

STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 22-010

DIRECT TESTIMONY OF
EDWARD A. DAVIS

Calculation of Lost Base Revenues due to Net Metering

On behalf of Public Service Company of New Hampshire
d/b/a Eversource Energy

April 29, 2022

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Attachment EAD-2, Exhibits A – E	2021 Calculation of Net Metering Lost Base Revenues (Rate R)
Attachment EAD-3, Exhibits A – J	2021 Calculation of Net Metering Lost Base Revenues (Rates G and GV)

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1 **I. INTRODUCTION**

2 **Q. Please state your name, business address and position.**

3 A. My name is Edward A. Davis. My business address is 107 Selden Street, Berlin,
4 Connecticut. I am employed by Eversource Energy Service Company as the Director of
5 Rates.

6 **Q. What are your principal responsibilities in this position?**

7 A. As the Director of Rates, I am responsible for activities related to rate design, cost of service
8 and rates administration for Connecticut, Massachusetts and New Hampshire electric and
9 gas subsidiaries of Eversource Energy, including the Company.

10 **II. SCOPE AND PURPOSE**

11 **Q. What is the purpose of your testimony?**

12 A. The purpose of my testimony is to present the Company's calculation of Lost Base
13 Revenues ("LBR") associated with net metering for 2021, in support of its inclusion in the
14 Regulatory Reconciliation Adjustment ("RRA") effective August 1, 2022.

1 **Q. Please outline the organization of your testimony and attachments.**

2 A. In addition to this written testimony, I provide three attachments. Attachment EAD-1
3 provides a summary of the total 2021 LBR as a result of net metering. Attachment EAD-
4 2, Exhibits A through E provide the detailed calculation of LBR for Rate R for 2021.
5 Attachment EAD-3, Exhibits A through J provide the calculation of LBR for Rate G and
6 GV customers for 2021.

7 **III. LOST BASE REVENUE**

8 **Q. On what basis is Eversource requesting recovery of LBR associated with net metering**
9 **for 2021?**

10 A. Under RSA 362-A:9, VII, distribution utilities, which include Eversource, “may perform
11 an annual calculation to determine the net effect this section had on its default service and
12 distribution revenues and expenses in the prior calendar year.” Further, it provides that the
13 “method of performing the calculation and applying the results, as well as a reconciliation
14 mechanism to collect or credit any such net effects with appropriate carrying charges and
15 credits applied, shall be determined by the commission.” In Docket No. DE 19-057 The
16 Commission approved a Settlement Agreement in the Company’s distribution rate case
17 pursuant to Order No. 26,433 (2020) (the “Settlement Agreement”). The Settlement
18 Agreement required LBRs associated with net metering to be calculated consistent with
19 RSA 362-A:9, VII and the Commission’s approved method in Order No. 26,029 (June 23,
20 2017) in Docket No. DE 16-576. The method approved in Docket No. DE 16-576 was a

1 mechanism and process approved by the Commission for Unitil in Docket DE 15-147,
2 Order No. 25,991 (2017).

3 The parties to the Settlement Agreement in Docket No. DE 19-057, acknowledged that the
4 Company's base distribution revenues do not include any LBR associated with net
5 metering for installations on or after January 1, 2019. The Settlement Agreement therefore
6 stated that the RRA shall recover LBR beginning as of January 1, 2019.

7 **Q. Please describe how the Company estimated the monthly and annual generation for**
8 **net metering customers.**

9 A. The amount of the displaced kWh of generation for each customer was calculated using
10 the "PVWatts" model provided by the National Renewable Energy Lab, applied by the
11 Company in its 2019 and 2020 LBR calculations. This model estimated the annual kWh
12 for a standard solar system, with capacity factor of 14.7%, which was applied in developing
13 the 2021 LBR for each system evaluated in Attachments EAD-2 and EAD-3.

14 **Q. Please explain how the output of the PVWatts data was used to calculate the monthly**
15 **kWh generation of each customer's load.**

16 A. The Company first took the total installed AC kW and multiplied that by the total hours in
17 the year (8,760) and further multiplied by the capacity factor of 14.7% calculated in the
18 PVWatts model. The result is the total estimated annual kWh output of each facility and
19 is shown for Rate R customers in Exhibit A of Attachment EAD-2, and for Rate G and GV
20 customers in Exhibit A in Attachment EAD-3.

1 To determine the monthly amounts, the Company took the total monthly kWh energy
2 calculated by PVWatts to allocate the total output to each month. In the first month a
3 facility went in-service, the Company determined whether there were kWh purchases
4 (energy delivered to customers from the distribution system) or kWh sales associated with
5 the facility (the portion of energy produced by the facility and delivered to the distribution
6 system). If there were purchases or sales associated with the facility, the Company
7 allocated the estimated generation by multiplying the monthly amount by the prorated
8 number of days the facility was in-service. The results for Rate R customers are provided
9 in Exhibit B to Attachment EAD-2, and the results for Rate G and GV customers are
10 provided in Exhibit B to Attachment EAD-3.

11 **Q. Please provide an explanation of how the Company used the data to calculate the total**
12 **displaced revenue for Rate R customers.**

13 A. After the Company calculated the estimated total generation kWh's produced as described
14 above, the Company obtained the total kWh sales and subtracted those amounts from the
15 estimated total generation kWh's. Because the Company recovers the expense associated
16 with sales through the Stranded Cost Recovery Charge ("SCRC"), removal of those sales
17 from the estimated generation ensures that the Company does not double recover any
18 revenues it is seeking through LBR.

19 Once the total kWh usage displaced by generation was calculated, the Company multiplied
20 that value by the distribution rate in effect for each month to determine the total LBR.
21 Those amounts are included in Attachment EAD-2, Attachment E.

1 **Q. Please provide an explanation of the calculation the Company used to calculate the**
2 **total displaced revenue for Rate G and GV customers.**

3 A. Because Rates G and GV have block rates, the Company had to approach this calculation
4 slightly different than the displaced revenues for Rate R customers. To calculate these
5 displaced revenues, the Company first calculated the total usage the customer would have
6 been billed absent net metering. That calculation sums the total monthly estimated
7 generation plus the actual monthly billed amount and the result of that calculation is shown
8 in Attachment EAD-3, Exhibit I. Those usage levels were then allocated to each
9 appropriate block to calculate the customers total bill absent net metering. The Company
10 then performed the same calculation based on actual purchases (Attachments EAD-3,
11 Exhibits F and G). The difference between the total bill absent net metering and the total
12 purchases results in the LBR amounts provided in Attachment EAD-3, Exhibit E.

13 **IV. CUSTOMER BILL IMPACTS**

14 **Q. Please describe the impact that the proposed LBR calculation would have on a 600**
15 **kWh and 650 kWh residential Rate R customer.**

16 A. The Company estimates that the total LBR of \$578,495, included in the RRA, compared
17 with total LBR of approximately \$290,000 under current rates, results in an estimated
18 increase to a 600 kWh Rate R customer of \$0.02 per month. The portion of the RRA
19 related to incremental LBR results in a rate equivalent to \$0.00004 per kWh.

1 In addition, other changes are being included in the RRA which will affect the total rate
2 impacts being proposed for August 1, 2021. Please see the joint testimony of Ms. Paruta
3 and Mr. Davis for total bill impacts of the RRA.

4 **Q. Does this conclude your testimony?**

5 **A. Yes, it does.**