



*Via ePUC*

May 31, 2023

Ms. Holly Anderson, Clerk  
Vermont Public Utility Commission  
112 State Street, 4<sup>th</sup> Floor  
Montpelier, VT 05620-2071

**VPPSA Response to Request for Information  
Case No. 23-1364-INV  
Investigation into Rates Related to Electric Vehicles**

On June 3, 2021, Act 55, entitled “An act relating to the Transportation Program and miscellaneous changes to laws related to transportation,” was signed into law. Section 33 of Act 55 directs the Vermont Public Utility Commission (“Commission”) to file an annual report with the Legislature for four years, through January 15, 2025, regarding the progress of Vermont distribution utilities on implementing rates related to plug-in electric vehicles (“EVs” or “PEVs”) and electric vehicle supply equipment (“EVSE”). On April 27, 2023<sup>1</sup>, the Commission opened Case No. 23-1364-INV to initiate their annual investigation into Rates Related to Electric Vehicles for the 2024 report. Per the opening order and request for comments, the Commission will provide an inventory of utilities’ existing rates related to EVs and EVSE, an update on the utilities’ progress toward meeting the requirements of Act 55 and plans to include a list of pending EV-related tariffs that have been filed with the Commission in advance of the June 30, 2024, deadline.

---

<sup>1</sup> [Case No. 23-1364-INV Order Opening Investigation and Requesting Comments, April 27, 2023](#)

The Vermont Public Power Supply Authority (VPPSA) submits the following response on behalf of its eleven (11) municipally owned electric distribution utility members on their progress related to meeting Act 55's EVSE rate requirements.

**1. The approximate date that you expect to file your tariffs with the Commission.**

The expected tariff filing date(s) are to-be-determined, though VPPSA acknowledges the Commission's expectations expressed in this Order that filings will be prepared in advance of its 2024 Legislative Report. Timelines are impacted by a range of factors, including ongoing research and additional contextual information from VPPSA members, service territories, and (possible) vendors.

**2. Whether you will file multiple EVSE tariffs, and to which rate classes, market segments, or customer segments those rates will apply.**

Final determinations on the specific number of EVSE tariffs, and to which rate classes, market segments, or customer segments those rates will apply is also yet to-be-determined. Tariffs will be established to meet Act 55 requirements including consideration of cost-effective solutions utilizing load control, time-varying rates, and/or other innovative practices that accomplish regulatory goals and priorities. Decisions will be made based on a range of factors. For example, pending research findings and technology or device capabilities, VPPSA may decide to differentiate rates depending on the installations' use case (e.g., residential, workplace, or public charging), number of charging ports, charging capacity, and subsequent load capacity.

For instance, the same rate might work fine for both small commercial and residential segments, but for large commercial and industrial customers, the added EVSE load may require further consideration for least-cost integrated planning to ensure system reliability through adequate protection and controls infrastructure. To date, VPPSA has focused on pursuing innovative rate design concepts that enable full cost-recovery as outlined in Section 33(1)(A) - (F). Additionally, these innovative rate design structures are predicated by the assumption that appropriate measurement and billing infrastructure is in place to implement those rates (i.e., interval metering and CIS/billing systems capable of accurate billing).

**3. Progress barriers that you are encountering that could prevent you from meeting the requirements of Sections (a) and (b) of Act 55 and possible solutions to overcoming those barriers.**

In its ongoing efforts, VPPSA has identified several progress barriers to implement Act 55 requirements under Section 33 (a) and (b), as described in greater detail below.

**Transportation, Economic Opportunities & Broadband Infrastructure:** To-date, VPPSA recognizes overall transportation security and quality of road infrastructure, economic opportunities, and broadband connectivity all present potential barriers to successful implementation of Act 55's requirements. According to the U.S. Department of Transportation's (DOT) Equitable Transportation Community Explorer (ETC)<sup>2</sup>, Transportation Insecurity in census tracts served by VPPSA's member utilities is

---

<sup>2</sup> See U.S. Department of Transportation [ETC Explorer's interactive web application results for the State of Vermont](#).

significantly higher than Vermont's 50% statewide average. For example, the ETC's Transportation Insecurity results include: Lyndonville (76%), Jacksonville (81%), Swanton (83%), Johnson (92%), Enosburg Falls (97%), Orleans (99%), and Barton (100%). As a predominately rural state, Vermont many residents who live in rural parts but travel to more densely-populated areas to pursue professional or economic growth opportunities. Reduced access to local opportunities for gainful employment, has the potential to place disproportionate cost burdens in the most rural parts of the state, particularly where limited EVSE charging infrastructure or funding opportunities currently exists. These barriers are exacerbated by limited access to affordable and reliable broadband high-speed internet access. While the Northeast is ranked highly for internet access, according to the Vermont Business Magazine, Vermont's broadband access is not only the most expensive in the region, but also ranks 45<sup>th</sup> for internet inequality and affordability<sup>3</sup>. Existing technologies available for implementing demand-side load management for EVSE require internet connectivity and these challenges present significant barriers to implanting Act 55 requirements, though VPPSA remains committed to exploring innovative solutions to meet these goals.

**Qualified Workers & Workforce Development:** Distribution utilities across the state have continued to witness shortages internally and externally; labor shortages are prevalent for not only power systems design, construction, maintenance, and operations, but also for electricians and licensed contractors. The current labor and

---

<sup>3</sup> Vermont Business Magazine, *Vermont has the most overpriced Internet in the Northeast, rural states struggle*, November 29, 2022.

workforce development landscape presents additional barriers to the installation/maintenance of charging infrastructure and thus enrollment in EVSE programs that support least-cost integrated planning.

**PEV Availability:** Vehicle stock availability from auto manufacturers also continues to prove to be a significant barrier, for both research and eventual adoption of EV/EVSE equipment. Per Drive Electric Vermont, the number of EVs increased by 2,290 in 2022<sup>4</sup>, with plug-in EVs accounting for 6.9% of all new light duty vehicle sales in the same period according to the Vermont Vehicle and Automotive Distributors Association.

**Accurate Measurement & Billing:** Absent advanced metering infrastructure (AMI), a project/investment that VPPSA and its member utilities are in the process of finalizing for implementation, active measurement and billing continues to present a potential barrier to further development and implementation of Act 55 requirements. While many distribution utilities maintain independent billing systems designed primarily for utility operations and customer billing, many municipally owned electric utilities are fully integrated with the local government and/or these systems also support water, wastewater, electric, and municipal government taxes and fee collections. This complexity may result in more costly or complex integrations to implementing potential rate design concepts or tariffs. Nevertheless, VPPSA is exploring other solutions, that leverage advances in technology and manufacturer

---

<sup>4</sup> See [VEIC/Drive Electric Vermont's January 2023 EV Registration Update](#), published 2/16/2023

developments that result from an evolving EV market. Ultimately, VPPSA continues to research and test solutions these barriers, while also preserving the goals and cost-recovery requirements outlined in Act 55<sup>5</sup>.

Given the nature of VPPSA's member utilities and the customers they serve, additional barriers unique to the local customers and communities they serve.

**4. Whether you already offer an EVSE rate that qualifies for the exemption of Act 55, Section (d). Please identify the rate class, market segment, or customer segment to which the exemption applies.**

As noted above, VPPSA is currently conducting research under the Vermont Department of Public Service (PSD) Innovative Rate Design grant, which seeks to identify the appropriate structures and costs to implement time of use tariffs by rate class, market segment, or customer segment. VPPSA is also engaged with Efficiency Vermont to offer and evaluate load patterns through the PowerShift Pilot Program which incentivized off-peak, residential EV charging applications.

**5. Whether you expect to request an extension under Act 55, Section (e), with respect to any of the EVSE rate classes, market segments, or customer segments.**

VPPSA and its members consistently monitor the rate of EV adoption by customers they serve, while concurrently incentivizing programs and rebates that encourage adoption. As referenced above, the VEIC/Drive Electric Vermont's EV Registration

---

<sup>5</sup> See Act 55 Section 33(c)(1) & Section 33(c)(2)

Report illustrates significant disparity in EV registrations in the more rural parts of the state served by VPPSA member utilities. Ultimately, an extension may be required in compliance with Section (e), particularly in relation to access to technology and the potential for adverse economic impacts to ratepayers.

Over the last several years, VPPSA has worked diligently with each member utility, community stakeholders, and their respective governing boards to research, negotiate and implement AMI, including seeking non-ratepayer funds through grant programs and/or appropriations. As of the date of this filing, VPPSA is currently awaiting final approval and execution of the grant agreement with the PSD for AMI deployment. Once installed, integrating time-based usage data and associated technologies for accurate load management and billing for EVSE rates may present new or unanticipated cost pressures. In the meantime, VPPSA continues to collaborate with Efficiency Vermont and other stakeholders by researching and seeking innovative solutions to observing and validating EVSE load profiles in different applications, to support new rate design structures.

Community is at the heart of VPPSA and its member utilities. Significant resources and effort have been invested in identifying cost-effective solutions for all customers while maintaining affordability, reliability, and customer-choice. Technology is changing evolving and innovative solutions continue to emerge in the EV/EVSE market.

## **6. Suggested topics for additional workshops or written filings.**

VPPSA appreciates the Commission's interest in feedback on topics for additional workshops related to EVSE rates in Vermont and offers the following suggestions:

- Experiences & Lessons Learned:
  - Focus on sharing experiences working with various technology providers and/or manufacturers to illustrate rate design concepts, solutions, cost structures.
  - Given the number of different programs and experiments that have already taken place, this may be a great opportunity to share notes and maximize learning.
- Innovative Rate Design & Modernizing Cost Recovery Structures
- Addressing Broadband Access
  - Workshop aimed at options that may not need internet connectivity for demand-side load management.

Thank you for the opportunity to engage more deeply in the Commission's investigative proceeding and submit VPPSA's response. If you have any questions or seek further clarification, please don't hesitate to contact me.

Respectfully,

/s/

Connor Daley, Manager of Government & Public Affairs  
Vermont Public Power Supply Authority  
P.O. Box 126, 5195 Waterbury-Stowe Rd., Waterbury Center, VT 05677  
(802) 884-4488  
cdaley@vppsa.com