

## Rate EV-2: Demand Charge Alternative Rate Design

### Rate GV - Rates Effective During July 2022

	(A) Billing Determinants	(B) Current Rate	(C) = (A) x (B) Rate Design Revenues
<b>Customer Charge</b>			
Customer Charge	16,601	\$ 211.21	\$ 3,506,255
<b>Demand 1-100 kW</b>	1,568,428		
Distribution		\$ 6.94	\$ 10,884,890
Transmission		10.52	16,499,863
Stranded Cost Recovery Charge		0.45	705,793
		\$ 17.91	\$ 28,090,546
<b>Demand &gt; 100 kW</b>	2,667,694		
Distribution		\$ 6.68	\$ 17,820,196
Transmission		10.52	28,064,141
Stranded Cost Recovery Charge		0.45	1,200,462
		\$ 17.65	\$ 47,084,799
<b>Minimum Charge</b>	123	\$ 1,062.00	\$ 130,894
<b>Energy Charge 1 - 200,000 kWh</b>	1,448,276,753		
Distribution		\$ 0.00663	\$ 9,602,075
Transmission		-	-
Stranded Cost Recovery Charge		0.00202	2,925,519
System Benefits Charge		0.00863	12,498,628
Energy Service Charge		0.09275	134,327,669
		\$ 0.11003	\$ 159,353,891
<b>Energy Charge &gt;200,000 kWh</b>	217,399,074		
Distribution		\$ 0.00583	\$ 1,267,437
Transmission		-	-
Stranded Cost Recovery Charge		0.00202	439,146
System Benefits Charge		0.00863	1,876,154
Energy Service Charge		0.09275	20,163,764
		\$ 0.10923	\$ 23,746,501

### Rate GV Average Rates In Effect During July 2022

<b>Customer Charge:</b>			\$211.21 /month	
<b>Demand Charges:</b>	(A)	(B)	(C) = (A) / (B)	
	Revenue Requirement	Class Consumption	Average Rate	
Distribution	\$ 28,705,086	1,665,675,827	\$ 0.01723 /kWh	(1)
Transmission	44,564,004	1,665,675,827	\$ 0.02675 /kWh	(2)
SCRC	1,906,255	1,665,675,827	\$ 0.00114 /kWh	(3)
<b>Total Demand Related</b>			\$ 0.04513 /kWh	(4)=(1)+(2)+(3)
<b>Volumetric Charges:</b>				
Distribution	\$ 10,869,512	1,665,675,827	\$ 0.00653 /kWh	
SCRC			\$ 0.00202 /kWh	
SBC			\$ 0.00863 /kWh	
ES			\$ 0.09275 /kWh	
<b>Total Volumetric</b>			\$ 0.10993 /kWh	(5)

### Revenue Neutral Rate Design including Class-to-Station Utilization Adjustment

<b>Monthly Customer Charge</b>	\$211.21		
<b>Station Design Utilization</b>	10%	(6)	
<b>Rate Parity Adjustment *</b>	5.5	(7)=(13) / (6)	
	<b>Volumetric Rate At Design Utilization Level</b>		
Demand Alternative	Distribution	\$ 0.09478 /kWh	(8)=(1)*(7)
Demand Alternative	Transmission	\$ 0.14715 /kWh	(9)=(2)*(7)
Demand Alternative	SCRC	\$ 0.00629 /kWh	(10)=(3)*(7)
Volumetric	Other**	\$ 0.10993 /kWh	(11)=(5)
<b>Total Alternative Rate</b>	<b>Total</b>	\$ 0.35815 /kWh	(13)=(9)+(10)+(11)+(12)
<b>Class Load Factor:</b>	55%	(13)	

\* Ratio of class load factor to station utilization (i.e., load factor) design level

\*\* See (5) "Total Volumetric"

### Demand Charge Alternative Rate Summary

Monthly Customer Charge	\$211.21
Volumetric Charge	35.815 cents/kWh

## I. Bill Comparison INPUTS

### Estimated Monthly Billing Determinants:

Peak Demand	120	kW
Average Utilization	7%	
TOU kWh proportions		
50%	Charging Consumption	Peak: 3,066 kWh
30%		Mid-peak: 1,840 kWh
20%		Off-peak: 1,226 kWh
	Total:	6,132 kWh

## II. Comparison of Rates and Bills (using Bill Comparison INPUTS)

	Rate GV (July 2022)		DCA (July 2022 proposed)		Com EV TOU (July 2022 proposed)	
Customer	\$ 211.21	Charge (see §III)	\$ 211.21	Attachment A	\$ 211.21	see §IV
Demand	\$ 2,144.00	Charge (see §III)	\$ -		\$ 8.87	/kW (see §IV)
Energy	\$ 674.70	Charge (see §III)	\$ 0.35815	per kWh (Attachment A)	\$ 0.19173	/kWh (see §IV)
Total Charge	\$ 3,029.91		\$ 2,407.39	Calculated	\$ 2,451.68	Calculated
Difference from GV			\$ 622.53	21%	\$ 578.23	19%
Avg. Rate (x/cust chg)	\$ 0.45967	/kWh	\$ 0.35815	/kWh	\$ 0.36537	/kWh

## III. RATE GV Bill Calculation (Rate GV combined rates from Attachment EAD-1)

RATE GV Bill Calculator		Pricing	Determinants	Billed Charge	Charge by Type	Equiv Avg Rate
Breakpoints:	CC	\$ 211.21		\$ 211.21	\$ 211.21	
100	DC - block 1	\$ 17.91	100.00	\$ 1,791.00		
	DC - block 2	\$ 17.65	20.00	\$ 353.00	\$ 2,144.00	\$ 0.34964
200,000	EC - block 1	\$ 0.11003	6,132	\$ 674.70		
	EC - block 2	\$ 0.10923	-	\$ -	\$ 674.70	\$ 0.11003
	Total			\$ 3,029.91	\$ 3,029.91	\$ 0.45967

## IV. Commercial EV TOU Rates and Charges (using Bill Comparison INPUTS)

Rates and TOU Volumetric Charges at Proposed Rates (July 2022)			
Customer Charge	\$ 211.21	/month	
Demand Charge	\$ 8.87	/kW-month	
Volumetric Rates			
Peak	\$ 0.26921	/kWh	Combined rates (line 72)
Mid-peak	\$ 0.13143	/kWh	Combined rates (line 72)
Off-peak	\$ 0.08847	/kWh	Combined rates (line 72)
Volumetric Charges:			
Peak	\$ 825.41		
Mid-peak	\$ 241.78		
Off-peak	\$ 108.50		
	\$ 1,175.69		Included in Section II Total Charge
Total Usage	6,132	kWh	
Avg. Volumetric Rate	\$ 0.19173	/kWh	

Volumetric Charges (July 2022 - All Rates)				
	Peak	Mid-peak	Off-peak	Total
Usage	3,066	1,840	1,226	6,132
Total Rate	\$ 0.26921	\$ 0.13143	\$ 0.08847	
Charge	\$ 825.41	\$ 241.78	\$ 108.50	\$ 1,175.69

Volumetric Rates (July 2022)			
	Peak	Mid-peak	Off-peak
Distribution	\$ 0.03143	\$ 0.01394	\$ 0.01050
Transmission	\$ 0.05185	\$ 0.01410	\$ 0.00053
SCRC	\$ 0.00259	\$ 0.00259	\$ 0.00259
SBC	\$ 0.00863	\$ 0.00863	\$ 0.00863
Energy Service	\$ 0.17472	\$ 0.09217	\$ 0.06622
Total	\$ 0.26921	\$ 0.13143	\$ 0.08847

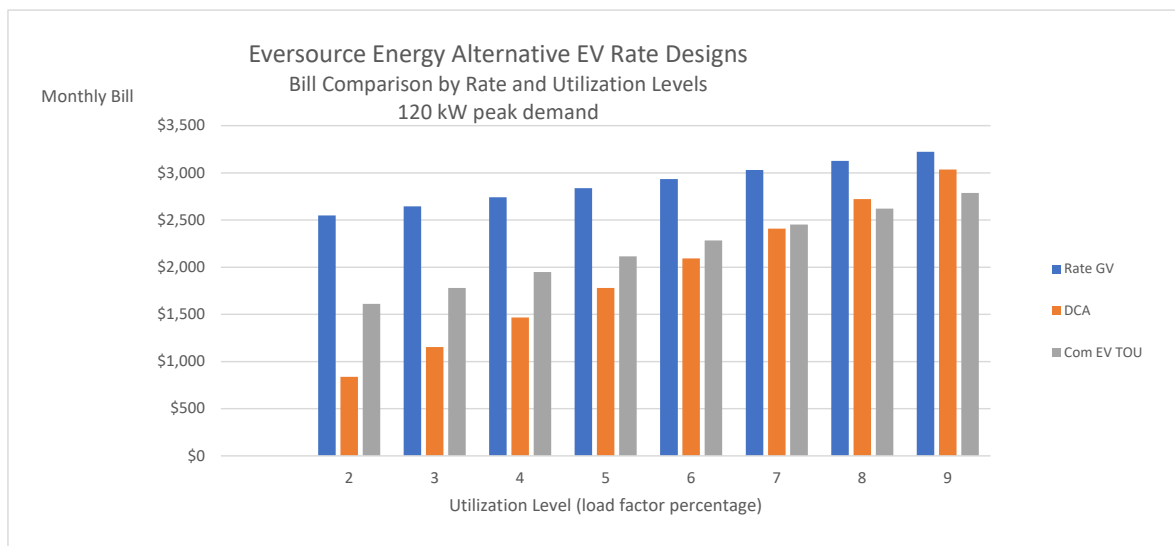
# Bill Comparison - General Service vs. Alternative Rates\*

## 120 kW Peak Demand

Percent Utilization *	Monthly Usage (kWh)	Rate GV	DCA	Com EV TOU
2	1,752	\$ 2,548	\$ 839	\$ 1,612
3	2,628	\$ 2,644	\$ 1,152	\$ 1,780
4	3,504	\$ 2,741	\$ 1,466	\$ 1,948
5	4,380	\$ 2,837	\$ 1,780	\$ 2,116
6	5,256	\$ 2,934	\$ 2,094	\$ 2,284
7	6,132	\$ 3,030	\$ 2,407	\$ 2,452
8	7,008	\$ 3,126	\$ 2,721	\$ 2,620
9	7,884	\$ 3,223	\$ 3,035	\$ 2,788

\* Comparison based on Rate GV rates in effect during July 2022

\*\* Comparisons provided for public charging station utilization up to 10%



NHPUC NO. 10-ELECTRICITY DELIVERY  
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE  
DBA EVERSOURCE ENERGY

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Rate EV-2

PRIMARY GENERAL DELIVERY SERVICE RATE EV-2

AVAILABILITY

This rate is available to serve the entire requirements of electric vehicle (EV) charging stations, which are available to the public, and where such customer (1) must have separately metered service, with at least 90 percent of the load at that meter dedicated to EV charging, that has sufficient total load to otherwise qualify for Eversource's Rate GV, with a maximum demand greater than 100 kilowatts; and (2) must have "publicly accessible" EV charging equipment, meaning that the charging equipment is available to the public without restriction. A potential participant in this rate offering that restricts charging equipment access to customers of the premises (e.g., restaurant patrons or other business visitors, tenants, or employees) shall not qualify as "publicly accessible" and shall not be eligible for this rate.

This rate offering, Rate EV-2, will initially be available to enroll in for a three-year period from Commission approval on August, 15, 2022 in Order No. 26,XXX. No new applications or enrollment requests will be accepted after August 15, 2025. Those already enrolled in the rate will continue to be served on it. After the expiration of the three-year term, an administrative proceeding will be conducted to determine whether this rate should be revised, discontinued or continue to be offered unchanged. Upon the conclusion of that proceeding and by Order of the Public Utilities Commission, if the rate is revised or remains unchanged new customers will be able to enroll once again. All existing customers on Rate EV-2 will either be moved to the revised Rate EV-2 if the rate is revised, moved to general service Rate GV if EV-2 is discontinued, or continue on this initial EV-2 rate if it remains unchanged, consistent with all relevant terms of the Commission Order.

Subject to the Terms and Conditions of the Tariff of which it is a part, this rate is for high voltage Delivery Service. It is available upon the signing of a Service Agreement for such service at specified delivery points to Customers whose maximum demand shall not exceed 1,000 kilowatts. Service rendered hereunder shall exclude backup and standby service provided under Backup Delivery Service Rate B. Outdoor area lighting is available under Outdoor Lighting Delivery Service Rate OL.

Suitable transforming, controlling and regulating apparatus, acceptable to and approved by the Company, shall be provided at the expense of the Customer. In locations in which space limitations or other factors make it impossible or inadvisable, in the opinion of the Company, for the Customer to have transforming apparatus devoted to its exclusive use, and in secondary network areas in which primary service is not made available by the Company at its option, Delivery Service shall be supplied from Company-owned transforming apparatus which also supplies other Customers. In such cases, this rate is available provided the Customer pays an annual rental charge equal to eighteen percent (18.0%) of the cost of the equivalent transformer capacity the Customer would furnish or rent to serve the load if exclusive use of a transformer bank by him were possible or if primary, three-phase service were available and provided the Customer pays in full the estimated cost of installing such equivalent transformer capacity at the time Delivery Service is initiated.

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Issued by: Douglas W. Foley

Effective:

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Rate EV-2

CHARACTER OF SERVICE

Delivery Service supplied under this rate will be three-phase, 60 hertz, alternating current, at a nominal voltage determined by the Company, generally 2,400/4,160, 4,800/8,320, 7,200/12,470, or 19,920/34,500 volts. A reasonably balanced load between phases shall be maintained by the Customer.

RATE PER MONTH

Customer Charge.....\$211.21 per month

Energy Charges:

Per Kilowatt-Hour

Distribution Charges:.....10.131¢

Transmission Charges:.....14.715¢

System Benefits Charge.....0.863¢

Stranded Cost Recovery Charges.....0.831¢

PRIMARY METERING LOSS ADJUSTMENT

When at the Company's option Delivery Service is metered at delivery voltage (2,400 volts nominal and above), all energy meter readings shall be reduced by one and three-quarters percent (1.75%). Where feasible and at the Company's option, a value other than one and three-quarters percent (1.75%) may be used when specific data is available and this value is a more accurate representation of electrical losses.

CONTRACT TERM

The contract term shall be for not less than one year and for such longer periods as maybe determined by the operation of the sections in this rate entitled "Guarantees" and "Apparatus". The customer may switch to either Rate GV or Rate EV-1 at any time. However, the customer must be on one of these three rates for at least one year.

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GUARANTEES

- (a) When the estimated expenditure necessary to deliver electrical energy properly to a Customer's premises shall be of such an amount that the income to be derived from the delivery of such energy at the rate herein established, including the monthly minimum charge, will be insufficient to warrant such expenditure, the Company may require the Customer to guarantee a minimum annual payment for a term of years and/or to pay the whole or a part of the cost of extending, enlarging, or rebuilding its facilities to supply the Customer's premises or other reasonable payments in addition to the payments otherwise provided herein.
- (b) Except as provided by the Terms and Conditions and as modified by the provisions of Paragraph (a) of this section, and exclusive of any charges made under the provisions of the section in this rate entitled "Apparatus" and if applicable, for Default Energy Service, the minimum charge shall be the Customer Charge.

APPARATUS

Substation foundations, structures, and all necessary controlling, regulating, transforming, and protective apparatus shall be furnished, owned, and maintained by the Customer at the Customer's expense. However, controlling, regulating, and transforming apparatus may be rented from the Company at a charge of eighteen percent (18.0%) per year of the equipment cost. The cost of installing such equipment shall be paid in full at the time service is initiated. In no event shall the Company be required to rent apparatus to the Customer the total cost of which shall exceed \$10,000. The Company may refuse to rent pole-mounted apparatus based on environmental and other immediate hazards that are present. In the event the Company refuses to rent a pole-mounted apparatus, the Company shall inform the Customer of the environmental and other immediate hazards that are present and shall provide the Customer with the opportunity to remove the hazards. In the event the environmental and the other immediate hazards are removed by the Customer, the Company shall agree to rent pole-mounted apparatus to the Customer. If a Customer-owned structure supporting a Company owned pole-mounted transformer is deemed insufficient or threatened by trees or other hazards, the Company shall inform the Customer of the hazards and shall provide the Customer with the opportunity to repair or remove the hazard. In the event the Customer refuses to repair or remove the hazard or does not repair or remove the hazard in a timely manner, the Company is authorized to terminate the existing rental agreement and to remove the transformer upon 90 days written notice to the Customer. In cases where the Customer elects to rent apparatus from the Company, the Customer shall guarantee, in addition to any other guarantees, to continue to pay rental therefor for a period of not less than four (4) years. Any customer rental fees for transformers or other equipment will last 4 years regardless of the duration of this rate offering. Should the Customer discontinue service before four (4) years shall have elapsed, the guaranteed rental then unpaid shall immediately become due and payable.

METERING

The Company may install one or more meters at its option. Metering shall be located on the low voltage side of the Customer's transforming apparatus provided, however, that metering may be at delivery voltage at the option of the Company.

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**I. MAKE-READY EV CHARGING INFRASTRUCTURE PROGRAM**

**Q. How was the need for EV Charging infrastructure in New Hampshire determined?**

A. As part of the effort to assess the need for electric vehicle charging infrastructure in New Hampshire, the Electric Vehicle Charging Stations Infrastructure Commission (“the EV Commission”) was established via Senate Bill 517, adopted in the 2018 legislative session. On pages 2-3 of its final report issued in November 2020<sup>1</sup>, the EV Commission reached the following conclusions:

The Electric Vehicle Charging Infrastructure Commission recommends prioritizing EV charging infrastructure initial investment from the Volkswagen Settlement and other potential sources along the interstate highway system, the NH turnpike system, and other roadways; and prioritized as deemed suitable as determined by OSI, NHDES, and NHDOT in consultation with the commission.

The EV Commission spent a significant amount of time discussing the need for DCFC on New Hampshire corridors and the need to utilize the Volkswagen Settlement funds to support such investment. In June 2019, OSI provided a high-level overview of a planned Request for Proposals (“RFP”) for installation of DCFC and co-located Level 2 charging infrastructure. In response to this overview the EV Commission developed the following public statement on page 4 of its Final Report:

- Adequate electric vehicle supply equipment (EVSE) in New Hampshire, and in particular direct current fast chargers (DCFC) along major travel corridors in the state, is necessary to enable electric vehicle (EV) travel within and through New Hampshire; and
- Availability of adequately spaced EVSE along the state’s major travel corridors is essential to overcome “range anxiety” and enable and encourage broader adoption of EVs by New Hampshire residents and residents throughout the Northeast; and

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<sup>1</sup> <https://www.des.nh.gov/sites/g/files/ehbemt341/files/inline-documents/2020-12/20201030-final-report.pdf>

- Manufacturers continue to introduce a wider variety of EV models which will be available to consumers in the coming years and that drivers will be best served if New Hampshire's EV charging market supports multiple business models, generates new jobs, and encourages innovation and competition in equipment and network services; and
- New Hampshire's Volkswagen Beneficiary Mitigation Plan provides funding for the support of EVSE development within the state.

The EV Commission's primary conclusion (page 6 of its Final Report) was that VW Settlement funding would be properly spent on enabling a DC Fast Charging corridor in New Hampshire to "support economic development in areas of the state dependent on tourism, lower lifetime costs of owning a vehicle for many drivers, and result in lower emissions of criteria pollutants and greenhouse gas emissions that contribute to climate change."

**Q. Why is Eversource proposing this DCFC infrastructure program?**

A. Eversource is proposing this DCFC infrastructure program to support the State's disbursement of New Hampshire Volkswagen Environmental Mitigation Trust ("NH Trust") funds consistent with the New Hampshire Beneficiary Mitigation Plan. The disbursement of the NH Trust funds alone will not be sufficient to enable the development of a DCFC travel corridor along the State's major roadways. Pairing the NH Trust funding with a utility-administered electrical infrastructure program will help to ensure that the New Hampshire Department of Environmental Services ("NHDES") is able to successfully deploy this network of DCFC. This investment will directly support sites in Eversource's service territory that are chosen through the NH Trust RFP competitive solicitation process, which the Company expects to be released by the New NHDES, serving as solicitor on behalf of the Office of Strategic Initiatives ("OSI") in

2021<sup>2</sup>. The entire NH Trust contains approximately \$31 million, \$4.6 million of which (or 15%) has been allocated to support the deployment of Electric Vehicle Supply Equipment (“EVSE”) throughout the State. NHDES has previously indicated that approximately \$2 million from the NH Trust is available for this solicitation, and that OSI reserves the right to increase or decrease the amount of funds available under the competitive solicitation<sup>3</sup>. The Company’s proposed investment would be in addition to the amount coming from the NH Trust.

**Q. Please summarize the proposed EV charging infrastructure program.**

A. By investing in EV charging infrastructure, Eversource proposes to support the development of a DCFC<sup>2</sup> corridor throughout New Hampshire. The EV fast charging corridor will advance in-state economic development by creating a multi-site DCFC corridor across New Hampshire’s most thoroughly traveled roadways. This proposal will support the State in its efforts to provide a strategic network of EVSE and associated operations, maintenance and management services along specified corridors in New Hampshire. This network will ensure that sufficient DCFC infrastructure exists to attract tourists from nearby states and provinces with aggressive EV adoption policies, and to support EV drivers who live and/or work in the State. The intent of the Company’s proposal is to significantly expand New Hampshire’s network of travel corridor EV

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<sup>2</sup> A DC fast charging station provides charging through a 480V AC plug and can deliver 60 to 80 miles of range in 20 minutes of charging. Source: [https://afdc.energy.gov/fuels/electricity\\_infrastructure.html](https://afdc.energy.gov/fuels/electricity_infrastructure.html)

1 charging stations by reducing the cost burden of site hosts seeking to install EV charging  
2 equipment.

3 The Company estimates that the competitive solicitation process will result in  
4 approximately five DCFC locations being deployed throughout Eversource's service  
5 territory. The Company further anticipates that the EVSE configuration at each of these  
6 sites will include two 150 kw DCFC, with a complementary Level 2<sup>3</sup> charger. The  
7 Company's proposal is to provide approximately \$2 million to fund certain portions of  
8 this infrastructure, as described in more detail below, in order to support the  
9 infrastructure buildout consistent with the EV Commission report described above.

10 Under this proposal, the Company will not own the chargers themselves. Instead,  
11 financing for the EVSE will come from the NH Trust. The EVSE will then be owned and  
12 operated by a third party (either an EVSE charging vendor or customer site host) who is  
13 selected via competitive bid through the NH Trust procurement process.

14 **Q. What infrastructure is Eversource proposing to include as part of this program?**

15 A. The Company is proposing to provide new service connections for each charging  
16 location. Each host site will be served by a new meter that is separate from any existing  
17 meter(s) at the selected site. For each site, the following infrastructure will be installed  
18 through the program: a primary lateral service feed from the existing circuit, any  
19 necessary transformer and transformer pad, a new meter, a new service panel, and the  
20 associated conduit and conductor to connect the electrical equipment to the EV

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<sup>3</sup> A Level 2 charging station provides charging through a 240V or 208V plug and can deliver 10 to 20 miles of range per hour of charging. Source: [https://afdc.energy.gov/fuels/electricity\\_infrastructure.html](https://afdc.energy.gov/fuels/electricity_infrastructure.html)

1 chargers. Of this work, internal Eversource resources will install the front of the meter  
2 infrastructure, including the distribution primary lateral service feed, transformer and  
3 pad, and the new meter. For installation work behind the meter, the NH Trust awardees  
4 will contract with third-party electrical contractors to complete the installation of any  
5 required transformer vaults, new service panels, and the connection to the EVSE.

6 **Q. Where will the Company locate the proposed EV infrastructure improvements?**

7 A. EVSE sites will be determined through the NH Trust RFP process. For a map of all  
8 travel corridors that NHDES has identified as primary targets, please see “FIGURE 1 –  
9 Target Corridors for RFP # NH-VW-2019-03 (page 9)” of the “New Hampshire VW  
10 Environmental Mitigation Trust Direct Current Fast Charging Infrastructure Request for  
11 Proposals RFP # NH-VW-2019-03 New Hampshire Electric Vehicle Supply Equipment  
12 Grant Program – Round 1 November 22, 2019.”<sup>4</sup>

13 **Q. What funding does the Company propose to provide through the program?**

14 A. The Company proposes to provide approximately \$2.0 million towards the cost of new  
15 service connections and electrical equipment for EV charging locations. This includes  
16 investment in front of meter distribution infrastructure as well as one-time rebates of  
17 comparable funding for the installation of electrical equipment behind the meter that will  
18 be owned by the customer. The Company also expects to incur an additional \$50,000 for

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<sup>4</sup> <https://www.nh.gov/osi/energy/programs/documents/dcf-c-corridor-rfp-112219.pdf>

associated program administration and other expenses. The estimated total budget is described in more detail below in Figure 1.

Figure 1		
Cost Elements		Total Program Investment
Front of Meter Infrastructure	Capital	\$ 650,000
Behind the Meter Infrastructure	Expense	\$ 1,400,000
Data Collection	Expense	\$ 30,000
Program Evaluation	Expense	\$ 20,000
		\$ 2,100,000

The estimated budget was based upon several assumptions, and is subject to change based on any subsequent adjustments to these assumptions as a result of the NH Trust RFP process:

- Site configuration: two 150 kw DCFC, with a complementary Level 2 charger.
- Number of sites in Eversource service territory: five
- Average site cost: \$410 thousand (Front of Meter: \$130 thousand, Behind the Meter: \$280 thousand)

The Company recommends that the proposed \$2 million funding be distributed evenly across all NH Trust funding awardees in Eversource service territory. Eversource also anticipates that this program will be completed within 12 months from both the Commission approval and NH Trust award of the anticipated RFP, whichever occurs at a later date.

**Q. How does the Company propose to recover its capital investment associated with the program?**

A. The Company is not seeking any special ratemaking treatment for its anticipated capital investment through the program. Eversource estimates it may invest approximately \$650,000 for front of the meter distribution equipment. The Company proposes that it

1 would include the net value of that investment in rate base as part of its next base  
2 distribution rate proceeding. The Company does not seek to recover amounts associated  
3 with estimated capital investment through any other rate mechanism at this time. The  
4 Company is, however, requesting that the Commission find that the capital investment for  
5 EV charging infrastructure made pursuant to this proposal is reasonable and appropriate.  
6 The Commission's authorization of these investments means that the Commission will  
7 approve the decision to proceed with those investments as part of this proceeding, and in  
8 the future would review the prudence of the implementation of these investments  
9 pursuant to that authorization.

10 **Q. Why is the proposed make-ready capital investment reasonable?**

11 A. The Company believes the proposed capital investment is reasonable to include in rate  
12 base given that public charging will produce incremental distribution revenue. As shown  
13 in Attachment BJR-1 the net present value of potential long-term distribution revenues  
14 from EV charging under applicable rates could be up to \$325,000 for a site with two 150  
15 kW DCFC, or \$1.6 million for five sites.

16 **Q. Why does the Company ask the Commission to find proposed investment amounts**  
17 **are reasonable in this docket, before they are incurred?**

18 A. Public EV charging is a new source of load that is not as predictable as that of other new  
19 customers, particularly in New Hampshire with a limited adoption of EVs to date. It is  
20 also anticipated that public EV charging may be more modest in the initial years of  
21 DCFC site operations, but could grow over the useful life of the Company's investments.  
22 The Company believes the proposed capital investment to enable EV charging sites is



1 appropriate given alignment with other state policies and the potential long-term benefits  
2 of increased electrification of the transportation sector.<sup>5</sup> Agreement from the  
3 Commission that the investment is appropriate and in the public interest is an important  
4 precondition for the Company to fund proposed make-ready capital investment.

5 **Q. Is the Company asking the Commission to determine costs are prudently incurred**  
6 **in this docket, before they are actually incurred?**

7 A. No. The Company expects the prudence of the Company's management of the make-  
8 ready program and resulting capital expenditures will be reviewed by the Commission in  
9 the future. The Company only requests that the reasonableness of the decision to proceed  
10 with the proposed make-ready program and associated capital investments be resolved in  
11 this docket.

12 **Q. How does the Company propose to recover non-capital expense associated with the**  
13 **program?**

14 A. Eversource expects the majority of funds provided to support the successful deployment  
15 of DCFC corridors in its service territory will be non-capital expenditures for customer-  
16 owned equipment located behind the utility meter. The proposed expenditures in such  
17 equipment and other O&M for the program are associated with activities outside the  
18 current normal course of electric distribution business, are incremental, and are also  
19 expected to be non-recurring. Eversource recommends that prudently incurred O&M

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<sup>5</sup> For example, the 2018 New Hampshire State Energy Strategy, available at: <https://www.nh.gov/osi/energy/programs/documents/2018-10-year-state-energy-strategy.pdf>, states at page 49: "While publicly-funded EV charging stations only demonstrate viability when adders for non-economic values are incorporated into a cost-benefit analysis, seed funding for infrastructure may have a knock-on effect promoting private investment."

1 costs for the proposed program be recovered through a reconciling mechanism, so that  
2 the costs of the program are reflected in rates on a timely basis. Alternatively, the  
3 Company would request authorization to defer the proposed non-recurring costs to a  
4 regulatory asset to be amortized following its next base rate proceeding.

5 **Q. What are the estimated benefits of the make-ready proposal?**

6 A. The primary benefit of the proposed make-ready infrastructure program is to support the  
7 successful development of DCFC corridors and advance the New Hampshire Beneficiary  
8 Mitigation Plan as discussed previously in this testimony. However, the Company also  
9 expects the expansion of EV charging within its service territory will produce other  
10 benefits for customers. As shown in Attachment BJR-1 the potential long-term revenue  
11 from public EV charging is projected to exceed the revenue requirement of the Company  
12 to support the program. Annual revenue could exceed the Company's annual cost by  
13 Year 4 and the program is projected to ultimately achieve simple payback by Year 23.  
14 The long-term benefits of distribution revenue in excess of costs would ultimately accrue  
15 to customers where increased sales volume would serve to reduce base distribution rates  
16 that would otherwise be charged to customers. Favorable rate impacts could be reflected  
17 in rates approved in the Company's next rate case and/or on an ongoing basis through a  
18 revenue decoupling mechanism. The Company has agreed to include a revenue  
19 decoupling proposal in its next base rate proceeding pursuant to the Settlement  
20 Agreement approved by the Commission in Docket No. DE 19-057. Eversource has not  
21 estimated the impact of EV charging on reconciling rates for transmission, stranded costs  
22 and other rate components, but additional customer benefits could emerge as costs

1 recovered through those rates are potentially spread across a larger volume of sales as  
2 well.

3 **Q. Please describe what data the Company will collect as part of this program.**

4 A. The Company anticipates that NHDES will require awarded site hosts to collect and  
5 report the following:

6 a. Date and time of usage (including start and stop time);

7 b. Utilization rates;

8 c. Total kWh and Total kW draw;

9 d. Total dollar amount charged to the user;

10 e. Station status and health in real time;

11 f. Equipment malfunctions and operating errors;

12 g. Percent of time vehicles connected to a charger are charging; and

13 h. Quarterly income from each station, net expenses.

14 The Company does not intend to propose redundant reporting requirements.

15 **Q. Please describe how the Company will report on program implementation progress.**

16 A. Upon completion of the proposed program, Eversource will provide a report detailing  
17 actual site deployment costs and a comparison of actual costs to budget.

18 On an annual basis, the Company will report data on site host monthly electric bills to  
19 capture sales revenue collected by Eversource as a result of this program.

[illegible]

1. Alternative charge assumed at load factor of 10% or less.

### PRO FORMA REVENUE REQUIREMENT

000038

## 24 Capital Depreciation Accrual Rate (Acc. 369 - Services)

23 Other assumptions

EV MAKE READY INFRASTRUCTURE PROPOSAL

COST OF CAPITAL & PROPERTY TAX

Class of Capital	Principal (\$000s)	Percent of Capital	Cost	After Tax Weighted Rate of Return	Tax Gross-up on Equity	Before Tax Weighted Rate of Return
Col.A	Col.B	Col.C	Col.D	Col.E	Col.F	Col.G
Long Term Debt	\$ 1,036,203	43.15%	4.08%	1.76%		1.76%
Short Term Debt	\$ 58,640	2.44%	2.07%	0.05%		0.05%
Common Equity	\$ 1,306,436	54.41%	9.30%	5.06%	1.88%	6.94%
Total	\$ 2,401,279	100.00%		6.87%	1.88%	8.75%

Cost of Capital per Docket No. DE 19-057, Settlement Order No. 26,433 dated 12/15/2020

Income Tax Rates	Current Rate	
Taxable Income	100.000%	
Federal Corporate Income Tax	21.000%	
Taxable Income After Federal Tax	79.000%	Line 21 - Line 22
New Hampshire Business Tax	7.700%	
NH State Income Tax	6.083%	Line 23 * Line 24
Federal and NH State Income Tax (T)	27.083%	Line 21 + Line 25
Net Income After Taxes on Income (1 - T)	72.917%	Line 21 - Line 26
State and Federal Taxes / Net Income After Taxes on Income (T / (1 - T))	0.3714	Line 26 / Line 27
Income Tax Gross-Up (1 / (1 - T))	1.3714	Line 21 / Line 27

Tax Rates per Dec 2017 Tax Cut and Jobs Act legislation effective January 1, 2018 and NH Business Tax Rate

After Tax Return used for discounting	After Tax Cost	Weighted Return
Long Term Debt	2.98%	1.28%
Short Term Debt	1.51%	0.04%
Common Equity	9.30%	5.06%
Total After Tax		6.38%

Other assumptions

Property Tax Rate 2.10%

Property Tax Rate calculated per Docket No. DE 19-057 Step 2 Adjustment