



H.433

**Senate
Transportation**

April 14, 2021



At a Glance

Number of Members: 32,800 (approx.)	Annual Revenue (2020): \$ 81 million
Meters Served: 40,633	Vermont Property Tax (2020): \$3.7 million
Square Miles Served: 2,056	Number of Communities Served: 75
Miles of Line: 2,880	Counties Served: 8 (Addison, Caledonia, Chittenden, Essex, Franklin, Grand Isle, Lamoille, and Orleans).
Meters served per mile of line: 14.89	
2020 VEC Total Load: 483,944 MWh	2020 Peak Load: 79 MWh
Five-year average growth rate: 0.8%	Wed. 12/16/2020 hour ending 5:00 pm

About VEC and Our Member-Owners:

- Established in 1938 to bring electricity to rural underserved Vermonters.
- Largest locally owned and second largest electric distribution utility in Vermont.
- Not-for-profit, member-owned cooperative with 106 employees.
- Democratically controlled: one member, one vote.
- Approximately one-half of electric sales are residential.
- 40% of residential members are on fixed incomes and 53% percent have been member-owners for 20 years or more.
- Serves eight of the top ten Vermont towns (and three of the top five counties) with the highest poverty populations.



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.





“SMART” METERS

There is some misperception about the capabilities of Advanced Metering Infrastructure (AMI) systems.

AMI meters can read whether electricity is currently being used, and can help us track past usage in 15-minute intervals.

These meters do not know what the electricity is being used for. They do not know whether a member is charging a car, heating a hot-tub or using a heat pump.

To meter and bill specific products (such as EV charging) some type of submeter will be needed. That submeter will need to integrate with our metering and billing systems. An additional utility meter will involve trip fees and monthly meter and module fees.

Metering embedded in equipment needs to be billing grade and must integrate into our systems.

This involves some complexity and cost which needs to be accounted for as policy changes are considered.





VEC 2021 Transportation Related Incentives

Plug-in hybrid (PHEV)

\$250 for purchases (new or used) and \$50/year for lease

All-electric vehicle (AEV)

\$500 for purchases (new or used) and \$100/year for leases.

Also:

-Opportunity to opt-in to TOU rate

-If qualify for higher state incentive additional \$250 from VEC.

Home Level II charger:

\$250 (with additional \$50 incentive if members allow VEC to communicate with the charger for load management).

Publicly-available charging stations (Level II and III)

\$500 per connection.



VEC 2020 Incentives

- **Plug-in hybrid (PHEV) 21**
- **All-electric vehicle (AEV) 36**
- **Home Level II charger: 26**
- **Publicly-available charging stations (Level II and III) 3**
- **TOU rate (total):** large commercial **4**, small commercial **3**, residential **28**



VEC Current Time of Use (TOU) Rate

VEC incentives for level 2 charging through our Energy Transformation Program “whole house” time of use (TOU) rate. Goal is to give members more control over their monthly electric bill by shifting load.

Off-Peak:	9:01 pm- 7:00 am (weekdays) weekends & holidays	\$0.1179 per kWh
Mid-Peak:	7:01 am- 5:00 pm (weekdays)	\$0.1704 per kWh
On-Peak	5:01 pm- 9:00 pm (weekdays)	\$0.3201 per kWh

Flexible Load Management Incentive

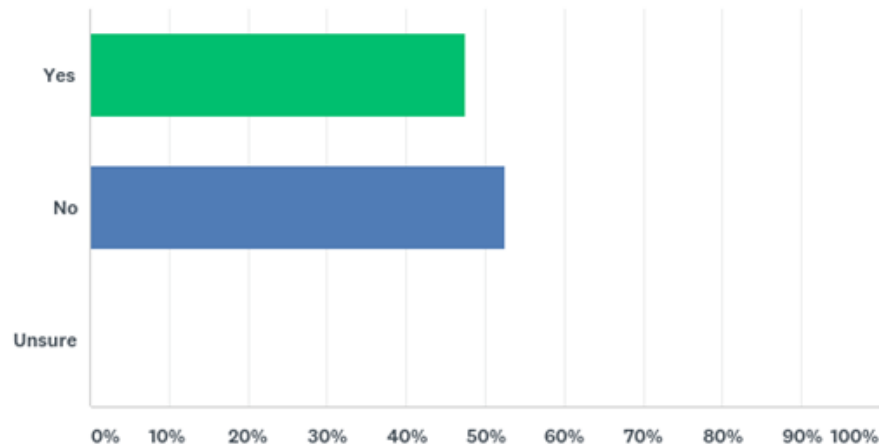
VEC offers an additional monthly bill credit for load management of eligible Level 2 EV chargers. These incentives are set at levels that bring benefit to all VEC members.



VEC Plug-in Survey 2020

Of the 80 respondents that reported having plug-in vehicles, more than half reported that they trickle charge and do not utilize a Level 2 charger at home.

Q5 Do you have a Level 2 charger at your home? A Level 2 charger (240-volt power source) is a charger that would have been installed specifically to charge your vehicle. It charges faster than a Level 1 (regular outlet, 120-volt power source).

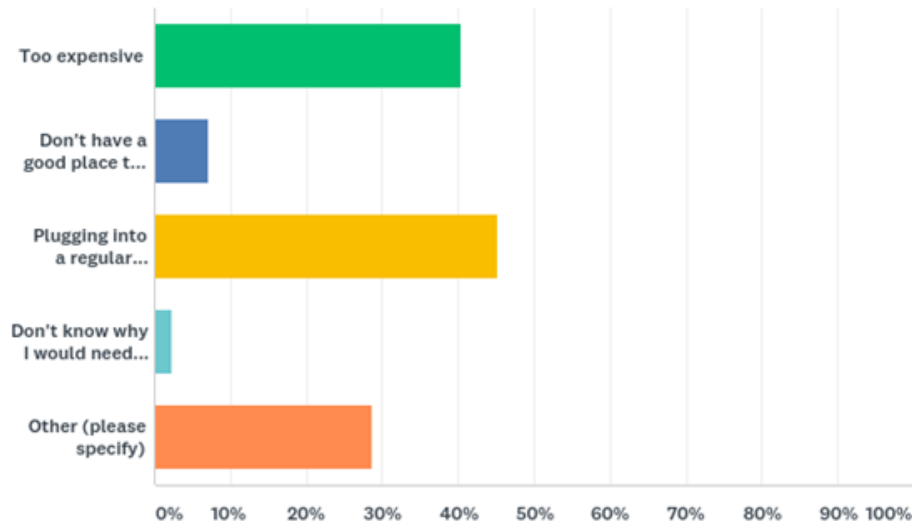




VEC Plug-in Driver Survey 2020

When asked why not Level 2, 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, we do expect many members will continue to trickle charge.

Q8 Why don't you have a Level 2 charger? (Please check all that apply)





H.433 section 21

- VEC supports “opt-in” rate options that incentive efficient EV charging, provided those rates do not shift costs to other members who are not in the position to utilize them.
- 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, and that share the value of charging when most cost effective.
- VEC currently offers an optional time of use (TOU) rate to Energy Transformation participants, that meets the requirements of section 21, although our preference is still incentives over mandates.
- We recommend (b) be changed “...shall ~~implement~~ offer PEV rates”. This makes clear it is an offer, not a requirement to use.
- Looking forward: some potential rate design options will require substantial equipment and software investments that may not be economically practical, equitable, or accessible to all (broadband). Mandates can have unintended financial consequences.



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