



March 28th, 2023

Daniel C. Goldner, Chair  
New Hampshire Public Utilities Commission  
21 South Fruit Street, Suite 10  
Concord, NH 03301

**RE: IR 22-076: Investigation of Whether Current Tariffs and Programs are Sufficient to Support Demand Response and Electric Vehicle Charging Programs**

**Comments by ReVision Energy, Inc.**

Dear Chair Goldner,

ReVision Energy finds that the Current Tariffs and Programs are not Sufficient to Support Electric Vehicle Charging Programs. Specifically, demand charges throughout all utilities are the business model killer of public charging station viability.

Our **EV Charging Station Operational Cost** spreadsheet submitted during the Pre-Conference hearing on February 2nd, 2022, aptly illustrates how high demand charges are stifling private investment in public charging in NH and that even with significant grant funding (e.g., from the VW settlement trust) providing up to 80% of project costs, a return on private investment is not possible even with high utilization rates. A significant and predictable demand charge reduction during the initial period of low utilization would dramatically assist in making such projects viable, particularly in rural New Hampshire where utilization rates will take longer to grow adequate revenue.

**A brief summary of utility demand charge alternative rates currently available in NH**

The Eversource EV-2 demand charge (G2 rate is currently \$15.42/kW) alternative rate that turns demand charges into a volumetric rate provides modest assistance in protecting the charging station owner from the significant impact during low utilization, but on the other hand it makes the cost of charging unreasonably high so that it will be challenging to attract consistent business and thus condemns the operator to a long term, unprofitable charging station. Furthermore, it precludes Level 2 stations from accessing the rate. Level 2 stations can also be impacted by high demand charges.

Until and Liberty offer a reduced demand charge at a reasonable rate of between \$4.20-\$5.96 but, both companies assess kWh charges based on Time of Use and this does not work in a public environment where drivers expect consistent pricing throughout the day, especially for highway corridor charging where they cannot wait to charge off peak while in the middle of a trip. Furthermore, a public charging station operator cannot be expected to curtail charging during the peak rate periods as this will provide drivers with an unacceptable service. This rate is best served for residential, workplace and fleet charging where charging sessions are more flexible.

New Hampshire Electric Coop provides the first 60kW free of demand charges and then at \$9.64/kW. This can help in situations where charging load can be managed, especially when a charger is paired with battery storage. ReVision Energy is in the process of installing a Freewire Boost Charger/Battery combination specifically in NHEC territory as the maximum load will be 27kW, while the battery output to the EV is as high as 200kW. This will completely avoid demand charges. The downside is that the system has a higher cost than standard DCFC EVSE.

**Proposing a Fair Demand Charge Alternative (DCA) that is in the interests of the public**

ReVision Energy installs and owns and operates public charging stations throughout our service territories in Maine, New Hampshire and Massachusetts and we have a wide experience with the effect of the different programs in Northeast.

We propose the **Sliding Scale Demand Charge Alternative for the Commission’s consideration**. This was widely endorsed by multiple stakeholders including Eversource, Until and National Grid who proposed and received approval in Massachusetts D.P.U. 20-69-A

This will support customers in reducing their operating costs of EV chargers by providing a tiered, load factor-based discount. The program will be offered for 10 years and will accept enrollments through 2032.

The table below uses a similar methodology to the Massachusetts DCA but offers amendments that are better suited in NH where EV sales lag the rest of New England, and it will take longer for EVs to become a significant share of the car market.

Load Factor Threshold	Enrollment Years	Demand Charge Discount
None	1	100%
LF <= 15%	2-9	100%
15% < LF <= 20%	2-9	75%
20% < LF <= 25%	2-9	50%
25% < LF <= 30%	2-9	25%

The **Sliding Scale Demand Charge Alternative** provides station owners with predictable operational costs during the initial years of low utilization and should incentivize investment in public charging in NH.

Public charging has been widely proven throughout the world that it is necessary to support drivers transitioning over to EVs and that EVs are typically charged overnight and generate incremental energy sales when grid load is low. Studies show that over time, EVs drive down rates for ALL rate payers and overwhelmingly pay for investments in charging programs.

We look forward to answering questions and providing the Commission with further comments.

Sincerely,

*/s/ James Penfold*

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