

THE STATE OF NEW HAMPSHIRE
BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
PREPARED TESTIMONY OF ERICA L. MENARD AND DAVID F. BIDMEAD
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM)
Docket No. DE 19-106

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 David F. Bidmead. My business address is 107 Selden Street, Berlin,
8 Connecticut. I am employed by Eversource Energy as a Senior Revenue
9 Requirements Analyst - New Hampshire and in that position, I provide service to
10 Eversource.

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

12 A. Yes, we both have.

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

14 A. (ELM) I am currently responsible for the coordination and implementation of
15 revenue requirements calculations for Eversource, as well as the filings associated

1 with Eversource's Energy Service ("ES") rate, Stranded Cost Recovery Charge
2 ("SCRC"), Transmission Cost Adjustment Mechanism ("TCAM"), and
3 Distribution Rates.

4 (DFB) I currently prepare and/or review the calculation of New Hampshire
5 revenue requirements for Eversource, as well as the filings associated with
6 Eversource's ES, SCRC, and TCAM rates.

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

8 A. Our testimony supports Eversource's TCAM filing for rates effective August 1,
9 2019. The testimony and supporting attachments present the reconciliation
10 through May 2019 for transmission costs as well as the proposed TCAM rate for
11 the forecast period to be effective August 1, 2019.

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

13 A. Eversource is requesting approval of a forecasted average retail transmission rate
14 to be effective August 1, 2019, for a twelve-month billing period. In addition, we
15 are requesting approval of the over- or under-recoveries resulting from the
16 reconciliation of actual transmission costs and revenues as compared to forecasted
17 transmission costs and revenues used in the previous rate filing. Our requests are
18 in accordance with the Commission's approval of the settlement in Docket No. DE
19 06-028 (Distribution Rate Case), which included a provision for a transmission
20 cost adjustment mechanism.

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

2 A. Yes. Edward A. Davis and John P. Dipaola-Tromba will be filing testimonies in
3 support of the proposed retail transmission rates. In his testimony, Mr. Davis will
4 detail the rates applicable to each individual rate class. In his testimony, Mr.
5 Dipaola-Tromba will be providing a description of projects included in LNS rates
6 as well as describing the planning process at ISO-NE.

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

8 A. There are two different groups of costs within this TCAM filing. The first group
9 of costs consists of four cost categories of “wholesale transmission” costs. The
10 second group consists of two cost categories of “other transmission” costs.

11 The “wholesale transmission” costs are as follows:

- 12 1) Regional Network Service (RNS) costs
- 13 2) Local Network Service (LNS) costs
- 14 3) Reliability costs
- 15 4) Scheduling and Dispatch (S&D) costs.

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

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

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

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

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

15 The "other transmission" costs are as follows:

- 16 A) Hydro-Quebec (HQ) support costs and related revenues,
- 17 B) TCAM working capital allowance return, and
- 18 C) Hydro Quebec (HQ) Interconnection Capacity Credits.

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

8 A) Hydro-Quebec support costs are costs associated with FERC approved
9 contractual agreements between Eversource and other New England utilities to
10 provide support for transmission and terminal facilities that are used to import
11 electricity from HQ in Canada. Under these agreements, Eversource is charged its
12 proportionate share of O&M and capital costs for a thirty-year period ending in
13 2020.

14 Eversource's share of any revenue associated with the HQ facility was previously
15 returned to customers through the ES rate. Effective July 1, 2010, consistent with
16 the requirements of NHPUC Order No. 25,122, in the 2010 TCAM docket, Docket
17 No. DE 10-158, Eversource began returning its share of any HQ facility revenues
18 to customers as a revenue credit in the TCAM.

19 B) When the TCAM was initially approved in Docket No. DE 06-028, there was
20 no provision for a working capital allowance in the TCAM. The TCAM working
21 capital allowance continued to be included with the distribution working capital

1 allowance. As part of the Settlement Agreement, the distribution revenue
2 requirement calculation excluded working capital on transmission costs.
3 Therefore, the TCAM includes a working capital allowance. An updated lead/lag
4 analysis has been completed for rates effective August 1, 2019 based on the
5 lead/lag study we discuss later in this testimony.

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

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

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

18 There are two premises that form the basis of the TCAM. First, the TCAM sets
19 transmission rates for a defined future billing period based on transmission cost
20 estimates using current budget and forecast data supported by the latest known
21 FERC approved transmission rates. This future billing period is referred to as the

1 “forecast period”. Second, the TCAM provides all available actual cost and
2 revenue (recovery) data referred to as the “reconciliation period”. Any over- or
3 under-recoveries that are incurred in the reconciliation period are rolled into the
4 subsequent billing period as part of the next TCAM rate.

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

7 A. The forecast period in this filing is the twelve-month period August 2019 through
8 July 2020. The reconciliation period includes actual results for January 2018
9 through May 2019 and estimated results for June and July 2019.

10 **Q. Do the transmission rate forecasts contained in this filing reflect the most**
11 **current FERC rates that were to be effective on June 1, 2019?**

12 A. Yes.

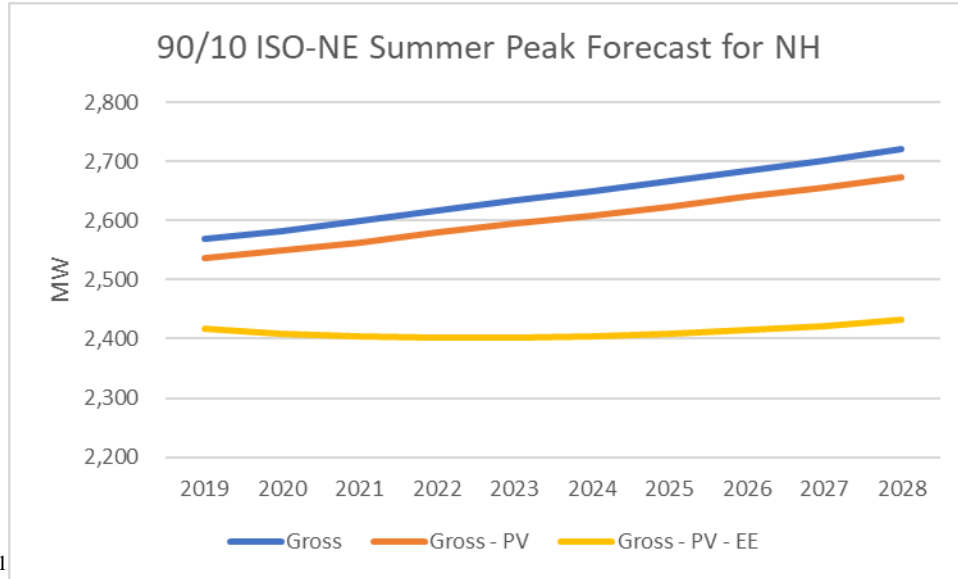
13 **Q. What then, is Eversource proposing as its annual TCAM rate in this filing?**

14 A. As shown in Attachment ELM/DFB-1, page 1a, Eversource is proposing a
15 forecasted average TCAM rate of 2.051 cents/kWh as compared to the current
16 average rate of 1.864 cents/kWh. The increase in the average TCAM rate is driven
17 primarily by an increase in LNS costs of \$7.4M, a decrease in the forecasted over
18 recovery of \$4.1M, a decrease in the forecasted Hydro Quebec Interconnection
19 Capacity Credits of \$3.6M, increased other costs of \$0.3M offset by decreased
20 RNS costs of (\$1.1M).

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

10 A. As the Company described during the hearing in Docket No. DE 17-081, energy
11 efficiency programs reduce consumption of energy (kWh), and costs, for
12 customers across New Hampshire. The efficiency measures that reduce kWh often
13 also reduce electric demand (kW) at the ISO-NE, distribution and customer level
14 during peak periods. The current New Hampshire 3-Year Energy Efficiency Plan
15 includes estimates of kW savings for 2018-2020 during ISO-NE summer and
16 winter peak hours. The efficiency measures installed in 2018 are estimated to
17 achieve 7.7 MW in summer peak demand reduction and 10 MW in winter peak
18 demand reduction. The measures installed in 2019 and 2020 are estimated,
19 respectively, to achieve 9.8 MW and 12.7 MW of summer peak reduction and 12
20 MW and 15 MW of winter peak reduction. As with the kWh savings, the demand
21 savings will persist over the lifetime of the measures installed.

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



3
4 As is the case in New Hampshire, the vast majority of demand savings from
5 energy efficiency programs in the region are achieved as a secondary benefit of the
6 measures designed to generate kWh savings. However, New Hampshire efficiency
7 programs are also reviewing a number of demand reduction demonstrations
8 currently taking place in Massachusetts and other states in the region that focus
9 more specifically on achieving peak demand reductions. The Company also has
10 proposals for demonstration projects as part of the Distribution Rate Case in
11 Docket No. DE 19-057 that, if implemented, would provide additional data and
12 insight related to potential peak demand reduction capabilities. Leveraging this
13 demonstration work done elsewhere will help to ensure that we understand the

¹ Graphical representation of the 90/10 data contained in the Final 2019 CELT Forecast: ISO-NE and States Annual Energy and Seasonal Peak Forecasts, page 48, available here: https://www.iso-ne.com/static-assets/documents/2019/03/lfc_29mar2019_final.pdf.

1 potential market and have good information on cost effectiveness to inform future
2 decisions about new program elements in New Hampshire.

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

5 A. Yes, Eversource has developed a Commercial and Industrial Demand Reduction
6 Initiative as part of its energy efficiency offerings. This initiative was approved as
7 part of the 2019 Update plan in Docket No. DE 17-136. Under an active demand
8 reduction approach, customers agree to respond to an event call targeting
9 conditions that typically result in peak reductions through curtailment service
10 providers (“CSPs”)—vendors who identify curtailable load, enroll customers,
11 manage curtailment events, and calculate payments. The customer is incentivized
12 to respond to event calls using performance-based incentives. This approach is
13 technology agnostic and can utilize single end-use control strategies or a multitude
14 of approaches that can reduce demand when an event is called. This typically
15 entails customers using lighting with both manual and automated controls, HVAC
16 with both manual and automated controls, process loads, scheduling changes,
17 excess Combined Heat & Power (CHP) capacity, and energy storage to reduce
18 demand. As noted by the Commission in Order No. 26,232 (April 5, 2019) when
19 approving the proposal, Eversource is targeting a demand reduction of 5 MW
20 through this initiative and will be reporting on the success of the initiative in the
21 coming months.

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

3 A. Yes, Eversource conducted a lead/lag study for the TCAM and provided that
4 analysis as Attachment ELM/DFB-2. The results of the lead/lag analysis were
5 applied effective August 1, 2019. This lead/lag study methodology is substantially
6 the same as the one provided in Docket No. DE 18-089.

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

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

12 **Q. Please describe the lead/lag study completed for the TCAM provided as**
13 **Attachment ELM/DFB-2.**

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

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

2 A. Revenue lag is the time, measured in days, between delivery of a service to
3 Eversource customers and the receipt by Eversource of the payment for such service.
4 Similarly, expense lead is the time, again measured in days, between the
5 performance of a service on behalf of Eversource by a vendor or employee and
6 payment for such service by Eversource. Since base rates are based on revenue and
7 expenses booked on an accrual basis, the revenue lag results in a need for capital
8 while the expense lead offsets this need to the extent the Company is typically not
9 required to reimburse its vendors until after a service is provided.

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

11 A. The retail revenue lag consists of a “meter reading or service lag,” “collection lag”
12 and a “billing lag.” The sum of the days associated with these three lag components
13 is the total retail revenue lag experienced by Eversource. See Attachment
14 ELM/DFB-2, Page 3 of 10.

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

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

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

2 A. The “collection lag” for TCAM totaled 30.7 days. This lag reflects the time delay
3 between the mailing of customer bills and the receipt of the billed revenues from
4 customers. The 30.7 days lag was arrived at by a thorough examination of TCAM
5 accounts receivable balances using the accounts receivable turnover method. End
6 of month balances were utilized as the measure of customer accounts receivable.
7 Attachment ELM/DFB-2, Page 4 details monthly balances for the majority of the
8 accounts receivable accounts. Attachment ELM/DFB-2, Page 3 calculated the
9 average daily revenue amount by dividing total revenue by 365 days. The resulting
10 Collection Lag is derived by dividing the average daily accounts receivable balance
11 by the average daily revenue amount to arrive at the Collection lag of 30.7 days.

12 **Q. How did you arrive at the 1.00 day “billing lag”?**

13 A. Nearly all of the Company’s customers are billed the evening after the meters are
14 read. Therefore, we have included a 1.00 day billing lag. We have not made an
15 exception for large customers which may require additional time to process

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

17 A. Yes. The total retail revenue lag of 46.9 days is computed by adding the number of
18 days associated with each of the three retail revenue lag components. See,
19 Attachment ELM/DFB-2, Page 3. This total number of lag days represents the
20 amount of time between the recorded delivery of service to retail customers and the
21 receipt of the related revenues from retail customers.

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

3 A. The monthly payments were reviewed and the expense lead days were calculated
4 based on the actual payment date of the payments. Once the lead days for each
5 category were determined, the lead days were summarized and dollar weighted
6 according to 2018 actual annual amounts to arrive at the lead days. These
7 calculations are shown in Attachment ELM/DFB-2, pages 5 through 10.

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

10 A. Based on the results of the lead/lag analysis of Eversource TCAM Cash Working
11 Capital, the Company identified an RNS working capital component of (16.8)
12 days, or (4.61) percent, an S&D working capital component of (16.8) days, or
13 (4.60) percent, an LNS working capital component of 6.5 days, or 1.77 percent,
14 a Reliability working capital component of (16.8) days, or (4.61) percent an HQ
15 Expense working capital component of 48.0 days, or 13.15 percent, and an HQ
16 ICC working capital component of (16.4) days or (4.48) percent. Application of
17 these values results in a total forecasted cash working capital allowance of
18 (\$5.773) million and a forecasted return on working capital of (\$0.554) million
19 for the forecasted period of August 2019 through July 2020.

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

2 A. Yes, Eversource is requesting final approval of the proposed TCAM rate change
3 by July 27, 2019 to allow for the implementation of an August 1, 2019 change in
4 rates.

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

6 A. Yes, it does.