### BEFORE THE STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

#### **Docket No. DE 20-170**

### **ELECTRIC DISTRIBUTION UTILITIES**

#### **Electric Vehicle Time of Use Rates**

## CONSERVATION LAW FOUNDATION'S COMMENTS ON THE PARTIAL SETTLEMENT AGREEMENT

The Conservation Law Foundation ("CLF"), intervenor in this docket, offers the following comments on the partial settlement agreement ("Settlement Agreement") entered into by the New Hampshire Department of Energy ("DOE"); Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty; Unitil Energy Systems, Inc. ("Unitil"); the Office of Consumer Advocate; and the Department of Environmental Services and filed with the New Hampshire Public Utilities Commission ("Commission") on January 14, 2022. On January 18, 2022, the Commission instructed non-settling parties to file comments on the Settlement Agreement.

### I. CLF Opposes the EV Commercial Rate Proposals in the Settlement Agreement

CLF objects to the electric vehicle ("EV") commercial rate provisions in the Settlement Agreement. Regarding commercial rates, the Settlement Agreement proposes time of use rates that would maintain 50 percent of the demand charge for the analogous commercial customer rate class. (Settlement Agreement at 7).

<sup>&</sup>lt;sup>1</sup> Because the residential rate provisions in the Settlement Agreement are largely consistent with the recommendations included in the pre-filed testimony of CLF and Clean Energy NH, filed on October 13, 2021, CLF does not object to the residential rate provisions.

As detailed in the direct testimony of Christopher R. Villarreal, filed on behalf of CLF and Clean Energy NH:

Demand charges can play a significant role in delaying EV infrastructure roll-out especially at low utilization rates, as New Hampshire is currently experiencing. EV charging can result in substantial demand when the [electric vehicle supply equipment ("EVSE")] is in use, which can trigger high demand charges. However, if a public charger is used only occasionally it will not generate enough volumetric sales to pay for the high demand charge. **As such, demand charges can be crippling to the economics of public EV charging**.

(Ex. 6, Villarreal Testimony at Bates 18-19) (emphasis added). Mr. Villarreal also explained:

At low utilization rates, a location charged a demand charge for EV charging, especially for DCFC, may see their bill rise substantially. In an analysis done by RMI for EVGo looking at their locations in California, RMI determined that in some locations site hosts could incur a bill up to \$3,114 a month with 94% of that bill due to demand charges. As further detailed by RMI, under the different proposals by the California utilities, those rate designs that included demand charges would continue to be a significant component of the site hosts' bills. Even at 15% utilization, RMI estimates that locations could see 70% to 88% of their bill be attributable to the demand charge.

*Id.* at Bates 19-20. Thus, "at low utilization rates, demand charges act as a penalty for installing EV charging infrastructure, especially DCFC, when the state should be trying to encourage deployment of EV charging infrastructure, including DCFC." *Id.* at Bates 19.<sup>2</sup>

As will be further discussed in the testimony of Mr. Villareal at the scheduled hearings in this docket, the provision in the Settlement Agreement to maintain 50 percent of demand charges for the proposed EV commercial rate classes would still produce a demand charge that acts as a

<sup>&</sup>lt;sup>2</sup> Several other parties to this docket have also acknowledged that the demand charge component of electric bills can be cost-prohibitive in the development of public EV charging stations. *See, e.g.*, Ex. 12, Rebuttal Testimony of Unitil (John D. Taylor) at Bates 30; Ex. 7, Direct Testimony of ChargePoint (Matthew Deal) at Bates 8-9.

significant barrier to investments in public EV infrastructure. Thus, CLF objects to the proposed commercial rates in the Settlement Agreement.

### II. The Commission Should Prioritize Rate Setting Principles Other than Pure Cost Causation

Ostensibly, the Settlement Agreement proposes to maintain 50 percent demand charges for the new EV commercial rate classes to ensure revenue neutrality. (Settlement Agreement at 7). However, as discussed in Mr. Villarreal's testimony, at this nascent stage in the adoption of EVs and deployment of EVSE, "rigidly applying the cost causation principle to EV rate design may not strike the right balance between conflicting regulatory principles" and "to achieve the public policy priority of increased EVSE adoption, the Commission should consider other rate-making principles, such as 'diffusion of benefits.'" (Ex. 6, Villarreal Testimony at Bates 13). In particular, because "increased EV adoption will benefit the community as a whole" at this early phase in the adoption of EVs, "charging infrastructure need not be held strictly to cost causation." *Id.* In essence, the Commission could decide "that for some period of time, developing rates that will promote EV adoption should be prioritized over other rate design principles." *Id.* Therefore, when setting commercial rates for EVs, the Commission should consider the societal and environmental benefits of EV adoption and not focus solely on cost causation.

However, even if the Commission is unready or unable to prioritize other rate design principles over cost causation at this point in time and decides that it must maintain revenue neutrality for the proposed EV commercial rate classes, there are ways to design EV commercial rates that eliminate all or most demand charges without sacrificing revenue neutrality. For

<sup>&</sup>lt;sup>3</sup> Under the cost causation principle of rate design, the person who caused the cost pays for it. (Ex. 6, Villarreal Testimony at Bates 14).

example, in this docket, Liberty initially designed a revenue neutral EV commercial rate that eliminated most demand charges,<sup>4</sup> and in Massachusetts, Unitil designed a revenue neutral EV commercial rate that would completely eliminate demand charges at low utilization rates.<sup>5</sup> *See* Ex. 1, Testimony of Heather M. Tebbetts and Attachments; Exs. 18-19, Until Responses to Staff 2-6, Attachments 1-2. Accordingly, the Commission should not approve the proposed EV commercial rates included in the Settlement Agreement.

# III. An EV Commercial Rate that Eliminates or Significantly Reduces Demand Charges is Consistent with the New Hampshire 10-Year State Energy Strategy

Regarding the transportation sector, the New Hampshire 10-Year State Energy Strategy ("State Energy Strategy") finds that allowing market demand to drive infrastructure investment decisions is more likely to deliver cost-effective energy to consumers over the long term. (State Energy Strategy at 47.) However, the State Energy Strategy notes that there is "market potential for non-internal combustion vehicles, but that potential has not yet been realized." *Id.* at 49. The State Energy Strategy also acknowledges the "feedback loop of EV adoption and infrastructure—consumers [do not] want to buy cars if there [is not] sufficient charging availability, and investors [will not] build charging stations unless there is a large enough market to serve." *Id.* Finally, the State Energy Strategy finds that although "[p]rivate entities are better positioned over the long-term to invest in charging infrastructure that will economically deliver in the market," "state programming may have a role in encouraging early investments." *Id.* at 50 (emphasis added).

<sup>4</sup> The Liberty proposal would decrease demand charges to 10 percent of the current level. (Ex. 1, Testimony of Heather M. Tebbetts and Attachments).

<sup>&</sup>lt;sup>5</sup> While neither of these revenue neutral EV commercial rates incorporate time of use rates, given that public charging stations users have limited ability to shift EV charging to other time periods (Ex. 6, Villarreal Testimony 13-14)—one of the main purposes of TOU rates—the Commission need not prioritize establishing TOU rates for public charging stations over other concerns, such as reducing demand charges to improve the viability of public charging stations.

Non-coincident demand charges, like those proposed by the settling parties, are often not

related to system use, send poor price signals to customers, and can act as a fixed charge. (Ex. 6,

Villarreal Testimony at Bates 20). Therefore, with regard to public EV charging stations, demand

charges improperly distort the market by making public charging station investments

uneconomical, which prevents the "market potential" of EVs from being "realized." (State Energy

Strategy at 49). Based on the state's recognition that "state programming may play a role in

encouraging early investments" in EV charging stations, id., to avoid the market distortions caused

by demand charges and assist in overcoming the feedback loop of EV adoption/EVSE deployment,

the Commission should only approve EV commercial rates that more significantly reduce demand

charges than what is proposed in the Settlement Agreement.

**IV. Conclusion** 

In conclusion, CLF urges the Commission to reject the demand charge alternative proposal

in the Settlement Agreement and require the utilities to develop demand charge alternatives that

eliminate all or most demand charges.

Sincerely,

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