VPPSA
Vermont Public Power Supply Authority

Putting the Public in Power.
www.vppsa.com

P.O. Box 126 • 5195 Waterbury-Stowe Rd. • Waterbury Center, VT 05677 • 802.244.7678 • Fax: 802.244.6889

Testimony on S. 271 and Amendment dated 3/23/18
Melissa Bailey, Legislative and Regulatory Affairs Representative

General

- This bill is aimed, in part, at increasing EV deployment and building out the EV charging infrastructure.
- VPPSA supports the goals of reducing barriers to EV charging and increasing EV deployment.
- Utilities are already engaged in these efforts under the Renewable Energy Standard. *(VPPSA EV Pilot)*
- VPPSA understands the need to replace lost gas tax revenue and that a per kWh tax is an attractive alternative.
- The electrification of the transportation sector is both a promising opportunity to make progress towards our climate goals and a complex undertaking that spans multiple entities, state agencies, and regulatory frameworks. This should be undertaken thoughtfully and mindfully of potential consequences.

Specific Comments on S. 271

- VPPSA does not have a position on the sales tax exemption or supplemental registration fees proposed in Sections 1 through 3 or the parking provisions laid out in Sections 4 through 7.
- VPPSA has concerns about the language in Section 8, to the extent that it would allow un-regulated entities sell electricity by the kWh.
    - Lack of PUC/PSD oversight for EVSE does not provide adequate consumer protection.
- This language deviates from a long-standing tradition of regulation within the electric industry that has served Vermont well.
    - Electric utilities in VT are subject to regulation by the PUC, which includes review and approval of rates.
    - This is fundamentally different from gas stations, which sell an unregulated fuel. Need to be careful about applying the "gas station model" to EVSE.
    - Having customers of a regulated utility set their own rates is potentially problematic.
- VPPSA believes that utilities already have the ability to propose rates for EV charging (Section 9.)
    - The PSD is currently engaged in rate discussions with utilities.
    - VPPSA opposes *requiring* utilities to offer EV charging rates because of the infrastructure required to separately meter EV charging in the home.
- VPPSA supports carrying out a study on rates for electric vehicle charging, but believes the study scope should be expanded to provide a comprehensive look at the appropriate regulatory framework for EV charging infrastructure (both privately-owned and utility-owned) as contemplated in the Transportation Bill (H. 917)
- It is important to take a holistic approach and vet all of the potential impacts before making a sweeping regulatory change (by allowing those other than regulated utilities sell electricity.) *RES obligations?*
- VPPSA appreciates the intent of the amendment in Section 10 related to net metering but is concerned that this may not completely resolve the concern.
    - Customers could not have NM and EVSE on the same account but could establish separate accounts.
    - This example underscores the complexity and interconnected nature of the impacts.
- We need to understand interactions and the proper role of utilities and non-utility parties. This calls for a comprehensive and thoughtful process.
    - Develop a coherent approach that works within the regulatory framework.

EVs and EVSE Under Tier 3 of the Renewable Energy Standard

- Electric Vehicles and EV charging stations (EVSE) have been characterized by the Tier 3 Technical Advisory Group for implementation by utilities to meet their Tier 3 obligations under the RES. (PHEV = 14 MWh, EV = 24 MWh)
- The incremental cost between a new, conventional, gasoline-powered vehicle and a new All Electric Vehicle is $13,631. For a Plug-in Hybrid EV the incremental Cost is $7,679. (Average cost of a new gasoline-powered vehicle is $25,000.)
- An electric vehicle is assumed to consume **3,000 kWh annually**, 2,500 kWh of which is expected to be consumed at home. (The average annual electricity consumption of a Vermont home is approximately 6,000 kWh.)
- It is assumed that **83%** of charging will take place at home and the remainder will take place at public charging stations (including at the place of employment.)
- The incremental cost of a **Level 2 charger** is roughly **$12,000** and the incremental cost of a **DC fast charger** is roughly **$55,000.**
- The peak demand ranges by charger type and characteristics of the vehicle battery

Charger Type	*Output (kW)*
Level 1 (8-15 hrs.)	1 - 1.2
Level 2 (3-8 hrs.)	3 – 20 (generally 3 to 6)
DC (20 min.-1 hr.)	20-100 (Tesla superchargers)

- There are currently 160+ public charging stations in Vermont.

Utility Electric Vehicle Programs

EV Incentives – VPPSA, VEC, BED, and GMP offer customer incentives for EV purchases (and in some case leases) under Tier 3. These include focused low and moderate-income customer incentives.

Partnerships – These utilities are partnering with local car dealers and Drive Electric Vermont to increase customer awareness of EVs.

EV promotion–GMP, BED, VEC, Stowe Electric and WEC have participated in special promotions including $10,000 off a Nissan Leaf and $297 no money down leases on the Chevy Bolt.

Utility EV Charging Initiatives

Stowe Electric – "EV Tourism:" partnered with commercial and public property owners to install publicly available EVSE throughout town

BED – operates a fleet of public EVSE; plans to install 60 EVSE at workplaces in next three years; pursuing plan to install 2-3 new DCFC

GMP – no-cost for home EVSE for customers that purchase a new EV; special energy pricing for participating customers; additional low-income component

WEC – has a fleet of 5 public Level 2 EVSE

VEC – offer bill credits to promote public EVSE among large employers and municipal entities

VPPSA – Barton Village and Swanton Village both own and operate public EV charging stations