

THE STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
PREPARED JOINT TESTIMONY OF ERICA L. MENARD AND JAMES E.
MATHEWS
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM)
Docket No. DE 20-085

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

2 A. My name is Erica L. Menard. My business address is 780 North Commercial
3 Street, Manchester, NH. I am employed by Eversource Energy Service Company
4 as the Manager of New Hampshire Revenue Requirements and in that position, I
5 provide service to Public Service Company of New Hampshire d/b/a Eversource
6 Energy (“Eversource” or the “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 Eversource Energy affiliated companies in Connecticut,
11 Massachusetts and New Hampshire, including the Company.

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

13 A. Ms. Menard: Yes, I have.

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

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

2 A. Ms. Menard: I am currently responsible for the coordination and implementation
3 of revenue requirements calculations for Eversource, as well as the filings
4 associated with Eversource's Energy Service ("ES") rate, Stranded Cost Recovery
5 Charge ("SCRC"), Transmission Cost Adjustment Mechanism ("TCAM"), and
6 Distribution Rates.

7 Mr. Mathews: I am currently responsible for coordination and implementation of
8 transmission rate and revenue requirement calculations for Eversource. I also have
9 responsibility related to transmission rate filings before Eversource's affiliated
10 companies' three state utility commissions, as well as the Federal Energy
11 Regulatory Commission.

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

13 A. Ms. Menard: My testimony supports Eversource's TCAM filing for rates
14 effective August 1, 2020. The testimony and supporting attachments present the
15 reconciliation through May 2020 for transmission costs as well as the proposed
16 TCAM rate for the forecast period to be effective August 1, 2020.

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

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

2 A. Eversource is requesting approval of a forecasted average retail transmission rate
3 to be effective August 1, 2020, for a twelve-month billing period. In addition,
4 approval of the over- or under-recoveries resulting from the reconciliation of actual
5 transmission costs and revenues as compared to forecasted transmission costs and
6 revenues used in the previous rate filing is being requested. These requests are in
7 accordance with the Commission's approval of the settlement in Docket No. DE
8 06-028 (Distribution Rate Case), which included a provision for a transmission
9 cost adjustment mechanism.

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

11 A. Yes. Jennifer Ullram and David J. Burnham are filing testimonies in support of
12 the proposed retail transmission rates. In her testimony, Ms. Ullram will detail the
13 rates applicable to each individual rate class. In his testimony, Mr. Burnham will
14 be providing a description of projects included in LNS rates as well as describing
15 the planning process at ISO-NE.

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

17 A. There are two different groups of costs within this TCAM filing. The first group
18 of costs consists of four cost categories of "wholesale transmission" costs. The
19 second group consists of two cost categories of "other transmission" costs.

20 The "wholesale transmission" costs are as follows:

1 1) Regional Network Service (RNS) costs

2 2) Local Network Service (LNS) costs

3 3) Reliability costs

4 4) Scheduling and Dispatch (S&D) costs.

5 All of these costs are regulated by the FERC. These costs are discussed below in
6 more detail.

7 1) RNS costs support the regional transmission infrastructure throughout New
8 England. RNS costs are charged to Eversource by ISO-NE based upon tariffs
9 approved by the FERC. RNS costs are billed to all entities in the region that have
10 RNS load responsibility, such as Eversource, based on their monthly peak load.

11 2) LNS costs encompass Eversource's local transmission costs that are not
12 included in the FERC-jurisdictional RNS tariff. These billings are also governed
13 by FERC approved tariffs and are based on costs allocated to Eversource based on
14 load ratio share. Eversource's load ratio share is calculated using a rolling twelve-
15 month coincident peak (12 CP).

16 3) Reliability costs include costs such as Black Start and VAR support that are
17 related to electric reliability. These reliability costs are billed to all entities in the
18 region that have RNS load responsibility, such as Eversource, based on their
19 monthly peak load.

1 4) S&D costs are associated with services provided by ISO-NE related to
2 scheduling, system control and dispatch services. These costs are billed by ISO-
3 NE to all entities in the region that have RNS load responsibility, such as
4 Eversource, based on their monthly peak load, in accordance with the applicable
5 FERC tariff.

6 The “other transmission” costs and credits or revenues are as follows:

- 7 A) Hydro-Québec (HQ) Phase I/II support costs and related revenues,
- 8 B) TCAM working capital allowance return, and
- 9 C) HQ Interconnection Capacity Credits.

10 Other transmission costs and revenues A) and B) were previously recovered
11 through Eversource’s distribution rates, but were transferred in total or in part to
12 the TCAM for recovery, effective July 1, 2010, as part of a negotiated “Settlement
13 Agreement on Permanent Distribution Service Rates” (“Settlement Agreement”)
14 between Eversource, the Commission Staff, and the Office of Consumer Advocate
15 (OCA) in Docket No. DE 09-035 that was approved in Order No. 25,123. These
16 costs and revenues are discussed below in more detail.

17 A) HQ Phase I/II support costs are costs associated with historical FERC-
18 approved contractual agreements between Eversource and other New England
19 utilities to provide support for, and receive rights related to, transmission and
20 terminal facilities that are used to import electricity from HQ in Canada. Under

1 these agreements, Eversource is charged its proportionate share of O&M and
2 capital costs for a thirty-year term that ends on October 31, 2020, with express
3 provisions governing the parties' rights to extend the term. C. At the present time
4 the contract participants are engaged in renegotiating an extension to the support
5 agreements for a twenty-year term commencing November 1, 2020.

6 Prior to July 1, 2010, Eversource's share of any revenue associated with HQ Phase
7 I/II was returned to customers through the ES rate. Effective July 1, 2010,
8 consistent with the requirements of NHPUC Order No. 25,122, in the 2010 TCAM
9 docket, Docket No. DE 10-158, Eversource began returning its share of any HQ
10 Phase I/II revenues to customers as a revenue credit in the TCAM. That credit
11 continues in the TCAM today.

12 B) When the TCAM was initially approved in Docket No. DE 06-028, there was
13 no provision for a working capital allowance in the TCAM. The TCAM working
14 capital allowance continued to be included with the distribution working capital
15 allowance. As part of the Settlement Agreement, the distribution revenue
16 requirement calculation excluded working capital on transmission costs.
17 Therefore, the TCAM includes a working capital allowance. An updated lead/lag
18 analysis has been completed for rates effective August 1, 2020 based on the
19 lead/lag study discussed later in this testimony.

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

7 **Q. Please describe the overall mechanics of the TCAM as they are presented in**
8 **this filing.**

9 A. The TCAM is a mechanism that allows Eversource to fully recover defined FERC
10 and/or Commission approved transmission costs. The proposed TCAM rate is
11 based on reconciliations of historic transmission costs and forecasted future
12 transmission costs using the latest approved FERC transmission rates.

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

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

3 A. The forecast period in this filing is the twelve-month period August 2020 through
4 July 2021. The reconciliation period includes actual results for January 2019
5 through May 2020 and estimated results for June and July 2020.

6 **Q. Do the transmission rate forecasts contained in this filing reflect the most**
7 **current FERC rates that were to be effective on June 1, 2020?**

8 A. Yes. Please see the table below for the current FERC rates that are proposed for
9 effect on August 1, 2020 and the prior year’s FERC rates approved in DE 19-106:

FERC Approved Rates	Description	DE 20-085	DE 19-106 **	Change
RNS Rate	\$ per kW per year	\$ 129.26	\$ 111.94	\$ 17.32
	\$ per MWh	\$ 26.44	\$ 23.62	\$ 2.82
LNS Monthly Expense	Load Ratio Share	20.9%	20.7%	0.2%
	August to December	\$2,045,700	\$ 1,357,600	\$ 688,100
	January to July	\$2,046,000	\$ 1,646,100	\$ 399,900
	\$ per MWh	\$ 3.85	\$ 2.34	\$ 1.51
Note ** - per Exhibit #5				

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

11 A. As shown in Attachment ELM-1, page 1a, Eversource is proposing a forecasted
12 average TCAM rate of 2.679 cents/kWh as compared to the current average rate of
13 2.051 cents/kWh. The increase in the average TCAM rate is driven primarily by
14 an increase in RNS cost of \$22.2M, an increase in LNS costs of \$14.7M (based on
15 the proposed recovery of the 2019 LNS True Up over a 24 month period

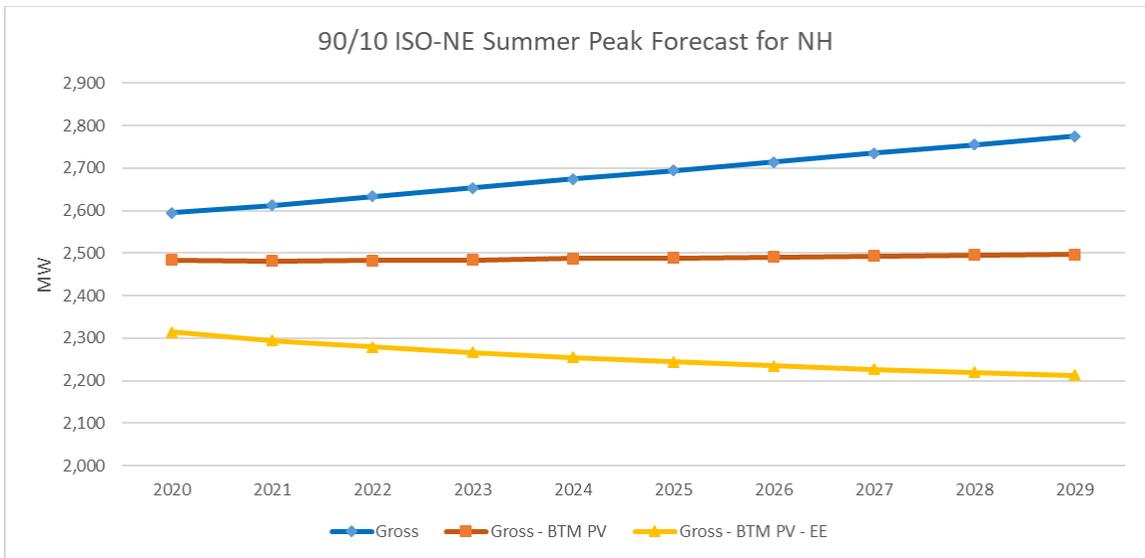
1 commencing June 1, 2020), a decrease in the forecasted over recovery of \$6.8M, a
2 decrease in the forecasted HQ Interconnection Capacity Credits of \$1.9M and
3 increased other costs of \$1.2M.

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

13 A. As the Company described during the hearing in Docket No. DE 17-081, energy
14 efficiency programs reduce consumption of energy (kWh), and costs, for
15 customers across New Hampshire. The efficiency measures that reduce kWh often
16 also reduce electric demand (kW) at the ISO-NE, distribution and customer level
17 during peak periods. The current New Hampshire 3-Year Energy Efficiency Plan
18 per Docket No. DE 17-136 includes revised estimates of kW savings for 2020
19 during ISO-NE summer and winter peak hours. The efficiency measures installed
20 in 2020 are estimated to achieve 12.4 MW in summer peak demand reduction and
21 15.6 MW in winter peak demand reduction. The draft New Hampshire 3-Year

1 Energy Efficiency plan for 2021-2023 includes proposed estimates of kW savings.
2 The efficiency measures proposed for 2021-2023 are estimated to achieve 41.5
3 MW in summer peak demand reduction and 38 MW in winter peak demand
4 reduction¹. As with the kWh savings, the demand savings will persist over the
5 lifetime of the measures installed.

6 ISO-NE has recognized the impact of these energy efficiency measures on its peak
7 demand forecast for NH, as shown in the below chart:



8
9 As is the case in New Hampshire, the majority of demand savings from energy
10 efficiency programs in the region are achieved as a secondary benefit of the
11 measures designed to generate kWh savings. However, New Hampshire efficiency

¹ These figures are draft and subject to change based on updates that may be made to savings assumptions and progress design.

² Graphical representation of the 90/10 data contained in the Final 2020 CELT Report published May 1, 2020, using data from the 6.2 Forecasts for Transmission tab.

<https://www.iso-ne.com/system-planning/system-plans-studies/celt>

1 programs have been monitoring demand management demonstrations and
2 programs taking place in other states to advance tailored methodologies for
3 adoption in New Hampshire. The current New Hampshire 3-Year Energy
4 Efficiency Plan includes a section on Capacity Demand Management that
5 describes many of the demand offerings being monitored as viable possibilities to
6 model in state. In 2019 the Company proposed and implemented an active demand
7 reduction offering, the 2019 NH Commercial and Industrial Active Demand
8 Reduction (ADR) Initiative. Results indicated that the 2019 Initiative achieved 3.9
9 MW in summer peak demand reduction. For 2020 the ADR Initiative is being
10 expanded to include residential offerings and is estimated to achieve 7.1 MW in
11 summer peak demand reduction. For the 2021-2023 term, the Company will build
12 upon the demonstrations offered in 2019 and 2020 and explore new active demand
13 reduction offerings during the term. Based upon its success to date, the Company
14 is proposing to shift the Commercial and Industrial demonstration to a full
15 program for the 2021-2023 term. Program goals have not yet been set in the
16 current draft plan.

17 **Q. Has Eversource taken any direct efforts to reduce peak demand in New**
18 **Hampshire?**

19 A. Yes, Eversource has developed a Commercial and Industrial Demand Reduction
20 Initiative as part of its energy efficiency offerings. This initiative was approved as
21 part of the 2019 Update plan in Docket No. DE 17-136. Under an active demand
22 reduction approach, customers agree to respond to an event call targeting

1 conditions that typically result in peak reductions through curtailment service
2 providers (“CSPs”)—vendors who identify curtailable load, enroll customers,
3 manage curtailment events, and calculate payments. The customer is incentivized
4 to respond to event calls using performance-based incentives. This approach is
5 technology agnostic and can utilize single end-use control strategies or a multitude
6 of approaches that can reduce demand when an event is called. This typically
7 entails customers using lighting with both manual and automated controls, HVAC
8 with both manual and automated controls, process loads, scheduling changes,
9 excess Combined Heat & Power (CHP) capacity, and energy storage to reduce
10 demand. The residential active demand response demonstration and proposed
11 program consists of two main bring-your-own-device offerings: Battery Storage
12 and Wi-Fi thermostats. For the 2021-2023 term, the NH Utilities will also explore
13 EV load management as a third offering.

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

16 A. Yes, Eversource conducted a lead/lag study for the TCAM and provides that
17 analysis as Attachment ELM-2. The results of the lead/lag analysis were applied
18 effective August 1, 2020. This lead/lag study methodology is substantially the
19 same as the one provided in Docket No. DE 19-106.

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

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

6 **Q. Please describe the lead/lag study completed for the TCAM provided as**
7 **Attachment ELM-2.**

8 A. The Lead/Lag Study consists of 14 pages of calculations and supporting schedules
9 to calculate working capital allowances by month for RNS, S&D, LNS, Reliability,
10 Hydro Quebec Interconnection Capacity Credits (HQ ICC), and HQ support
11 components. Revenue lag days are the same for all components, however expense
12 lead days vary by component. Each component has a separate expense lead days
13 schedule.

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

15 A. Revenue lag is the time, measured in days, between delivery of a service to
16 Eversource customers and the receipt by Eversource of the payment for such service.
17 Similarly, expense lead is the time, again measured in days, between the
18 performance of a service on behalf of Eversource by a vendor or employee and
19 payment for such service by Eversource. Since base rates are based on revenue and
20 expenses booked on an accrual basis, the revenue lag results in a need for capital

1 while the expense lead offsets this need to the extent the Company is typically not
2 required to reimburse its vendors until after a service is provided.

3 **Q. How is the retail revenue lag computed?**

4 A. The retail revenue lag consists of a “meter reading or service lag,” “collection lag”
5 and a “billing lag.” The sum of the days associated with these three lag components
6 is the total retail revenue lag experienced by Eversource. See Attachment ELM-2,
7 Page 6 of 14.

8 **Q. What lag does the Lead/Lag Study reveal for the component "meter reading or
9 service lag?"**

10 A. The Lead/Lag Study reveals 15.2 days. This lag was obtained by dividing the
11 number of billing days in the test year by 12 months and then in half to arrive at the
12 midpoint of the monthly service periods.

13 **Q. How was the “collection lag” calculated and what was the result?**

14 A. The “collection lag” for TCAM totaled 27.1 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 27.1 days 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 ELM-2, Page 7 details monthly balances for the majority of the accounts
20 receivable accounts. Attachment ELM-2, Page 6 calculated the average daily
21 revenue amount by dividing total revenue by 365 days. The resulting Collection Lag

1 is derived by dividing the average daily accounts receivable balance by the average
2 daily revenue amount to arrive at the Collection lag of 27.1 days.

3 **Q. How did you arrive at the 1.48 day “billing lag”?**

4 A. Nearly all customers are billed the evening after the meters are read. However, if a
5 meter is read on a Friday or prior to a scheduled holiday, there is additional lag over
6 the weekend or holiday. The Company refined the billing lag calculation to account
7 for this additional lag in this filing. The previous lead/lag study used a 1.00 day
8 billing lag. This updated lead/lag study uses a 1.48 days billing lag as shown in
9 Attachment ELM-2, Page 8. An exception for large customers which may require
10 additional time to process has not been made in this calculation.

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

12 A. Yes. The total retail revenue lag of 43.8 days is computed by adding the number of
13 days associated with each of the three retail revenue lag components. See,
14 Attachment ELM-2, Page 6. This total number of lag days represents the amount of
15 time between the recorded delivery of service to retail customers and the receipt of
16 the related revenues from retail customers.

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

19 A. The monthly payments were reviewed and the expense lead days were calculated
20 based on the actual payment date of the payments. Once the lead days for each
21 category were determined, they were summarized and dollar weighted according to

1 2019 actual annual amounts to arrive at the lead days. These calculations are shown
2 in Attachment ELM-2, pages 9 through 14.

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

5 A. Per the terms of the Service Contract between the Company and EESC, bills are
6 rendered for each calendar month on or before the twentieth day of the succeeding
7 month and are payable upon presentation and not later than the last day of that
8 month.

9 **Q. Has the Company included an expense lead for the 2018 LNS true-up amount**
10 **that was accounted for in May 2019? If so, please explain how the expense**
11 **lead is determined relative to 2018 LNS true-up amount compared to the**
12 **current month LNS billing in May 2019.**

13 A. Yes. As shown in Attachment ELM-2, Page 11, the expense lead for the prior year
14 2018 LNS true up payment made in 2019 is determined by calculating the number
15 of days from the mid-point of the true-up year (in this case 2018) to the payment
16 date. This results in a longer expense lead compared to the current month LNS
17 billing that is paid on the same day.

18 **Q. Please explain how the Company proposes to reflect the current 2019 LNS**
19 **true-up amount in the proposed TCAM revenue requirement.**

20 A. The proposed adjustment to the TCAM effective August 1, 2020 includes an

1 unusually large under-recovery of LNS costs of approximately \$15.5 million,
2 primarily due to significantly lower actual New England RNS loads (~1,000
3 megawatt decrease). Due to the significant increase in the proposed TCAM rate as
4 a result of this under-recovery, and the Company's awareness of the challenging
5 economic climate customers are facing as a consequence of COVID-19, Eversource
6 is proposing to take advantage of a deferred payment option offered to local
7 transmission customers for the 2019 LNS true-up. This deferred payment option
8 would recover these costs over a 24-month recovery period, with interest, rather than
9 the traditional 12-month recovery period. The Company is requesting that the
10 Commission approve a 24-month recovery period for this amount, to mitigate the
11 bill impact on all customers during this unprecedented time. This proposal will
12 result in an average TCAM rate of 2.679 cents/kWh (24-month recovery) rather than
13 2.758 cents/kWh if the LNS true-up was recovered over 12 months.

14 **Q. Please explain how the change in RNS rates impacts the Company's proposed**
15 **revenue requirement.**

16 A. The RNS rate also increased as noted above due to the lower New England loads
17 along with forecasted investments in transmission infrastructure. The TCAM
18 reflects the transmission costs attributable to the Company in accordance with
19 applicable FERC approved tariffs.

1 **Q. Would you summarize the Company's proposal regarding Cash Working**
2 **Capital?**

3 A. Based on the results of the lead/lag analysis of Eversource TCAM Cash Working
4 Capital, the Company identified an RNS working capital component of (19.7)
5 days, or (5.40) percent, an S&D working capital component of (19.7) days, or
6 (5.40) percent, an LNS working capital component of 48.0 days, or 13.14
7 percent, a Reliability working capital component of (19.8) days, or (5.43)
8 percent an HQ Expense working capital component of 45.0 days, or 12.32
9 percent, and an HQ ICC working capital component of (19.8) days or (5.41)
10 percent. Application of these values results in a total forecasted cash working
11 capital allowance of (\$4.073) million and a forecasted return on working capital
12 of (\$0.383) million for the forecasted period of August 2020 through July 2021.

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

14 A. Yes, Eversource is requesting final approval of the proposed TCAM rate change
15 by July 27, 2020 to allow for the implementation of an August 1, 2020 change in
16 rates.

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

18 A. Yes, it does.