

Vermont Electric Cooperative, Inc.

42 Wescom Road Toll Free: 1-800-832-2667 Johnson, VT 05656-9717 Telephone: 802-635-2331

www.vermontelectric.coop

Testimony to House Energy and Technology March 10, 2021 Transportation Bill Section 11 re: Electric Vehicle Rates

Andrea Cohen, Manager, Government Affairs and Member Relations, VEC

Thank you for the opportunity to offer comments on Section 11 of the Transportation bill concerning EV rate design. VEC supports the goal of transforming our transportation system, creating incentives that encourage transition to cleaner transportation fuels, and appreciates the need for all transportation infrastructure users to pay their fair share for maintenance of the system. A successful system will be equitable, cost effective and economically sustainable.

VEC has participated in numerous regulatory and legislative proceedings regarding transformation of our transportation systems, including EV rate incentives, and ways to generate revenue from EV drivers for road infrastructure. We support the development of "opt-in" rate options to incentive EV charging provided they are cost effective and that do not shift costs to other members that are not in the position to utilize them.

As we pursue new rate design options it is important to highlight a common misperception about capabilities of current metering systems. Even "smart meters" are not as smart as people may think. While our AMI meters can read whether electricity is being used, and past usage in 15-minute intervals, the meters do not know what the electricity is being used for. We do not know whether a member is charging a car, heating a hot-tub or using a heat pump. To meter and bill EV charging only, some type of submeter will need to be utilized for metering and billing, and that submeter needs to integrate with our metering and billing systems. There is cost and complexity to doing this which needs to be accounted for. The good news is that the technology continues to evolve. The question is how rapidly and at what cost.

Currently, VEC offers members incentives for level 2 charging through our Energy Transformation Program "whole house" time of use (TOU) rate. TOU rates can be an effective tool for shifting load and giving members more control over their usage and monthly electric bill. VEC also offers an additional monthly bill credit for load management of eligible Level 2 EV chargers. These incentives are set at levels that bring benefit to all VEC members. Currently, four large commercial, three small commercial, and twenty eight residential members have opted to participate in the TOU rate.

In 2020, VEC surveyed our members, asking whether they use plug-in vehicles and if they did how they charged them. An interesting result is that of the 80 respondents who reported having plug-in vehicles, more than half reported that they trickle charge (Level 1) and do not utilize a Level 2 charger at home. When asked why they do not have Level 2 chargers, 45% said "plugging into a regular outlet is sufficient" and 40% said Level 2 chargers were "too expensive". Although we expect Level 2 home charging to increase proportionally over time, and EV rates will offer some additional incentive, we do expect many members will continue to trickle charge.

Regarding T-Bill section 11.

VEC supports the goal of time-differentiated price signals to facilitate efficient use of the grid that encourage collaboration between the customer and the utility; sharing the value of charging when most cost effective. Our interpretation is that if the bill was passed, VEC would need have in place by

2024 an EV rate that members could opt into, but it would not be mandatory that they select that rate. This would provide the member with a value proposition option that they could evaluate for themselves. This option may require that they incur certain costs to be able participate. The bill provides time for utilities to work on the EV rate design which is necessary as technology and systems continue to emerge and become cost efficient.

VEC suggests that in section (b) the term "implement" may be misinterpreted to mean that EV drivers must participate in a rate that is offered so we offer alternative language that we find more on-point with the stated goals.

(b) Not later than June 30, 2024, all State electric distribution utilities shall implement offer PEV rates for public and private EVSE that....

A potential barrier that we raise here and have discussed at length in regulatory proceedings is the ability of the distribution utility to meter and bill the EV charging. Metering and billing are complex and expensive systems. The true and full cost may be a limitation on a customer being able to opt-in to the EV rate incentive. There are a few options currently available and more will likely become available as the technology emerges.

- Installing a submeter for EV charging. In our PUC filings we outlined the associated cost and
 process which may involve hiring an electrician to install a meter socket so VEC can install the
 meter. VEC charges would include trip fees and monthly meter and module fees for the
 additional meter.
- Utilize metering technology embedded in the charging equipment. For this to be feasible the technology would need to demonstrate that the system was billing grade and could integrate into our metering and billing systems. Currently this would need to be a manual process which would not be sustainable with high EV rate adoption.

Section (b) outlines the requirements of the rate design that include encouraging (1) efficient use of PEV loads consistent with objectives of least-cost integrated planning, (2) participation in the PEV rates; (3) travel by PEV relative to available alternatives; and (4) greater adoption of PEVs.

VEC supports those EV rate design goals as well as the PUC approval findings: (1) support greater adoption of PEVs; (2) adequately compensate PEV operators and owners of EVSE available to the public for the value of grid-related services; (3) adequately compensate the electric distribution utility for all forward-looking or avoidable costs of service that are directly attributable to the delivery of electricity through a PEV rate; (4) include a reasonable contribution to historic or embedded costs required to meet the overall cost of service; (5) do not discourage EVSE available to the public; and (6) do not have an adverse impact, over time, to ratepayers not utilizing the PEV rate.

VEC supports any additional flexibility and exceptions that might be necessary due to prohibitive costs or technology limitations that might impede implementation of the EV rate.

Thank you for the opportunity to comment. We look forward to continued engagement on this topic.