Testimony to the House Committee on Energy and Technology

Daniel Dutcher, Environmental Policy Manager
Vermont Agency of Transportation
daniel.dutcher@vermont.gov
802-498-4540

March 15, 2019

Elements of the Transportation Bill Relating to Electric Vehicles

I. EV Incentive Program for Low- and Moderate-Income Vermonters

A. Reasons for an EV Incentive Program

The section of the Transportation Bill relating to an EV Purchase and Lease Incentive Program contains proposed findings as well as the basic elements of the Program.

One of the biggest barriers to EV adoption is the upfront cost of the vehicle. Purchase incentives are an effective means of overcoming this barrier. Purchase incentives are linked to increased sales of EVs, and consumers who take advantage of incentives report that incentives played an important part in their decisions to enter the EV market.

In its final report, the Vermont Climate Action Commission recommended building an EV point-of-sale customer incentive for EVs. Governor Scott has taken up this recommendation and called for a $1.5M EV purchase and lease incentive program in his budget address. VTrans, with the assistance of ANR and PSD, put together the basic elements of a program and drafted the proposed legislation provided to this Committee.

Many Vermonters lease rather than own their vehicles, and many Vermonters who purchase vehicles purchase used vehicles. The proposed Program therefore covers both new and used EVs and well as both purchases and leases.

The proposed Program is designed to benefit low- and moderate-income Vermonters in order to help ensure that all income strata and all regions of Vermont start to enjoy the benefits of vehicle electrification as quickly as possible. Transportation energy burdens are particularly high for rural, low-income Vermonters. The incentive, combined with the lower fueling and maintenance costs of EVs, could significantly lessen transportation cost burdens for Vermonters.

In addition to directly benefiting the consumers who take advantage of the incentives, this Program will function as education and outreach to a broad segment of Vermont society. A central task in electrifying Vermont's fleet as quickly as possible is to bring EVs to rural areas and to all income levels. Vehicle electrification is not going to work unless it works for everyone. EV owners tend to be very satisfied with their vehicles. This Program will help get the word around about EVs and help move Vermont to a renewable transportation system.

B. Elements of an EV Incentive Program

Either VTrans or the PSD will be chiefly responsible for establishing and administering the new EV Incentive Program, with whichever agency does not take the lead and ANR providing cooperation and support to the lead agency. The Transportation Bill in the House currently identifies the PSD as the lead agency, but the lead agency still needs to be determined.

The agencies will coordinate marketing for this this new incentive program with existing and new distribution utility EV and EVSE purchase incentives.

In addition, part of the Incentive Program involves recruiting utilities to provide a Level 2 home charger to be offered in conjunction with the EV purchase incentive. The distribution utilities would provide the L2 chargers as part of their responsibilities under Tier 3 of Vermont's Renewable Energy Standard. Tier 3 requires utilities to help Vermonters reduce their use of fossil fuels for heating and transportation.

As the Program would be structured, incentives of $2,500 would be available to households with income levels between 100% and 140% of the State's most recent Median Household Income (MHI) level. MHI is about $58,000. Additional incentives of up to twice that amount would be available to households below Vermont's MHI. This approach could translate into two or three hundred grants over the course of the Program.

As the House Transportation Bill is currently written, vehicles with a Base Manufacturer's Suggested Retail Price (MSRP) of $35,000 or less would be eligible for the incentive. This cutoff point could have the unintended effect of including some EV models in the Program while leaving other popular EVs, just over the cutoff line, out. VTrans is open to adjusting this cap on the maximum vehicle price up to $45,000 as may be necessary to ensure that all appropriate EVs are included in the Program.

The Program would run for two years from the date the State makes the first incentive payment available, or until the available funds are fully obligated, with available incentives spread evenly across each year to the extent possible.

Funding shall be available on a first-come, first-serve basis in each year of the Program.

Subject to state procurement requirements, the lead agency may retain Drive Electric Vermont or another consultant to assist with marketing, program development, and administration. Up to $75,000 of program funding would be set aside for this purpose. The lead agency would take responsibility for contracting with the consultant. VTrans is willing to accept this responsibility.

Note that some of the figures is section (a)(3) of the bill are already out of date. Vermont now has approximately 3,000 EVs on the road, and EVs in Vermont are approaching 6% of new passenger vehicle registrations, according to Drive Electric Vermont's website.

II. Fees for the Use of State-Owned or -Controlled EV Charging Stations

Currently, agencies cannot charge the public fees that are not specifically authorized by law. VTrans, ANR, PSD, and BGS collaboratively drafted a proposed section of the Transportation Bill that would authorize state agencies to charge a fee for the use of state-owned or -controlled electric vehicle supply equipment (EVSE).

VTrans has purchased two battery electric vehicles (EVs)—a Nissan Leaf and a Chevy Bolt—and VTrans plans to purchase additional EVs going forward. VTrans has installed a level-two (L2) charging station at the Dill Building in Berlin and plans to install a direct current fast charging (DCFC) station at its garage in White River Junction. VTrans will most likely purchase additional EVSE to keep its growing electric fleet charged.

VTrans would like to make its charging stations available to its employees to charge their own vehicles and to members of the public visiting VTrans facilities. However, to do so, VTrans needs to be able to charge a fee to help recover its costs. This section of the Transportation Bill would enable VTrans and all other agencies to do that. Other agencies have their own fleets, and BGS runs the state motor pool, which includes EVs and EVSE and which will continue to electrify. BGS plans to invest $500,000 in battery electric vehicles in the near future and to invest another $150,000 in EVSE to support those vehicles.

Other situations may arise where a state agency may need to charge a fee for the use of EVSE. Although state agencies are not planning to enter into the EV charging business, an agency may at times need to take over a public charging station. For example, Washington Electric Coop installed and currently runs the charging station at the Middlesex Park & Ride, but under the agreement between WEC and the State, that equipment will soon belong to VTrans. VTrans will need to be able to charge for the use of this equipment unless and until VTrans finds another third party to operate it.

Other scenarios could arise where VTrans or another agency enters into a public-private partnership with a third-party providing EV charging on state land, with the State owning the EVSE at the end of the lease.

In the near term, VTrans and other agencies may not realistically be able to fully recover their costs from the use of their EVSE by their employees or the public. Full cost recovery may require charging prices to be set unreasonably high. The proposed legislation allows for the changing economics around EVSE by allowing the agencies to charge below cost, at cost, or at the regional market rate. It could be difficult for state agencies to determine exactly what their costs would be in some situations. The regional market rate would act as a kind of cap on charging fees by the State and could be determined by looking at prices set by publicly available charging stations in the area.

By not limiting state agencies to charging their costs and by not requiring the agencies to go through a review process every time they want to change their charging fees, the proposed legislation would treat EV charging fees differently from other authorized fees. People have no choice when it comes to permits, transcripts, and other matters that fee statutes address. Linking fees to costs and requiring changes in fees to undergo legislative review for these matters is therefore appropriate. However, the State does not have a monopoly over EV charging—if people do not like an agency's price for a charge, they can charge elsewhere.

Allowing the State to charge up to the market rate for the use of EVSE it owns or controls is analogous to existing rules that require the State to obtain fair market value for leases of its land, except when the public interest or other relevant factors justify a lower rate. (See, e.g., 19 V.S.A. §26a(a).)

It makes sense to afford state agencies some discretion for how much they charge for the use of their chargers so the agencies can set prices at levels they determine

will best advance vehicle electrification while also covering their costs to the extent practicable.

House Ways and Means expressed some concern that the State could undercharge users of its EVSE over the long term. Ways and Means therefore recommended to House Transportation that the State's authority to charge for charging sunset after three years. At that time, the charging landscape can be reassessed and the statute authorizing the State to charge for charging can be modified. The Transportation Bill now incorporates this approach.

The agencies are not opposed to the sunset section, although it may be more efficient to allow the agencies to adjust their charging rates on their own as the EVSE market shifts.

III. Jurisdiction over Electric Vehicle Charging Stations

Section 25 of last year's Transportation Bill (Act 158) requires the Public Utility Commission (PUC) to investigate a variety of issues relating to electric vehicles EVs and EV charging stations.

Among the issues that last year's Transportation Bill requires the PUC to investigate are the scope of its jurisdiction and that of other agencies over EV charging stations and the transparency of EV charging station rates and prices.

The PUC is conducting its investigation in the form of a series of workshops and has received input from a breadth of stakeholders, including state agencies, distribution utilities, NGOs, and EV charging companies.

It is currently not clear whether the PUC has jurisdiction over EV charging stations that are not run by electric distribution utilities. Stakeholders in the PUC workshops have generally agreed that clarifying the scope of the PUC's jurisdiction over EV charging stations should be a priority. Stakeholders have also generally agreed that the PUC should not have jurisdiction over EV charging stations.

Clarifying that EV charging stations are not regulated public utilities will allow the EV charging station market to develop and enable non-utility EVSE owners and operators to sell electricity directly and to charge by the kWh. This is much fairer that the go-arounds that EV charging stations companies have used, such as charging for the use of the parking space, because different vehicles charge at different rates and different charging equipment provides electricity at different rates.

Although the PUC's final report to the Legislature is not due until July 1, 2019, the PUC is taking a staged approach to its investigation of EV charging, with the highest priority, foundational issues to be addressed first. Thus, the PUC, with general support of the stakeholders participating in its investigation, wrote the Legislature on January 23, 2019 with proposed amendments to Title 30 that would remove EV charging from the PUC's jurisdiction.

In its draft legislation, the PUC included language that would remove submeters for EV charging stations from the PUC's jurisdiction, thus leaving the Agency of Agriculture, Farms, and Markets (AAFM) with the responsibility for regulating the transparency and accuracy of publicly available EV charging pursuant to its general authority over weights and measures under Title 9.

Section 24 of this year's Transportation Bill adopts the PUC's proposed amendment. VTrans supports the amendment. VTrans, the Public Service Department (PSD), and the Agency of Natural Resources (ANR) are working with the AAFM to determine whether additional statutory language is needed regarding the AAFM's authority over weights and measures relating to EV charging. For example, the AAFM will most likely charge a registration fee for publicly available EVSE.

Another bill, H.191 (which is in House Energy and Technology), adopts some of the PUC's recommended language that removes EV charging from the PUC's jurisdiction. However, H.191 takes a different tack on the issue of weights and measures. H.191 would require the PUC, in consultation with the AAFM, to study the issue of weights and measures relating to EV charging and to file recommendations with the Legislature on or before January 30, 2020.

VTrans does not recommend postponing legislation addressing weights and measures over EV charging another year. The AAFM is the agency responsible for weights and measures, and there is no reason to make an exception to that system for EV charging. The AAFM has been consulted and agrees. However, the AAFM may require additional resources to perform these duties and will likely want to address the appropriate committees directly.

The National Institute of Standards and Technology (NIST) is developing a weights and measures protocol for EVSE. Until that protocol is in place, AAFM may choose not to enforce weights and measures against EVSE owners or operators. However, consumer fraud relating to EVSE could still be prosecuted by the Attorney General.

There is an open question about whether a tracking system for EVSE to enable utilities to plan for additional loads and for other purposes can be adequately handled through AAFM's weights and measures program for EVSE or whether a separate mechanism within the purview of the PUC would also be helpful. VTrans tends to think the AAFM process will suffice but will let this conversation play out.

Thank you for your consideration.