

STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 21-029

DIRECT TESTIMONY OF
JENNIFER A. ULLRAM

Calculation of Lost Base Revenues due to Net Metering

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

July 12, 2021

Table of Contents

1 I. INTRODUCTION 1
2 II. SCOPE AND PURPOSE 2
3 III. LOST BASE REVENUE..... 3
4 V. CUSTOMER BILL IMPACTS 8

Attachments

Attachment JAU-1	Summary of 2019 and 2020 Net Metering Lost Base Revenues
Attachment JAU-2, Exhibits A – E	2019 Calculation of Net Metering Lost Base Revenues (Rate R)
Attachment JAU-3, Exhibits A – E	2020 Calculation of Net Metering Lost Base Revenues (Rate R)
Attachment JAU-4, Exhibits A – J	2019 Calculation of Net Metering Lost Base Revenues (Rates G and GV)
Attachment JAU-5, Exhibits A – J	2020 Calculation of Net Metering Lost Base Revenues (Rates G and GV)
Attachment JAU-6	PVWatts Model

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1 **I. INTRODUCTION**

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

3 A. My name is Jennifer A. Ullram. I am employed by Eversource Energy Service Company
4 as the Manager of Rates in Connecticut and New Hampshire. In this position, I provide
5 support to Public Service Company of New Hampshire, d/b/a Eversource Energy
6 (“Eversource” or the “Company”). My business address is 107 Selden Street, Berlin,
7 Connecticut.

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

9 A. As the Manager of Rates, I am responsible for activities related to rate design, cost of
10 service and rates administration for electric and gas subsidiaries of Eversource Energy,
11 including Eversource.

1 **Q. Please describe your educational and professional background.**

2 A. I graduated from Bryant College (now Bryant University) in Smithfield, Rhode Island in
3 1997 with a Bachelor of Science degree in Finance. In 2005, I graduated from the
4 University of Hartford Barney School of Business with a Master of Science in Accounting
5 and Taxation. Immediately prior to my employment at Eversource Energy, I was a SEC
6 and NYSE auditor for Advest. In 2001, I joined the predecessor to Eversource (“Northeast
7 Utilities”) and held various staff and supervisor level positions in the Transmission Rates
8 and Revenue Requirements Department prior to joining the Rates group. In 2015, I was
9 promoted to Manager of Connecticut Rates and in 2019, was promoted to Manager of
10 Connecticut and New Hampshire Rates.

11 **Q. Have you testified previously before the New Hampshire Public Utilities Commission
12 or other regulatory bodies?**

13 A. Yes. I have testified before the New Hampshire Public Utilities Commission
14 (“Commission”) on behalf of Eversource, and at the state utility commission in Connecticut
15 on behalf of other Eversource Energy companies on rate related matters.

16 **II. SCOPE AND PURPOSE**

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

18 A. The purpose of my testimony is to present the Company’s calculation of Lost Base
19 Revenues (“LBR”) associated with net metering for 2019 and 2020 so that it may be
20 included in the Regulatory Reconciliation Adjustment (“RRA”) effective August 1, 2021.

1 **Q. Please outline the organization of your Testimony and Attachments.**

2 A. In addition to this written testimony, I am presenting six attachments. Attachment JAU-1
3 provides a summary of the total 2019 and 2020 calculation LBR as a result of net metering.
4 Attachments JAU-2 and JAU-3, Exhibits A through E provide the detailed calculation of
5 LBR for Rate R for 2019 and 2020, respectively. Attachments JAU-4 and JAU-5, Exhibits
6 A through J provide the calculation of LBR for Rate G and GV customers for 2019 and
7 2020. Finally, Attachment JAU-6 provides the PVWatts model used to calculate the
8 estimated kWh generated for each customer by month.

9 **III. LOST BASE REVENUE**

10 **Q. On what basis is Eversource requesting recovery of LBR associated with net metering**
11 **for 2019 and 2020?**

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

1 Commission's approved method in Order No. 26,029 (June 23, 2017) in Docket No. DE
2 16-576. That approved method was based upon a mechanism and process approved by the
3 Commission for Unitil in Order No. 25,991 (February 21, 2017) in Docket No. DE 15-147.
4 In the Settlement Agreement in Docket No. DE 19-057, the Settling Parties acknowledged
5 that base distribution revenues do not include any LBR associated with net metering for
6 installations on or after January 1, 2019. The Settlement Agreement also stated that the
7 RRA shall recover LBR beginning as of January 1, 2019.

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

10 A. The amount of the displaced kWh of generation was calculated based on the PVWatts
11 model (see Attachment JAU-6). To calculate the amount of kWh generated per kW (AC)
12 installed for a Photovoltaic system, the Company input a 1,250 kW-DC into the model and
13 utilized a DC to AC ratio of 1.25 to achieve 1,000 kW-AC. The model estimated the annual
14 kWh of generation of 1,611,023 with a capacity factor of 14.7%.

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

17 A. The Company first took the total installed AC kW and multiplied that by the total hours in
18 the year (8,760) and further multiplied by the capacity factor of 14.7% calculated in the
19 PVWatts model. The result is the total estimated annual kWh output of each facility and

1 is shown for Rate R customers in Exhibit A in Attachments JAU-2 and JAU-3. For Rate
2 G and GV customers that calculation is provided in Exhibit A in Attachments JAU-4 and
3 JAU-5.

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

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

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

1 Once the total displaced generation was calculated, the Company multiplied that value by
2 the distribution rate in effect for each month to determine the total LBR. Those amounts
3 are included in Exhibits E in Attachments JAU-2 and JAU-3.

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

6 A. Because Rates G and GV have block rates, the Company had to approach this calculation
7 slightly different than the displaced revenues for Rate R customers. To calculate these
8 displaced revenues, the Company first calculated the total usage the customer would have
9 been billed absent net metering. That calculation sums the total monthly estimated
10 generation plus the actual monthly billed amount and the result of that calculation is shown
11 in Attachments JAU-4 and JAU-5, Exhibits I. Those usage levels were then allocated to
12 each appropriate block to calculate the customers total bill absent net metering. The
13 Company then performed the same calculation based on actual purchases (Attachments
14 JAU-4 and JAU-5, Exhibits F and G). The difference between the total bill absent net
15 metering and the total purchases results in the LBR amounts provided in Attachments JAU-
16 4 and JAU-5, Exhibit E.

17 The reason this calculation works is due to the fact that the difference in total kWh usage
18 absent net metering minus total kWh purchases is equal to the displaced kWh due to net
19 metering. The following example supports this:

		Customer #1 - 2019			
		(kWh)	Reference		
1	Estimated Generation	1,605	JAU-4, Ex. B		
2	Purchases	4,995	JAU-4, Ex. F		
3	Sales	39	JAU-4, Ex. C		
4	Billed	4,956	Line 2 - Line 3		
5	Total Usage	6,561	Line 1 + Line 4		
6	Displaced kWh	1,566	Line 1 - Line 3		
		Billed Amount of Total Usage		Billed Amount of Purchases	
		kWh	Revenues	kWh	Revenues
7	Block 1	500	\$ 34.93	500	\$ 34.93
8	Block 2	1,000	17.31	1,000	17.31
9	Block 3	5,061	30.97	3,495	21.39
10	Total	6,561	\$ 83.21	4,995	\$ 73.63
11			Difference	1,566 kWh	\$ 9.58

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As shown on line 11 above, the total displaced kWh for January 2019 is 1,566 kWh which ties to the calculated displaced kWh on line 6. Therefore, the difference between the billed total usage and the billed purchases is equal to the displaced kWh and revenues. The total \$9.58 for this customer is show in Attachment JAU-4, Exhibit E.

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Q. How does this methodology differ from what Unitil files in its calculation of LBR?

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A. As stated above, because the Company recovers the “Sales” portion through the SCRC, the Company needs to ensure there is no double recovery of revenues. It is my understanding that Unitil’s calculation determines the estimated generation less any surplus kWh multiplied by the distribution rates in effect to estimate the LBR. Given the way the Company’s meters record sales and purchases, applying the Unitil methodology exactly

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1 the same way to our data would result in some revenues being recovered twice – once
2 through the SCRC and then again through the LBR calculation that is ultimately included
3 in the RRA. Nonetheless, the methodology we applied is based on the Until method
4 achieves the appropriate calculation of LBR.

5 **V. CUSTOMER BILL IMPACTS**

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

8 A. The Company estimates that the total LBR of \$290,291 results in an estimated increase to
9 a 600 kWh Rate R customer of \$0.03 per month. The portion of the RRA related to LBR
10 results in a rate equivalent to \$0.00004 per kWh.

11 In addition, other changes are being included in the RRA which will affect the total rate
12 impacts being proposed for August 1, 2021. Please see the joint testimony of Ms. Menard
13 and Ms. Ullram for total bill impacts of the RRA.

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

15 A. Yes, it does.