

**STATE OF NEW HAMPSHIRE**  
**BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION**  
**DIRECT JOINT TESTIMONY OF MARISA B. PARUTA AND JAMES E.**  
**MATHEWS**  
**PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**  
**d/b/a EVERSOURCE ENERGY**  
**REQUEST FOR TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM)**  
**RATE CHANGE**

**August 4, 2023**

**Docket No. DE 23-070**

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1 **Q. Please state your names, business addresses and your present positions.**

2 A. My name is Marisa B. Paruta. My business address is 107 Selden Street, Berlin,  
3 CT. I am employed by Eversource Energy Service Company as the Director of  
4 Revenue Requirements and in that position, I provide service to Public Service  
5 Company of New Hampshire d/b/a Eversource Energy (“PSNH” or the  
6 “Company”).

7 My name is James E. Mathews. My business address is 107 Selden Street, Berlin,  
8 CT. I am employed by Eversource Energy Service Company as the Manager of  
9 Rates and Revenue Requirements, Transmission and in that position, I provide  
10 service to the operating affiliates in Connecticut, Massachusetts and New  
11 Hampshire, including PSNH.

1 **Q. Have you previously testified before the Commission?**

2 A. Ms. Paruta: Yes, I have.

3 A. Mr. Mathews: Yes, I have.

4 **Q. What are your current responsibilities?**

5 A. Ms. Paruta: I am currently responsible for the coordination and implementation of  
6 revenue requirements calculations for Eversource, as well as the filings associated  
7 with Eversource's Energy Service ("ES") rate, Stranded Cost Recovery Charge  
8 ("SCRC"), Transmission Cost Adjustment Mechanism ("TCAM"), Regulatory  
9 Reconciliation Adjustment Mechanism ("RRA"), Pole Purchase Adjustment  
10 Mechanism ("PPAM") and Distribution Rates.

11 Mr. Mathews: I am currently responsible for coordination and implementation of  
12 transmission rate and revenue requirement calculations for the operating affiliates.  
13 I also have responsibility related to transmission rate filings before three state  
14 utility commissions in the operating companies' service territories, as well as the  
15 Federal Energy Regulatory Commission ("FERC").

16 **Q. What is the purpose of your joint testimony?**

17 A. Ms. Paruta: My testimony supports PSNH's TCAM filing for proposed rates to  
18 take effect October 1, 2023. The testimony and supporting attachments present the  
19 reconciliation with actual data through June 30, 2023 and forecast data for the

1 period from July 1, 2023 to September 30, 2024 for transmission costs resulting in  
2 the total TCAM rate to take effect on October 1, 2023.

3 Mr. Mathews: My testimony is to support and describe the year-to-year change in  
4 RNS and LNS rates.

5 **Q. What is Eversource requesting in this filing?**

6 A. The TCAM is comprised of a couple of components. One component is the  
7 approval of the calculated forecasted average retail transmission rate for the period  
8 from October 1, 2023 to September 30, 2024. The second component includes  
9 approval of the prior period's over-recovery resulting from the reconciliation of  
10 actual transmission costs and revenues against the costs that were forecasted in the  
11 previous rate filing. These component parts of the TCAM rate are consistent with  
12 the Commission-approved settlement in Docket No. DE 06-028, which created the  
13 TCAM, and would be collected over 12 months beginning October 1, 2023.

14 **Q. Will anyone else be providing testimony in support of this filing?**

15 A. Yes. Scott R. Anderson and David J. Burnham are each filing testimony in support  
16 of the proposed TCAM updated rate. Mr. Anderson will detail the rates applicable  
17 to each individual rate class. Mr. Burnham will be providing a description of  
18 projects developed by the Company and included in RNS and/or LNS rates, as  
19 well as describing the planning process at ISO-NE.

1 **Q. What is Eversource proposing as its annual TCAM rate in this filing?**

2 A. As shown in Attachment MBP-1, Pages 1 and 2, PSNH is proposing a forecasted  
3 average TCAM rate of 2.701 cents per kilowatt-hour (kWh), as compared to the  
4 current average rate of 2.179 cents per kWh. The increase in the proposed average  
5 TCAM rate effective October 1, 2023 is driven primarily by the following:

- 6 • Line 8, a decrease in Revenue Credits, which results in a lower benefit  
7 flowing through the TCAM Rate of approximately \$15.5 million;
- 8 • Line 1, an increase in RNS costs of approximately \$13.7 million; and
- 9 • Line 10, a projected decrease in the retail transmission over-recovery,  
10 which results in a lower benefit flowing through the TCAM Rate of \$8.8  
11 million.

12

13 **Q. Please provide a five-year historical TCAM rate table.**

14 A. Please refer to the table on the next page for the five-year historical TCAM rate  
15 data. The proposed increase in the TCAM rate effective October 1, 2023 represents  
16 a rate similar to the rates in effect in 2020 and 2021.

<b>Transmission Cost Adjustment Mechanism (TCAM) Forecast and Average Rate</b>					
(\$ in 000s, except for the rate per kWh)	Docket No. DE 19-106 Approved per Order No. 26,276 (July 30, 2019)	Docket No. DE 20-085 Approved per Order No. 26,386 (July 31, 2020)	Docket No. DE 21-109 Approved per Order No. 26,501 (July 29, 2021)	Docket No. DE 22-034 Approved per Order No. 26,651 (July 22, 2022)	Docket No. DE 23-070 Proposed
<b>TCAM Costs</b>	<b><u>\$160,396</u></b>	<b><u>\$213,418</u></b>	<b><u>\$213,755</u></b>	<b><u>\$166,361</u></b>	<b><u>\$209,102</u></b>
Retail Sales (MWh)	7,822,136	7,737,205	7,673,863	7,633,526	7,741,834
<b>TCAM Rate (\$ per kWh)</b>	<b>\$0.02051</b>	<b>\$0.02758</b>	<b>\$0.02785</b>	<b>\$0.02179</b>	<b>\$0.02701</b>

1 **Q. Describe the types of costs included in this TCAM filing.**

2 A. There are two different groups of costs recovered through the TCAM. The first  
3 group of costs consists of four cost categories of “wholesale transmission” costs.  
4 The second group consists of three cost categories of “other transmission” costs.

5 The “wholesale transmission” costs are as follows:

- 6 1. Regional Network Service (RNS) costs;
- 7 2. Scheduling and Dispatch (S&D) costs;
- 8 3. Local Network Service (LNS) costs; and
- 9 4. Reliability costs.

10 All transmission costs are regulated and authorized by the FERC. These costs are  
11 discussed below in more detail.

12 1. RNS costs reflect the cost for the provision of regional transmission  
13 service across all of New England and recovers the cost of specific  
14 facilities referred to as Pooled Transmission Facilities (“PTF”).

15 RNS costs are billed to all entities in the region that have RNS load

1 responsibility, such as PSNH, based on the annual RNS rate divided by 12,  
2 multiplied by PSNH's monthly regional network load. The RNS rate is set  
3 annually on January 1 and is calculated under a FERC approved formula  
4 rate included as Attachment F to the ISO-NE OATT. The RNS rate and  
5 supporting calculations are publicly posted on ISO-NE's website<sup>1</sup> 45 days  
6 in advance of the annual informational filing submission to FERC on July  
7 31.

8 2. S&D costs are associated with services provided by ISO-NE related to  
9 scheduling, system control and dispatch services. These costs are billed by  
10 ISO-NE to all entities in the region that have RNS load responsibility, such  
11 as PSNH, based on their monthly peak load, in accordance with the  
12 applicable FERC tariff. The S&D rate is set annually on June 1. The S&D  
13 rate and supporting calculations are publicly posted on ISO-NE's website<sup>2</sup>  
14 45 days in advance of the annual informational filing submission to FERC  
15 on July 31.

16 3. LNS costs reflect the cost for provision of local transmission service.  
17 LNS costs are based on FERC approved formula rates included as  
18 Schedule 21-ES of the ISO-NE OATT. On a monthly basis,

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<sup>1</sup> <https://www.iso-ne.com/search?query=2023%20annual%20informational%20filing> - 2023/2024 OATT Schedule 1 & 9 Rate Development Worksheets and Supporting Documents (Schedule 9), posted on June 15, 2023

<sup>2</sup> <https://www.iso-ne.com/search?query=2023%20annual%20informational%20filing> - 2023/2024 OATT Schedule 1 & 9 Rate Development Worksheets and Supporting Documents (Schedule 1), posted on June 15, 2023.

1 Eversource Service Company bills LNS expenses to the Company  
2 based on the Schedule 21-ES Local Network Service rate multiplied  
3 by PSNH's monthly Local Service load coincident with the local  
4 network peak load. Each of Eversource operating company's wholesale  
5 LNS costs are billed to its LNS customers on a state-by-state basis; for  
6 example, PSNH's LNS costs are billed only to PSNH's LNS customers in  
7 New Hampshire. The LNS rate is set annually on January 1. The LNS rate  
8 and supporting calculations under Schedule 21-ES are publicly posted on  
9 ISO-NE's website<sup>3</sup> 45 days in advance of the annual informational filing  
10 submission to FERC on July 31.

- 11 4. Reliability costs include costs, such as black start and volt-ampere reactive  
12 ("VAR") support, that are related to electric system reliability. These  
13 reliability costs are billed to all entities in the region that have RNS load  
14 responsibility, such as Eversource, based on their monthly peak load.

15 The "other transmission" costs and credits/revenues are as follows:

- 16 5. Hydro-Québec (HQ) Interconnection Capacity Credits,  
17 6. HQ Phase I/II support costs and related revenues, and  
18 7. TCAM working capital allowance return.

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<sup>3</sup> <https://www.iso-ne.com/search?query=2023%20annual%20informational%20filing> - 2023/2024 OATT Schedule 1 & 9 Rate Development Worksheets and Supporting Documents (Schedule ES-2 (Part A), Appendix A), posted on June 15, 2023.

1 Other transmission costs and revenues (numbers 6 and 7) were previously  
2 recovered through Eversource's distribution rates but were transferred in total or in  
3 part to the TCAM for recovery, effective July 1, 2010, as part of a negotiated  
4 "Settlement Agreement on Permanent Distribution Service Rates" ("Settlement  
5 Agreement") between Eversource, the Commission Staff, and the Office of  
6 Consumer Advocate (OCA) in Docket No. DE 09-035 that was approved by Order  
7 No. 25,123. These costs and revenues are discussed below in more detail.

8 5. HQ Interconnection Capacity Credits were historically included in the Capacity  
9 Expense/Credit portion of the ES rate. With the transition from the  
10 Eversource-owned generation energy service rates to the new market  
11 solicitation rates effective April 1, 2018, it was appropriate to start including  
12 these credits in the TCAM, as that is where HQ Phase I/II Support Costs and  
13 Revenue Credits are included.

14 6. HQ Phase I/II support costs are costs associated with FERC-approved  
15 contractual agreements between PSNH and other New England utilities to  
16 provide support for, and receive rights related to, transmission and terminal  
17 facilities that are used to import electricity from Canada. Under the amended,  
18 extended and restated agreements<sup>4</sup>, PSNH is charged its proportionate share of  
19 O&M and capital costs for a twenty-year term that ends on October 31, 2040.

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<sup>4</sup> On December 18, 2020 in Docket No. ER21-712-000, the Asset Owners and the IRH Management Committee ("Filing Parties") submitted to FERC for approval an Offer of Settlement ("Settlement") that amended and restated the four Support Agreements and the Use Agreement as part of a comprehensive



1 Prior to July 1, 2010, Eversource’s share of any revenue associated with HQ  
2 Phase I/II was returned to customers through the ES rate. Effective July 1,  
3 2010, consistent with the requirements of NHPUC Order No. 25,122, in the  
4 2010 TCAM docket, Docket No. DE 10-158, PSNH began returning its share  
5 of any HQ Phase I/II revenues to customers as a revenue credit in the TCAM.<sup>5</sup>  
6 The shift in the collection of the revenue credit from the default ES rate to the  
7 TCAM rate was based on the fact that all customers, not just those on default  
8 supply, pay the HQ support costs, and therefore all customers should receive  
9 the benefit of the revenue credit, which is possible through the non-bypassable  
10 TCAM rate.<sup>6</sup> The decrease in the proceeds from the revenue credits as a result  
11 of the most recent RFP for the 12-month period ending May 2024, as

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package that will provide for ongoing financial support of, and related rights and obligations with respect to, the Phase I/II HVDC-TF. The Settlement reflected the exercise by certain IRH of rights under the existing Support Agreements to extend the term of those Support Agreements another twenty years until October 31, 2040. Further, because the Use Agreement by its own terms will remain in effect through expiration of the term of the last Support Agreement, the term of Use Agreement was also extended to October 31, 2040. The Filing Parties asserted that the Phase I/II HVDC-TF are vitally important to both the New England and Québec regions and provide a variety of benefits to consumers in New England. In an order issued on May 20, 2021, FERC accepted the Settlement, finding that it appears to be fair and reasonable and in the public interest. 175 FERC ¶ 61,140 (2020). Materials pertaining to the extension were shared with the Commission, Staff, and OCA in January 2021, and notice of FERC’s acceptance of the Settlement was provided to the Commission, Staff, and OCA on May 24, 2021.

<sup>5</sup> PSNH and its affiliates, The Connecticut Light and Power Company (“CL&P”) and NSTAR Electric Company (“NSTAR” and together with PSNH and CL&P, “Eversource”), have issued Requests for Proposals for the Reassignment of their Use Rights on the Phase I/II HVDC-TF. Proposals were requested for 100% of the Eversource Use Rights or for tranches of their combined Use Rights in bid blocks of 25%, and a fixed dollar proposal was requested. Based on the recent proposals received, Eversource signed agreements to reassign all of its Use Rights to H.Q. Energy Services (U.S.) Inc. for a one-year term commencing June 1, 2023. All proceeds from the reassignment of Eversource’s Use Rights will be credited back on a pro rata basis (by IRH Participant Share percentage) to the retail customers of PSNH, CL&P and NSTAR. The proceeds as a result of the most recent RFP for the period June 2023 to May 2024 are shown in Attachment MBP-1, pages 3 and 4, line 10.

<sup>6</sup> Order No. 25,122 at 7.

1 compared to the same period last year, was the result of the decrease in the  
2 forward energy markets.

3 7. When the TCAM was initially approved in Docket No. DE 06-028, there was  
4 no provision for a working capital allowance. The TCAM working capital  
5 allowance continued to be included with the distribution working capital  
6 allowance. As part of the Commission-approved Settlement Agreement in  
7 Docket No. DE 09-035 (Order No. 25,123), the distribution revenue  
8 requirement calculation excluded working capital on transmission costs.  
9 Therefore, the TCAM now includes a working capital allowance based on a  
10 lead/lag study as directed by the Commission in Docket No. DE 16-566 (Order  
11 No. 25,912). An updated lead/lag analysis has been completed based on  
12 calendar year 2022 for rates effective October 1, 2023 and discussed later in  
13 this testimony.

14  
15 **Q. Please describe the overall mechanics of the TCAM as they are presented in**  
16 **this filing.**

17 A. The TCAM is a mechanism that allows Eversource to fully recover defined FERC  
18 and FERC-approved transmission costs. The proposed TCAM updated rate, as  
19 mentioned previously, is based on both reconciliations of historic transmission  
20 costs and forecasted future transmission costs using the latest approved FERC  
21 transmission rates.

1           There are two premises that form the basis of the TCAM. First, the TCAM sets  
2           transmission rates for a defined future billing period based on transmission cost  
3           estimates using current budget and forecast data supported by the latest known  
4           FERC approved transmission rates. This future billing period is referred to as the  
5           “forecast period”. Second, the TCAM provides all available actual cost and  
6           revenue (recovery) data referred to as the “reconciliation period”. Any over- or  
7           under-recoveries that are incurred in the reconciliation period are rolled into the  
8           subsequent billing period as part of the next TCAM rate.

9           **Q.    What is the forecast period used in this filing, and what is the reconciliation**  
10           **period?**

11          A.    The forecast period in this filing is the twelve-month period from October 1, 2023  
12           to September 30, 2024.<sup>7</sup> The reconciliation period in this filing is the 14-month  
13           period from August 1, 2022 to September 30, 2023, and includes actual results for  
14           August 2022 through June 2023 and estimated results for July 2023 through  
15           September 2023. The Settled Formula Rate<sup>8</sup> became effective January 1, 2022.  
16           Therefore, actual costs during the reconciliation period will reflect activity under  
17           the settlement tariff.

18  
19

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<sup>7</sup> Docket No. DE 22-034, Order No. 26,735 (November 28, 2022)

<sup>8</sup> The wholesale Transmission rate transparency settlement was filed at FERC on June 15, 2020 and approved by FERC on December 28, 2020 in Docket No. ER20-2054-000.

1 **Q. Do the RNS and LNS expense forecasts contained in this filing reflect the most**  
2 **current FERC rates that are effective during the forecast period?**

3 A. Yes. Please see the table below for the FERC rates that will be in effect on  
4 October 1, 2023 and January 1, 2024, as well as the prior year’s FERC rates that  
5 were utilized in the RNS and LNS expense forecasts approved in DE 22-034:

FERC Approved Rates	Description	(A)		(B)		(C)		(D)		(E) = (A) - (C)		(F) = (B) - (D)	
		DE 23-070 (a)				DE 22-034				Change			
		Oct 23 to Dec 23	Jan 24 to Sep 24	Aug 22 to Dec 22	Jan 23 to Jul 23								
RNS Rate	\$ per kW per year	\$ 141.64	\$ 154.35	\$ 142.78	\$ 140.94	\$		\$		\$	(1.13)	\$	13.41
	\$ per MWh	\$ 29.51	\$ 32.16	\$ 31.02	\$ 30.62	\$		\$		\$	(1.51)	\$	1.54
LNS Rate	\$ per kW per year	\$ 20.72	\$ 22.96	\$ 19.57	\$ 20.72	\$		\$		\$	1.15	\$	2.24
	\$ per MWh	\$ 4.32	\$ 4.78	\$ 4.25	\$ 4.50	\$		\$		\$	0.07	\$	0.28

**Notes:**

(a) The forecasted twelve month period in this filing is October 2023 through September 2024 per Order Nisi No. 26,735 (November 28, 2022) in Docket No. DE 22-034.

6  
7 **Q. Please explain how the change in RNS rates impacts the Company’s proposed**  
8 **revenue requirement.**

9 A. The Table above provides the RNS rates that are reflected in the TCAM rate  
10 proposed for the period from October 1, 2023 to September 30, 2024 and the RNS  
11 rates previously approved for the TCAM period from August 1, 2022 to September  
12 30, 2023. As reflected in Exhibit MBP-1, page 2, line 1, the Company is projecting  
13 an increase in the estimated RNS expenses for the forecast period from October 1,  
14 2023 to September 30, 2024, as compared to the prior year’s forecasted RNS  
15 expenses. The increase is primarily due to the projected increase in the January 1,  
16 2024 RNS rate. This RNS rate increase is primarily due to incremental forecasted  
17 RNS revenue requirements associated with forecasted PTF investments and a  
18 decrease in the 12CP load (12 monthly coincident peak loads that are used to  
19 assign costs). The TCAM thus reflects higher RNS costs attributable to the

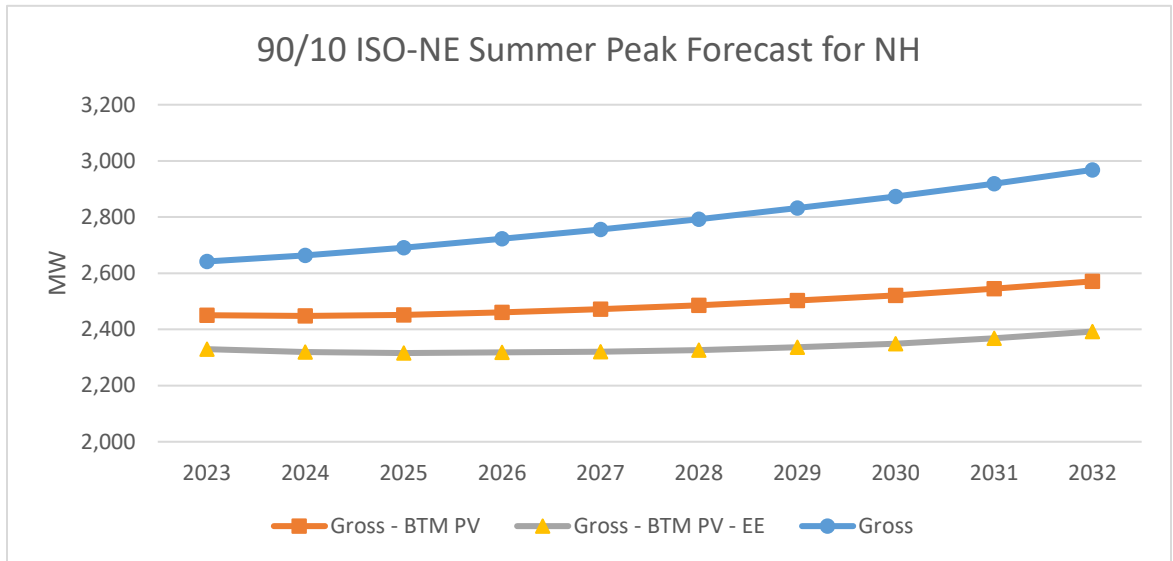
1 Company in accordance with applicable FERC-approved tariffs.

2 **Q. In Order No. 26,031 (June 28, 2017) in Docket No. DE 17-081, the**  
3 **Commission noted that there have been changes in the RNS rates as a result**  
4 **of changes in peak demand throughout New England. In that order, the**  
5 **Commission noted that as other states in the region reduce their share of peak**  
6 **load relative to the total, New Hampshire's share of the peak, and allocation**  
7 **of costs, increases. The Commission stated that it expected the Company to**  
8 **explain its efforts to reduce peak demand in New Hampshire in future TCAM**  
9 **filings. What efforts has Eversource made to address peak demand in New**  
10 **Hampshire?**

11 A. As the Company described during the hearing in Docket No. DE 17-081, energy  
12 efficiency programs reduce consumption of energy (kWh), and costs, for  
13 customers across New Hampshire. The efficiency measures that reduce kWh often  
14 also reduce electric demand (kW) at the ISO-NE, distribution and customer levels  
15 during peak periods. Per the end of year energy efficiency filing in Docket IR 22-  
16 042, the efficiency measures installed in 2022 were estimated to achieve 8.1 MW  
17 in summer peak demand reduction and 8.2 MW in winter peak demand reduction.  
18 The revised energy efficiency plan for 2022-2023, filed in Docket No. DE 20-092  
19 and approved by the Commission in Order No. 26,621 (April 29, 2022),  
20 established goals for 2023. The plan included estimates of kW savings. The  
21 efficiency measures proposed for 2023 are estimated to achieve 8.1 MW in  
22 summer peak demand reduction and 7.6 MW in winter peak demand reduction. As  
23 with the kWh savings, the demand savings will persist over the lifetime of the  
24 measures installed.

1 ISO-NE has recognized the impact of these energy efficiency measures on its peak  
2 demand forecast for New Hampshire, as shown in the chart below<sup>9</sup>:

3



4

5 As is the case in New Hampshire, the majority of demand savings from energy  
6 efficiency programs in the region are achieved as a secondary benefit of the  
7 measures designed to generate kWh savings. However, New Hampshire efficiency  
8 programs have been monitoring demand management demonstrations and  
9 programs taking place in other states to advance tailored methodologies for  
10 adoption in New Hampshire. During the 2018-2020 triennium, the Company  
11 launched Active Demand Reduction (ADR) pilot programs for (i) Commercial and  
12 Industrial load curtailment, (ii) Residential Battery Storage and (iii) Wi-Fi

<sup>9</sup> Graphical representation of the 90/10 data contained in the Final 2023 CELT Report published May 1, 2023, using data from the 6.2 Forecasts for Transmission tab.  
[CELT Reports \(iso-ne.com\)](https://www.iso-ne.com/reports-and-data-releases/celt-reports)

1 thermostat direct load control. These pilot programs were continued into the  
2 current 2021-2023 term, where results indicate that the 2022 ADR initiative  
3 achieved 7.7 MW in summer peak demand reduction. For the final year of the  
4 2021-2023 term, the Company will build upon the demonstrations offered in 2019  
5 through 2022 and will continue to offer them as pilot programs. The active  
6 demand measures planned for 2023 are estimated to achieve 8.7 MW in summer  
7 peak demand reduction.

8

9 **Q. Has Eversource taken any other direct efforts to reduce peak demand in New**  
10 **Hampshire?**

11 A. Yes, Eversource has developed a Commercial and Industrial Demand Reduction  
12 Initiative as part of its energy efficiency offerings. This initiative was approved as  
13 part of the 2019 Update plan in Docket No. DE 17-136. Under an ADR approach,  
14 customers agree to respond to an event call targeting conditions that typically  
15 result in peak reductions through curtailment service providers (“CSPs”)—vendors  
16 who identify curtailable load, enroll customers, manage curtailment events, and  
17 calculate payments. The customer is incentivized to respond to event calls using  
18 performance-based incentives. This approach is technology agnostic and can  
19 utilize single end-use control strategies or a multitude of approaches that can  
20 reduce demand when an event is called. This typically entails customers using  
21 lighting with both manual and automated controls, HVAC with both manual and  
22 automated controls, process loads, scheduling changes, excess Combined Heat &

1 Power (CHP) capacity, and energy storage to reduce demand. The residential  
2 ADR initiative consists of two main bring-your-own-device offerings: Battery  
3 Storage and Wi-Fi thermostats. Due to the success and popularity of the ADR  
4 pilots, the pilots have been proposed as full programs for the 2024-2026 triennium  
5 in Docket No. DE 23-068.

6

7 **Q. Did Eversource conduct a lead/lag study for the TCAM as required in Order**  
8 **No. 25,912, dated June 28, 2016, in Docket No. DE 16-566?**

9 A. Yes, Eversource conducted a lead/lag study for the TCAM and provides that  
10 analysis as Attachment MBP-2. The results of the lead/lag analysis will be applied  
11 effective October 1, 2023. This lead/lag study methodology is substantially the  
12 same as that provided in Docket Nos. DE 20-085, DE 21-109 and DE 22-034.

13

14 **Q. How is cash working capital estimated through a lead-lag study?**

15 A. A lead/lag study identifies the amount of time it typically takes for the Company to  
16 collect revenue from customers, as well as the amount of time the Company takes  
17 to make payment for applicable operating costs. The difference between those two  
18 numbers is used as the basis to estimate cash working capital requirements.

19

20

21



1 **Q. Please describe the lead/lag study completed for the TCAM provided as**  
2 **Attachment MBP-2.**

3 A. The Lead/Lag Study consists of 13 pages of calculations and supporting schedules  
4 to calculate working capital allowances by month for RNS, S&D, LNS, Reliability,  
5 HQ support components, and HQ Interconnection Capacity Credits (HQ ICC).  
6 Revenue lag days are the same for all components, however expense lead days vary  
7 by component. Each component has a separate expense lead days schedule.

8  
9 **Q. Please define the terms “revenue lag days” and “expense lead days.”**

10 A. Revenue lag is the time, measured in days, between delivery of a service to  
11 Eversource customers and the receipt by Eversource of the payment for such service  
12 from customers. Similarly, expense lead is the time, again measured in days,  
13 between the performance of a service on behalf of Eversource by a vendor or  
14 employee and payment for such service by Eversource to a vendor or employee.  
15 Since base rates are based on revenue and expenses booked on an accrual basis, the  
16 revenue lag results in a need for capital while the expense lead offsets this need to  
17 the extent the Company is typically not required to reimburse its vendors until after  
18 a service is provided.

19  
20 **Q. How is the retail revenue lag computed?**

21 A. The retail revenue lag consists of a

22 

- Meter Reading or Service lag,

1                   • Collection lag, and

2                   • Billing lag

3           The sum of the days associated with these three lag components is the total retail  
4           revenue lag experienced by Eversource. See Attachment MBP-2, Page 5.

5

6   **Q.   What lag does the Lead/Lag Study reveal for the component "Meter Reading**  
7   **or Service lag?"**

8

9   A.   The Lead/Lag Study reveals a lag of 15.21 days. This lag was obtained by dividing  
10       the number of billing days in the test year by 12 months and then in half to arrive at  
11       the midpoint of the monthly service periods.

12

13   **Q.   How was the "Collection lag" calculated and what was the result?**

14   A.   The "Collection lag" for TCAM totaled 30.96 days. This lag reflects the time delay  
15       between the mailing of customer bills and the receipt of the billed revenues from  
16       customers. The 30.96-day lag was arrived at by a thorough examination of TCAM  
17       accounts receivable balances using the accounts receivable turnover method. End-  
18       of-month balances were utilized as the measure of customer accounts receivable.  
19       Attachment MBP-2, Page 6 details monthly balances for the TCAM accounts  
20       receivable. Attachment MBP-2, Page 5 calculated the average daily revenue amount  
21       (line 3) by dividing annual transmission revenue by 365 days. The resulting

1 Collection Lag is derived by dividing the average accounts receivable balance by  
2 the average daily revenue amount to arrive at the Collection lag of 30.96 days.

3

4 **Q. How did you arrive at the 1.53 day “Billing lag”?**

5 A. Nearly all customers are billed the evening after the meters are read. However, if a  
6 meter is read on a Friday or prior to a scheduled holiday, there is additional lag over  
7 the weekend or holiday. Consistent with prior year filings, the Company’s Billing  
8 lag calculation accounts for this additional lag. The updated lead/lag study uses a  
9 1.53-day Billing lag as shown in Attachment MBP-2, Page 7. An exception for large  
10 customers, which may require additional time to process, has not been made in this  
11 calculation.

12

13 **Q. Is the total retail revenue lag computed from these separate lag calculations?**

14 A. Yes. The total retail revenue lag of 47.70 days is computed by adding the number  
15 of days associated with each of the three retail revenue lag components. See,  
16 Attachment MBP-2, Page 5. This total number of lag days represents the amount of  
17 time between the recorded delivery of service to retail customers and the receipt of  
18 the related revenues from retail customers.

19

20 **Q. Please explain how the RNS, S&D, LNS, Reliability, HQ expenses, and HQ**  
21 **ICC lead/lag period is determined.**

22 A. The monthly payments were reviewed and the expense lead days were calculated

1 based on the actual payment date of the payments. Once the lead days for each  
2 category were determined, they were summarized and dollar weighted according to  
3 2022 actual annual amounts to arrive at the lead days. These calculations are shown  
4 in Attachment MBP-2, pages 8 through 13.

5

6 **Q. Please explain how the Eversource Energy Service Company (EESC) due date**  
7 **is determined related to LNS billings.**

8 A. Per the terms of the service contract between the Company and EESC, bills are  
9 rendered for each calendar month on or before the twentieth day of the succeeding  
10 month and are payable upon presentation and not later than the last day of that  
11 month.

12

13 **Q. Would you summarize the Company’s proposal regarding Cash Working**  
14 **Capital?**

15 A. Yes, the results of Eversource’s TCAM Cash Working Capital lead/lag analysis  
16 is summarized in the table below:

	Revenue	Lead/(Lag)	Net (Lead)/	Net (Lead)/
<u>Components</u>	<u>Lag Days</u>	<u>Days</u>	<u>Lag Days</u>	<u>Lag %</u>
RNS	47.7	62.4	(14.7)	-4.02%
S&D	47.7	62.5	(14.8)	-4.06%
LNS	47.7	42.5	5.2	1.42%
Reliability	47.7	62.3	(14.6)	-4.00%
HQ Expense	47.7	61.2	(13.5)	-3.70%
HQICC	47.7	(32.0)	79.7	21.83%
<b>Total/Average</b>	47.7	62.4	(14.7)	-4.02%

17

1 Application of these values results in a total forecast cash working capital  
2 allowance of (\$8.637) million and a forecast return on working capital of  
3 (\$0.756) million for the period from October 1, 2023 to September 30, 2024, as  
4 shown in Attachment MBP-2, page 1, lines 19 and 21, respectively.

5

6 **Q. Does Eversource require Commission approval of this rate by a specific date?**

7 A. Yes, Eversource is requesting final approval of the proposed TCAM rate update by  
8 September 22, 2023 to allow for the implementation of an October 1, 2023 updated  
9 TCAM rate.

10

11 **Q. Will the proposed update to the TCAM rate result in just and reasonable**  
12 **rates?**

13 A. Yes, it will.

14

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

16 A. Yes, it does.