed behind the meter. Breaking out the kWh delivered for the purposes of EV charging would require the installation of additional metering capability, such as installing a second meter at the customer premises. This would come with a cost for the DU to supply and install the meter, as well as the customer's cost to hire an electrician to install the EVSE, the meter socket, and perform the wiring necessary to separately meter the new equipment. These costs could range significantly depending upon the circumstances at the customer's location, such as the existing wiring or if there is enough room available in the breaker box. The other option, as has been explored by other Vermont distribution utilities, would be to submeter the kWh delivered for the purposes of charging the EV using non-revenue grade metering equipment. In both of these instances, it is important to note that the DU always has a revenue-grade utility meter on the customer premises that meets the ANSI standards and can easily be referenced by the DU for various customer service, load study, and grid planning purposes.

It is important to note that if the DU were permitted to bill a customer for the full cost of the utility materials and labor for the additional service in order to avoid any possible cross-subsidy in favor of EV drivers, that charge may serve as a disincentive for those customers to adopt the new EV rate. That could in turn limit the efficacy of a kWh fee or tax for the purpose of supporting the maintenance of the State's transportation infrastructure. This would be particularly true for residential customers and businesses who offer EV charging as an amenity for their customers and employees, or DU customers who currently use Level 1 charging that often does not require the installation of new equipment at the premises.

Perhaps the simplest application of a new per kWh tax or fee would be in the instance where a 3rd party installs, owns, and operates their own EVSE at a new service location. This would be treated by the Utility as a standard commercial operation for billing purposes and charged under one of Stowe's existing commercial tariffs. Stowe would install the new service drop and any other equipment necessary to provide power to the new location, including a meter. In this case, no matter the number of charging stations or their level of output, the Utility could simply track the total kWh delivered to the equipment using the utility meter and then apply the per kWh fee. This process would be no different than how utilities currently collect sales taxes and the entity that operates the EVSE could decide how to allocate the cost of that fee to the EV drivers that make use of the equipment.

2. *For any Vermont utility that currently has in place a program or tariff that provides a rate specific to EV charging, an explanation of how EV charging is tracked and accounted for when billing a customer using that rate and whether such tracking could also be used for calculating and billing for a kWh tax or fee applied to that same usage. Please explain any differences in your response for at-home charging versus charging at a public charging station, and any differences based on the use of Level 1, Level 2, or DC fast-charging facilities.*

Stowe has had a tariff since 2013 for utility-owned EVSE available for public use. The tariff is essentially a parking fee and charges the customer for usage based upon time that they occupy the EVSE charging port rather than kWh consumption. All of the Utility's charging stations are part of the ChargePoint network which provides a 3rd party point of sale service based upon the rate set by the EVSE owner. ChargePoint measures the time that the customer spends at the charging station, applies Stowe's tariff, and directly charges the customer the corresponding fee through the customer's own ChargePoint account or using the credit card info that they provided when they started the charging session. This rate is applied to EV charging at Stowe's Level 2 facilities as well as the Utility's one DC fast charger. As outlined

above, this rate is not available for any residential EVSE or privately-owned stations that may be available for public use.

ChargePoint then provides monthly statements to Stowe which provide a number of data points for each charging session, including the kWh delivered as measured by their equipment. The administrative tools offered with this service do offer the owner of a charging station the option to implement a rate based upon the kWh delivered to the EV customer. Currently these tools only allow the utility to implement a flat per kWh charge which would require the utility to bake in any additional fees such as sales tax, an energy efficiency charge, or an EV fee.

- 3. Any information or reference materials on other jurisdictions that have implemented whether by pilot program, statute, or otherwise, a kWh fee on EV charging for the purpose of collecting contributions from EV users. Information explaining how such a tax or fee was implemented and collected and how successful the program has been would be particularly useful.*

Stowe is not aware of any state programs that have implemented a kWh fee similar to what is being discussed in this proceeding or any corresponding information and reference materials. We hope that the other stakeholders may be able to provide such materials for discussion purposes if in fact they are available.

Thank you for the opportunity to comment on this matter. Please let me know should you have any questions.



Matthew DS Rutherford
Manager of Regulatory Compliance
Town of Stowe Electric Department