EVERSOURCE ENERGY

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July 10, 2020

Debra Howland
Executive Director
New Hampshire Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429

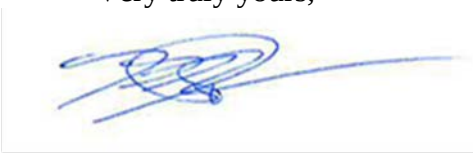
RE: Docket No. DE 20-085
Public Service Company of New Hampshire d/b/a Eversource Energy
2020 Transmission Cost Adjustment Mechanism

Dear Director Howland:

Enclosed for filing is an original and six copies of Public Service Company of New Hampshire d/b/a Eversource Energy's Petition for Approval of Change in Transmission Cost Adjustment Mechanism. Accompanying the petition are the testimony and exhibits of Erica L. Menard, James E. Mathews, Jennifer A. Ullram, and David J. Burnham, supporting Eversource's request.

If you have any questions, please do not hesitate to contact me. Thank you for your assistance with this matter.

Very truly yours,



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Enclosures
CC: Service List

STATE OF NEW HAMPSHIRE
before the
PUBLIC UTILITIES COMMISSION

Eversource Energy
2020 Transmission Cost Adjustment Mechanism

Docket No. DE 20-085

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY'S PETITION FOR APPROVAL OF CHANGE IN TRANSMISSION COST ADJUSTMENT MECHANISM RATE

Pursuant to N.H. Code Admin. Rule Puc 202.01 and Puc 203.06, Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or "the Company") petitions the Commission to establish a revised Transmission Cost Adjustment Mechanism ("TCAM") rate for effect on August 1, 2020. In support of this Petition, Eversource states as follows:

1. Consistent with the Settlement Agreement approved by the Commission in Order 24,750 (May 25, 2007), which established the TCAM, Eversource is seeking a change in the existing TCAM rate. Eversource is requesting approval of a forecasted retail transmission rate to be effective August 1, 2020, for a twelve-month billing period, as well as approval of the reconciliation of transmission costs and recoveries for the period of January 2019 through July 2020. The overall average rate for the TCAM is proposed to be 2.679 cents per kWh.

2. Accompanying this petition are the testimony and exhibits of Erica L. Menard and James E. Mathews explaining the TCAM and its calculation, including how the Company's recent lead/lag analysis is incorporated. Additionally, the Company includes the testimony and exhibits of Jennifer A. Ullram to describe the calculation of the TCAM rates applied to each rate

class, and the testimony of David J. Burnham to describe the transmission planning process at ISO-NE along with the projects included in the LNS rates that are part of the TCAM rate.

WHEREFORE, Eversource's respectfully requests that the Commission:

A. Review and approve Eversource's proposed TCAM rate change; and

B. Grant such further relief as is just and equitable.

Respectfully submitted,
Public Service Company of New Hampshire d/b/a Eversource Energy
By Its Attorney

Dated: July 10, 2020

By: 

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CERTIFICATE OF SERVICE

I hereby certify that, on the date written below, I caused the attached to be served pursuant to N.H. Code Admin. Rule Puc 203.11.

Dated: July 10, 2020

Matthew J. Fossum

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

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

A. My name is Erica L. Menard. My business address is 780 North Commercial Street, Manchester, NH. I am employed by Eversource Energy Service Company as the Manager of New Hampshire Revenue Requirements and in that position, I provide service to Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or the "Company").

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

Q. Have you previously testified before the Commission?

A. Ms. Menard: Yes, I have.

A. Mr. Mathews: Yes, I have.

Q. What are your current responsibilities?

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

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

Q. What is the purpose of your joint testimony?

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

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

Q. What is Eversource requesting in this filing?

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

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

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

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

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

The "wholesale transmission" costs are as follows:

1) Regional Network Service (RNS) costs

2) Local Network Service (LNS) costs

3) Reliability costs

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

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

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

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

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

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

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

A) Hydro-Québec (HQ) Phase I/II support costs and related revenues,

B) TCAM working capital allowance return, and

C) HQ Interconnection Capacity Credits.

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

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

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

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

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

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

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

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

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

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

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

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

A. Yes. Please see the table below for the current FERC rates that are proposed for 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				

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

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

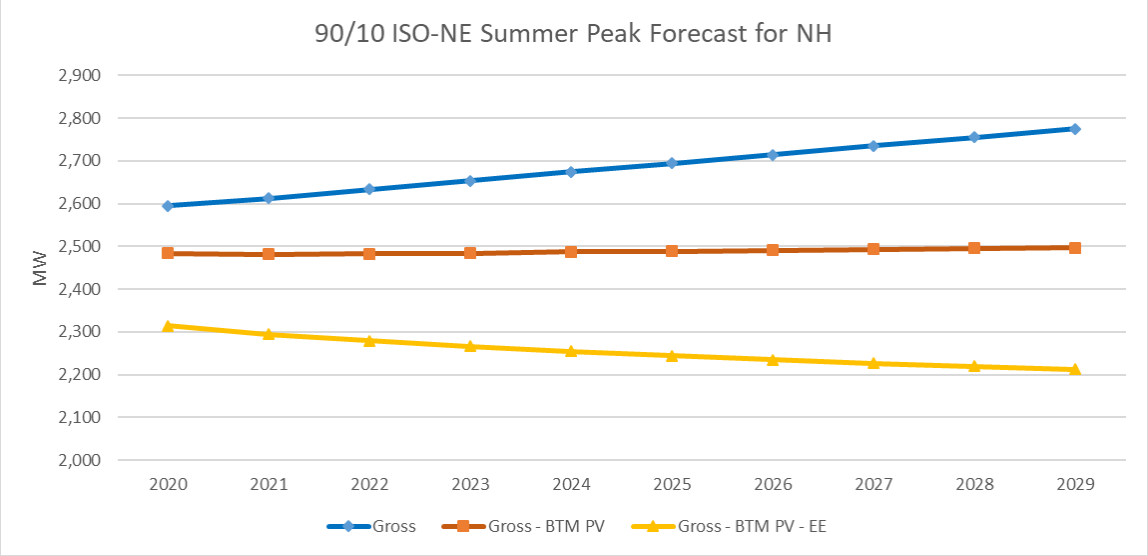
commencing June 1, 2020), a decrease in the forecasted over recovery of $6.8M, a decrease in the forecasted HQ Interconnection Capacity Credits of $1.9M and increased other costs of $1.2M.

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

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

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

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



[2]

As is the case in New Hampshire, the majority of demand savings from energy efficiency programs in the region are achieved as a secondary benefit of the 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

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

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

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

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

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

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

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

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

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

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

Q. Please define the terms "revenue lag days" and "expense lead days."

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

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

Q. How is the retail revenue lag computed?

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

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

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

Q. How was the "collection lag" calculated and what was the result?

A. The "collection lag" for TCAM totaled 27.1 days. This lag reflects the time delay between the mailing of customer bills and the receipt of the billed revenues from customers. The 27.1 days lag was arrived at by a thorough examination of TCAM accounts receivable balances using the accounts receivable turnover method. End of month balances were utilized as the measure of customer accounts receivable. Attachment ELM-2, Page 7 details monthly balances for the majority of the accounts receivable accounts. Attachment ELM-2, Page 6 calculated the average daily revenue amount by dividing total revenue by 365 days. The resulting Collection Lag

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

Q. How did you arrive at the 1.48 day "billing lag"?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Q. Does this conclude your testimony?

A. Yes, it does.

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Dated: July 10, 2020
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Page 1

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION

Docket No. DE 20-085
Dated: July 10, 2020
Attachment ELM-1
Page 1

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION

(Dollars in 000s)

	TCAM Rate Calculation August 2020 Through July 2021	Forecast Summary	Reference: Attachment ELM-1
1			
2			
3	Regional Network Service (RNS)	$ 170,758	Page 2
4	Scheduling and Dispatch (S&D)	2,312	Page 2
5	Local Network Service (LNS)	35,376	Page 2
6	Reliability	6,048	Page 2
7	Hydro-Quebec Interconnection Capacity Credits	(6,409)	Page 2
8	Hydro-Quebec Support Costs	4,969	Page 2
9	Return on TCAM Working Capital	(383)	Page 2
10	Revenue Credits	(4,969)	Page 2
11			
12	Total Forecasted Costs	$ 207,702	
13			
14	Cumulative Estimated (Over) / Under Recovery	(458)	Page 5
15			
16	Total Costs	$ 207,244	
17			
18	Forecasted Retail MWH Sales	7,737,205	Page 2
19			
20	Forecasted TCAM Rate--cents per kWh	2.679	
21			
22			
23			
24	Amounts shown above may not add due to rounding.		

Docket No. DE 20-085
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Attachment ELM-1
Page 1a

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION

(Dollars in 000s)

Note: This schedule is provided as an aid to analysis and is not part of the rate calculation

		(A)	(B)	(C)
	TCAM Rate Calculation	**Forecast**	**Currently Allowed (1)**	**(A)-(B)=(C)**
1	**Comparison of Forecast to Currently Allowed**	**12 mths-07/2021**	**12 mths-07/2020**	**Delta**
2				
3	Regional Network Service (RNS)	$ 170,758	$ 148,526	$ 22,232
4	Scheduling and Dispatch (S&D)	2,312	2,110	202
5	Local Network Service (LNS)	35,376	20,640	14,736
6	Reliability	6,048	5,238	810
7	Hydro-Quebec Interconnection Capacity Credits	(6,409)	(8,294)	1,885
8	Hydro-Quebec Support Costs	4,969	4,137	832
9	Return on TCAM Working Capital	(383)	(555)	172
10	Revenue Credits	(4,969)	(4,137)	(832)
11				
12	Sub-total	$ 207,702	$ 167,664	$ 40,037
13				
14	Prior Period (Over) / Under Recovery	(458)	(7,268)	6,810
15				
16	Total	$ 207,244	$ 160,396	$ 46,848
17				
18	Retail MWH Sales	7,737,205	7,822,136	
19				
20	TCAM Rate--cents per kWh	2.679	2.051	
21				
22	(1) DE 19-106; Order # 26,276 dated July 30, 2019			
23				
24	Amounts shown above may not add due to rounding.			

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
August 2020 through July 2021

(Dollars in 000s)

		Forecast						
	Retail Transmission Cost	August 2020	September 2020	October 2020	November 2020	December 2020	January 2021	Six Months August-January Subtotal
3	Regional Network Service (RNS)	18,053	16,955	15,587	11,763	13,023	13,885	89,265
5	Scheduling and Dispatch (S&D)	244	230	211	159	176	188	1,209
7	Local Network Service (LNS) (1)	2,948	2,948	2,948	2,948	2,948	2,948	17,688
9	Reliability	499	499	499	499	499	499	2,993
11	Hydro-Quebec Interconnection Capacity Credits	(546)	(546)	(546)	(546)	(546)	(546)	(3,273)
13	Hydro-Quebec Support Costs	414	414	414	414	414	414	2,485
15	Return on TCAM Working Capital Allowance (2))	(51)	(46)	(39)	(19)	(26)	(30)	(211)
17	(Over) Recovery TCAM, previous TCAM Year	(458)	-	-	-	-	-	(458)
19	Revenue Credits (3)	(414)	(414)	(414)	(414)	(414)	(414)	(2,485)
21	Retail Transmission Operating Costs	$ 20,690	$ 20,040	$ 18,660	$ 14,804	$ 16,075	$ 16,944	$ 107,212
23	Estimated Retail MWH Sales	720,362	608,001	608,508	604,191	679,307	707,777	3,928,145

		Forecast							
	Retail Transmission Cost	February 2021	March 2021	April 2021	May 2021	June 2021	July 2021	Six Months February-July Subtotal	Twelve Months August 20 - July 21 Total
31	Regional Network Service (RNS)	14,535	13,464	12,979	11,669	13,277	15,569	81,493	170,758
33	Scheduling and Dispatch (S&D)	197	182	176	158	180	211	1,103	2,312
35	Local Network Service (LNS) (1)	2,948	2,948	2,948	2,948	2,948	2,948	17,688	35,376
37	Reliability	499	511	511	511	511	511	3,055	6,048
39	Hydro-Quebec Interconnection Capacity Credits	(546)	(546)	(546)	(546)	(476)	(476)	(3,135)	(6,409)
41	Hydro-Quebec Support Costs	414	414	414	414	414	414	2,485	4,969
43	Return on TCAM Working Capital Allowance (2)	(33)	(28)	(25)	(19)	(27)	(39)	(172)	(383)
45	(Over) Recovery TCAM, previous TCAM Year	-	-	-	-	-	-	-	(458)
47	Revenue Credits (3)	(414)	(414)	(414)	(414)	(414)	(414)	(2,485)	(4,969)
49	Retail Transmission Operating Costs	$ 17,599	$ 16,532	$ 16,043	$ 14,722	$ 16,412	$ 18,724	$ 100,032	$ 207,244
51	Estimated Retail MWH Sales	617,101	647,671	581,724	590,301	639,702	732,561	3,809,060	7,737,205

53 Note 1 - LNS includes the following:

	August 2020	September 2020	October 2020	November 2020	December 2020	January 2021	August-January Subtotal
LNS - ISO-NE Current Month	$ 2,046	$ 2,046	$ 2,046	$ 2,046	$ 2,046	$ 2,046	$ 12,275
LNS - ISO-NE Prior Year True-Up	667	667	667	667	667	667	4,004
LNS - HQ Current Month	235	235	235	235	235	235	1,410
LNS Total	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 17,688

	February 2021	March 2021	April 2021	May 2021	June 2021	July 2021	February-July Subtotal
LNS - ISO-NE Current Month	2,046	2,046	2,046	2,046	2,046	2,046	$ 12,276
LNS - ISO-NE Prior Year True-Up	667	667	667	667	667	667	4,002
LNS - HQ Current Month	235	235	235	235	235	235	1,410
LNS Total	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 17,688

68 Note 2 - The return on the working capital allowance is based on the calculation provided in the Lead/Lag Analysis Attachment ELM-2, Page 1, Line 21.

70 Note 3 - Revenue credits represent Hydro-Quebec (H-Q) revenues associated with the H-Q support contract through July 2021.

73 Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
January 2019 - July 2019

(Dollars in 000s)

			Actual								
		Balance 12/31/2018	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	Total	Reference
1	**Retail Transmission Costs**										
2											
3	Retail Transmission Operating Revenues		$ (13,539)	$ (11,194)	$ (11,979)	$ (10,537)	$ (10,691)	$ (11,782)	$ (14,856)	$ (84,579)	ELM-1, Pg 6
4											
5	Regional Network Service (RNS)		11,669	12,684	11,410	11,034	9,275	9,834	12,327	78,231	
6											
7	Scheduling and Dispatch		168	182	164	159	133	141	175	1,123	
8											
9	Local Network Service (LNS) (1)		1,485	1,496	1,486	1,528	(578)	1,606	1,527	8,550	
10											
11	Reliability		425	449	463	442	456	396	442	3,073	
12											
13	Hydro-Quebec Interconnection Capacity Credits		(993)	(964)	(972)	(973)	(1,050)	(1,026)	(429)	(6,407)	
14											
15	Hydro-Quebec Support Costs		338	279	261	313	353	289	315	2,147	
16											
17	Return on TCAM Working Capital Allowance (2)		(57)	(63)	(57)	(54)	(48)	(48)	(61)	(388)	
18											
19	Revenue Credits (3)		(338)	(279)	(261)	(313)	(353)	(289)	(315)	(2,147)	
20											
21	Retail Transmission Operating Costs		$ 12,695	$ 13,784	$ 12,494	$ 12,135	$ 8,189	$ 10,903	$ 13,981	$ 84,181	
22											
23	(Over) / Under-Recovery		$ (844)	$ 2,590	$ 515	$ 1,598	$ (2,503)	$ (879)	$ (875)	$ (398)	
24											
25	Cumulative (Over) / Under-Recovery (4)	$ (10,970)	$ (11,814)	$ (9,225)	$ (8,710)	$ (7,112)	$ (9,615)	$ (10,493)	$ (11,368)		
26											
27	**Calculation of Return/Deferral**										
28											
29	Average Balance		(11,392)	(10,520)	(8,967)	(7,911)	(8,364)	(10,054)	(10,931)		
30											
31	Deferred tax calculation--										
32	Deferred tax rate		27.241%	27.241%	27.241%	27.241%	27.241%	27.241%	27.241%		
33											
34	ADIT on the average balance		$ 3,103	$ 2,866	$ 2,443	$ 2,155	$ 2,278	$ 2,739	$ 2,978		
35											
36	Average Balance, Net of ADIT		$ (8,289)	$ (7,654)	$ (6,525)	$ (5,756)	$ (6,085)	$ (7,315)	$ (7,953)		
37											
38	x Return at Prime Rate		0.4583%	0.4583%	0.4583%	0.4583%	0.4583%	0.4583%	0.4583%		
39											
40	Return-Monthly		$ (38)	$ (35)	$ (30)	$ (26)	$ (28)	$ (34)	$ (36)	$ (227)	
41											
42	Cumulative Return		$ (38)	$ (73)	$ (103)	$ (129)	$ (157)	$ (191)	$ (227)		
43											
44	Cumulative (Over) / Under Recovery, Including Return		$ (11,852)	$ (9,298)	$ (8,813)	$ (7,241)	$ (9,772)	$ (10,684)	$ (11,595)		
45											
46	Note 1 - LNS includes the following:										
47	LNS - ISO-NE Current Month		$ 1,291	$ 1,280	$ 1,277	$ 1,278	$ 1,286	$ 1,365	$ 1,365	$ 9,142	
48	LNS - ISO-NE Prior Year True-Up		-	-	-	-	(2,140)	-	-	(2,140)	
49	LNS - HQ Current Month		194	217	209	249	277	241	162	1,548	
50	LNS Total		$ 1,485	$ 1,496	$ 1,486	$ 1,528	$ (578)	$ 1,606	$ 1,527	$ 8,550	
51											
52	Note 2 - The return on the working capital allowance per Attachment ELM-2, Page 2, Line 18.										
53											
54	Note 3 - Revenue credits include Hydro-Quebec revenues.										
55											
56	Note 4 - Cumulative (Over) / Under Recovery at 12/31/2018 per DE 19-106 Attachment ELM/DFB-1, Page 4, Line 44										
57											
58	Amounts shown above may not add due to rounding.										

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
August 2019 - January 2020

(Dollars in 000s)

	Balance 07/31/2019	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020	Total	Reference
Retail Transmission Costs									
Retail Transmission Operating Revenues		$ (13,806)	$ (12,970)	$ (12,965)	$ (12,543)	$ (13,475)	$ (13,618)	$ (79,376)	ELM-1, Pg 7
Regional Network Service (RNS)		14,420	14,180	11,250	9,305	11,251	12,117	72,523	
Scheduling and Dispatch		205	202	160	132	160	172	1,032	
Local Network Service (LNS) (1)		1,535	1,546	1,481	1,581	1,693	2,236	10,072	
Reliability		485	509	509	450	410	481	2,844	
Hydro-Quebec Interconnection Capacity Credits		(727)	(724)	(729)	(737)	(731)	(718)	(4,365)	
Hydro-Quebec Support Costs		380	272	351	341	371	310	2,025	
Return on TCAM Working Capital (2)		(55)	(56)	(42)	(33)	(41)	(45)	(271)	
Revenue Credits (3)		(380)	(272)	(351)	(339)	(373)	(310)	(2,025)	
Retail Transmission Operating Costs		$ 15,863	$ 15,658	$ 12,630	$ 10,700	$ 12,740	$ 14,244	$ 81,835	
(Over) / Under-Recovery		$ 2,057	$ 2,688	$ (334)	$ (1,842)	$ (735)	$ 626	$ 2,459	
Cumulative (Over) / Under-Recovery	$ (11,595)	$ (9,538)	$ (6,851)	$ (7,185)	$ (9,028)	$ (9,763)	$ (9,137)		
Calculation of Return/Deferral									
Average Balance		(10,567)	(8,194)	(7,018)	(8,106)	(9,395)	(9,450)		
Deferred tax calculation--									
Deferred tax rate		27.083%	27.083%	27.083%	27.083%	27.083%	27.083%		
ADIT on the average balance		$ 2,862	$ 2,219	$ 1,901	$ 2,195	$ 2,544	$ 2,559		
Average Balance, Net of ADIT		$ (7,705)	$ (5,975)	$ (5,117)	$ (5,911)	$ (6,851)	$ (6,890)		
x Return at Prime Rate		0.4375%	0.4292%	0.4158%	0.3958%	0.3958%	0.3958%		
Return-Monthly		$ (34)	$ (26)	$ (21)	$ (23)	$ (27)	$ (27)	$ (158)	
Cumulative Return		$ (34)	$ (59)	$ (81)	$ (104)	$ (131)	$ (158)		
Cumulative (Over) / Under Recovery, Including Return		$ (9,572)	$ (6,910)	$ (7,266)	$ (9,132)	$ (9,894)	$ (9,295)		
Note 1 - LNS includes the following:									
LNS - ISO-NE Current Month		$ 1,358	$ 1,372	$ 1,363	$ 1,348	$ 1,362	$ 2,011	$ 8,815	
LNS - ISO-NE Prior Year True-Up		-	-	-	-	-	-	-	
LNS - HQ Current Month		176	174	118	233	331	225	1,257	
LNS Total		$ 1,535	$ 1,546	$ 1,481	$ 1,581	$ 1,693	$ 2,236	$ 10,072	

Note 2 - The return on the working capital allowance per Attachment ELM-2, Page 3, Line 21.

Note 3-- Revenue credits include Hydro-Quebec revenues.

Amounts shown above may not add due to rounding.

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
February 2020 - July 2020

(Dollars in 000s)

							Forecast			
		Balance	February	March	April	May	June	July		
1	**Retail Transmission Costs**	01/31/2020	2020	2020	2020	2020	2020	2020	Total	Reference
2										
3	Retail Transmission Operating Revenues		$ (12,266)	$ (12,900)	$ (11,208)	$ (11,866)	$ (12,873)	$ (14,990)	$ (76,104)	ELM-1, Pg 8
4										
5	Regional Network Service (RNS)		11,609	10,893	10,073	9,679	11,688	16,179	70,120	
6										
7	Scheduling and Dispatch (S&D)		165	155	143	138	166	219	986	
8										
9	Local Network Service (LNS) (1)		2,231	2,237	2,341	2,358	3,066	2,948	15,181	
10										
11	Reliability		505	514	497	481	499	499	2,995	
12										
13	Hydro-Quebec Interconnection Capacity Credits		(709)	(717)	(718)	(743)	(546)	(546)	(3,978)	
14										
15	Hydro-Quebec Support Costs		365	293	338	370	419	414	2,199	
16										
17	Return on TCAM Working Capital (2)		(42)	(40)	(35)	(33)	(41)	(61)	(252)	
18										
19	Revenue Credits (3)		(365)	(293)	(338)	(370)	(419)	(414)	(2,199)	
20										
21	Retail Transmission Operating Costs		$ 13,759	$ 13,042	$ 12,302	$ 11,880	$ 14,833	$ 19,238	$ 85,053	
22										
23	(Over) / Under-Recovery		$ 1,492	$ 142	$ 1,094	$ 14	$ 1,960	$ 4,248	$ 8,949	
24										
25	Cumulative (Over) / Under-Recovery	$ (9,295)	$ (7,829)	$ (7,687)	$ (6,593)	$ (6,580)	$ (4,620)	$ (372)		
26										
27	**Calculation of Return/Deferral**									
28										
29	Average Balance		(8,562)	(7,758)	(7,140)	(6,587)	(5,600)	(2,496)		
30										
31	Deferred tax calculation--									
32	Deferred tax rate		27.083%	27.083%	27.083%	27.083%	27.083%	27.083%		
33										
34	ADIT on the average balance		$ 2,319	$ 2,101	$ 1,934	$ 1,784	$ 1,517	$ 676		
35										
36	Average Balance, Net of Accum. Def. Income Taxes		$ (6,243)	$ (5,657)	$ (5,206)	$ (4,803)	$ (4,083)	$ (1,820)		
37										
38	x Return at Prime Rate		0.3958%	0.3150%	0.2708%	0.2708%	0.2708%	0.2708%		
39										
40	Return-Monthly		$ (25)	$ (18)	$ (14)	$ (13)	$ (11)	$ (5)	$ (86)	
41										
42	Cumulative Return		$ (25)	$ (43)	$ (57)	$ (70)	$ (81)	$ (86)		
43										
44	Cumulative (Over) / Under Recovery, Including Return		$ (7,854)	$ (7,730)	$ (6,650)	$ (6,650)	$ (4,701)	$ (458)		
45										
46	Note 1 - LNS includes the following:									
47	LNS - ISO-NE Current Month		$ 2,022	$ 2,026	$ 2,025	$ 2,049	2,046	2,046	$ 12,212	
48	LNS - ISO-NE Prior Year True-Up		-	-	-	-	667	667	1,335	
49	LNS - HQ Current Month		209	211	317	310	353	235	1,635	
50	LNS Total		$ 2,231	$ 2,237	$ 2,341	$ 2,358	$ 3,066	$ 2,948	$ 15,181	
51										
52	Note 2 - The return on the working capital allowance per Attachment ELM-2, Page 4, Line 21.									
53										
54	Note 3-- Revenue credits include Hydro-Quebec revenues.									
55										
56	Amounts shown above may not add due to rounding.									

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
January 2019 - July 2019

(Dollars in 000s)

		Actual							
	Retail Transmission Revenues	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	Total
3	Transmission Revenue - Billed	$ (12,944)	$ (12,460)	$ (11,797)	$ (11,110)	$ (10,896)	$ (11,109)	$ (13,059)	$ (83,377)
5	Transmission Revenue - Unbilled	$ (595)	$ 1,266	$ (182)	$ 573	$ 205	$ (673)	$ (1,797)	(1,202)
7	**Total**	$ (13,539)	$ (11,194)	$ (11,979)	$ (10,537)	$ (10,691)	$ (11,782)	$ (14,856)	$ (84,579)

10 Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
August 2019 - January 2020

(Dollars in 000s)

	Retail Transmission Revenues	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020	Total
3	Transmission Revenue - Billed	$ (14,879)	$ (13,643)	$ (12,007)	$ (11,893)	$ (13,680)	$ (13,826)	$ (79,927)
5	Transmission Revenue - Unbilled	$ 1,073	$ 673	$ (958)	$ (650)	$ 205	$ 208	551
7	Total	$ (13,806)	$ (12,970)	$ (12,965)	$ (12,543)	$ (13,475)	$ (13,618)	$ (79,376)

10 Amounts shown above may not add due to rounding.

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
February 2020 - July 2020

(Dollars in 000s)

						Forecast		
	February	March	April	May	June	July	
Retail Transmission Revenues	2020	2020	2020	2020	2020	2020	Total
Transmission Revenue - Billed	$ (13,077)	$ (12,351)	$ (12,019)	$ (11,513)	$ (12,873)	$ (14,990)	$ (76,824)
Transmission Revenue - Unbilled	$ 811	$ (549)	$ 811	$ (353)	$ -	$ -	720
Total	$ (12,266)	$ (12,900)	$ (11,208)	$ (11,866)	$ (12,873)	$ (14,990)	$ (76,104)

Amounts shown above may not add due to rounding.

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Dated: July 10, 2020
Atachment ELM-2
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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY
RETAIL TRANSMISSION CASH WORKING CAPITAL REQUIREMENT

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
For the 12 Months Ending July 31, 2021
Monthly Working Capital Allowance Calculation
($ in 000s)

Line	Retail Transmission Cost	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Aug-Jul Total	Source
1	Regional Network Service (RNS)	$ 18,053	$ 16,955	$ 15,587	$ 11,763	$ 13,023	$ 13,885	$ 14,535	$ 13,464	$ 12,979	$ 11,669	$ 13,277	$ 15,569	$ 170,758	Attachment ELM-1, Page 2, Lines 3 and 31
2	(RNS) Working Capital Allowance Percent	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%		Attachment ELM-2, Page 5,, Line 1
3	(RNS) Working Capital Allowance $	$ (975)	$ (916)	$ (842)	$ (636)	$ (704)	$ (750)	$ (785)	$ (727)	$ (701)	$ (630)	$ (717)	$ (841)	$ (9,226)	Line 1 * Line 2
4	Scheduling and Dispatch (S&D)	$ 244	$ 230	$ 211	$ 159	$ 176	$ 188	$ 197	$ 182	$ 176	$ 158	$ 180	$ 211	$ 2,312	Attachment ELM-1, Page 2, Lines 5 and 33
5	(S&D) Working Capital Allowance Percent	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%		Attachment ELM-2, Page 5,, Line 2
6	(S&D) Working Capital Allowance $	$ (13)	$ (12)	$ (11)	$ (9)	$ (10)	$ (10)	$ (11)	$ (10)	$ (9)	$ (9)	$ (10)	$ (11)	$ (125)	Line 4 * Line 5
7	Local Network Service (LNS)	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 2,948	$ 35,376	Attachment ELM-1, Page 2, Lines 7 and 35
8	(LNS) Working Capital Allowance Percent	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%		Attachment ELM-2, Page 5,, Line 3
9	(LNS) Working Capital Allowance $	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 387	$ 4,648	Line 7 * Line 8
10	Reliability	$ 499	$ 499	$ 499	$ 499	$ 499	$ 499	$ 499	$ 511	$ 511	$ 511	$ 511	$ 511	$ 6,048	Attachment ELM-1, Page 2, Lines 9 and 37
11	(Reliability) Working Capital Allowance Percent	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%		Attachment ELM-2, Page 5,, Line 4
12	(Reliability) Working Capital Allowance $	$ (27)	$ (27)	$ (27)	$ (27)	$ (27)	$ (27)	$ (27)	$ (28)	$ (28)	$ (28)	$ (28)	$ (28)	$ (329)	Line 10 * Line 11
13	Hydro-Quebec (HQ) Support Costs	$ 414	$ 414	$ 414	$ 414	$ 414	$ 414	$ 414	$ 414	$ 414	$ 414	$ 414	$ 414	$ 4,969	Attachment ELM-1, Page 2, Lines 13 and 41
14	(HQ Support Costs) Working Capital Allowance Percent	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%		Attachment ELM-2, Page 5,, Line 5
15	(HQ Support Costs) Working Capital Allowance $	$ 51	$ 51	$ 51	$ 51	$ 51	$ 51	$ 51	$ 51	$ 51	$ 51	$ 51	$ 51	$ 612	Line 13 * Line 14
16	Hydro-Quebec Interconnection Capacity Credits (HQICC)	$ (546)	$ (546)	$ (546)	$ (546)	$ (546)	$ (546)	$ (546)	$ (546)	$ (546)	$ (546)	$ (476)	$ (476)	$ (6,409)	Attachment ELM-1, Page 2, Lines 11 and 39
17	(HQ ICC) Working Capital Allowance Percent	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%		Attachment ELM-2, Page 5,, Line 6
18	(HQ ICC) Working Capital Allowance $	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 30	$ 26	$ 26	$ 347	Line 16 * Line 17
19	Monthly Working Capital Allowance $	$ (548)	$ (488)	$ (413)	$ (203)	$ (272)	$ (320)	$ (355)	$ (297)	$ (271)	$ (199)	$ (291)	$ (416)	$ (4,073)	Line 3 + Line 6 + Line 9 + Line 12 + Line 15 + Line 18
20	Rate of Return	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%		Authorized Return per DE 09-035 including tax gross up
21	**Monthly Return on Working Capital**	**$ (51)**	**$ (46)**	**$ (39)**	**$ (19)**	**$ (26)**	**$ (30)**	**$ (33)**	**$ (28)**	**$ (25)**	**$ (19)**	**$ (27)**	**$ (39)**	**(383)**	Line 19 * Line 20

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
For the 7 Months Ending July 31, 2019
Monthly Working Capital Allowance Calculation
($ in 000s)

Line	Retail Transmission Cost	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Jan-Jul Total	Source
1	Regional Network Service (RNS)	$ 11,669	$ 12,684	$ 11,410	$ 11,034	$ 9,275	$ 9,834	$ 12,327	$ 78,231	Attachment ELM-1, Page 3, Line 5
2	(RNS) Working Capital Allowance Percent	-5.49%	-5.49%	-5.49%	-5.49%	-5.49%	-5.49%	-5.49%		DE 18-089 Attachment CJG-2, Page 1, Line 2
3	(RNS) Working Capital Allowance $	$ (641)	$ (696)	$ (626)	$ (606)	$ (509)	$ (540)	$ (677)	$ (4,295)	Line 1 * Line 2
4	Scheduling and Dispatch (S&D)	168	182	164	159	133	141	175	$ 1,123	Attachment ELM-1, Page 3, Line 7
5	(S&D) Working Capital Allowance Percent	-5.49%	-5.49%	-5.49%	-5.49%	-5.49%	-5.49%	-5.49%		DE 18-089 Attachment CJG-2, Page 1, Line 4
6	(S&D) Working Capital Allowance $	$ (9)	$ (10)	$ (9)	$ (9)	$ (7)	$ (8)	$ (10)	$ (62)	Line 4 * Line 5
7	Local Network Service (LNS)	1,485	1,496	1,486	1,528	(578)	1,606	1,527	$ 8,550	Attachment ELM-1, Page 3, Line 9
8	(LNS) Working Capital Allowance Percent	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%		DE 18-089 Attachment CJG-2, Page 1, Line 6
9	(LNS) Working Capital Allowance $	$ 24	$ 24	$ 24	$ 24	$ (9)	$ 26	$ 24	$ 137	Line 7 * Line 8
10	Reliability	425	449	463	442	456	396	442	$ 3,073	Attachment ELM-1, Page 3, Line 11
11	(Reliability) Working Capital Allowance Percent	-5.50%	-5.50%	-5.50%	-5.50%	-5.50%	-5.50%	-5.50%		DE 18-089 Attachment CJG-2, Page 1, Line 8
12	(Reliability) Working Capital Allowance $	$ (23)	$ (25)	$ (25)	$ (24)	$ (25)	$ (22)	$ (24)	$ (169)	Line 10 * Line 11
13	Hydro-Quebec Support Costs	338	279	261	313	353	289	315	$ 2,147	Attachment ELM-1, Page 3, Line 15
14	(HQ Support Costs) Working Capital Allowance Percent	11.95%	11.95%	11.95%	11.95%	11.95%	11.95%	11.95%		DE 18-089 Attachment CJG-2, Page 1, Line 10
15	(HQ Support Costs) Working Capital Allowance $	$ 40	$ 33	$ 31	$ 37	$ 42	$ 34	$ 38	$ 257	Line 13 * Line 14
16	Monthly Working Capital Allowance	$ (609)	$ (674)	$ (606)	$ (577)	$ (509)	$ (509)	$ (649)	$ (4,132)	Line 3 + Line 6 + Line 9 + Line 12 + Line 15
17	Rate of Return	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%		Authorized Return per DE 09-035 including tax gross up
18	**Monthly Return on Working Capital**	**$ (57)**	**$ (63)**	**$ (57)**	**$ (54)**	**$ (48)**	**$ (48)**	**$ (61)**	**(388)**	Line 16 * Line 17

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
For the 6 Months Ending January 31, 2020
Monthly Working Capital Allowance Calculation
($ in 000s)

Line	Retail Transmission Cost	Aug 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Aug-Jan Total	Source
1	Regional Network Service (RNS)	$ 14,420	$ 14,180	$ 11,250	$ 9,305	$ 11,251	$ 12,117	$ 72,523	Attachment ELM-1, Page 4, Line 5
2	(RNS) Working Capital Allowance Percent	-4.61%	-4.61%	-4.61%	-4.61%	-4.61%	-4.61%		DE 19-106 Attachment ELM-2, Page 1, Line 2
3	(RNS) Working Capital Allowance $	$ (665)	$ (654)	$ (519)	$ (429)	$ (519)	$ (559)	$ (3,344)	Line 1 * Line 2
4	Scheduling and Dispatch (S&D)	$ 205	$ 202	$ 160	$ 132	$ 160	$ 172	$ 1,032	Attachment ELM-1, Page 4, Line 7
5	(S&D) Working Capital Allowance Percent	-4.60%	-4.60%	-4.60%	-4.60%	-4.60%	-4.60%		DE 19-106 Attachment ELM-2, Page 1, Line 4
6	(S&D) Working Capital Allowance $	$ (9)	$ (9)	$ (7)	$ (6)	$ (7)	$ (8)	$ (47)	Line 4 * Line 5
7	Local Network Service (LNS)	$ 1,535	$ 1,546	$ 1,481	$ 1,581	$ 1,693	$ 2,236	$ 10,072	Attachment ELM-1, Page 4, Line 9
8	(LNS) Working Capital Allowance Percent	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%		DE 19-106 Attachment ELM-2, Page 1, Line 6
9	(LNS) Working Capital Allowance $	$ 27	$ 27	$ 26	$ 28	$ 30	$ 40	$ 178	Line 7 * Line 8
10	Reliability	$ 485	$ 509	$ 509	$ 450	$ 410	$ 481	$ 2,844	Attachment ELM-1, Page 4, Line 11
11	(Reliability) Working Capital Allowance Percent	-4.61%	-4.61%	-4.61%	-4.61%	-4.61%	-4.61%		DE 19-106 Attachment ELM-2, Page 1, Line 8
12	(Reliability) Working Capital Allowance $	$ (22)	$ (23)	$ (23)	$ (21)	$ (19)	$ (22)	$ (131)	Line 10 * Line 11
13	Hydro-Quebec Support Costs	$ 380	$ 272	$ 351	$ 341	$ 371	$ 310	$ 2,025	Attachment ELM-1, Page 4, Line 15
14	(HQ Support Costs) Working Capital Allowance Percent	13.15%	13.15%	13.15%	13.15%	13.15%	13.15%		DE 19-106 Attachment ELM-2, Page 1, Line 12
15	(HQ Support Costs) Working Capital Allowance $	$ 50	$ 36	$ 46	$ 45	$ 49	$ 41	$ 266	Line 13 * Line 14
16	Hydro-Quebec Interconnection Capacity Credits	$ (727)	$ (724)	$ (729)	$ (737)	$ (731)	$ (718)	$ (4,365)	Attachment ELM-1, Page 4, Line 13
17	(HQ ICC) Working Capital Allowance Percent	-4.48%	-4.48%	-4.48%	-4.48%	-4.48%	-4.48%		DE 19-106 Attachment ELM-2, Page 1, Line 10
18	(HQ ICC) Working Capital Allowance $	$ 33	$ 32	$ 33	$ 33	$ 33	$ 32	$ 196	Line 16 * Line 17
19	Monthly Working Capital Allowance	$ (587)	$ (591)	$ (445)	$ (350)	$ (434)	$ (476)	$ (2,883)	Line 3 + Line 6 + Line 9 + Line 12 + Line 15 + Line 18
20	Rate of Return	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%		Authorized Return per DE 09-035 including tax gross up
21	**Monthly Return on Working Capital**	**$ (55)**	**$ (56)**	**$ (42)**	**$ (33)**	**$ (41)**	**$ (45)**	**(271)**	Line 19 * Line 20

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
For the 6 Months Ending July 31, 2020
Monthly Working Capital Allowance Calculation
($ in 000s)

Line	Retail Transmission Cost	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Feb-Jul Total	Source
1	Regional Network Service (RNS)	$ 11,609	$ 10,893	$ 10,073	$ 9,679	$ 11,688	$ 16,179	$ 70,120	Attachment ELM-1, Page 5, Line 5
2	(RNS) Working Capital Allowance Percent	-4.61%	-4.61%	-4.61%	-4.61%	-4.61%	-4.61%		DE 19-106 Attachment ELM-2, Page 1, Line 2
3	(RNS) Working Capital Allowance $	$ (535)	$ (502)	$ (465)	$ (446)	$ (539)	$ (746)	$ (3,234)	Line 1 * Line 2
4	Scheduling and Dispatch (S&D)	$ 165	$ 155	$ 143	$ 138	$ 166	$ 219	$ 986	Attachment ELM-1, Page 5, Line 7
5	(S&D) Working Capital Allowance Percent	-4.60%	-4.60%	-4.60%	-4.60%	-4.60%	-4.60%		DE 19-106 Attachment ELM-2, Page 1, Line 4
6	(S&D) Working Capital Allowance $	$ (8)	$ (7)	$ (7)	$ (6)	$ (8)	$ (10)	$ (45)	Line 4 * Line 5
7	Local Network Service (LNS)	$ 2,231	$ 2,237	$ 2,341	$ 2,358	$ 3,066	$ 2,948	$ 15,181	Attachment ELM-1, Page 5, Line 9
8	(LNS) Working Capital Allowance Percent	1.77%	1.77%	1.77%	1.77%	1.77%	1.77%		DE 19-106 Attachment ELM-2, Page 1, Line 6
9	(LNS) Working Capital Allowance $	$ 39	$ 40	$ 41	$ 42	$ 54	$ 52	$ 269	Line 7 * Line 8
10	Reliability	$ 505	$ 514	$ 497	$ 481	$ 499	$ 499	$ 2,995	Attachment ELM-1, Page 5, Line 11
11	(Reliability) Working Capital Allowance Percent	-4.61%	-4.61%	-4.61%	-4.61%	-4.61%	-4.61%		DE 19-106 Attachment ELM-2, Page 1, Line 8
12	(Reliability) Working Capital Allowance $	$ (23)	$ (24)	$ (23)	$ (22)	$ (23)	$ (23)	$ (138)	Line 10 * Line 11
13	Hydro-Quebec Support Costs	$ 365	$ 293	$ 338	$ 370	$ 419	$ 414	$ 2,199	Attachment ELM-1, Page 5, Line 15
14	(HQ Support Costs) Working Capital Allowance Percent	13.15%	13.15%	13.15%	13.15%	13.15%	13.15%		DE 19-106 Attachment ELM-2, Page 1, Line 12
15	(HQ Support Costs) Working Capital Allowance $	$ 48	$ 39	$ 44	$ 49	$ 55	$ 54	$ 289	Line 13 * Line 14
16	Hydro-Quebec Interconnection Capacity Credits	$ (709)	$ (717)	$ (718)	$ (743)	$ (546)	$ (546)	$ (3,978)	Attachment ELM-1, Page 5, Line 13
17	(HQ ICC) Working Capital Allowance Percent	-4.48%	-4.48%	-4.48%	-4.48%	-4.48%	-4.48%		DE 19-106 Attachment ELM-2, Page 1, Line 10
18	(HQ ICC) Working Capital Allowance $	$ 32	$ 32	$ 32	$ 33	$ 24	$ 24	$ 178	Line 16 * Line 17
19	Monthly Working Capital Allowance	$ (447)	$ (423)	$ (376)	$ (351)	$ (436)	$ (648)	$ (2,681)	Line 3 + Line 6 + Line 9 + Line 12 + Line 15 + Line 18
20	Rate of Return	9.40%	9.40%	9.40%	9.40%	9.40%	9.40%		Authorized Return per DE 09-035 including tax gross up
21	**Monthly Return on Working Capital**	**$ (42)**	**$ (40)**	**$ (35)**	**$ (33)**	**$ (41)**	**$ (61)**	**(252)**	Line 19 * Line 20

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019

Line	Components	Revenue Lag days	Cost Lead Days	Net Lag Days	Net Lag %	Total Expense	Cash WC Requirement
		(A)	(B)	(C) = (A) - (B)	(D) = (C) / 365	(E)	(F) = (D) x (E)
1	RNS	43.8	63.5	(19.7)	-5.40%	$ 138,637,019	$ (7,490,449)
2	S&D	43.8	63.5	(19.7)	-5.40%	1,983,030	(107,122)
3	LNS	43.8	(4.2)	48.0	13.14%	16,385,833	2,152,776
4	Reliability	43.8	63.6	(19.8)	-5.43%	5,435,549	(295,290)
5	HQ Expense	43.8	(1.2)	45.0	12.32%	3,861,527	475,651
6	Hydro-Quebec Interconnection Capacity Credits	43.8	63.5	(19.8)	-5.41%	(10,054,294)	544,326
7	Total / Average	43.8	55.3	(11.6)	-3.17%	$ 166,302,958	$ (5,264,433)

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
Revenue Lag

Line	Components		Total	Reference
1	Average Accounts Receivable Balance	$	11,450,016	Attachment ELM-2, Page 7, Line 14
2	Annual Transmission Revenue	$	154,199,296	Attachment ELM-1, Page 3 (Line 3 + Line 19) + Page 4 (Line 3 + Line 19)
3	Average daily revenue	$	422,464	Line 2 / 365
4	Collection lag (days)		27.10	Line 1/ Line 3
5	Meter reading lag		15.21	(365/12)/2
6	Billing lag		1.48	Attachment ELM-2, Page 8, Line 13
7	Retail revenue lag (days)		43.79	Sum of Line 4 through Line 6

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
Monthly Accounts Receivable Balances

Line	Date		AR Balance
1	January 2019	$	12,089,456
2	February 2019		12,821,060
3	March 2019		12,453,033
4	April 2019		10,844,467
5	May 2019		10,356,464
6	June 2019		11,330,377
7	July 2019		11,719,485
8	August 2019		12,670,633
9	September 2019		12,091,839
10	October 2019		9,383,431
11	November 2019		9,735,985
12	December 2019		11,903,955
13	Total	$	137,400,186
14	Average	$	11,450,016

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Dated: July 10, 2020
Atachment ELM-2
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Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
Billing Lag

Line No.	Month	Billing Days	Accounts Receivable Balance	Month Weight	Weighted Billing Days
	(A)	(B)	(C)	(D)	(E) = (B)*(D)
1	January	1.39	$ 12,089,456	0.09	0.12
2	February	1.54	12,821,060	0.09	0.14
3	March	1.48	12,453,033	0.09	0.13
4	April	1.40	10,844,467	0.08	0.11
5	May	1.48	10,356,464	0.08	0.11
6	June	1.50	11,330,377	0.08	0.12
7	July	1.42	11,719,485	0.09	0.12
8	August	1.48	12,670,633	0.09	0.14
9	September	1.50	12,091,839	0.09	0.13
10	October	1.48	9,383,431	0.07	0.10
11	November	1.60	9,735,985	0.07	0.11
12	December	1.45	11,903,955	0.09	0.13
13			$ 137,400,186	Lead Lag Days	1.48

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
RNS

Line	Month	Begining of Service Period	End of Service Period	Midpoint of Service Period	Payment Date	Lead Days	Payment Amount	Dollar Weighted Days
		(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	(G) = (E)*(F)
1	January	12/01/2018	12/31/2018	12/16/2018	02/15/2019	61.0	$ 11,668,549	$ 711,781,489
2	February	01/01/2019	01/31/2019	01/16/2019	03/15/2019	58.0	12,683,671	735,652,918
3	March	02/01/2019	02/28/2019	02/14/2019	04/22/2019	66.5	11,409,778	758,750,237
4	April	03/01/2019	03/31/2019	03/16/2019	05/17/2019	62.0	11,034,055	684,111,410
5	May	04/01/2019	04/30/2019	04/15/2019	06/21/2019	66.5	9,274,506	616,754,649
6	June	05/01/2019	05/31/2019	05/16/2019	07/19/2019	64.0	9,833,808	629,363,712
7	July	06/01/2019	06/30/2019	06/15/2019	08/16/2019	61.5	12,327,033	758,112,530
8	August	07/01/2019	07/31/2019	07/16/2019	09/20/2019	66.0	14,419,959	951,717,294
9	September	08/01/2019	08/31/2019	08/16/2019	10/21/2019	66.0	14,180,448	935,909,568
10	October	09/01/2019	09/30/2019	09/15/2019	11/18/2019	63.5	11,249,931	714,370,619
11	November	10/01/2019	10/31/2019	10/16/2019	12/20/2019	65.0	9,304,679	604,804,135
12	December	11/01/2019	11/30/2019	11/15/2019	01/17/2020	62.5	11,250,602	703,162,625
13	Average					63.5	$ 138,637,019	$ 8,804,491,185

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
Scheduling & Dispatch

Line	Month	Begining of Service Period	End of Service Period	Midpoint of Service Period	Payment Date	Lead Days	Payment Amount	Dollar Weighted Days
		(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	(G) = (E)*(F)
1	January	12/01/2018	12/31/2018	12/16/2018	02/15/2019	61.0	$ 167,794	$ 10,235,434
2	February	01/01/2019	01/31/2019	01/16/2019	03/15/2019	58.0	182,391	10,578,678
3	March	02/01/2019	02/28/2019	02/14/2019	04/22/2019	66.5	164,073	10,910,855
4	April	03/01/2019	03/31/2019	03/16/2019	05/17/2019	62.0	158,670	9,837,540
5	May	04/01/2019	04/30/2019	04/15/2019	06/21/2019	66.5	133,367	8,868,906
6	June	05/01/2019	05/31/2019	05/16/2019	07/19/2019	64.0	141,410	9,050,240
7	July	06/01/2019	06/30/2019	06/15/2019	08/16/2019	61.5	175,471	10,791,467
8	August	07/01/2019	07/31/2019	07/16/2019	09/20/2019	66.0	205,263	13,547,358
9	September	08/01/2019	08/31/2019	08/16/2019	10/21/2019	66.0	201,854	13,322,364
10	October	09/01/2019	09/30/2019	09/15/2019	11/18/2019	63.5	160,139	10,168,827
11	November	10/01/2019	10/31/2019	10/16/2019	12/20/2019	65.0	132,449	8,609,185
12	December	11/01/2019	11/30/2019	11/15/2019	01/17/2020	62.5	160,149	10,009,313
13	Average					63.5	$ 1,983,030	$ 125,930,165

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
LNS

Line	Month	Description	Begining of Service Period	End of Service Period	Midpoint of Service Period	Payment Date	Lead Days	Payment Amount	Dollar Weighted Days
			(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	(G) = (E)*(F)
1	January	Vermont Electric Power Co	12/01/2018	12/31/2018	12/16/2018	01/24/2019	39.0	$ 68,427	$ 2,668,651
2	February	Vermont Electric Power Co	01/01/2019	01/31/2019	01/16/2019	02/26/2019	41.0	86,383	3,541,700
3	March	Vermont Electric Power Co	02/01/2019	02/28/2019	02/14/2019	03/22/2019	35.5	75,667	2,686,179
4	April	Vermont Electric Power Co	03/01/2019	03/31/2019	03/16/2019	04/25/2019	40.0	125,028	5,001,112
5	May	Vermont Electric Power Co	04/01/2019	04/30/2019	04/15/2019	05/24/2019	38.5	149,575	5,758,622
6	June	Vermont Electric Power Co	05/01/2019	05/31/2019	05/16/2019	06/26/2019	41.0	118,430	4,855,625
7	July	Vermont Electric Power Co	06/01/2019	06/30/2019	06/15/2019	07/26/2019	40.5	97,324	3,941,622
8	August	Vermont Electric Power Co	07/01/2019	07/31/2019	07/16/2019	08/28/2019	43.0	47,950	2,061,834
9	September	Vermont Electric Power Co	08/01/2019	08/31/2019	08/16/2019	09/26/2019	41.0	37,331	1,530,587
10	October	Vermont Electric Power Co	09/01/2019	09/30/2019	09/15/2019	10/22/2019	36.5	(6,398)	(233,531)
11	November	Vermont Electric Power Co	10/01/2019	10/31/2019	10/16/2019	11/15/2019	30.0	114,000	3,420,000
12	December	Vermont Electric Power Co	11/01/2019	11/30/2019	11/15/2019	12/23/2019	37.5	208,163	7,806,126
13	Subtotal	Vermont Electric Power Co					38.4	$ 1,121,879	$ 43,038,526
14	January	Green Mountain Power Corp.	12/01/2018	12/31/2018	12/16/2018	01/31/2019	46.0	$ 125,307	$ 5,764,137
15	February	Green Mountain Power Corp.	01/01/2019	01/31/2019	01/16/2019	02/28/2019	43.0	130,882	5,627,947
16	March	Green Mountain Power Corp.	02/01/2019	02/28/2019	02/14/2019	03/29/2019	42.5	133,067	5,655,330
17	April	Green Mountain Power Corp.	03/01/2019	03/31/2019	03/16/2019	04/30/2019	45.0	124,298	5,593,392
18	May	Green Mountain Power Corp.	04/01/2019	04/30/2019	04/15/2019	05/31/2019	45.5	127,332	5,793,588
19	June	Green Mountain Power Corp.	05/01/2019	05/31/2019	05/16/2019	06/28/2019	43.0	122,116	5,250,988
20	July	Green Mountain Power Corp.	06/01/2019	06/30/2019	06/15/2019	07/31/2019	45.5	64,242	2,922,997
21	August	Green Mountain Power Corp.	07/01/2019	07/31/2019	07/16/2019	08/30/2019	45.0	128,235	5,770,561
22	September	Green Mountain Power Corp.	08/01/2019	08/31/2019	08/16/2019	09/30/2019	45.0	136,730	6,152,832
23	October	Green Mountain Power Corp.	09/01/2019	09/30/2019	09/15/2019	10/31/2019	45.5	124,567	5,667,806
24	November	Green Mountain Power Corp.	10/01/2019	10/31/2019	10/16/2019	11/30/2019	45.0	119,234	5,365,551
25	December	Green Mountain Power Corp.	11/01/2019	11/30/2019	11/15/2019	12/31/2019	45.5	121,695	5,537,126
26	Subtotal	Green Mountain Power Corp.					44.7	$ 1,457,704	$ 65,102,253
27	January	Intercompany	01/01/2019	01/31/2019	01/16/2019	02/22/2019	37.0	$ 1,290,957	$ 47,765,409
28	February	Intercompany	02/01/2019	02/28/2019	02/14/2019	03/22/2019	35.5	1,279,516	45,422,818
29	March	Intercompany	03/01/2019	03/31/2019	03/16/2019	04/22/2019	37.0	1,277,092	47,252,404
30	April	Intercompany	04/01/2019	04/30/2019	04/15/2019	05/22/2019	36.5	1,278,397	46,661,491
31	May	Intercompany - Current Month	05/01/2019	05/31/2019	05/16/2019	06/22/2019	37.0	1,286,045	47,583,665
32	May	Intercompany - PY True-Up	01/01/2018	12/31/2018	07/01/2018	06/22/2019	356.0	(2,140,481)	(762,011,236)
33	June	Intercompany	06/01/2019	06/30/2019	06/15/2019	07/22/2019	36.5	1,365,154	49,828,121
34	July	Intercompany	07/01/2019	07/31/2019	07/16/2019	08/22/2019	37.0	1,365,023	50,505,851
35	August	Intercompany	08/01/2019	08/31/2019	08/16/2019	09/22/2019	37.0	1,358,333	50,258,321
36	September	Intercompany	09/01/2019	09/30/2019	09/15/2019	10/22/2019	36.5	1,371,845	50,072,343
37	October	Intercompany	10/01/2019	10/31/2019	10/16/2019	11/22/2019	37.0	1,363,318	50,442,766
38	November	Intercompany	11/01/2019	11/30/2019	11/15/2019	12/22/2019	36.5	1,348,234	49,210,541
39	December	Intercompany	12/01/2019	12/31/2019	12/16/2019	01/22/2020	37.0	1,362,203	50,401,511
40	Subtotal	Intercompany					(12.8)	$ 13,805,636	$ (176,605,996)
41	March	New England Power	05/01/2019	05/31/2019	05/16/2019	01/24/2020	253.0	$ 444	$ 112,352
42	April	New England Power	11/01/2018	11/30/2018	11/15/2018	01/24/2020	434.5	169	73,474
43	Subtotal	New England Power					303.1	$ 613	$ 185,826
44	Average						(4.2)	$ 16,385,833	$ (68,279,390)

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
Reliability

Line	Month	Begining of Service Period	End of Service Period	Midpoint of Service Period	Payment Date	Lead Days	Payment Amount	Dollar Weighted Days
		(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	(G) = (E)*(F)
1	January	12/01/2018	12/31/2018	12/16/2018	02/15/2019	61.0	$ 424,676	$ 25,905,236
2	February	01/01/2019	01/31/2019	01/16/2019	03/15/2019	58.0	448,670	26,022,860
3	March	02/01/2019	02/28/2019	02/14/2019	04/22/2019	66.5	463,158	30,800,007
4	April	03/01/2019	03/31/2019	03/16/2019	05/17/2019	62.0	442,016	27,404,992
5	May	04/01/2019	04/30/2019	04/15/2019	06/21/2019	66.5	456,382	30,349,403
6	June	05/01/2019	05/31/2019	05/16/2019	07/19/2019	64.0	395,850	25,334,400
7	July	06/01/2019	06/30/2019	06/15/2019	08/16/2019	61.5	441,940	27,179,310
8	August	07/01/2019	07/31/2019	07/16/2019	09/20/2019	66.0	485,368	32,034,288
9	September	08/01/2019	08/31/2019	08/16/2019	10/21/2019	66.0	508,525	33,562,650
10	October	09/01/2019	09/30/2019	09/15/2019	11/18/2019	63.5	509,034	32,323,659
11	November	10/01/2019	10/31/2019	10/16/2019	12/20/2019	65.0	449,519	29,218,735
12	December	11/01/2019	11/30/2019	11/15/2019	01/17/2020	62.5	410,411	25,650,688
13	Average					63.6	$ 5,435,549	$ 345,786,228

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
HQ Expense

Line	Month	Description	Begining of Service Period	End of Service Period	Midpoint of Service Period	Payment Date	Lead Days	Payment Amount	Dollar Weighted Days
			(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	(G) = (E)*(F)
1	January	New England Hydro Transmission - HQ Phase II	01/01/2019	01/31/2019	01/16/2019	01/15/2019	(1.0)	$ 318,573	$ (318,573)
2	February	New England Hydro Transmission - HQ Phase II	02/01/2019	02/28/2019	02/14/2019	02/15/2019	0.5	270,545	135,273
3	March	New England Hydro Transmission - HQ Phase II	03/01/2019	03/31/2019	03/16/2019	03/15/2019	(1.0)	249,205	(249,205)
4	April	New England Hydro Transmission - HQ Phase II	04/01/2019	04/30/2019	04/15/2019	04/15/2019	(0.5)	293,618	(146,809)
5	May	New England Hydro Transmission - HQ Phase II	05/01/2019	05/31/2019	05/16/2019	05/15/2019	(1.0)	335,081	(335,081)
6	June	New England Hydro Transmission - HQ Phase II	06/01/2019	06/30/2019	06/15/2019	06/13/2019	(2.5)	266,016	(665,040)
7	July	New England Hydro Transmission - HQ Phase II	07/01/2019	07/31/2019	07/16/2019	07/15/2019	(1.0)	296,166	(296,166)
8	August	New England Hydro Transmission - HQ Phase II	08/01/2019	08/31/2019	08/16/2019	08/15/2019	(1.0)	358,733	(358,733)
9	September	New England Hydro Transmission - HQ Phase II	09/01/2019	09/30/2019	09/15/2019	09/13/2019	(2.5)	250,270	(625,675)
10	October	New England Hydro Transmission - HQ Phase II	10/01/2019	10/31/2019	10/16/2019	10/15/2019	(1.0)	327,499	(327,499)
11	November	New England Hydro Transmission - HQ Phase II	11/01/2019	11/30/2019	11/15/2019	11/14/2019	(1.5)	327,062	(490,593)
12	December	New England Hydro Transmission - HQ Phase II	12/01/2019	12/31/2019	12/16/2019	12/13/2019	(3.0)	353,720	(1,061,159)
13	Subtotal	New England Hydro Transmission - HQ Phase II					(1.3)	$ 3,646,488	$ (4,739,259)
14	January	Vermont Electric Transmission Co.	01/01/2019	01/31/2019	01/16/2019	01/18/2019	2.0	11,230	22,461
15	February	Vermont Electric Transmission Co.	02/01/2019	02/28/2019	02/14/2019	02/16/2019	1.5	-	0
16	March	Vermont Electric Transmission Co.	03/01/2019	03/31/2019	03/16/2019	03/15/2019	(1.0)	1,972	(1,972)
17	April	Vermont Electric Transmission Co.	04/01/2019	04/30/2019	04/15/2019	04/12/2019	(3.5)	9,948	(34,818)
18	May	Vermont Electric Transmission Co.	05/01/2019	05/31/2019	05/16/2019	05/28/2019	12.0	9,989	119,871
19	June	Vermont Electric Transmission Co.	06/01/2019	06/30/2019	06/15/2019	06/18/2019	2.5	10,167	25,417
20	July	Vermont Electric Transmission Co.	07/01/2019	07/31/2019	07/16/2019	07/17/2019	1.0	13,109	13,109
21	August	Vermont Electric Transmission Co.	08/01/2019	08/31/2019	08/16/2019	08/21/2019	5.0	12,864	64,322
22	September	Vermont Electric Transmission Co.	09/01/2019	09/30/2019	09/15/2019	09/16/2019	0.5	13,772	6,886
23	October	Vermont Electric Transmission Co.	10/01/2019	10/31/2019	10/16/2019	10/18/2019	2.0	14,177	28,354
24	November	Vermont Electric Transmission Co.	11/01/2019	11/30/2019	11/15/2019	11/20/2019	4.5	14,047	63,212
25	December	Vermont Electric Transmission Co.	12/01/2019	12/31/2019	12/16/2019	12/18/2019	2.0	11,282	22,564
26	Subtotal	Vermont Electric Transmission Co.					2.7	$ 122,558	$ 329,405
27	January	NE Electric Transmission - HQ Phase I	01/01/2019	01/31/2019	01/16/2019	01/15/2019	(1.0)	7,707	(7,707)
28	February	NE Electric Transmission - HQ Phase I	02/01/2019	02/28/2019	02/14/2019	02/15/2019	0.5	8,112	4,056
29	March	NE Electric Transmission - HQ Phase I	03/01/2019	03/31/2019	03/16/2019	03/15/2019	(1.0)	9,895	(9,895)
30	April	NE Electric Transmission - HQ Phase I	04/01/2019	04/30/2019	04/15/2019	04/15/2019	(0.5)	9,002	(4,501)
31	May	NE Electric Transmission - HQ Phase I	05/01/2019	05/31/2019	05/16/2019	05/15/2019	(1.0)	8,278	(8,278)
32	June	NE Electric Transmission - HQ Phase I	06/01/2019	06/30/2019	06/15/2019	06/13/2019	(2.5)	12,421	(31,053)
33	July	NE Electric Transmission - HQ Phase I	07/01/2019	07/31/2019	07/16/2019	07/15/2019	(1.0)	6,004	(6,004)
34	August	NE Electric Transmission - HQ Phase I	08/01/2019	08/31/2019	08/16/2019	08/15/2019	(1.0)	7,924	(7,924)
35	September	NE Electric Transmission - HQ Phase I	09/01/2019	09/30/2019	09/15/2019	09/13/2019	(2.5)	8,077	(20,192)
36	October	NE Electric Transmission - HQ Phase I	10/01/2019	10/31/2019	10/16/2019	10/15/2019	(1.0)	9,088	(9,088)
37	November	NE Electric Transmission - HQ Phase I	11/01/2019	11/30/2019	11/15/2019	11/15/2019	(0.5)	-	0
38	December	NE Electric Transmission - HQ Phase I	12/01/2019	12/31/2019	12/16/2019	12/13/2019	(3.0)	5,973	(17,920)
39	Subtotal	NE Electric Transmission - HQ Phase I					(1.3)	$ 92,481	$ (118,507)
40	Average						(1.2)	$ 3,861,527	$ (4,528,361)

Public Service Company of New Hampshire d/b/a Eversource Energy
Retail Transmission Cash Working Capital Requirement
Year Ending December 31, 2019
HQ ICC

Line	Month	Begining of Service Period	End of Service Period	Midpoint of Service Period	Payment Date	Lead Days	Payment Amount	Dollar Weighted Days
		(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	(G) = (E)*(F)
1	January	12/01/2018	12/31/2018	12/16/2018	02/15/2019	61.0	$ (993,282)	$ (60,590,202)
2	February	01/01/2019	01/31/2019	01/16/2019	03/15/2019	58.0	(963,880)	(55,905,040)
3	March	02/01/2019	02/28/2019	02/14/2019	04/22/2019	66.5	(971,646)	(64,614,459)
4	April	03/01/2019	03/31/2019	03/16/2019	05/17/2019	62.0	(973,445)	(60,353,590)
5	May	04/01/2019	04/30/2019	04/15/2019	06/21/2019	66.5	(1,050,405)	(69,851,933)
6	June	05/01/2019	05/31/2019	05/16/2019	07/19/2019	64.0	(1,025,741)	(65,647,424)
7	July	06/01/2019	06/30/2019	06/15/2019	08/16/2019	61.5	(428,726)	(26,366,649)
8	August	07/01/2019	07/31/2019	07/16/2019	09/20/2019	66.0	(726,866)	(47,973,156)
9	September	08/01/2019	08/31/2019	08/16/2019	10/21/2019	66.0	(723,569)	(47,755,554)
10	October	09/01/2019	09/30/2019	09/15/2019	11/18/2019	63.5	(728,544)	(46,262,544)
11	November	10/01/2019	10/31/2019	10/16/2019	12/20/2019	65.0	(736,964)	(47,902,660)
12	December	11/01/2019	11/30/2019	11/15/2019	01/17/2020	62.5	(731,226)	(45,701,625)
13	Average					63.5	$ (10,054,294)	$ (638,924,836)

THE STATE OF NEW HAMPSHIRE

BEFORE THE

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

PREPARED TESTIMONY OF JENNIFER A. ULLRAM

TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM)

Docket No. DE 20-085

Q. Please state your name, business address and your present position.

A. My name is Jennifer A. Ullram. My business address is 107 Selden Street, Berlin, CT 06037. I am employed by Eversource Energy Service Company as Manager of the Connecticut and New Hampshire Rates Departments. In that position I provide service to Eversource Energy's Connecticut and New Hampshire subsidiaries, including Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or the "Company").

Q. Have you previously testified before the Commission?

A. No, I have not previously testified before the Commission in New Hampshire, however; I am responsible for the development, support and implementation of the Company's New Hampshire rate and tariff filings, including the distribution rate case submitted by Eversource to the New Hampshire Public Utilities Commission. In addition, I have testified numerous times in Connecticut at the Public Utilities Regulatory Authority on rate and tariff related matters.

Q. What are your current responsibilities?

A. I am responsible for the Company's rate calculations and design and administration of its Delivery Service tariff.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to propose transmission prices effective August 1, 2020 under the Transmission Cost Adjustment Mechanism ("TCAM"). My testimony proposes specific rates and charges for transmission based on the transmission revenue requirement contained in the attachments to Ms. Menard's and Mr. Mathews' testimony.

Q. Have you calculated specific rates and charges for transmission for all rate classes?

A. Yes, I have. The proposed rates and charges are included in Attachment JAU-1.

Q. Please describe generally the transmission pricing rate design contained in Attachment JAU-1.

A. The rates have been calculated as required by the settlement agreement in Docket No. DE 06-028, in the same manner that they have been calculated since the approval of this settlement. In general, other than Backup Delivery Service Rate B, the Company adjusts all transmission rates by an equal percentage to achieve the overall average transmission rate, in this case, 2.679 cents/kWh.

For Rate B, the settlement agreement provides that transmission costs be recovered through a demand charge, which splits the demand charge into two components for rate calculation purposes: a base component and an incremental component[1]. To calculate the base component, a portion of the TCAM costs are allocated to Rate B based on the class contribution to the Company's demands at the time of the corresponding monthly

[1] For billing purposes, the two components are summed so only one demand charge is billed.

system peaks. These costs are reconciled against actual revenue for the class, with any resulting over- or under-recovery flowing into the rate calculation. The incremental component of the rate is adjusted by the same percentage applied to all other rates. The total demand charges are provided in Attachment JAU-4.

Q. Please describe how the base component of the Rate B demand charge was determined.

A. Please refer to Attachment JAU-2. First, the ratio of average Rate B demands to average total Company demands at the time of the corresponding monthly system peaks was calculated. The calculation of that ratio is shown on Attachment JAU-2, Page 2. The Rate B base component revenue requirement for the forecast period was determined by multiplying the total transmission revenue requirement for the forecast period included in Ms. Menard's Attachment ELM-1, line 16 by the ratio calculated in Attachment JAU-2, Page 2. The result is shown in Attachment JAU-2, Page 1, line 18. The base component reconciliation from the prior period was then added to the base component forecasted revenue requirement to determine the total revenue requirement (Attachment JAU-2, Page 1, line 22). The Rate B base component rate was then determined by dividing the total base component revenue requirement by the projected billing demand. As shown on Attachment JAU-2 Page 1, line 26, that calculation produces a Rate B base component rate of $0.85 per kW or kVA per month.

Q. How did you calculate the base component reconciliation?

A. The base component reconciliation calculation is shown on Page 3 of Attachment JAU-2 and was calculated by multiplying the estimated transmission revenue requirement for

the twelve-month period August 2019 through July 2020 by the base component ratio for the same period. The base component reconciliation for the prior period August 2018 through July 2019 was then added to the base component revenue requirement. The result is shown in Attachment JAU-2, Page 3 line 28. The estimated base component revenue for the period August 2019 through July 2020 was then subtracted from the total base component revenue requirement to determine the base component reconciliation (in this case, an under-recovery of $241,886).

Q. How did you forecast the data to perform the calculations described above?

A. For the contribution to the monthly system peaks, historical data was used as a proxy for what will occur in the prospective period because there is no reliable way to forecast Rate B contributions to peak load. The projected billing demand for Rate B was based on actual historical data, with adjustments that could reasonably be anticipated. The total transmission revenue requirement is based on the forecast provided in Ms. Menard's and Mr. Mathews' testimony.

Q. How did you calculate all other transmission rates and charges?

A. The transmission rate calculations were based on 2014 actual billing determinants. The forecasted TCAM rate of 2.679 cents/kWh provided in ELM-1 was multiplied by 2014 MWH sales to produce the target transmission revenue (Attachment JAU-3, line 15). The Rate B base component revenue shown on Attachment JAU-4 was then subtracted from the target transmission revenue which results in the amount to be recovered from all other customers (Attachment JAU-3, line 17). Revenue and the resulting rates and

charges for all other customer classes were determined by adjusting all currently-effective revenue and rates by an equal percentage to result in the amount necessary to recover the transmission revenue requirement net of the Rate B base amount. The allocation of transmission revenue to each rate class under this methodology is shown on Attachment JAU-3, lines 27 to 39.

Q. Please explain why 2018 sales and demands filed in the PSNH Permanent rate case were not used to calculate bill impacts or used to develop billing determinants.

A. The 2018 Test Year information used in the permanent rate case has not been litigated or approved by the Commission. Based on the current schedule, approval will not occur until later in 2020. Therefore, the Company believes it is appropriate to update transmission class allocations and corresponding billing determinants and after approval of distribution rates in the permanent rate case. Accordingly, the Company plans to incorporate updates consistent with the Commission's approval of revenue allocations and rate design in proposed changes in the July 2021 TCAM filing for rates effective August 1, 2021.

Q. Please describe the bill impacts for a residential customer using 600 kWh per month.

A. A residential customer using 600 kWh per month will see a total bill decrease of $2.86 per month if the customer is taking Default Energy Service from Eversource. This assumes the Commission approves the Company's proposal to spread the 2019 Local Network Service true-up over 24-months as well as approving the Stranded Cost

Recovery Charge as filed. The residential bill impacts are shown in Attachment JAU-6. The proposal related to the 2019 LNS true-up is discussed in more detail in Ms. Menard's and Mr. Mathews' testimony.

Q. Does this complete your testimony?

A. Yes, it does.

Public Service Company of New Hampshire,
d/b/a Eversource Energy
Docket No. DE 20-085
Dated: July 10, 2020
Attachment JAU-1
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TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
TRANSMISSION RATES PROPOSED FOR EFFECT ON AUGUST 1, 2020

Rate	Blocks	(A) Current Rates Effective 08/01/2019 (1)	(B) Proposed Rates Effective 08/01/2020 (2)
R	All KWH	$ 0.02241	$ 0.02924
Uncontrolled Water Heating	All KWH	$ 0.01735	$ 0.02264
Controlled Water Heating	All KWH	$ 0.01735	$ 0.02264
R-OTOD	On-peak KWH	$ 0.02241	$ 0.02924
	Off-peak KWH	$ 0.01463	$ 0.01909
G	Load charge (over 5 KW)	$ 5.78	$ 7.54
	First 500 KWH	$ 0.02089	$ 0.02726
	Next 1,000 KWH	$ 0.00786	$ 0.01026
	All additional KWH	$ 0.00421	$ 0.00549
Space Heating	All KWH	$ 0.02089	$ 0.02726
G-OTOD	Load charge	$ 3.81	$ 4.97
LCS	Radio-controlled option	$ 0.01735	$ 0.02264
	8-hour option	$ 0.01735	$ 0.02264
	10 or 11-hour option	$ 0.01735	$ 0.02264
GV	First 100 KW	$ 7.74	$ 10.10
	All additional KW	$ 7.74	$ 10.10
LG	Demand charge	$ 7.62	$ 9.94
B (3)	Demand charge	$ 1.02	$ 1.51
OL, EOL	All KWH	$ 0.01532	$ 0.01999

Notes:
(1) Current rates are based on a retail average transmission rate of 2.051 ¢/KWH.
(2) Proposed rates are based on a retail average transmission rate of 2.679 ¢/KWH.
(3) The calculation of the Rate B charge is shown on Attachment JAU-4. All other rates have been calculated by adjusting current rates by an equal percentage necessary to recover the remaining transmission revenue requirement.

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TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
RATE B CUSTOMERS

Base Component Revenue Requirement

Total Transmission Revenue Requirement	$ 207,243,987		ELM-1, Page 1, Line 16
Times Base Component Ratio	0.38480%		JAU-2, Page 2, Line 33
Base Component Forecasted Revenue Requirement	$ 797,483		Line 14 x Line 16
Base Component Reconciliation	$ 241,886		JAU-2, Page 3, Line 32
Base Component Revenue Requirement	$ 1,039,369		Line 18 + Line 20
Rate B Projected Billing Demand	1,228,722		
Rate B Base Component per kW or kVA	$ 0.85		Line 22/Line 24

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TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
RATE B CUSTOMERS

Contribution to Coincident System Peak (KW)
Period Ending 7/31/20

	Rate B	Total PSNH	Ratio of Rate B to Total PSNH
Aug-19	2,711	1,524,262	
Sep	2,663	1,208,957	
Oct	1,564	1,000,350	
Nov	7,479	1,217,750	
Dec	9,369	1,303,444	
Jan-20	10,036	1,248,370	
Feb	4,214	1,170,844	
Mar	1,441	1,082,364	
Apr (1)	4,278	1,040,322	
May (1)	10,906	1,351,753	
Jun (1)	2,335	1,446,984	
Jul (1)	1,724	1,664,075	
Average	4,893	1,271,623	0.38480%

(1) Estimated data

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TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
RATE B CUSTOMERS

Estimated Base Component Reconciliation, 12 months Ending July 31, 2020

Prior Period Transmission Revenue Requirement:			
Retail Transmision Operating Costs	$	166,887,951	ELM-1, Page 4, line 21 and Page 5, line 21
(Over)/Underrecovery, 12 month period ending 7/31/2019		(11,595,422)	ELM-1, Page 3, line 44
Return on monthly (over)/underrecovery, 12 month period ending 7/31/2020		(244,036)	ELM-1, Page 4, line 40 and Page 5, line 40
Prior Period Transmission Revenue Requirement	$	155,048,493	Sum of Lines 16 to 18
Base Component Ratio		0.38480%	JAU-2, Page 2, Line 33
Prior Period Base Component Revenue Requirement	$	596,632	Line 20 x Line 22
Base Component Reconciliation for 12-Month Period Ending 7/31/2019		174,955	JAU-2, Page 5, line 32
Total Base Component Revenue Requirement	$	771,587	Line 24 + Line 26
Base Component Revenue (actual through May 2020; June and July 2020 estimated)		529,701	
Estimated Base Component Reconciliation, 12 months Ending 7/31/2020	$	241,886	Line 28 - Line 30

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TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
RATE B CUSTOMERS

Contribution to Legacy NU System Peak (KW)
Period Ending 7/31/2019

	Rate B	Total PSNH	Ratio of Rate B to Total PSNH
Aug-18	4,370	1,526,481	
Sep	7,693	1,164,130	
Oct	4,115	1,179,267	
Nov	8,290	1,270,077	
Dec	4,114	1,382,451	
Jan-19	2,314	1,244,754	
Feb	1,441	1,202,384	
Mar	5,517	1,010,513	
Apr	8,387	1,071,107	
May	2,833	1,499,215	
Jun	1,324	1,680,250	
Jul	1,552	1,560,048	
Average	4,329	1,315,890	0.32899%

TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
RATE B CUSTOMERS

Actual Base Component Reconciliation, 13 months Ending July 31, 2019

Prior Period Transmission Revenue Requirement:			
Retail Transmision Operating Costs	$	163,658,004	ELM-1, P3, Line 21 & 2019 ELM/DFB-1 P4, Line 21
(Over)/Underrecovery, period ending 6/30/2018		(14,731,866)	2019 ELM/DFB-1, P3, Line 44
Return on monthly (over)/underrecovery, period Ending 7/31/2019		(448,089)	ELM-1, P3, Line 40 & 2019 ELM/DFB-1, P4, Line 40
Prior Period Transmission Revenue Requirement	$	148,478,049	Sum of Lines 16 to 18
Base Component Ratio		0.32899%	JAU-2, Page 4, Line 30
Prior Period Base Component Revenue Requirement	$	488,474	Line 20 x Line 22
Base Component Reconciliation for 13-Month Period Ending 7/31/2018		189,265	2019 EAD-2, Page 5, Line 32
Total Base Component Revenue Requirement	$	677,739	Line 24 + Line 26
Actual Base Component Revenue, 12 Month Period Ending 7/31/2019		502,784	
Actual Base Component Reconciliation, 12 months Ending 7/31/2019	$	174,955	Line 28 - Line 30

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TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
ALLOCATION OF AUGUST 1, 2020 TRANSMISSION REVENUE TO CLASS
BASED ON 2014 BILLING DETERMINANTS

				Source
2014 retail billed delivery sales		7,906,557	MWH	
Forecasted TCAM Rate	$	0.02679	per KWH	Attachment ELM-01, Page 1, Line 20
Target transmission revenue	$	211,780	(000)	Line 13 x Line 14
Rate B Base Component Revenue	$	1,003	(000)	Attachment JAU-4, Column C, Line 27
Transmission revenue to be recovered from all other classes	$	210,777	(000)	Line 15 - Line 16

	(1)	(2)	(3)	(4)
Transmission revenue excluding Rate B Base Component	Revenue at 08/01/2019 Rate Level	08/01/2020 Revenue Target	Change Amount	Change Percent Change
Residential Rates R, R-OTOD	$ 70,596	$ 92,121	$ 21,525	30.5%
General Service Rates G, G-OTOD	35,538	46,373	10,836	30.5%
Primary General Service Rate GV	32,688	42,655	9,967	30.5%
GV Rate B - incremental component only	23	30	7	30.5%
Large General Service Rate LG	21,514	28,074	6,560	30.5%
LG Rate B - incremental component only	574	750	175	30.5%
Outdoor Lighting Rates OL, EOL	594	775	181	30.5%
Total (Sum of Lines 27 to 37)	**$ 161,526**	**$ 210,777**	**$ 49,251**	**30.5%**
Rate B Base Component				
GV Rate B - base component	$ 23	$ 39	$ 16	66.7%
LG Rate B - base component	578	964	386	66.7%
Total (Line 43 + Line 44)	**$ 602**	**$ 1,003**	**$ 401**	**66.7%**
Total, all customers (Line 39 + Line 45)	**$ 162,128**	**$ 211,780**	**$ 49,652**	**30.6%**
Total Rate B, incremental plus base:				
Rate GV: Line 32 + Line 43	$ 47	$ 69	$ 23	48.6%
Rate LG: Line 35+ Line 44	1,153	1,714	561	48.6%
Total	$ 1,200	$ 1,783	$ 584	48.6%

Notes:
(1) The result of applying rates effective August 1, 2019 to 2014 billing determinants.
(2) The Rate B base component was taken from Attachment JAU-4. Revenue targets for all other classes were calculated by adjusting current revenues for each class by an equal percentage.
(3) Column (2) - Column (1).
(4) Column (3) / Column (1).

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TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION
CALCULATION OF TRANSMISSION REVENUE AND RATES FOR RATE B CUSTOMERS
BASED ON DE 06-028 SETTLEMENT AGREEMENT ARTICLE V, SECTION 5.1.1. AND
2014 BILLING DETERMINANTS

	(A) 2014 Billing Demand	(B) Base Component of Rate	(C) = (A) x (B) Revenue from Base Component	(D) Allocated Revenue from Incremental Component	(E) = (D) / (A) Incremental Component of Rate	(F) = (B) + (E) Total Base Plus Incremental Rate
Rate B customers on Rate GV	45,945	$ 0.85	$ 39,053	$ 30,364	$ 0.66	$ 1.51
Rate B customers on Rate LG	1,134,264	$ 0.85	$ 964,124	$ 749,617	$ 0.66	$ 1.51
Total Rate B customers	1,180,209		$ 1,003,178	$ 779,981		

Column (B) is from Attachment JAU-2, Page 1, Line 26
Column (D) is from Attachment JAU-3, Column (B), Lines 32 and 35.

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Comparison of Rates Effective August 1, 2019 and Proposed Rates for Effect August 1, 2020
for Residential Service Rate R

(A) Effective Date	(B) Charge	(C) Distribution Charge	(D) Transmission Charge	(E) Stranded Cost Recovery Charge	(F) System Benefits Charge	(G) Electricity Consumption Tax	(H) Energy Service Charge	(I) Total Rate
August 1, 2019	Customer charge (per month)	$ 13.81						$ 13.81
	Charge per kWh	$ 0.04508	$ 0.02241	**$ 0.01764**	**$ 0.00586**	**$ -**	**$ 0.08825**	**$ 0.17924**
August 1, 2020 (Proposed)	Customer charge (per month)	$ 13.81						$ 13.81
	Charge per kWh	$ 0.04508	**$ 0.02924**	**$ 0.01098**	**$ 0.00743**	$ -	**$ 0.07068**	**$ 0.16341**

Calculation of 550 kWh monthly bill, by rate component:

	08/01/2019	08/01/2020	$ Change	% Change in each Component	Change as a % of Total Bill
Distribution	$ 38.60	$ 38.60	$ -	0.0%	0.0%
Transmission	12.33	16.08	3.75	30.4%	3.3%
Stranded Cost Recovery Charge	9.70	6.04	(3.66)	-37.7%	-3.3%
System Benefits Charge	3.22	4.09	0.87	27.0%	0.8%
Electricity Consumption Tax	-	-	-	0.0%	0.0%
Delivery Service	$ 63.85	$ 64.81	$ 0.96	1.5%	0.9%
Energy Service	48.54	38.87	(9.67)	-19.9%	-8.6%
Total	$ 112.39	$ 103.68	$ (8.71)	-7.7%	-7.7%

Calculation of 600 kWh monthly bill, by rate component:

	08/01/2019	08/01/2020	$ Change	% Change in each Component	Change as a % of Total Bill
Distribution	$ 40.86	$ 40.86	$ -	0.0%	0.0%
Transmission	13.45	17.54	4.09	30.4%	3.4%
Stranded Cost Recovery Charge	10.58	6.59	(3.99)	-37.7%	-3.3%
System Benefits Charge	3.52	4.46	0.94	26.7%	0.8%
Electricity Consumption Tax	-	-	-	0.0%	0.0%
Delivery Service	$ 68.41	$ 69.45	$ 1.04	1.5%	0.9%
Energy Service	52.95	42.41	(10.54)	-19.9%	-8.7%
Total	$ 121.36	$ 111.86	$ (9.50)	-7.8%	-7.8%

Calculation of 650 kWh monthly bill, by rate component:

	08/01/2019	08/01/2020	$ Change	% Change in each Component	Change as a % of Total Bill
Distribution	$ 43.11	$ 43.11	$ -	0.0%	0.0%
Transmission	14.57	19.01	4.44	30.5%	3.4%
Stranded Cost Recovery Charge	11.47	7.14	(4.33)	-37.8%	-3.3%
System Benefits Charge	3.81	4.83	1.02	26.8%	0.8%
Electricity Consumption Tax	-	-	-	0.0%	0.0%
Delivery Service	$ 72.96	$ 74.09	$ 1.13	1.5%	0.9%
Energy Service	57.36	45.94	(11.42)	-19.9%	-8.8%
Total	$ 130.32	$ 120.03	$ (10.29)	-7.9%	-7.9%

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Comparison of Rates Effective February 1, 2020 and Proposed Rates for Effect August 1, 2020 for Residential Service Rate R

(A) Effective Date	(B) Charge	(C) Distribution Charge	(D) Transmission Charge	(E) Stranded Cost Recovery Charge	(F) System Benefits Charge	(G) Electricity Consumption Tax	(H) Energy Service Charge	(I) Total Rate
February 1, 2020	Customer charge (per month)	$ 13.81						$ 13.81
	Charge per kWh	$ 0.04508	$ 0.02241	**$ 0.01018**	$ 0.00743	$ -	**$ 0.08306**	**$ 0.16816**
August 1, 2020 (Proposed)	Customer charge (per month)	$ 13.81						$ 13.81
	Charge per kWh	$ 0.04508	**$ 0.02924**	**$ 0.01098**	$ 0.00743	$ -	**$ 0.07068**	**$ 0.16341**

Calculation of 550 kWh monthly bill, by rate component:

	02/01/2020	08/01/2020	$ Change	% Change in each Component	Change as a % of Total Bill
Distribution	$ 38.60	$ 38.60	$ -	0.0%	0.0%
Transmission	12.33	16.08	3.75	30.4%	3.5%
Stranded Cost Recovery Charge	5.60	6.04	0.44	7.9%	0.4%
System Benefits Charge	4.09	4.09	-	0.0%	0.0%
Electricity Consumption Tax	-	-	-	0.0%	0.0%
Delivery Service	$ 60.62	$ 64.81	$ 4.19	6.9%	3.9%
Energy Service	45.68	38.87	(6.81)	-14.9%	-6.4%
Total	$ 106.30	$ 103.68	$ (2.62)	-2.5%	-2.5%

Calculation of 600 kWh monthly bill, by rate component:

	02/01/2020	08/01/2020	$ Change	% Change in each Component	Change as a % of Total Bill
Distribution	$ 40.86	$ 40.86	$ -	0.0%	0.0%
Transmission	$ 13.45	17.54	4.09	30.4%	3.6%
Stranded Cost Recovery Charge	$ 6.11	6.59	0.48	7.9%	0.4%
System Benefits Charge	$ 4.46	4.46	-	0.0%	0.0%
Electricity Consumption Tax	$ -	-	-	0.0%	0.0%
Delivery Service	$ 64.88	$ 69.45	$ 4.57	7.0%	4.0%
Energy Service	49.84	42.41	(7.43)	-14.9%	-6.5%
Total	$ 114.72	$ 111.86	$ (2.86)	-2.5%	-2.5%

Calculation of 650 kWh monthly bill, by rate component:

	02/01/2020	08/01/2020	$ Change	% Change in each Component	Change as a % of Total Bill
Distribution	$ 43.11	$ 43.11	$ -	0.0%	0.0%
Transmission	14.57	19.01	4.44	30.5%	3.6%
Stranded Cost Recovery Charge	6.62	7.14	0.52	7.9%	0.4%
System Benefits Charge	4.83	4.83	-	0.0%	0.0%
Electricity Consumption Tax	-	-	-	0.0%	0.0%
Delivery Service	$ 69.13	$ 74.09	$ 4.96	7.2%	4.0%
Energy Service	53.99	45.94	(8.05)	-14.9%	-6.5%
Total	$ 123.12	$ 120.03	$ (3.09)	-2.5%	-2.5%

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Rate Changes Proposed for Effect on August 1, 2020

Impact of Each Change on Delivery Service Bills
Rate Changes Expressed as a Percentage of Total Delivery Revenue for Each Class

Class	Distribution	Transmission	SCRC	System Benefits	Consumption Tax	Total Delivery Service
Residential	0.0%	6.3%	0.7%	0.0%	0.0%	7.1%
General Service	0.0%	7.0%	0.5%	0.0%	0.0%	7.5%
Primary General Service	0.0%	10.1%	1.1%	0.0%	0.0%	11.2%
GV Rate B	0.0%	6.4%	0.5%	0.0%	0.0%	6.8%
Total Primary General Service	0.0%	10.1%	1.1%	0.0%	0.0%	11.2%
Large General Service	0.0%	11.2%	2.1%	0.0%	0.0%	13.3%
LG Rate B	0.0%	15.6%	2.2%	0.0%	0.0%	17.8%
Total Large General Service	0.0%	11.4%	2.1%	0.0%	0.0%	13.5%
Outdoor Lighting Rate OL	0.0%	1.5%	-0.4%	0.0%	0.0%	1.1%
Energy Efficient Outdoor Lt. Rate EOL	0.0%	1.7%	-0.5%	0.0%	0.0%	1.2%
Total Outdoor Lighting	0.0%	1.6%	-0.4%	0.0%	0.0%	1.1%
Total Retail	0.0%	7.4%	0.8%	0.0%	0.0%	8.3%

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Rate Changes Proposed for Effect on August 1, 2020

Impact of Each Change on Bills including Energy Service
Rate Changes Expressed as a Percentage of Total Revenue for Each Class

Class	Distribution	Transmission	SCRC	System Benefits	Consumption Tax	Energy Service	Total Delivery and Energy
Residential	0.0%	3.6%	0.4%	0.0%	0.0%	-6.5%	-2.5%
General Service	0.0%	3.7%	0.3%	0.0%	0.0%	-7.2%	-3.2%
Primary General Service	0.0%	4.3%	0.4%	0.0%	0.0%	-7.1%	-2.4%
GV Rate B	0.0%	4.8%	0.4%	0.0%	0.0%	-3.1%	2.1%
Total General Service	0.0%	4.3%	0.4%	0.0%	0.0%	-7.1%	-2.4%
Large General Service	0.0%	4.1%	0.8%	0.0%	0.0%	-7.8%	-2.9%
LG Rate B	0.0%	7.1%	1.0%	0.0%	0.0%	-6.7%	1.4%
Total Large General Service	0.0%	4.2%	0.8%	0.0%	0.0%	-7.7%	-2.7%
Outdoor Lighting Rate OL	0.0%	1.2%	-0.3%	0.0%	0.0%	-3.1%	-2.2%
Energy Efficient Outdoor Lt. Rate EOL	0.0%	1.3%	-0.4%	0.0%	0.0%	-3.4%	-2.5%
Total Outdoor Lighting	0.0%	1.2%	-0.3%	0.0%	0.0%	-3.3%	-2.4%
Total Retail	0.0%	3.8%	0.4%	0.0%	0.0%	-6.9%	-2.7%

THE STATE OF NEW HAMPSHIRE

BEFORE THE

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

PREPARED TESTIMONY OF DAVID JAMES BURNHAM

TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM)

Docket No. DE 20-085

Q. Please state your name, business address and your present position.

A. My name is David James Burnham. My business address is 56 Prospect Street, Hartford, CT 06103. I am a Manager of ISO Policy and Economic Analysis at Eversource Energy ("Eversource").

Q. Have you previously testified before the Commission?

A. No, I have not previously testified before the Commission.

Q. What are your current responsibilities?

A. I represent Eversource on several ISO New England and NEPOOL stakeholder committees, including those that focus on transmission-related topics. I am responsible for advising Eversource transmission project teams on stakeholder processes and reporting requirements. Among other things, I oversee the preparation and submission of Transmission Cost Allocation (TCA) filings with ISO New England. I also coordinate Eversource's responses to policy and tariff changes that are developed via the NEPOOL stakeholder processes. Finally, I

oversee assessments of non-transmission alternatives for major transmission projects.

Q. Please describe your educational background.

A. I hold a Bachelor of Engineering from Dartmouth College in Hanover, New Hampshire, and a Master of Science in Electrical Engineering from the University of Texas in Austin, Texas.

Q. Please describe your professional experience.

A. I have experience with transmission planning, project development, and ISO New England markets. I joined Eversource as an electrical engineer supporting economic analysis of major transmission projects and have held positions of increasing responsibility within the transmission business. Prior to joining Eversource, I was an Electrical Engineer within the Office of Electric Reliability at the Federal Energy Regulatory Commission in Washington, DC.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe the transmission planning process at ISO-NE and to provide a detailed description of the projects included in the LNS rates that have been included as part of this Transmission Cost Adjustment Mechanism ("TCAM") filing consistent with the directive of Order No. 25,912 dated June 28, 2016 in Docket No. DE 16-566.

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

A. Yes. Jennifer Ullram is filing testimony in support of the proposed retail transmission rates. In her testimony, Ms. Ullram will detail the rates applicable to each individual rate class. Erica L. Menard and James E. Mathews are filing testimony in support of the calculation of Eversource's TCAM rates effective August 1, 2020 as well as the reconciliation of actual/forecast transmission costs through the reconciliation period ending July 2020, and to describe the year to year change in LNS and RNS rates.

Q. What information have you provided to meet the requirements of Order No. 25,912, dated June 28, 2016, in Docket No. DE 16-566?

A. The ISO-NE transmission planning process is a regionally-coordinated process conducted periodically to reliably meet customer demand, system stability and asset condition needs throughout the region. Broadly speaking, there is an extensive stakeholder process to identify the various needs of the electrical system and the potential solutions to those needs through the development of the regional system plan. As part of that process, ISO-NE will review potential transmission solutions and, in parallel, market participants can develop and propose market alternatives that would resolve the identified needs. Eventually, a preferred solution is selected to address the identified needs.

Eversource employs similar methods to develop a local system plan to address more localized needs of the electric system. A more complete description of this

process is contained in the last Least Cost Integrated Resource Plan submitted on June 19, 2015 in Docket No. 15-248. Bates pages 18-20 of that filing provide descriptions and links to information on both the regional and local system planning processes. While there have been some minor changes to the ISO New England processes since the 2015 filing, the overall description of the process is still accurate.

Additionally, as Attachment DJB-1, I have provided the Actual 2019 Projects in Service greater than $5 million included in Schedule 21-ES, Category A (Local Network Service) for The Connecticut Light and Power Company ("CL&P"), Public Service Company of New Hampshire ("PSNH"), and NSTAR Electric Company (West) ("NSTAR(West)") that are included in the LNS expenses in this filing. The attachment includes CL&P, PSNH and NSTAR(West) because all LNS customers (including PSNH retail customers) pay an average rate under Schedule 21-ES. The attachment details the projects by individual company, project title, total project investment amount and what portion of the project is classified by ISO-New England as a Pool Transmission Facility ("PTF").

Q. Does this conclude your testimony?

A. Yes, it does.

CL&P, PSNH, and NSTAR (West)
Transmission Plant In-Service
2019 Actual

(A) Line	(B) Company	(C) Project Title	(D) Total	(E) PTF
1	CL&P	Transmission Structure Refurb & Replace	$ 243,787,064	$ 239,823,797
2	CL&P	Other CL&P Reliability Projects	$ 54,437,046	$ 31,571,357
3	CL&P	1342 L Rebuild G. Hill to Bokum	$ 19,089,519	$ 19,089,519
4	CL&P	1655-E.Wallingford-Branford Upgrade	$ 16,366,635	$ 16,366,635
5	CL&P	SWCT Projects	$ 9,753,253	$ 9,752,681
6	CL&P	Greater Hartford Central CT Projects	$ 9,255,576	$ 9,255,576
7	CL&P	Relay Replacement Projects	$ 8,183,083	$ 7,558,975
8	CL&P	Card - Montville - Tunnel Partial Rebuild & OPGW	$ 5,366,979	$ 5,366,979
9		**Total CL&P (Sum Lines 1 - 8)**	**$ 366,239,156**	**$ 338,785,520**
10	PSNH	Transmission Structure Refurb & Replace	$ 106,883,283	$ 98,554,354
11	PSNH	Other PSNH Reliability Projects	$ 41,384,205	$ 24,848,203
12	PSNH	System Grounding - NH 345KV LINES	$ 5,760,226	$ 5,760,226
13	PSNH	Portsmouth SS 115KV TRML F107 - SRP	$ 5,125,445	$ 44,937
14		**Total PSNH (Sum Lines 10 - 13)**	**$ 159,153,159**	**$ 129,207,720**
15	NSTAR (West)	Transmission Structure Refurb & Replace	$ 96,130,467	$ 85,999,364
16		**Total NSTAR (West) (Sum Lines 15)**	**$ 96,130,467**	**$ 85,999,364**
17		**Total CL&P, PSNH, and NSTAR (West) (Line 9 + 14 + 16)**	**$ 621,522,782**	**$ 553,992,604**