# PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY ALTERNATIVE METERING FEASIBLIITY ASSESSMENT PILOT PROPOSAL

The Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or the "Company") submits to the New Hampshire Public Utilities Commission (the "Commission") this compliance filing consistent with the directive in the Commission's April 7, 2022 Order No. 26,604 in Docket No. DE 20-170, which states in relevant part:

"We also require Eversource to develop an alternative metering pilot proposal that will utilize metering embedded in chargers and vehicles for the purpose of offering time varying rates."

In compliance with this directive, the Company provides the following alternative metering pilot (the "Pilot") proposal:

**Purpose:** The Pilot is designed to determine the technical and practical feasibility of utilizing metering embedded in Electric Vehicle Supply Equipment ("EVSE") and metering embedded in electric vehicles for the purposes of offering Electric Vehicle ("EV") only time varying rates to residential customers.

**Scope:** Over a minimum 12-month period after customers have enrolled, the Pilot will evaluate charging session data accuracy, data availability, and data security of data provided by meters embedded in select EVSE and select EVs compared with revenue grade utility interval meters.

The Company will issue a request for proposals ("RFP") for a third-party to administer the Pilot. The scope of work shall include customer recruitment and enrollment, verification that the EVSE, EV and Wifi capability all meet program requirements, data collection, data analysis and reporting of findings.

The Company will evaluate results from up to 100 customers who are enrolled in the Company's proposed residential EV Time of Use ("TOU") rate, by comparing charging data obtained from EVSEs or the EV telematics. This proposed EV TOU rate is discussed in further detail in the "EV TOU Rate" section.

**Eligibility**: To be eligible for the Pilot, customers will be required to: (1) be enrolled on the Eversource residential EV-only TOU electric rate<sup>1</sup>; (2) own/lease a qualifying EV or install a Company-approved charging station; and (3) have broadband internet access at the charging premises to enable the transmission of data between the vehicle or residence and the Company.

#### **Metering Embedded in EVSE:**

An eligible customer voluntarily electing to participate in the Pilot (the "Participating Customer") shall agree to purchase and install for the Participating Customer's qualifying EVSE

<sup>&</sup>lt;sup>1</sup> The Pilot is contingent upon the Company offering a residential EV TOU rate. Eversource filed its proposed residential EV TOU rate ("Rate R-EV") and cost estimate to this docket on July 7, 2022 (Tab 121), but this proposal has yet to be approved. If and when the Commission approves Rate R-EV, the Company will need six to ten months to implement the changes necessary to offer the rate, as described in the rate proposal.

that is selected by the Company. The EVSE selected by the Company shall have a meter that will register and transmit information on the energy use of vehicles that are charged using the technology. The Participating Customer shall make such usage data available to the Company or Company Vendor for evaluation across a broadband internet connection provided by the Participating Customer.

Participating Customers shall purchase at their own expense the EVSE selected by the Company. However, the Company shall provide an equipment incentive to reduce the cost of the EVSE for a Participating Customer of up to \$500, without regard to any applicable sales and/or use taxes that may be due or any available tax incentives applied towards the purchase of an EVSE.

Participating Customers shall be responsible for any installation costs and operating and maintenance costs associated with the EVSE. Participating Customers shall also be responsible for any taxes associated with the purchase, operation or maintenance of the EVSE.

### **Metering Embedded in Electric Vehicles:**

Participating Customers shall agree to enroll with a qualifying EV equipped with telematics capabilities that will register and transmit information on the energy use of vehicles that are charged using the EVSE. The Participating Customer shall make such usage data available to the Company for evaluation across a broadband internet connection provided by the Participating Customer.

The Company shall provide an enrollment incentive to Participating Customers of \$100.

#### **EV TOU Rate:**

On July 6, 2022, in compliance with the Commission's order in Docket No. DE 20-170 the Company filed a proposal for a two-part EV only residential TOU rate (Rate R-EV). Rate R-EV sets a peak time from 2pm-7pm on non-holiday weekdays. As noted in that filing "The Company estimates that work would involve design, build, test and deployment under its C2 system and take approximately ten months after receiving Commission direction to implement the rate or six months from the time of a resourced project kick-off meeting. Eversource's estimated cost is approximately \$600,000. For this estimate, Eversource assumed that competitive supply service billed by the Company would not be time-differentiated."

All Participating Customers will be required to enroll in the separately-metered residential EV TOU rate and a Company interval meter must be installed that enables 15-minute interval data to be read. The Company will collect the data from both the participating EVSE and the Company's EV TOU meters. The Company will analyze and compare embedded data collected from the EVSE against the correlating utility metering interval data for the same period to assess accuracy, availability, format, interface capabilities, data sharing, load metering, sub-metering, metering data disaggregation, remote control, volt/VAR capability, customer controls, testing,

<sup>&</sup>lt;sup>2</sup> Eversource EV TOU rate proposal, cost estimates and compliance tariff at Bates page 25. Docket No. DE 20-170, Tab 121.

privacy, and cyber and physical security, along with any other considerations that may arise during the assessment.

## **Estimated Budget and Timeline:**

The cost figures in the table below are for illustrative purposes only and are highly variable—these costs will change due to a number of factors not limited to supply chain issues and the possible variance from these estimated figures to actual bids received. However, based on currently available information and knowledge of the Company, the figures in the table below provide a starting estimate for the Pilot.

The Company notes that there are substantial customer costs associated with installing a separately metered rate. These customer costs are governed by the Eversource tariff, and as such, cannot be modified or waived by the Company. However, these costs may also prove to be a significant barrier to customer enrollment in the Pilot.

The following timeline is contingent upon approval and implementation of the Company's proposed Rate R-EV as described above. For administrative efficiency and to expedite the Pilot as much as possible, elements of the Pilot timeline, such as the Third-Party RFP and contracting can be done simultaneously with implementation of Rate R-EV once the rate receives Commission approval.

• Third-Party RFP / Contracting: 6 months

• Enrollment period: 6 months

• Duration of data collection: minimum 12 months

• Analysis / Reporting: 6-12 months

• Total Pilot duration: minimum 30 months

	Per Participant		Estimated Number of Participants		Total	
EVSE Enrollment Incentive	\$	500	65		\$	32,500
EVSE DERMS fees	fixed			9	\$50,000.00	
Telematics Enrollment Incentive	\$	100	35		\$	3,500
Telematics DERMS fees	fixed			\$	325	,000.00
Consultant Fees	fixed				\$400,000	
Total Pilot Costs					-\$5	511,000

**Cost Recovery:** As the Pilot is a Commission-mandated program, the Company plans to defer all non-capital expenses as they are incurred to a regulatory asset for review and recovery in its next distribution rate case, contingent upon Commission authorization of this Pilot proposal.

**Reporting:** Within six to twelve months of the conclusion of the Pilot, the Company will submit a final report to the Commission outlining the number of residential customer participants in the Pilot, incentives distributed, third-party partners within the Pilot, and findings related to embedded metering and future use cases.