

October 16, 2023

Holly Anderson, Clerk  
Public Service Commission  
116 State St  
Montpelier, VT 05620

Re: Case No. 23-1364-INV Flexible Load Home Charging Program Tariff and Request for Commercial and Industrial Exemption

Dear Ms. Anderson,

Vermont Electric Cooperative (VEC) is filing this response to the Vermont Public Utility Commission's (Commission's) investigation into electric vehicle rates. We are filing a new tariff for the Flexible Load Home Charging Program for residential members and requesting an exemption based on Service Classification 2.2 and 2.3, existing commercial and industrial time of use rates, for commercial members.

### **Flexible Load Home Charging Program Tariff**

Through our current Tier 3 incentives, VEC offers a flexible load home charging program for residential members that have L2 chargers. Starting in 2019, VEC began enrolling L2 chargers in a platform to communicate with the chargers and request that they not charge during peak times. Only certain brands of L2 charger are compatible with this platform. Therefore, we also offered a program where the member could set a schedule to avoid charging from 5-9pm Mon-Fri. Members with enrolled chargers received a \$300 incentive upfront and \$8 per month provided that they did not opt out of any events. Members who set a static schedule received a \$250 incentive.

In 2023, VEC began offering free home chargers to residential members who own or lease an electric vehicle. The participant is responsible for the installation and must enroll the charger in VEC's communications platform so that VEC can ask the charger not to charge during peak events (5-6 events per month, up to 3-4 hours each event). Participants receive \$8 per month provided that they do not opt out of any events. This program enables VEC to ensure that charging is not occurring during peak events, provides discounted charging to members, and is simple to administer.

Between the original managed charging program that began in 2019 and the 2023 enhancement that provides a free charger, we currently have 98 chargers enrolled on the platform and another 50 where enrollment is pending. We also have 107 chargers that have set



a schedule to avoid charging from 5-9pm. Counting both direct management and the set schedule, the total participation rate is 46 percent (255 out of 550), and VEC has a goal of increasing participation to 75 percent.

VEC is currently working with a telematics provider to communicate directly with electric vehicles to call peak events. This platform could replace the previous program that communicates with L2 chargers and enable VEC to manage charging for many electric vehicle drivers who have a different brand of L2 charger or who rely on an L1 charger.

The current program, as reflected in the new tariff, provides an enrollment incentive of either a free home level II charger or a \$50 bill credit and an ongoing credit of \$8 per month to incentivize ongoing participation. These incentives reward the individual participant while retaining some of the value of load shifting for the co-op as a whole. Please see the accompanying economic model for more detail on how this value was determined.

In accordance with Section 33 of Act 55, the Flexible Load Home Charging Program addresses the following criteria:

*(A) support greater adoption of PEVs;*

As part of this program, VEC provides a free Level 2 charger, which removes an initial barrier to EV adoption. VEC envisions maintaining this benefit (where needed) regardless of whether the communication is with the charger or the vehicle, as an incentive for participating in the Flexible Load Program. **Participants who already have a level II charger will receive a \$50 enrollment incentive.**

*(B) adequately compensate PEV operators and owners of EVSE available to the public for the value of grid-related services, including costs avoided through peak management;*

The monthly incentive of \$8 per month is based on an economic analysis the VEC has done on the value of shifting usage away from peak times. About 60 percent of this value is given to the individual participant and 40 percent is retained for the co-op membership as a whole.

*(C) adequately compensate the electric distribution utility and its customers for the additional costs that are directly attributable to the delivery of electricity through a PEV rate;*

As stated above, about 40 percent of the value of peak-shifting is retained for the larger co-op membership.



*(D) include a reasonable contribution to historic or embedded costs required to meet the overall cost of service;*

Participants in the Flexible Load Home Charging Program are charged the standard residential rate, which covers the cost of service, then credited back \$8 per month to compensate them for the benefit of avoiding charging during peak times.

*(E) do not discourage EVSE available to the public; and*

Since this is strictly a residential program, it has no bearing on public charging.

*(E) do not have an adverse impact to ratepayers not utilizing the PEV rate.*

Please see the response to (D) above.

### **Request for Commercial & Industrial Exemption**

On the commercial and industrial side, VEC is requesting an exemption based on Service Classification 2.2 and 2.3, our existing commercial and industrial time of use (TOU) rates, which are available to any member who participates in VEC's Energy Transformation Program. Electric vehicle chargers are part of this program.

Service Classification 2.2 for Small Commercial members and 2.3 for Large Commercial & Industrial offer non-demand, time of use rates that can be used for level II (L2) and level III (L3) public and workplace chargers. The TOU rate has three time periods—on peak (5:01pm-9pm), mid peak (7:01am-5pm) and off peak (9:01pm to 7am weekdays, and all-day weekends and holidays).

These rates are:

ENERGY USAGE CHARGES

Off-Peak Rate	\$0.13587	Per kWh
Mid-Peak Rate	\$0.18813	Per kWh
On-Peak Rate	\$0.33763	Per kWh



Currently, no commercial or industrial members that host L2 or L3 chargers participate in these rates. However, there are fewer than twenty commercial or industrial accounts that VEC is aware of in our service territory that host L2 or L3 chargers. The ones that do have maintained the rate that they were previously on. Two L3 charger-only accounts that were developed as part of the ACCD grant program currently have low enough usage that they qualify for the small commercial rate. They may opt for the TOU rate once the usage is high enough to trigger a rate with a demand charge.

In accordance with Section 33 of Act 55, Service Classification 2.2 and 2.3 address the following criteria:

*(A) support greater adoption of PEVs;*

Lack of electric vehicle supply equipment (EVSE) is a barrier to EV adoption, and demand charges have been identified by EVSE providers as a barrier to development of EVSE. Service Classification 2.2 and 2.3 do not include demand charges, thereby removing this barrier to greater deployment of EVSE in VEC's service territory.

*(B) adequately compensate PEV operators and owners of EVSE available to the public for the value of grid-related services, including costs avoided through peak management;*

These rates deliver power at a lower cost during mid- and off-peak times, and at a higher cost during on-peak times. For public charging, VEC does not believe that it would be possible to curtail charging during peak times. These chargers must be available on-demand. Therefore, the best strategy is to charge appropriate, time-varying rates to the EVSE provider. It will be up to the EVSE owner to determine how to factor time-varying rates into the cost to the end-user.

*(C) adequately compensate the electric distribution utility and its customers for the additional costs that are directly attributable to the delivery of electricity through a PEV rate;*

Please see response to (B) above.

*(D) include a reasonable contribution to historic or embedded costs required to meet the overall cost of service;*

Please see response to (B) above.



*(E) do not discourage EVSE available to the public; and*

Please see response to (A) above.

*(E) do not have an adverse impact to ratepayers not utilizing the PEV rate.*

Please see the response to (B) above.

Please contact us with any questions.

Sincerely,



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