## Docket DE 21-109 - Exhibit 1



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July 20, 2021

Via electronic mail only Dianne Martin, Chair New Hampshire Public Utilities Commission 21 South Fruit Street, Suite 10 Concord, NH 03301-2429

**RE:** Docket No. DE 21-109 - 2021 Transmission Cost Adjustment Mechanism Public Service Company of New Hampshire d/b/a Eversource Energy

Chair Martin:

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

This revised filing is being made due to an overage of the listed LNS forecasted expense in the amount of approximately \$2.2 million. The correction to the forecasted LNS expense number changed the originally requested TCAM rate of 2.815 cents per kWh downward to 2.785 cents per kWh. This is in comparison to the current overall average rate of 2.758 cents per kWh. Since the change to this number necessitated a revision to the overall requested TCAM rate, in addition to certain calculations, nearly all of the documents included with the original July 8 filing had to be revised. To minimize confusion in evaluation and for presentation and discussion at hearing, the entire filing from July 8 is being refiled to reflect these revisions. All revisions have been preserved in either track changes, or have been highlighted.

Eversource is requesting approval of a forecasted retail transmission rate to be effective August 1, 2021, for a twelve-month billing period, as well as approval of the reconciliation of transmission costs and recoveries for the period of January 2020 through July 2021.

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

Regards, Jessica A. Chiavara

Counsel, Eversource Energy

Attachment cc: 21-109 Service List

## STATE OF NEW HAMPSHIRE before the PUBLIC UTILITIES COMMISSION

Eversource Energy 2021 Transmission Cost Adjustment Mechanism

Docket No. DE 21-109

## 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, 2021. 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, 2021, for a twelve-month billing period, as well as approval of the reconciliation of transmission costs and recoveries for the period of January 2020 through July 2021. The overall average rate for the TCAM is proposed to be 2.785 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

1

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 20, 2021

By: \_\_\_\_\_ Matthew J. Fossum Senior Regulatory Counsel Public Service Company of New Hampshire d/b/a Eversource Energy 780 No. Commercial Street, P.O. Box 330 Manchester, NH 03105-0330 (603) 634-2961 Matthew.Fossum@eversource.com

## **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 20, 2021

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 21-109

1	Q.	Please state your names, business addresses and your present positions.
2	A.	My name is Erica L. Menard. My business address is 780 North Commercial
3		Street, Manchester, NH. I am employed by Eversource Energy Service Company
4		as the Manager of New Hampshire Revenue Requirements and in that position, I
5		provide service to Public Service Company of New Hampshire d/b/a Eversource
6		Energy ("Eversource" or the "Company").
7		My name is James E. Mathews. My business address is 107 Selden Street, Berlin,
8		CT. I am employed by Eversource Energy Service Company as the Manager of
9		Rates and Revenue Requirements, Transmission and in that position, I provide
10		service to the Eversource Energy affiliated companies in Connecticut,
11		Massachusetts and New Hampshire, including the Company.
12	Q.	Have you previously testified before the Commission?
13	A.	Ms. Menard: Yes, I have.
14	A.	Mr. Mathews: Yes, I have.

Joint Testimony of Erica L. Menard and James E. Mathews Docket No. DE 21-109 July 20, 2021 Page 2 of 19

1	Q.	What are your current responsibilities?
2	A.	Ms. Menard: I am currently responsible for the coordination and implementation
3		of revenue requirements calculations for Eversource, as well as the filings
4		associated with Eversource's Energy Service ("ES") rate, Stranded Cost Recovery
<b>5</b>		Charge ("SCRC"), Transmission Cost Adjustment Mechanism ("TCAM"),
6		Regulatory Reconciliation Adjustment mechanism ("RRA"), and Distribution
7		Rates.
8		Mr. Mathews: I am currently responsible for coordination and implementation of
9		transmission rate and revenue requirement calculations for Eversource. I also have
10		responsibility related to transmission rate filings before Eversource's affiliated
11		companies' three state utility commissions, as well as the Federal Energy
12		Regulatory Commission ("FERC").
13	Q.	What is the purpose of your joint testimony?
14	A.	Ms. Menard: My testimony supports Eversource's TCAM filing for rates
15		effective August 1, 2021. The testimony and supporting attachments present the
16		reconciliation through May 2021 for transmission costs as well as the proposed
17		TCAM rate for the forecast period to be effective August 1, 2021.
18		Mr. Mathews: My testimony is to support and describe the year-to-year change in
10		with matters. Wy testimony is to support and describe the year-to-year change in
19		LNS and RNS rates.

Joint Testimony of Erica L. Menard and James E. Mathews Docket No. DE 21-109 July 20, 2021 Page 3 of 19

1 What is Eversource requesting in this filing? **Q**. 2 A. Eversource is requesting approval of a forecasted average retail transmission rate 3 to be effective August 1, 2021, for a twelve-month billing period. In addition, approval of the over- or under-recoveries resulting from the reconciliation of actual 4 transmission costs and revenues as compared to forecasted transmission costs and  $\mathbf{5}$ 6 revenues used in the previous rate filing is being requested. These requests are in 7 accordance with the Commission's approval of the settlement in Docket No. DE 06-028 (Distribution Rate Case), which included a provision for a transmission 8 9 cost adjustment mechanism. 10Q. Will anyone else be providing testimony in support of this filing? 11 A. Yes. Jennifer A. Ullram and David J. Burnham are each filing testimony in 12support of the proposed retail transmission rates. In her testimony, Ms. Ullram 13will 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 1415as describing the planning process at ISO-NE. 16**Q**. Describe the types of costs included in this TCAM filing. 17A. There are two different groups of costs within this TCAM filing. The first group 18 of costs consists of four cost categories of "wholesale transmission" costs. The 19second group consists of two cost categories of "other transmission" costs. The "wholesale transmission" costs are as follows: 20

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1	1) Regional Network Service (RNS) costs
2	2) Local Network Service (LNS) costs
3	3) Reliability costs
4	4) Scheduling and Dispatch (S&D) costs.
5	All of these costs are regulated by the FERC. These costs are discussed below in
6	more detail.
7	1) RNS costs support the regional transmission infrastructure throughout New
8	England. RNS costs are charged to Eversource by ISO-NE based upon tariffs
9	approved by the FERC. RNS costs are billed to all entities in the region that have
10	RNS load responsibility, such as Eversource, based on their monthly peak load.
11	2) LNS costs encompass Eversource's local transmission costs that are not
12	included in the FERC-jurisdictional RNS tariff. These billings are also governed
13	by FERC approved tariffs and are based on costs allocated to Eversource based on
14	load ratio share <sup>1</sup> . Eversource's load ratio share is calculated using a rolling
15	twelve-month coincident peak (12 CP).
16	3) Reliability costs include costs such as Black Start and VAR support that are
17	related to electric reliability. These reliability costs are billed to all entities in the

<sup>&</sup>lt;sup>1</sup> The wholesale Transmission rate transparency settlement, filed at FERC on June 15, 2020, was approved by FERC on December 28, 2020 in Docket No. ER20-2054-000. Under the Settlement, effective January 1, 2022 Local Service revenue requirements will be billed based on state by state unit rates multiplied times the customer's monthly load, in a manner similar to the RNS rate.

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

- 9 A) Hydro-Québec (HQ) Phase I/II support costs and related revenues,
- B) TCAM working capital allowance return, and 10
- 11 C) HQ Interconnection Capacity Credits.

- 12Other transmission costs and revenues A) and B) were previously recovered
- 13through 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 14
- 15Agreement on Permanent Distribution Service Rates" ("Settlement Agreement")
- 16between Eversource, the Commission Staff, and the Office of Consumer Advocate
- 17(OCA) in Docket No. DE 09-035 that was approved in Order No. 25,123. These
- 18costs and revenues are discussed below in more detail.
- 19 A) HQ Phase I/II support costs are costs associated with FERC-approved 20contractual agreements between Eversource and other New England utilities

### Joint Testimony of Erica L. Menard and James E. Mathews Docket No. DE 21-109 July 20, 2021 Page 6 of 19

1	to provide support for, and receive rights related to, transmission and
2	terminal facilities that are used to import electricity from HQ in Canada.
3	Under the amended, extended and restated agreements <sup>2</sup> , Eversource is
4	charged its proportionate share of O&M and capital costs for a twenty-year
5	term that ends on October 31, 2040.
6	Prior to July 1, 2010, Eversource's share of any revenue associated with HQ Phase
7	I/II was returned to customers through the ES rate. Effective July 1, 2010,
8	consistent with the requirements of NHPUC Order No. 25,122, in the 2010 TCAM
9	docket, Docket No. DE 10-158, Eversource began returning its share of any HQ
10	Phase I/II revenues to customers as a revenue credit in the TCAM. That credit
11	continues in the TCAM today <sup>3</sup> .

<sup>&</sup>lt;sup>2</sup> On December 18, 2020 in Docket No. ER21-712-000, the Asset Owners and the IRH Management Committee ("Filing Parties") submitted to FERC for approval an Offer of Settlement ("Settlement") that amended and restated the four Support Agreements and the Use Agreement as part of a comprehensive package that will provide for ongoing financial support of, and related rights and obligations with respect to, the Phase I/II HVDC-TF. The Settlement reflected the exercise by certain IRH of rights under the existing Support Agreements to extend the term of those Support Agreements another twenty years until October 31, 2040. Further, because the Use Agreement by its own terms will remain in effect through expiration of the term of the last Support Agreement, the term of Use Agreement was also extended to October 31, 2040. The Filing Parties asserted that the Phase I/II HVDC-TF are vitally important to both the New England and Québec regions and provide a variety of benefits to consumers in New England. In an order issued on May 20, 2021, FERC accepted the Settlement, finding that it appears to be fair and reasonable and in the public interest. 175 FERC ¶ 61,140 (2020). Materials pertaining to the extension were shared with the Commission, Staff, and OCA in January 2021, and notice of FERC's acceptance of the Settlement was provided to the Commission, Staff, and OCA on May 24, 2021. <sup>3</sup> On April 1, 2021, Public Service Company of New Hampshire ("PSNH") and its affiliates, The Connecticut Light and Power Company ("CL&P") and NSTAR Electric Company ("NSTAR" and together with PSNH and CL&P, "Eversource"), issued a Request for Proposals for the Reassignment of their Use Rights on the Phase I/II HVDC-TF. Proposals were requested for 100% of the Eversource Use Rights or for tranches of their combined Use Rights in bid blocks of 25%, and a fixed dollar proposal was requested. Based on the proposals received, Eversource signed agreements to reassign all of its Use Rights to H.Q. Energy

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1		B) When the TCAM was initially approved in Docket No. DE 06-028, there was
2		no provision for a working capital allowance in the TCAM. The TCAM working
3		capital allowance continued to be included with the distribution working capital
4		allowance. As part of the Settlement Agreement, the distribution revenue
5		requirement calculation excluded working capital on transmission costs.
6		Therefore, the TCAM includes a working capital allowance. An updated lead/lag
7		analysis has been completed for rates effective August 1, 2021 based on the
8		lead/lag study discussed later in this testimony.
9		C) HQ Interconnection Capacity Credits were historically included in the Capacity
10		Expense/Credit portion of the ES rate. With the transition from the Eversource-
11		owned generation energy service rates to the new market solicitation rates effective
12		April 1, 2018, it was appropriate to start including these credits in the TCAM, as
13		that is where HQ Phase I/II Support Costs and Revenue Credits currently are
14		included.
15	Q.	Please describe the overall mechanics of the TCAM as they are presented in
16		this filing.
17	А.	The TCAM is a mechanism that allows Eversource to fully recover defined FERC
18		and/or Commission approved transmission costs. The proposed TCAM rate is

Services (U.S.) Inc. for a one-year term commencing June 1, 2021. All proceeds from the reassignment of Eversource's Use Rights will be credited back on a pro rata basis to the retail customers of PSNH, CL&P and NSTAR. The forecast proceeds as a result of the RFP for the period June 2021 to July 2022 are shown in Attachment ELM-1, pages 2, 3 and 5, line 19.

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1	based on reconciliations of historic transmission costs and forecasted future
2	transmission costs using the latest approved FERC transmission rates.
3	There are two premises that form the basis of the TCAM. First, the TCAM sets
4	transmission rates for a defined future billing period based on transmission cost
5	estimates using current budget and forecast data supported by the latest known
6	FERC approved transmission rates. This future billing period is referred to as the
7	"forecast period". Second, the TCAM provides all available actual cost and
8	revenue (recovery) data referred to as the "reconciliation period". Any over- or

9 under-recoveries that are incurred in the reconciliation period are rolled into the
10 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 2021 through
July 2022. The reconciliation period includes actual results for January 2020
through May 2021 and estimated results for June and July 2021.

# Q. Do the transmission rate forecasts contained in this filing reflect the most current FERC rates that were to be effective on June 1, 2021?

A. Yes. Please see the table below for the current FERC rates that are proposed for
effect on August 1, 2021 and the prior year's FERC rates approved in DE 20-085:

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		DE2	21-109		DE 20	)-085		Chan	ge	
FERC Approved Rates	Description	Aug 21 to Dec 21	Jan 22 to Jul 22 **		Aug 20 to Dec 20	Jan 21 to Jul 21	Au	g to Dec	Jaı	n to Jul
RNS Rate	\$ per kW per year	\$ 140.98	\$ 143.73		\$ 129.26	\$ 129.26	\$	11.72	\$	14.47
	\$ per MWh	\$ 30.39	\$ 30.98		\$ 26.44	\$ 26.44	\$	3.95	\$	4.54
LNS Monthly Expense	Load Ratio Share	21.6%	79.0%		20.9%	20.9%		0.7%		58.1%
	Expense	\$ 2,114,000	\$ 2,059,000		\$ 2,045,700	\$ 2,046,000	\$	68,300	\$	13,000
	\$ per MWh	\$ 4.05	\$ 4.23		\$ 3.85	\$ 3.85	\$	0.20	\$	0.38
** reflects change per t	he Rate Transparen	cv Settlement appr	oved in Docket No. I	ER20	-2054-000					

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

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Q.

	-	
2	A.	As shown in Attachment ELM-1, page 1a, Eversource is proposing a forecasted
3		average TCAM rate of 2.785 cents/kWh as compared to the current average rate of
4		2.758 cents/kWh. The increase in the average TCAM rate is driven primarily by
5		an increase in RNS cost of \$16.9M, <mark>a decrease</mark> in LNS costs of <mark>(\$0.2)</mark> M, an
6		increase in Reliability cost of \$1.6M, a decrease in the forecasted under recovery
7		of \$9.0M, a decrease in the forecasted HQ Interconnection Capacity Credits of
8		\$0.9M, a decrease in Hydro Quebec Support cost of \$1.5M, an increase in the
9		forecasted Revenue Credits of \$7.2M, and decreased other costs of \$1.1M.
10	Q.	In Order No. 26,031 (June 28, 2017) in Docket No. DE 17-081, the
11		Commission noted that there have been changes in the RNS rates as a result
12		of changes in peak demand throughout New England. In that order, the
13		Commission noted that as other states in the region reduce their share of peak
14		load relative to the total, New Hampshire's share of the peak, and allocation
15		of costs, increases. The Commission stated that it expected the Company to

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# filings. What efforts has Eversource made to address peak demand in New Hampshire?

3	A.	As the Company described during the hearing in Docket No. DE 17-081, energy
4		efficiency programs reduce consumption of energy (kWh), and costs, for
5		customers across New Hampshire. The efficiency measures that reduce kWh often
6		also reduce electric demand (kW) at the ISO-NE, distribution and customer level
7		during peak periods. The New Hampshire 3-Year Energy Efficiency Plan per
8		Docket No. DE 17-136 included revised estimates of kW savings for 2020 during
9		ISO-NE summer and winter peak hours. Per the end of year filing the efficiency
10		measures installed in 2020 were estimated to achieve 11.8 MW in summer peak
11		demand reduction and 13.5 MW in winter peak demand reduction. The settlement
12		agreement submitted for Commission approval in Docket No. DE 20-092 for the
13		New Hampshire 3-Year Energy Efficiency plan for 2021-2023 was filed in
14		December 2020 included proposed estimates of kW savings. The efficiency
15		measures proposed for 2021-2023 were estimated to achieve 42.3 MW in summer
16		peak demand reduction and 38.4 MW in winter peak demand reduction <sup>4</sup> . As with
17		the kWh savings, the demand savings will persist over the lifetime of the measures
18		installed. The proposed 3-Year Energy Efficiency plan for 2021-2023 has not yet
19		been approved by the Commission as of the filing of this testimony. In the interim,
20		the Commission has ordered a short-term extension of existing 2020 Energy

<sup>&</sup>lt;sup>4</sup> There has been no final Order in DE 20-092 approving the proposed plan. These figures are therefore draft and subject to change based on changes that may be made to savings assumptions, programs and other elements determined by a final Order.

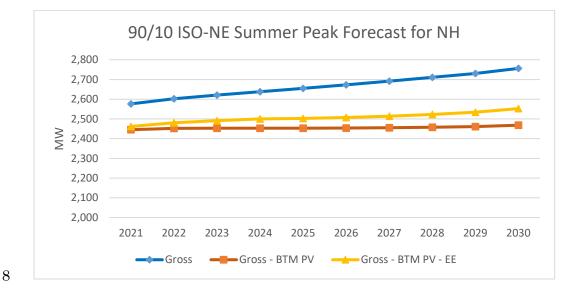
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1	Efficiency Programs and System Benefits Charge rates. As a result, budgets for
2	2021 are expected to track closer to those approved for 2020, with savings and
3	peak demand reductions likely lower than those of 2020 due to new realization
4	rates and net-to-gross factors included in the 2021 New Hampshire Technical
5	Reference Manual.

ISO-NE has recognized the impact of these energy efficiency measures on its peak demand forecast for New Hampshire, as shown in the below chart<sup>5</sup>:

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7



9 As is the case in New Hampshire, the majority of demand savings from energy 10 efficiency programs in the region are achieved as a secondary benefit of the 11 measures designed to generate kWh savings. However, New Hampshire efficiency 12 programs have been monitoring demand management demonstrations and

<sup>13</sup> programs taking place in other states to advance tailored methodologies for

<sup>&</sup>lt;sup>5</sup> Graphical representation of the 90/10 data contained in the Final 2021 CELT Report published May 1, 2021, using data from the 6.2 Forecasts for Transmission tab. <u>https://www.iso-ne.com/system-planning/system-plans-studies/celt</u>

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1		adoption in New Hampshire. The 2018-2020 New Hampshire 3-Year Energy
2		Efficiency Plan includes a section on Capacity Demand Management that
3		describes many of the demand offerings being monitored as viable possibilities to
4		model in state. In 2019 the Company proposed and implemented an active demand
5		reduction offering: the 2019 NH Commercial and Industrial Active Demand
6		Reduction (ADR) Initiative. Results indicated that the 2019 ADR Initiative
7		achieved 3.9 MW in summer peak demand reduction. For 2020 the ADR Initiative
8		was expanded to include residential offerings and results indicate a reduction of
9		12.0 MW in summer peak demand. For the 2021-2023 term, the Company will
10		build upon the demonstrations offered in 2019 and 2020 and explore new active
11		demand reduction offerings during the term. Based upon its success to date, the
12		Company has proposed shifting the Commercial and Industrial demonstration to a
13		full program for the 2021-2023 term. The active demand measures proposed for
14		2021-2023 were estimated to achieve 44.3 MW in summer peak demand reduction.
15	Q.	Has Eversource taken any other direct efforts to reduce peak demand in New
16		Hampshire?
17	A.	Yes, Eversource has developed a Commercial and Industrial Demand Reduction
18		Initiative as part of its energy efficiency offerings. This initiative was approved as
19		part of the 2019 Update plan in Docket No. DE 17-136. Under an ADR approach,
20		customers agree to respond to an event call targeting conditions that typically
21		result in peak reductions through curtailment service providers ("CSPs")-vendors
22		who identify curtailable load, enroll customers, manage curtailment events, and

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1		calculate payments. The customer is incentivized to respond to event calls using
2		performance-based incentives. This approach is technology agnostic and can
3		utilize single end-use control strategies or a multitude of approaches that can
4		reduce demand when an event is called. This typically entails customers using
5		lighting with both manual and automated controls, HVAC with both manual and
6		automated controls, process loads, scheduling changes, excess Combined Heat &
7		Power (CHP) capacity, and energy storage to reduce demand. The residential ADR
8		demonstration and proposed program consists of two main bring-your-own-device
9		offerings: Battery Storage and Wi-Fi thermostats. For the 2021-2023 term, the
10		New Hampshire Utilities will also explore electric vehicle (EV) load management
11		as a third offering.
		······································
12	Q.	Did Eversource conduct a lead/lag study for the TCAM as required in Order
	Q.	
12	<b>Q.</b> A.	Did Eversource conduct a lead/lag study for the TCAM as required in Order
12 13		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?
12 13 14		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? Yes, Eversource conducted a lead/lag study for the TCAM and provides that
12 13 14 15		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? 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 will be applied
12 13 14 15 16		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? 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 will be applied effective August 1, 2021. This lead/lag study methodology is substantially the
12 13 14 15 16 17	A.	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? 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 will be applied effective August 1, 2021. This lead/lag study methodology is substantially the same as the one provided in Docket No. DE 20-085.

to make payment for applicable operating costs. The difference between those two
 numbers is used as the basis to estimate cash working capital requirements.

3

4

## Q. Please describe the lead/lag study completed for the TCAM provided as

Attachment ELM-2.

A. The Lead/Lag Study consists of 15 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.

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

Revenue lag is the time, measured in days, between delivery of a service to 12A. 13Eversource customers and the receipt by Eversource of the payment for such service. 14Similarly, 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 15payment for such service by Eversource. Since base rates are based on revenue and 1617expenses booked on an accrual basis, the revenue lag results in a need for capital 18while the expense lead offsets this need to the extent the Company is typically not 19required to reimburse its vendors until after a service is provided.

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## 1 Q. How is the retail revenue lag computed?

2	A.	The retail revenue lag consists of a "meter reading or service lag," "collection lag"
3		and a "billing lag." The sum of the days associated with these three lag components
4		is the total retail revenue lag experienced by Eversource. See Attachment ELM-2,
5		Page 7 of 15.
6	Q.	What lag does the Lead/Lag Study reveal for the component "meter reading or
7		service lag?"
8	A.	The Lead/Lag Study reveals a lag of 15.2 days. This lag was obtained by dividing
9		the number of billing days in the test year by 12 months and then in half to arrive at
10		the midpoint of the monthly service periods.
11	Q.	How was the "collection lag" calculated and what was the result?

A. The conection ag for TCAW totaled 27.2 days. This tag reflects the time detay between the mailing of customer bills and the receipt of the billed revenues from customers. The 27.2-day lag was arrived at by a thorough examination of TCAM accounts receivable balances using the accounts receivable turnover method. Endof-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 7 calculated the average daily revenue amount by dividing total revenue by 365 days. The resulting Collection Lag Joint Testimony of Erica L. Menard and James E. Mathews Docket No. DE 21-109 July 20, 2021 Page 16 of 19

is derived by dividing the average daily accounts receivable balance by the average
 daily revenue amount to arrive at the Collection lag of 27.2 days.

3 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. Consistent with last year's filing the Company's billing lag
calculation accounts for this additional lag. The updated lead/lag study uses a 1.48day billing lag as shown in Attachment ELM-2, Page 9. An exception for large
customers which may require additional time to process has not been made in this
calculation.

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

A. Yes. The total retail revenue lag of 43.9 days is computed by adding the number of
days associated with each of the three retail revenue lag components. See,
Attachment ELM-2, Page 7. 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.

# 17 Q. Please explain how the RNS, S&D, LNS, Reliability, HQ expenses, and HQ 18 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

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1		category were determined, they were summarized and dollar weighted according to
2		2020 actual annual amounts to arrive at the lead days. These calculations are shown
3		in Attachment ELM-2, pages 10 through 15.
4	Q.	Please explain how the Eversource Energy Service Company (EESC) due date
5		is determined related to LNS billings.
6	А.	Per the terms of the Service Contract between the Company and EESC, bills are
7		rendered for each calendar month on or before the twentieth day of the succeeding
8		month and are payable upon presentation and not later than the last day of that
9		month.
10	Q.	Has the Company included an expense lead for the 2019 LNS true-up amount
10 11	Q.	Has the Company included an expense lead for the 2019 LNS true-up amount that was accounted for in July 2020? If so, please explain how the expense
	Q.	
11	Q.	that was accounted for in July 2020? If so, please explain how the expense
11 12	Q. A.	that was accounted for in July 2020? If so, please explain how the expense lead is determined relative to 2019 LNS true-up amount compared to the
11 12 13		that was accounted for in July 2020? If so, please explain how the expense lead is determined relative to 2019 LNS true-up amount compared to the current month LNS billing in July 2020.
11 12 13 14		<ul> <li>that was accounted for in July 2020? If so, please explain how the expense</li> <li>lead is determined relative to 2019 LNS true-up amount compared to the</li> <li>current month LNS billing in July 2020.</li> <li>Yes. As shown in Attachment ELM-2, Page 12, the expense lead for the prior year</li> </ul>
11 12 13 14 15		<ul> <li>that was accounted for in July 2020? If so, please explain how the expense</li> <li>lead is determined relative to 2019 LNS true-up amount compared to the</li> <li>current month LNS billing in July 2020.</li> <li>Yes. As shown in Attachment ELM-2, Page 12, the expense lead for the prior year</li> <li>2019 LNS true up under recovery is determined by calculating the number of days</li> </ul>

1	Q.	Please explain how the change in RNS rates impacts the Company's proposed
2		revenue requirement.
3	А.	The RNS rate effective June 1, 2021 and January 1, 2022 increased as compared to
4		the prior RNS rate due to forecasted incremental investments in transmission
<b>5</b>		infrastructure. The TCAM thus reflects higher RNS costs attributable to the
6		Company in accordance with applicable FERC-approved tariffs.
7	Q.	Would you summarize the Company's proposal regarding Cash Working
8		Capital?
9	A.	Based on the results of the lead/lag analysis of Eversource TCAM Cash Working
10		Capital, the Company identified an RNS working capital component of (19.4)
11		days, or (5.32) percent, an S&D working capital component of (19.4) days, or
12		(5.32) percent, an LNS working capital component of (131.4) days, or (35.99)
13		percent, a Reliability working capital component of (19.4) days, or (5.31)
14		percent, an HQ Expense working capital component of 44.7 days, or 12.24
15		percent, and an HQ ICC working capital component of (19.5) days or (5.35)
16		percent. Application of these values results in a total forecasted cash working
17		capital allowance of (\$20.346) million and a forecasted return on working capital
18		of (\$1.780) million for the forecasted period of August 2021 through July 2022.

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1	Q.	Does Eversource require Commission approval of this rate by a specific date?
2	A.	Yes, Eversource is requesting final approval of the proposed TCAM rate change
3		by July 26, 2021 to allow for the implementation of an August 1, 2021 change in
4		rates.
_	0	

- 5 Q. Does this conclude your testimony?
- 6 A. Yes, it does.

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

### Page Attachment ELM - 1

- 1 TCAM Rate Calculation August 2021 through July 2022
- 1a TCAM Rate Calculation Comparison of Forecast to Currently Allowed TCAM
- 2 Forecast Costs August 2021 through January 2022
- 3 Forecast Costs February 2022 through July 2022
- 4 Actual Costs January 2020 through July 2020
- 5 Actual Costs August 2020 through January 2021
- 6 Actual and Forecast Costs February 2021 through July 2021
- 7 Actual Revenues January 2020 through July 2020
- 8 Actual Revenues August 2020 through January 2021
- 9 Actual and Forecast Revenues February 2021 through July 2021

#### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION (Dollars in 000s)

1	TCAM Rate Calculation August 2021 Through July 2022	orecast ummary	Reference: Attachment ELM-1
2			
3	Regional Network Service (RNS)	\$ 187,667	Page 3
4	Scheduling and Dispatch (S&D)	2,461	Page 3
5	Local Network Service (LNS)	27,146	Page 3
6	Reliability	7,633	Page 3
7	Hydro-Quebec Interconnection Capacity Credits	(5,556)	Page 3
8	Hydro-Quebec Support Costs	3,513	Page 3
9	Return on TCAM Working Capital	(1,712)	Page 3
10	Revenue Credits	(12,176)	Page 3
11		 · · ·	-
12	Total Forecasted Costs	\$ 208,977	
13			
14	Cumulative Estimated (Over) / Under Recovery	4,778	Page 6
15			C C
16	Total Costs	\$ 213,755	
17			
18	Forecasted Retail MWH Sales	7,673,863	Page 3
19		 ,,	
20	Forecasted TCAM Ratecents per kWh	2.785	
21			
21			

22

23

### 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	F	orecast		Currently lowed (1)	(A)	-(B)=(C)	
1 Comparison of Forecast to Currently Allowed	12 mths- 07/2022			2 mths- 07/2021	Delta		
<ul> <li>2</li> <li>3 Regional Network Service (RNS)</li> <li>4 Scheduling and Dispatch (S&amp;D)</li> <li>5 Local Network Service (LNS)</li> <li>6 Reliability</li> <li>7 Hydro-Quebec Interconnection Capacity Credits</li> <li>8 Hydro-Quebec Support Costs</li> <li>9 Return on TCAM Working Capital</li> <li>10 Revenue Credits</li> </ul>	\$	187,667 2,461 27,146 7,633 (5,556) 3,513 (1,712) (12,176)	\$	170,758 2,312 27,371 6,048 (6,409) 4,969 (481) (4,969)	\$	16,910 149 (224) 1,586 853 (1,456) (1,231) (7,207)	
11 12 Sub-total 13 14 Prior Period (Over) / Under Recovery 15	\$	208,977 4,778	\$	199,597 13,821	\$	9,380 (9,043)	
16 Total 17 18 Retail MWH Sales 19 20 TCAM Ratecents per kWh	\$	213,755 7,673,863 2.785	\$	213,418 7,737,205 2.758	\$	337 (63,342) 0.027	
21							

22 (1) DE 20-085; Order No. 26,386 dated July 31, 2020

23

#### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION August 2021 through January 2022 (Dollars in 000s)

_				Forecast			
1 <u>Retail Transmission Cost</u>	August 2021	September 2021	October 2021	November 2021	December 2021	January 2022	Six Months August-January Subtotal
2 3 Regional Network Service (RNS) 4	19,780	18,353	16,754	13,405	13,835	15,182	97,309
5 Scheduling and Dispatch (S&D) 6	262	243	222	178	183	197	1,286
7 Local Network Service (LNS) (1)	2,295	2,295	2,295	2,295	2,295	2,253	13,726
9 Reliability 10	630	630	630	630	630	630	3,781
11 Hydro-Quebec Interconnection Capacity Credits	(476)	(476)	(476)	(476)	(476)	(476)	(2,859)
13 Hydro-Quebec Support Costs	316	316	316	316	316	276	1,856
15 Return on TCAM Working Capital Allowance (2))	(163)	(156)	(149)	(133)	(135)	(140)	(876)
17 (Over) Recovery TCAM, previous TCAM Year	4,778	-	-	-	-	-	4,778
19 Revenue Credits (3)	(1,015)	(1,015)	(1,015)	(1,015)	(1,015)	(1,015)	(6,088)
21 Retail Transmission Operating Costs	6 26,406	\$ 20,189	\$ 18,577	\$ 15,200	\$ 15,633	\$ 16,908	\$ 112,913
23 Estimated Retail MWH Sales 24 25	716,323	602,148	597,054	591,264	664,259	698,502	3,869,550
26 Note 1 - LNS includes the following: 27 28	August 2021	September 2021	October 2021	November 2021	December 2021	January 2022	August-January Subtotal
29         LNS - ISO-NE Current Month           30         LNS - ISO-NE Prior Year True-Up	5 2,114 -	\$     2,114 -	<b>\$</b> 2,114 -	\$      2,114 -	\$      2,114 -	\$ 2,073 -	<mark>\$ 12,643</mark>
31   LNS - HQ Current Month     32   LNS Total	181 2,295	181 \$ 2,295	181 \$ 2,295	181 \$2,295	<u>181</u> \$2,295	181 \$ 2,253	1,083 \$ 13,726

33
 34 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.
 35

36 Note 3 - Revenue credits represent Hydro-Quebec (H-Q) revenues associated with the H-Q support contract. 37 38

#### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION February 2022 through July 2022 (Dollars in 000s)

				Forecast				
1 Retail Transmission Cost	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022	Six Months February-July Subtotal	Twelve Months August 21 - July 22 Total
2 3 Regional Network Service (RNS) 4	15,891	14,777	14,220	12,578	15,134	17,758	90,358	187,667
5 Scheduling and Dispatch (S&D) 6	207	192	185	164	197	231	1,175	2,461
7 Local Network Service (LNS) (1) 8	2,350	2,198	2,122	1,898	2,247	2,605	13,420	27,146
9 Reliability 10	630	645	645	645	645	645	3,853	7,633
11 Hydro-Quebec Interconnection Capacity Credits	(476)	(476)	(476)	(476)	(395)	(395)	(2,697)	(5,556)
13 Hydro-Quebec Support Costs 14	276	276	276	276	276	276	1,657	3,513
15 Return on TCAM Working Capital Allowance (2) 16	(147)	(137)	(132)	(117)	(140)	(164)	(836)	(1,712)
17 (Over) Recovery TCAM, previous TCAM Year 18	-	-	-	-	-	-	-	4,778
19 Revenue Credits (3) 20	(1,015)	(1,015)	(1,015)	(1,015)	(1,015)	(1,015)	(6,088)	(12,176)
21 Retail Transmission Operating Costs 22	\$ 17,716	\$ 16,460	\$ 15,825	\$ 13,952	\$ 16,948	\$ 19,941	\$ 100,842	\$ 213,755
23 Estimated Retail MWH Sales 24	614,564	661,574	582,532	581,373	632,873	731,396	3,804,312	7,673,863
25 Note 1 - LNS includes the following: 26	February	March	April	May	lune	huh c		
27	February 2022	2022	April 2022	May 2022	June 2022	July 2022	February-July Subtotal	
28         LNS - ISO-NE Current Month           29         LNS - ISO-NE Prior Year True-Up           30         LNS - HQ Current Month	2,170 - 181	2,018 - 181	1,942 - 181	1,717 - 181	2,066 - 181	2,425 - 181	\$ 12,337 - 1,083	
31 LNS Total 32	-	<u>\$ 2,198</u>	<u>\$ 2,122</u>			\$ <u>2,605</u>	<u>\$ 13,420</u>	

Note 2 - The return on the working capital allowance is based on the calculation provided in the Lead/Lag Analysis Attachment ELM-2, Page 2, Line 21.
Sote 3 - Revenue credits represent Hydro-Quebec (H-Q) revenues associated with the H-Q support contract.
a

## PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION January 2020 - July 2020 (Dollars in 000s)

	Actual Balance lapuany February March April May lune luiky													
1 Retail Transmission Costs	Balance 12/31/2019		January 2020	February 2020	March 2020	April 2020	May 2020	June 2020	July 2020	Total	Reference			
2 3 Retail Transmission Operating Revenues		\$	(13,618) \$	(12,266) \$	(12,900) \$	(11,208) \$	(11,866) \$	(14,268) \$	(16,060) \$	(92,186)	ELM-1, Pg 7			
5 Regional Network Service (RNS)			12,117	11,609	10,893	10,073	9,679	12,571	15,071	82,012				
6 7 Scheduling and Dispatch			172	165	155	143	138	179	203	1,156				
8 9 Local Network Service (LNS) (1)			2,236	2,231	2,237	2,341	2,358	2,537	17,843	31,784				
10 11 Reliability			481	505	514	497	481	497	590	3,565				
12 13 Hydro-Quebec Interconnection Capacity Credits			(718)	(709)	(717)	(718)	(743)	(735)	(431)	(4,771)				
14 15 Hydro-Quebec Support Costs			310	365	293	338	370	419	388	2,483				
16 17 Return on TCAM Working Capital Allowance (2)			(45)	(42)	(40)	(35)	(33)	(45)	(32)	(272)				
18 19 Revenue Credits (3)			(310)	(365)	(293)	(338)	(370)	(419)	(410)	(2,505)				
20 21 Retail Transmission Operating Costs		\$	14,244 \$	13,759 \$	13,042 \$	12,302 \$	11,880 \$	15,004 \$	33,223 \$	113,453				
22 23 (Over) / Under-Recovery		\$	626 \$	1,492 \$	142 \$	1,094 \$	14 \$	736 \$	17,164 \$	21,268				
24 25 Cumulative (Over) / Under-Recovery (4)	\$ (9,894)	)\$	(9,268) \$	(7,775) \$	(7,633) \$	(6,540) \$	(6,526) \$	(5,790) \$	11,374					
26 27 <u>Calculation of Return/Deferral</u>														
28 29 Average Balance 30			(9,581)	(8,522)	(7,704)	(7,087)	(6,533)	(6,158)	2,792					
31 Deferred tax calculation 32 Deferred tax rate			27.083%	27.083%	27.083%	27.083%	27.083%	27.083%	27.083%					
33 34 ADIT on the average balance		\$	2,595 \$	2,308 \$	2,087 \$	1,919 \$	1,769 \$	1,668 \$	(756)					
35 36 Average Balance, Net of ADIT		\$	(6,986) \$	(6,214) \$	(5,618) \$	(5,167) \$	(4,764) \$	(4,490) \$	2,036					
37 38 x Return at Prime Rate			0.3958%	0.3958%	0.3150%	0.2708%	0.2708%	0.2708%	0.2708%					
39 40 Return-Monthly		\$	(28) \$	(25) \$	(18) \$	(14) \$	(13) \$	(12) \$	6 \$	(103)				
41 42 Cumulative Return		\$	(28) \$	(52) \$	(70) \$	(84) \$	(97) \$	(109) \$	(103)					
43 44 Cumulative (Over) / Under Recovery, Including Return		\$	(9,295) \$	(7,828) \$	(7,703) \$	(6,624) \$	(6,623) \$	(5,899) \$	11,270					
45           46 Note 1 - LNS includes the following:           47         LNS - ISO-NE Current Month           48         LNS - ISO-NE Prior Year True-Up           49         LNS - HQ Current Month           50         LNS Total           51         51		\$	2,011 \$ - - 2,236 \$	209	2,026 \$ - - 211 2,237 \$	2,025 \$ - 317 2,341 \$	2,049 \$ - - 2,358 \$	2,132 \$ - - 405 2,537 \$	2,086 \$ 15,546 212 17,843 \$	14,350 15,546 <u>1,888</u> 31,784				

51
52 Note 2 - The return on the working capital allowance per Attachment ELM-2, Page 3, Line 18.
53
54 Note 3 - Revenue credits include Hydro-Quebec revenues.
55
56 Note 4 - Cumulative (Over) / Under Recovery at 12/31/2019 per DE 20-085 Attachment ELM-1, Page 4, Line 44
57
58 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 - January 2021 (Dollars in 000s)

							Act	tual	I							
1 <u>Retail Transmission Costs</u>	Balance 07/31/2020		August 2020	S	eptember 2020	(	October 2020	N	ovember 2020		ember )20	•	January 2021		Total	Reference
2 3 Retail Transmission Operating Revenues		\$	(18,809)	\$	(18,660)	\$	(16,822)	\$	(16,894) \$	6 (	18,777)	\$	(18,040)	\$	(108,002)	ELM-1, Pg 8
4 5 Regional Network Service (RNS)			18,452		17,546		14,012		11,313		12,898		13,897		88,118	
6 7 Scheduling and Dispatch 8			249		237		189		153		174		112		1,114	
9 Local Network Service (LNS) (1) 10			2,263		2,258		2,271		2,248		2,083		2,341		13,464	
11 Reliability 12			533		602		582		555		475		591		3,337	
13 Hydro-Quebec Interconnection Capacity Credits 14			(578)		(576)		(584)		(567)		(583)		(577)		(3,465)	
15 Hydro-Quebec Support Costs 16			368		312		334		205		236		270		1,726	
17 Return on TCAM Working Capital (2) 18			(63)		(59)		(40)		(28)		(37)		(36)		(264)	
19 Revenue Credits (3) 20			(368)		(312)		(334)		(205)		(236)		(270)		(1,726)	
21 Retail Transmission Operating Costs 22		\$	20,857	\$	20,008	\$	16,429	\$	13,673 \$	5	15,009	\$	16,328	\$	102,304	
23 (Over) / Under-Recovery 24		\$	2,048	\$	1,348	\$	(392)	\$	(3,220) \$	5	(3,768)	\$	(1,712)	\$	(5,697)	
25 Cumulative (Over) / Under-Recovery 26	\$ 11,270	\$	13,318	\$	14,666	\$	14,274	\$	11,053 \$	5	7,285	\$	5,573			
27 Calculation of Return/Deferral 28																
29 Average Balance 30			12,294		13,992		14,470		12,663		9,169		6,429			
31 Deferred tax calculation 32 Deferred tax rate			27.083%		27.083%		27.083%		27.083%	2	7.083%		27.083%			
33 34 ADIT on the average balance		\$	(3,330)	\$	(3,789)	\$	(3,919)	¢	(3,430) \$		(2,483)		(1,741)			
35 36 Average Balance, Net of ADIT		\$	8,964		10,202		10,551		9,234		6,686		4,688			
37 38 x Return at Prime Rate		Ŷ	0.2708%	Ŷ	0.2708%	Ŷ	0.2708%	Ŷ	0.2708%		.2708%		0.2708%			
39 40 Return-Monthly		\$	24	\$		\$		\$	25 \$		18	\$		\$	136	
41					-									Ψ	100	
42 Cumulative Return 43		\$	24	\$	52	\$	80	\$	105 \$	6	124	\$	136			
44 Cumulative (Over) / Under Recovery, Including Return 45		\$	13,342	\$	14,718	\$	14,354	\$	11,159 \$	6	7,408	\$	5,709			
46 Note 1 - LNS includes the following:																
47 LNS - ISO-NE Current Month		\$	2,104	\$	2,114	\$	2,130	\$	2,132 \$	5	2,140	\$	2,132	\$	12,751	
48 LNS - ISO-NE Prior Year True-Up 49 LNS - HQ Current Month			-		-		-		-		- (57)		- 209		- 712	
50 LNS - HQ Current Month		\$	159 2,263	\$	2,258	\$	141 2,271	\$	2,248		2,083	\$		\$	13,464	
51		Ψ	2,203	Ψ	2,200	Ψ	2,211	Ψ	2,240 4	,	2,003	Ψ	2,041	Ψ	10,404	

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 February 2021 - July 2021 (Dollars in 000s)

				ctual				Fore	cast			
Retail Transmission Costs	Balance 01/31/2021	F	ebruary 2021	Narch 2021	April 2021		<i>l</i> lay 021	June 2021		July 2021	Total	Refe
Retail Transmission Operating Revenues		\$	(17,955)	\$ (17,092)	\$ (15,369)	\$	(16,886)	\$ (17,643)	\$	(20,204)	\$ (105,149)	ELM-
Regional Network Service (RNS)			13,427	13,484	13,166		10,731	14,707		17,281	82,796	
Scheduling and Dispatch (S&D)			112	107	105		88	182		229	823	
Local Network Service (LNS) (1)			2,285	2,294	2,331		10,004	2,418		2,295	21,627	
Reliability			621	631	641		618	630		630	3,771	
Hydro-Quebec Interconnection Capacity Credits			(573)	(579)	(578)		(585)	(476)		(476)	(3,268)	
Hydro-Quebec Support Costs			210	212	222		241	243		316	1,445	
Return on TCAM Working Capital (2)			(36)	(36)	(34)		66	(41)		(54)	(134)	
Revenue Credits (3)			(210)	(212)	(222)		(241)	(1,015)		(1,015)	(2,915)	
Retail Transmission Operating Costs		\$	15,836	\$ 15,902	\$ 15,632	\$	20,922	\$ 16,648	\$	19,206	\$ 104,146	
(Over) / Under-Recovery		\$	(2,118)	\$ (1,190)	\$ 263	\$	4,036	\$ (995)	\$	(998)	\$ (1,002)	
Cumulative (Over) / Under-Recovery	\$ 5,709	\$	3,591	\$ 2,401	\$ 2,664	\$	6,700	\$ 5,705	\$	4,707		
Calculation of Return/Deferral												
Average Balance			4,650	2,996	2,532		4,682	6,203		5,206		
Deferred tax calculation Deferred tax rate			0.000%	0.000%	0.000%		0.000%	0.000%		0.000%		
ADIT on the average balance		\$	-	\$ -	\$ -	\$	-	\$ -	\$	-		
Average Balance, Net of Accum. Def. Income Taxes		\$	4,650	\$ 2,996	\$ 2,532	\$	4,682	\$ 6,203	\$	5,206		
x Return at Prime Rate			0.2708%	0.2708%	0.2708%	0	).2708%	0.2708%		0.2708%		
Return-Monthly		\$	13	\$ 8	\$ 7	\$	13	\$ 17	\$	14	\$ 71	
Cumulative Return		\$	13	\$ 21	\$ 28	\$	40	\$ 57	\$	71		
Cumulative (Over) / Under Recovery, Including Return		\$	3,604	\$ 2,421	\$ 2,691	\$	6,740	\$ 5,762	\$	4,778		
Note 1 - LNS includes the following: LNS - ISO-NE Current Month LNS - ISO-NE Prior Year True-Up		\$	2,118 -	\$ 2,125 -	\$ 2,115	\$	2,087 7,656	\$ 2,114 -	\$	2,114	\$ 12,672 7,656	
LNS - HQ Current Month LNS Total		\$	168 2,285	\$ 169 2,294	\$ 216 2,331	\$	261 10,004	\$ 304 2,418	\$	181 2,295	\$ 1,299 21,627	
Note 2 - The return on the working capital allowance pe	r Attachmont I			 	 	-						
• • • •			2, Page 5, L									
Note 3 Revenue credits include Hydro-Quebec reven	ues.											

#### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION January 2020 - July 2020 (Dollars in 000s)

	Actual															
		January	F	ebruary	March			April		May		June		July		
1 Retail Transmission Revenues		2020		2020	2020			2020		2020	2020			2020	Total	
2																
3 Transmission Revenue - Billed 4	\$	(13,826)	\$	(13,077)	\$	(12,351)	\$	(12,019)	\$	(11,513)	\$	(12,854)	\$	(15,439)	\$	(91,079)
5 Transmission Revenue - Unbilled 6	\$	208	\$	811	\$	(549)	\$	811	\$	(353)	\$	(1,414)	\$	(621)		(1,107)
7 Total	\$	(13,618)	\$	(12,266)	\$	(12,900)	\$	(11,208)	\$	(11,866)	\$	(14,268)	\$	(16,060)	\$	(92,186)

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#### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION August 2020 - January 2021 (Dollars in 000s)

	Actual														
	August			eptember	October			lovember	D	ecember		January			
1 Retail Transmission Revenues		2020	20 2020			2020		2020		2020		2021	Total		
2															
3 Transmission Revenue - Billed 4	\$	(18,378)	\$	(18,753)	\$	(16,702)	\$	(16,276)	\$	(18,159)	\$	(18,798)	\$	(107,066)	
5 Transmission Revenue - Unbilled 6	\$	(431)	\$	93	\$	(120)	\$	(618)	\$	(618)	\$	758		(936)	
7 Total	\$	(18,809)	\$	(18,660)	\$	(16,822)	\$	(16,894)	\$	(18,777)	\$	(18,040)	\$	(108,002)	

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#### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION February 2021 - July 2021 (Dollars in 000s)

				Act	ua	I			Fore					
	February			March		April	May	June			July			
1 Retail Transmission Revenues		2021		2021		2021	2021		2021		2021	Total		
2														
3 Transmission Revenue - Billed	\$	(17,951)	\$	(17,884)	\$	(16,477)	\$ (15,304)	\$	(17,643)	\$	(20,204)	\$	(105,463)	
5 Transmission Revenue - Unbilled	\$	(4)	\$	792	\$	1,109	\$ (1,582)	\$	-	\$	-		315	
7 Total	\$	(17,955)	\$	(17,092)	\$	(15,369)	\$ (16,886)	\$	(17,643)	\$	(20,204)	\$	(105,149)	
8														

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#### PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY RETAIL TRANSMISSION CASH WORKING CAPITAL REQUIREMENT

#### Page Attachment ELM - 2

- 1 Monthly Working Capital Allowance Calculation August 2021 to January 2022
- 2 Monthly Working Capital Allowance Calculation February 2022 to July 2022
- 3 Monthly Working Capital Allowance Calculation January 2020 to July 2020
- 4 Monthly Working Capital Allowance Calculation August 2020 to January 2021
- 5 Monthly Working Capital Allowance Calculation February 2021 to July 2021
- 6 Working Capital Requirement
- 7 Revenue Lag
- 8 Monthly Accounts Receivable Balances
- 9 Billing Lag
- 10 Working Capital Requirement Regional Network Service (RNS)
- 11 Working Capital Requirement Scheduling and Dispatch (S&D)
- 12 Working Capital Requirement Local Network Service (LNS)
- 13 Working Capital Requirement Reliability
- 14 Working Capital Requirement Hydro Quebec (HQ) Support
- 15 Working Capital Requirement Hydro Quebec Interconnection Capacity Credit (HQICC)

# Public Service Company of New Hampshire d/b/a Eversource Energy Retail Transmission Cash Working Capital Requirement For the 6 Months Ending January 31, 2022 Monthly Working Capital Allowance Calculation (\$ in 000s)

		Aug	Sept	Oct	Nov	Dec		Jan	А	ug-Jan	
Line	Retail Transmission Cost	2021	2021	2021	2021	2021		2022		Total	Source
1	Regional Network Service (RNS)	\$ 19,780	\$ 18,353	\$ 16,754	\$ 13,405	\$ 13,835	\$	15,182	\$	97,309	Attachment ELM-1, Page 2, Line 3
2	(RNS) Working Capital Allowance Percent	-5.32%	-5.32%	-5.32%	-5.32%	-5.32%		-5.32%			Attachment ELM-2, Page 6, Line 1
3	(RNS) Working Capital Allowance \$	\$ (1,053)	\$ (977)	\$ (892)	\$ (713)	\$ (736)	\$	(808)	\$	(5,178)	Line 1 * Line 2
4	Scheduling and Dispatch (S&D)	\$ 262	\$ 243	\$ 222	\$ 178	\$ 183	\$	197	\$	1,286	Attachment ELM-1, Page 2, Line 5
5	(S&D) Working Capital Allowance Percent	-5.32%	-5.32%	-5.32%	-5.32%	-5.32%		-5.32%			Attachment ELM-2, Page 6, Line 2
6	(S&D) Working Capital Allowance \$	\$ (14)	\$ (13)	\$ (12)	\$ (9)	\$ (10)	\$	(11)	\$	(68)	Line 4 * Line 5
7	Local Network Service (LNS)	\$ 2,295	\$ 2,295	\$ 2,295	\$ 2,295	\$ 2,295	\$	2,253	\$	13,726	Attachment ELM-1, Page 2, Line 7
8	(LNS) Working Capital Allowance Percent	-35.99%	-35.99%	35.99%	-35.99%	-35.99%		-35.99%			Attachment ELM-2, Page 6, Line 3
9	(LNS) Working Capital Allowance \$	\$ (826)	\$ (826)	\$ (826)	\$ (826)	\$ <mark>(826)</mark>	\$	(811)	\$	(4,941)	Line 7 * Line 8
10	Reliability	\$ 630	\$ 630	\$ 630	\$ 630	\$ 630	\$	630	\$	3,781	Attachment ELM-1, Page 2, Line 9
11	(Reliability) Working Capital Allowance Percent	-5.31%	-5.31%	-5.31%	-5.31%	-5.31%		-5.31%			Attachment ELM-2, Page 6, Line 4
12	(Reliability) Working Capital Allowance \$	\$ (33)	\$ (33)	\$ (33)	\$ (33)	\$ (33)	\$	(33)	\$	(201)	Line 10 * Line 11
13	Hydro-Quebec (HQ) Support Costs	\$ 316	\$ 316	\$ 316	\$ 316	\$ 316	\$	276	\$	1,856	Attachment ELM-1, Page 2, Line 13
14	(HQ Support Costs) Working Capital Allowance Percent	12.24%	12.24%	12.24%	12.24%	12.24%		12.24%			Attachment ELM-2, Page 6, Line 5
15	(HQ Support Costs) Working Capital Allowance \$	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$	34	\$	227	Line 13 * Line 14
16	Hydro-Quebec Interconnection Capacity Credits (HQICC)	\$ (476)	\$ (476)	\$ (476)	\$ (476)	\$ (476)	\$	(476)	\$	(2,859)	Attachment ELM-1, Page 2, Line 11
17	(HQ ICC) Working Capital Allowance Percent	-5.35%	-5.35%	-5.35%	-5.35%	-5.35%		-5.35%			Attachment ELM-2, Page 6, Line 6
18	(HQ ICC) Working Capital Allowance \$	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$	25	\$	153	Line 16 * Line 17
19	Monthly Working Capital Allowance \$	\$ (1,862)	\$ (1,785)	\$ (1,699)	\$ (1,518)	\$ (1,541)	Ş	(1,604)	\$	(10,008)	Line 3 + Line 6 + Line 9 + Line 12 + Line 15 + Line 18
20	Rate of Return	8.75%	8.75%	8.75%	8.75%	8.75%		8.75%			Authorized Return per DE 19-057 including tax gross up
21	Monthly Return on Working Capital	\$ <mark>(163)</mark>	\$ <mark>(156)</mark>	\$ (149)	\$ <mark>(133)</mark>	\$ <mark>(135)</mark>	\$	(140)		<mark>(876)</mark>	Line 19 * Line 20

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## Public Service Company of New Hampshire d/b/a Eversource Energy Retail Transmission Cash Working Capital Requirement For the 6 Months Ending July 31, 2022 Monthly Working Capital Allowance Calculation (\$ in 000s)

		Feb	Mar		Apr	May	Jun		Jul	F	eb-Jul	
Line	Retail Transmission Cost	2022	2022	2	2022	2022	2022	:	2022		Total	Source
1	Regional Network Service (RNS)	\$ 15,891	\$ 14,777	\$ :	14,220	\$ 12,578	\$ 15,134	\$	17,758	\$	90,358	Attachment ELM-1, Page 2, Line 31
2	(RNS) Working Capital Allowance Percent	-5.32%	-5.32%		-5.32%	-5.32%	-5.32%		-5.32%			Attachment ELM-2, Page 6, Line 1
3	(RNS) Working Capital Allowance \$	\$ (846)	\$ (786)	\$	(757)	\$ (669)	\$ (805)	\$	(945)	\$	(4,808)	Line 1 * Line 2
4	Scheduling and Dispatch (S&D)	\$ 207	\$ 192	\$	185	\$ 164	\$ 197	\$	231	\$	1,175	Attachment ELM-1, Page 2, Line 33
5	(S&D) Working Capital Allowance Percent	-5.32%	-5.32%		-5.32%	-5.32%	-5.32%		-5.32%			Attachment ELM-2, Page 6, Line 2
6	(S&D) Working Capital Allowance \$	\$ (11)	\$ (10)	\$	(10)	\$ (9)	\$ (10)	\$	(12)	\$	(63)	Line 4 * Line 5
7	Local Network Service (LNS)	\$ 2,350	\$ 2,198	\$	2,122	\$ 1,898	\$ 2,247	\$		\$	13,420	Attachment ELM-1, Page 2, Line 35
8	(LNS) Working Capital Allowance Percent	 -35.99%	-35.99%		35.99%	-35.99%	35.99%	-	35.99%			Attachment ELM-2, Page 6, Line 3
9	(LNS) Working Capital Allowance \$	\$ (846)	\$ (791)	\$	(764)	\$ (683)	\$ (809)	\$	(938)	\$	(4,831)	Line 7 * Line 8
10	Reliability	\$ 630	\$ 	\$	645	\$ 645	\$ 645	\$		\$	3,853	Attachment ELM-1, Page 2, Line 37
11	(Reliability) Working Capital Allowance Percent	-5.31%	-5.31%		-5.31%	-5.31%	-5.31%		-5.31%			Attachment ELM-2, Page 6, Line 4
12	(Reliability) Working Capital Allowance \$	\$ (33)	\$ (34)	\$	(34)	\$ (34)	\$ (34)	\$	(34)	\$	(204)	Line 10 * Line 11
13	Hydro-Quebec (HQ) Support Costs	\$ 276	\$ 276	\$	276	\$ 276	\$ 276	\$	276	\$	1,657	Attachment ELM-1, Page 2, Line 41
14	(HQ Support Costs) Working Capital Allowance Percent	12.24%	12.24%		12.24%	12.24%	12.24%		12.24%			Attachment ELM-2, Page 6, Line 5
15	(HQ Support Costs) Working Capital Allowance \$	\$ 34	\$ 34	\$	34	\$ 34	\$ 34	\$	34	\$	203	Line 13 * Line 14
16	Hydro-Quebec Interconnection Capacity Credits (HQICC)	\$ (476)	\$ (476)	\$	(476)	\$ (476)	\$ (395)	\$	(395)	\$	(2,697)	Attachment ELM-1, Page 2, Line 39
17	(HQ ICC) Working Capital Allowance Percent	-5.35%	-5.35%		-5.35%	-5.35%	-5.35%		-5.35%			Attachment ELM-2, Page 6, Line 6
18	(HQ ICC) Working Capital Allowance \$	\$ 25	\$ 25	\$	25	\$ 25	\$ 21	\$	21	\$	144	Line 16 * Line 17
19	Monthly Working Capital Allowance \$	\$ (1,677)	\$ (1,563)	\$	(1,505)	\$ (1,336)	\$ (1,604)	\$	(1,874)	\$	<mark>(9,559)</mark>	Line 3 + Line 6 + Line 9 + Line 12 + Line 15 + Line 18
20	Rate of Return	8.75%	8.75%		8.75%	8.75%	8.75%		8.75%			Authorized Return per DE 19-057 including tax gross up
21	Monthly Return on Working Capital	\$ (147)	\$ (137)	\$	<mark>(132)</mark>	\$ <mark>(117)</mark>	\$ (140)	\$	<mark>(164)</mark>		<mark>(836)</mark>	Line 19 * Line 20

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## Public Service Company of New Hampshire d/b/a Eversource Energy Retail Transmission Cash Working Capital Requirement For the 7 Months Ending July 31, 2020 Monthly Working Capital Allowance Calculation (\$ in 000s)

Line	Retail Transmission Cost		Jan 2020		Feb 2020		Mar 2020		Apr 2020		May 2020		Jun		Jul 2020	-	an-Jul Total
1	Regional Network Service (RNS)		12,117		11.609	ć	10.893	ć	10,073	Ś	9.679	Ś	2020 12,571	ć	15,071		82,012
2	(RNS) Working Capital Allowance Percent	Ş	-4.61%	Ş	-4.61%	Ş	82,012										
3	(RNS) Working Capital Allowance \$	\$	(559)	\$	(535)	\$	(502)	\$		\$	(446)	\$	(580)	\$		\$	(3,782)
4	Scheduling and Dispatch (S&D)		172		165		155		143		138		179		203	\$	1,156
5	(S&D) Working Capital Allowance Percent		-4.60%		-4.60%		-4.60%		-4.60%		-4.60%		-4.60%		-4.60%		
6	(S&D) Working Capital Allowance \$	\$	(8)	\$	(8)	\$	(7)	\$	(7)	\$	(6)	\$	(8)	\$	(9)	\$	(53)
7	Local Network Service (LNS)		2,236		2,231		2,237		2,341		2,358		2,537		17,843	\$	31,784
8	(LNS) Working Capital Allowance Percent		1.77%		1.77%		1.77%		1.77%		1.77%		1.77%		1.77%		
9	(LNS) Working Capital Allowance \$	\$	40	\$	39	\$	40	\$	41	\$	42	\$	45	\$	316	\$	562
10	Reliability		481		505		514		497		481		497		590	\$	3,565
11	(Reliability) Working Capital Allowance Percent		-4.61%		-4.61%		-4.61%		-4.61%		-4.61%		-4.61%		-4.61%		
12	(Reliability) Working Capital Allowance \$	\$	(22)	\$	(23)	\$	(24)	\$	(23)	\$	(22)	\$	(23)	\$	(27)	\$	(164)
13	Hydro-Quebec Support Costs		310		365		293		338		370		419		388	\$	2,483
14	(HQ Support Costs) Working Capital Allowance Percent		13.15%		13.15%		13.15%		13.15%		13.15%		13.15%		13.15%		
15	(HQ Support Costs) Working Capital Allowance \$	\$	41	\$	48	\$	39	\$	44	\$	49	\$	55	\$	51	\$	327
16	Hydro-Quebec Interconnection Capacity Credits		(718)		(709)		(717)		(718)		(743)		(735)		(431)	\$	(4,771)
17	(HQ ICC) Working Capital Allowance Percent		-4.48%		-4.48%		-4.48%		-4.48%		-4.48%		-4.48%		-4.48%		
18	(HQ ICC) Working Capital Allowance \$	\$	32	\$	32	\$	32	\$	32	\$	33	\$	33	\$	19	\$	214
19	Monthly Working Capital Allowance	\$	(476)	\$	(447)	\$	(423)	\$	(376)	\$	(351)	\$	(478)	\$	(346)	\$	(2,897)
20	Rate of Return		9.40%		9.40%		9.40%		9.40%		9.40%		9.40%		9.40%		
21	Monthly Return on Working Capital	Ś	(45)	Ś	(42)	Ś	(40)	Ś	(35)	Ś	(33)	Ś	(45)	Ś	(32)		(272)

Source Attachment ELM-1, Page 3, Line 5 DE 19-106 Attachment ELM/DFB-2, Page 1, Line 2 Line 1 \* Line 2 Attachment ELM-1, Page 3, Line 7 DE 19-106 Attachment ELM/DFB-2, Page 1, Line 4 Line 4 \* Line 5 Attachment ELM-1, Page 3, Line 9 DE 19-106 Attachment ELM/DFB-2, Page 1, Line 6 Line 7 \* Line 8 Attachment ELM-1, Page 3, Line 11 DE 19-106 Attachment ELM/DFB-2, Page 1, Line 8 Line 10 \* Line 11 Attachment ELM-1, Page 3, Line 15 DE 19-106 Attachment ELM/DFB-2, Page 1, Line 12 Line 13 \* Line 14 Attachment ELM-1, Page 3, Line 13 DE 19-106 Attachment ELM/DFB-2, Page 1, Line 10 Line 16 \* Line 17 Line 3 + Line 6 + Line 9 + Line 12 + Line 15 + Line 18 Authorized Return per DE 09-035 including tax gross up

Line 19 \* Line 20

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### Public Service Company of New Hampshire d/b/a Eversource Energy Retail Transmission Cash Working Capital Requirement For the 6 Months Ending January 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	,	Aug-Jan Total	
1	Regional Network Service (RNS)	\$ 18,452	\$ 17,546	\$ 14,012	\$ 11,313	\$ 12,898	\$ 13,897	\$	88,118	
2	(RNS) Working Capital Allowance Percent	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%			
3	(RNS) Working Capital Allowance \$	\$ (997)	\$ (948)	\$ (757)	\$ (611)	\$ (697)	\$ (751)	\$	(4,761)	
4	Scheduling and Dispatch (S&D)	\$ 249	\$ 237	\$ 189	\$ 153	\$ 174	\$ 112	\$	1,114	
5	(S&D) Working Capital Allowance Percent	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%			
6	(S&D) Working Capital Allowance \$	\$ (13)	\$ (13)	\$ (10)	\$ (8)	\$ (9)	\$ (6)	\$	(60)	
7	Local Network Service (LNS)	\$ 2,263	\$ 2,258	\$ 2,271	\$ 2,248	\$ 2,083	\$ 2,341	\$	13,464	
8	(LNS) Working Capital Allowance Percent	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%			
9	(LNS) Working Capital Allowance \$	\$ 297	\$ 297	\$ 298	\$ 295	\$ 274	\$ 308	\$	1,769	
10	Reliability	\$ 533	\$	\$ 582	\$	\$	\$ 591	\$	3,337	
11	(Reliability) Working Capital Allowance Percent	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%			
12	(Reliability) Working Capital Allowance \$	\$ (29)	\$ (33)	\$ (32)	\$ (30)	\$ (26)	\$ (32)	\$	(181)	
13	Hydro-Quebec Support Costs	\$ 368	\$ 312	\$ 334	\$	\$	\$ 270	\$	1,726	
14	(HQ Support Costs) Working Capital Allowance Percent	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%			
15	(HQ Support Costs) Working Capital Allowance \$	\$ 45	\$ 38	\$ 41	\$ 25	\$ 29	\$ 33	\$	213	
16	Hydro-Quebec Interconnection Capacity Credits	\$ (578)	\$ (576)	\$ (584)	\$ (567)	\$ (583)	\$ (577)	\$	(3,465)	
17	(HQ ICC) Working Capital Allowance Percent	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%			
18	(HQ ICC) Working Capital Allowance \$	\$ 31	\$ 31	\$ 32	\$ 31	\$ 32	\$ 31	\$	188	
19	Monthly Working Capital Allowance	\$ (665)	\$ (627)	\$ (428)	\$ (298)	\$ (398)	\$ (417)	\$	(2,833)	L
20	Rate of Return	9.40%	9.40%	9.40%	9.40%	9.40%	8.75%			Authori
21	Monthly Return on Working Capital	\$ (63)	\$ (59)	\$ (40)	\$ (28)	\$ (37)	\$ (36)		(264)	

DE 20-085 Attachment ELM-2, Page 1, Line 8 Line 10 \* Line 11 Attachment ELM-1, Page 4, Line 15 DE 20-085 Attachment ELM-2, Page 1, Line 12 Line 13 \* Line 14

Source Attachment ELM-1, Page 4, Line 5 DE 20-085 Attachment ELM-2, Page 1, Line 2 Line 1 \* Line 2

Attachment ELM-1, Page 4, Line 7 DE 20-085 Attachment ELM-2, Page 1, Line 4 Line 4 \* Line 5

Attachment ELM-1, Page 4, Line 9 DE 20-085 Attachment ELM-2, Page 1, Line 6 Line 7 \* Line 8 Attachment ELM-1, Page 4, Line 11

Attachment ELM-1, Page 4, Line 13 DE 20-085 Attachment ELM-2, Page 1, Line 10

Line 16 \* Line 17

Line 3 + Line 6 + Line 9 + Line 12 + Line 15 + Line 18

orized Return per DE 09-035/19-057 including tax gross up

Line 19 \* Line 20

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## Public Service Company of New Hampshire d/b/a Eversource Energy Retail Transmission Cash Working Capital Requirement For the 6 Months Ending July 31, 2021 Monthly Working Capital Allowance Calculation (\$ in 000s)

		Feb	Mar	Apr	May	Jun	Jul	F	eb-Jul	
Line	Retail Transmission Cost	2021	2021	2021	2021	2021	2021		Total	Source
1	Regional Network Service (RNS)	\$ 13,427	\$ 13,484	\$ 13,166	\$ 10,731	\$ 14,707	\$ 17,281	\$	82,796	Attachment ELM-1, Page 5, Line 5
2	(RNS) Working Capital Allowance Percent	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%			DE 20-085 Attachment ELM-2, Page 1, Line 2
3	(RNS) Working Capital Allowance \$	\$ (725)	\$ (729)	\$ (711)	\$ (580)	\$ (795)	\$ (934)	\$	(4,473)	Line 1 * Line 2
4	Scheduling and Dispatch (S&D)	\$ 112	\$ 107	\$ 105	\$ 88	\$ 182	\$ 229	\$	823	Attachment ELM-1, Page 5, Line 7
5	(S&D) Working Capital Allowance Percent	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%	-5.40%			DE 20-085 Attachment ELM-2, Page 1, Line 4
6	(S&D) Working Capital Allowance \$	\$ (6)	\$ (6)	\$ (6)	\$ (5)	\$ (10)	\$ (12)	\$	(44)	Line 4 * Line 5
7	Local Network Service (LNS)	\$ 2,285	\$ 2,294	\$ 2,331	\$ 10,004	\$ 2,418	\$ 2,295	\$	21,627	Attachment ELM-1, Page 5, Line 9
8	(LNS) Working Capital Allowance Percent	13.14%	13.14%	13.14%	13.14%	13.14%	13.14%			DE 20-085 Attachment ELM-2, Page 1, Line 6
9	(LNS) Working Capital Allowance \$	\$ 300	\$ 301	\$ 306	\$ 1,314	\$ 318	\$ 301	\$	2,841	Line 7 * Line 8
10	Reliability	\$ 621	\$ 631	\$ 641	\$ 618	\$ 630	\$ 630	\$	3,771	Attachment ELM-1, Page 5, Line 11
11	(Reliability) Working Capital Allowance Percent	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%	-5.43%			DE 20-085 Attachment ELM-2, Page 1, Line 8
12	(Reliability) Working Capital Allowance \$	\$ (34)	\$ (34)	\$ (35)	\$ (34)	\$ (34)	\$ (34)	\$	(205)	Line 10 * Line 11
13	Hydro-Quebec Support Costs	\$ 210	\$ 212	\$ 222	\$ 241	\$ 243	\$ 316	\$	1,445	Attachment ELM-1, Page 5, Line 15
14	(HQ Support Costs) Working Capital Allowance Percent	12.32%	12.32%	12.32%	12.32%	12.32%	12.32%			DE 20-085 Attachment ELM-2, Page 1, Line 12
15	(HQ Support Costs) Working Capital Allowance \$	\$ 26	\$ 26	\$ 27	\$ 30	\$ 30	\$ 39	\$	178	Line 13 * Line 14
16	Hydro-Quebec Interconnection Capacity Credits	\$ (573)	\$ (579)	\$ (578)	\$ (585)	\$ (476)	\$ (476)	\$	(3,268)	Attachment ELM-1, Page 5, Line 13
17	(HQ ICC) Working Capital Allowance Percent	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%	-5.41%			DE 20-085 Attachment ELM-2, Page 1, Line 10
18	(HQ ICC) Working Capital Allowance \$	\$ 31	\$ 31	\$ 31	\$ 32	\$ 26	\$ 26	\$	177	Line 16 * Line 17
19	Monthly Working Capital Allowance	\$ (408)	\$ (410)	\$ (387)	\$ 758	\$ (465)	\$ (614)	\$	(1,526)	Line 3 + Line 6 + Line 9 + Line 12 + Line 15 + Line 18
20	Rate of Return	8.75%	8.75%	8.75%	8.75%	8.75%	8.75%			Authorized Return per DE 19-057 including tax gross up
21	Monthly Return on Working Capital	\$ (36)	\$ (36)	\$ (34)	\$ 66	\$ (41)	\$ (54)		(134)	Line 19 * Line 20

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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, 2020

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	43.9	63.3	(19.4)	-5.32%	\$ 156,232,9	905	\$ (8,313,710)
2	S&D	43.9	63.3	(19.4)	-5.32%	2,158,5	507	(114,940)
3	LNS	43.9	175.2	(131.4)	-35.99%	42,907,4	154	(15,444,422)
4	Reliability	43.9	63.2	(19.4)	-5.31%	6,311,0	)17	(334,961)
5	HQ Expense	43.9	(0.8)	44.7	12.24%	3,939,6	513	482,174
6	Hydro-Quebec Interconnection Capacity Credits	43.9	63.4	(19.5)	-5.35%	(7,659,4	<b>1</b> 67)	409,706
7	Total / Average	43.9	84.8	(40.9)	-11.22%	\$ 211,549,4	197 \$	(23,725,859)

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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, 2020 Revenue Lag

Line	Components	Total	Reference
1	Average Accounts Receivable Balance	\$ 13,557,857	Attachment ELM-2, Page 7, Line 14
2	Annual Transmission Revenue	\$ 182,147,570	Attachment ELM-1, Page 3 (Line 3 + Line 19) + Page 4 (Line 3 + Line 19) Aug to Dec
3	Average daily revenue	\$ 499,034	Line 2 / 365
4	Collection lag (days)	27.17	Line 1/ Line 3
5	Meter reading lag	15.21	(365/12)/2
6	Billing lag	 1.48	Attachment ELM-2, Page 9, Line 13
7	Retail revenue lag (days)	 43.85	Sum of Line 4 through Line 6

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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, 2020 Monthly Accounts Receivable Balances

Line	Date	AR Balance
1	January 2020	\$ 11,594,892
2	February 2020	12,244,644
3	March 2020	12,058,842
4	April 2020	11,018,121
5	May 2020	11,725,190
6	June 2020	12,717,292
7	July 2020	12,958,108
8	August 2020	15,803,284
9	September 2020	15,719,079
10	October 2020	14,543,906
11	November 2020	15,106,145
12	December 2020	17,204,777
13	Total	\$ 162,694,279
14	Average	\$ 13,557,857

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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, 2020 Billing Lag

<u>Line</u> <u>No.</u>	Month (A)	Billing Days (B)	Accounts ivable Balance (C)	Month Weight (D)	Weighted Billing Days (E) = (B)*(D)
	(1)	( <b>U</b> )		(D)	$(\mathbf{L}) = (\mathbf{D}) \ (\mathbf{D})$
1	January	1.48	\$ 11,594,892	0.07	0.11
2	February	1.59	12,244,644	0.08	0.12
3	March	1.42	12,058,842	0.07	0.11
4	April	1.40	11,018,121	0.07	0.09
5	May	1.61	11,725,190	0.07	0.12
6	June	1.40	12,717,292	0.08	0.11
7	July	1.39	12,958,108	0.08	0.11
8	August	1.48	15,803,284	0.10	0.14
9	September	1.50	15,719,079	0.10	0.14
10	October	1.55	14,543,906	0.09	0.14
11	November	1.53	15,106,145	0.09	0.14
12	December	1.39	17,204,777	0.11	0.15

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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, 2020 RNS

		Begining of	End of	Midpoint of		Lead	Payment	Dollar
Line	Month	Service Period	Service Period	Service Period	Payment Date	Days	Amount	Weighted Days
		(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	$(G) = (E)^*(F)$
1	January	12/01/2019	12/31/2019	12/16/2019	02/24/2020	70.0 \$	12,117,008	\$ 848,190,531
2	February	01/01/2020	01/31/2020	01/16/2020	03/20/2020	64.0	11,608,675	742,955,225
3	March	02/01/2020	02/29/2020	02/15/2020	04/17/2020	62.0	10,892,557	675,338,535
4	April	03/01/2020	03/31/2020	03/16/2020	05/15/2020	60.0	10,072,849	604,370,924
5	May	04/01/2020	04/30/2020	04/15/2020	06/19/2020	64.5	9,678,563	624,267,339
6	June	05/01/2020	05/31/2020	05/16/2020	07/17/2020	62.0	12,570,900	779,395,817
7	July	06/01/2020	06/30/2020	06/15/2020	08/14/2020	59.5	15,071,433	896,750,243
8	August	07/01/2020	07/31/2020	07/16/2020	09/18/2020	64.0	18,452,243	1,180,943,567
9	September	08/01/2020	08/31/2020	08/16/2020	10/19/2020	64.0	17,546,279	1,122,961,885
10	October	09/01/2020	09/30/2020	09/15/2020	11/20/2020	65.5	14,012,143	917,795,355
11	November	10/01/2020	10/31/2020	10/16/2020	12/18/2020	63.0	11,312,639	712,696,255
12	December	11/01/2020	11/30/2020	11/15/2020	01/15/2021	60.5	12,897,615	780,305,714
13	Average					63.3 \$	156,232,905	\$ 9,885,971,390

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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, 2020 Scheduling & Dispatch

		Begining of	End of	Midpoint of		Lead	Payment	Dollar
Line	Month	Service Period	Service Period	Service Period	Payment Date	Days	Amount	Weighted Days
		(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	$(G) = (E)^*(F)$
1	January	12/01/2019	12/31/2019	12/16/2019	02/24/2020	70.0	\$ 172,482	\$ 12,073,714
2	February	01/01/2020	01/31/2020	01/16/2020	03/20/2020	64.0	165,246	10,575,724
3	March	02/01/2020	02/29/2020	02/15/2020	04/17/2020	62.0	155,052	9,613,223
4	April	03/01/2020	03/31/2020	03/16/2020	05/15/2020	60.0	143,384	8,603,022
5	May	04/01/2020	04/30/2020	04/15/2020	06/19/2020	64.5	137,771	8,886,240
6	June	05/01/2020	05/31/2020	05/16/2020	07/17/2020	62.0	178,943	11,094,444
7	July	06/01/2020	06/30/2020	06/15/2020	08/14/2020	59.5	203,495	12,107,973
8	August	07/01/2020	07/31/2020	07/16/2020	09/18/2020	64.0	249,143	15,945,167
9	September	08/01/2020	08/31/2020	08/16/2020	10/19/2020	64.0	236,911	15,162,295
10	October	09/01/2020	09/30/2020	09/15/2020	11/20/2020	65.5	189,193	12,392,124
11	November	10/01/2020	10/31/2020	10/16/2020	12/18/2020	63.0	152,744	9,622,866
12	December	11/01/2020	11/30/2020	11/15/2020	01/15/2021	60.5	174,144	10,535,732
							,	, ,
13	Average					63.3	\$ 2,158,507	\$ 136,612,524

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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, 2020 LNS

	March		Begining of	End of	Midpoint of		Lead		Payment		Dollar
Line	Month	Description	(A)	Service Period (B)	Service Period (C)	Payment Date (D)	Days (E) =(D)-(C)		Amount (F)		$\frac{\text{Weighted Days}}{(G) = (E)^*(F)}$
			(A)	(B)	(C)	(D)	(L) = (D) = (C)		(1)		(0) = (L) (1)
1	January	Vermont Electric Power Co	12/01/2019	12/31/2019	12/16/2019	01/24/2020	39.0	\$	95,443	\$	3,722,294
2	February	Vermont Electric Power Co	01/01/2020	01/31/2020	01/16/2020	02/26/2020	41.0		69,933		2,867,257
3	March	Vermont Electric Power Co	02/01/2020	02/29/2020	02/15/2020	03/22/2020	36.0		80,261		2,889,405
4	April	Vermont Electric Power Co	03/01/2020	03/31/2020	03/16/2020	04/25/2020	40.0		186,016		7,440,638
5	May	Vermont Electric Power Co	04/01/2020	04/30/2020	04/15/2020	05/24/2020	38.5		180,509		6,949,586
6	June	Vermont Electric Power Co	05/01/2020	05/31/2020	05/16/2020	06/26/2020	41.0		273,145		11,198,927
7	July	Vermont Electric Power Co	06/01/2020	06/30/2020	06/15/2020	07/26/2020	40.5		66,314		2,685,701
8	August	Vermont Electric Power Co	07/01/2020	07/31/2020	07/16/2020	08/28/2020	43.0		1,376		59,168
9	September	Vermont Electric Power Co	08/01/2020	08/31/2020	08/16/2020	09/26/2020	41.0		-		0
10	October	Vermont Electric Power Co	09/01/2020	09/30/2020	09/15/2020	10/22/2020	36.5		-		0
11	November	Vermont Electric Power Co	10/01/2020	10/31/2020	10/16/2020	11/15/2020	30.0		37,000		1,110,000
12	December	Vermont Electric Power Co	11/01/2020	11/30/2020	11/15/2020	12/23/2020	37.5		(187,354)		(7,025,785)
13	Subtotal	Vermont Electric Power Co					39.7	\$	802,642	\$	31,897,191
14	Ianuary	Green Mountain Power Corp.	12/01/2019	12/31/2019	12/16/2019	01/31/2020	46.0	\$	129,334	¢	5,949,351
	January	-						ф	,	э	, ,
15 16	February March	Green Mountain Power Corp. Green Mountain Power Corp.	01/01/2020 02/01/2020	01/31/2020 02/29/2020	01/16/2020 02/15/2020	02/28/2020 03/29/2020	43.0 43.0		139,025 131,139		5,978,056 5,638,989
10	April	Green Mountain Power Corp.		03/31/2020	03/16/2020		43.0 45.0		131,139		5,875,316
17	May	1	03/01/2020 04/01/2020	03/31/2020	03/16/2020	04/30/2020 05/31/2020	45.0		,		· · ·
18	June	Green Mountain Power Corp.				06/28/2020	43.5		129,295		5,882,915
		Green Mountain Power Corp.	05/01/2020	05/31/2020	05/16/2020				131,754		5,665,431
20 21	July	Green Mountain Power Corp.	06/01/2020 07/01/2020	06/30/2020	06/15/2020 07/16/2020	07/31/2020 08/30/2020	45.5 45.0		145,646 157,431		6,626,912 7,084,373
	August	Green Mountain Power Corp.		07/31/2020					,		, ,
22 23	September	Green Mountain Power Corp.	08/01/2020	08/31/2020	08/16/2020	09/30/2020	45.0		143,603		6,462,125
	October	Green Mountain Power Corp.	09/01/2020	09/30/2020	09/15/2020	10/31/2020	45.5 45.0		140,975		6,414,348
24 25	November December	Green Mountain Power Corp.	10/01/2020 11/01/2020	10/31/2020 11/30/2020	10/16/2020 11/15/2020	11/30/2020			79,742		3,588,369 5,940,514
		Green Mountain Power Corp.	11/01/2020	11/50/2020	11/15/2020	12/31/2020			130,561	-	
26	Subtotal	Green Mountain Power Corp.					44.7	\$	1,589,066	\$	71,106,697
27	January	Intercompany	01/01/2020	01/31/2020	01/16/2020	02/22/2020	37.0	\$	2,011,405	\$	74,421,985
28	February	Intercompany	02/01/2020	02/29/2020	02/15/2020	03/22/2020	36.0		2,021,748		72,782,928
29	March	Intercompany	03/01/2020	03/31/2020	03/16/2020	04/22/2020	37.0		2,025,712		74,951,344
30	April	Intercompany	04/01/2020	04/30/2020	04/15/2020	05/22/2020	36.5		2,024,648		73,899,652
31	May	Intercompany	05/01/2020	05/31/2020	05/16/2020	06/22/2020	37.0		2,048,621		75,798,977
32	June	Intercompany	06/01/2020	06/30/2020	06/15/2020	07/22/2020	36.5		2,132,482		77,835,593
33	July	Intercompany - Current Month	07/01/2020	07/31/2020	07/16/2020	08/22/2020	37.0		2,085,501		77,163,537
34	July	Intercompany - PY True-Up	01/01/2019	12/31/2019	07/01/2019	08/22/2020	418.0		15,545,990		6,498,223,820
35	August	Intercompany	08/01/2020	08/31/2020	08/16/2020	09/22/2020	37.0		2,104,098		77,851,626
36	September	Intercompany	09/01/2020	09/30/2020	09/15/2020	10/22/2020	36.5		2,114,081		77,163,957
37	October	Intercompany	10/01/2020	10/31/2020	10/16/2020	11/22/2020	37.0		2,129,839		78,804,043
38	November	Intercompany	11/01/2020	11/30/2020	11/15/2020	12/22/2020	36.5		2,131,504		77,799,896
39	December	Intercompany	12/01/2020	12/31/2020	12/16/2020	01/22/2021	37.0		2,140,117		79,184,329
40	Subtotal	Intercompany					183.0	\$	40,515,746	\$	7,415,881,687
41		New England Power						\$	0	\$	
41 42		New England Power New England Power					-	¢	-	ф	-
43	Subtotal	New England Power					-	\$	0	\$	-
44	Average						175.2	\$	42,907,454	\$	7,518,885,575

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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, 2020 Reliability

		Begining of	End of	Midpoint of		Lead	Payment	Dollar
Line	Month	Service Period	Service Period	Service Period	Payment Date	Days	Amount	Weighted Days
		(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	$(G) = (E)^{*}(F)$
1	January	12/01/2019	12/31/2019	12/16/2019	02/24/2020	70.0 \$	481,149	\$ 33,680,448
2	February	01/01/2020	01/31/2020	01/16/2020	03/20/2020	64.0	504,972	32,318,186
3	March	02/01/2020	02/29/2020	02/15/2020	04/17/2020	62.0	513,786	31,854,762
4	April	03/01/2020	03/31/2020	03/16/2020	05/15/2020	60.0	497,422	29,845,303
5	May	04/01/2020	04/30/2020	04/15/2020	06/19/2020	64.5	481,204	31,037,676
6	June	05/01/2020	05/31/2020	05/16/2020	07/17/2020	62.0	496,754	30,798,766
7	July	06/01/2020	06/30/2020	06/15/2020	08/14/2020	59.5	589,591	35,080,692
8	August	07/01/2020	07/31/2020	07/16/2020	09/18/2020	64.0	533,126	34,120,033
9	September	08/01/2020	08/31/2020	08/16/2020	10/19/2020	64.0	602,066	38,532,239
10	October	09/01/2020	09/30/2020	09/15/2020	11/20/2020	65.5	581,626	38,096,486
11	November	10/01/2020	10/31/2020	10/16/2020	12/18/2020	63.0	554,736	34,948,338
12	December	11/01/2020	11/30/2020	11/15/2020	01/15/2021	60.5	474,585	28,712,390
13	Average					63.2 \$	6,311,017	\$ 399,025,321

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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, 2020

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	01/01/2020	01/31/2020	01/16/2020	01/15/2020	(1.0)	\$ 290,507	\$ (290,507
2	February	New England Hydro Transmission - HQ Phase II	02/01/2020	02/29/2020	02/15/2020	02/14/2020	(1.0)	342,235	(342,235
3	March	New England Hydro Transmission - HQ Phase II	03/01/2020	03/31/2020	03/16/2020	03/13/2020	(3.0)	272,929	(818,786
4	April	New England Hydro Transmission - HQ Phase II	04/01/2020	04/30/2020	04/15/2020	04/15/2020	(0.5)	314,024	(157,012
5	May	New England Hydro Transmission - HQ Phase II	05/01/2020	05/31/2020	05/16/2020	05/15/2020	(1.0)	351,732	(351,732
6	June	New England Hydro Transmission - HQ Phase II	06/01/2020	06/30/2020	06/15/2020	06/15/2020	(0.5)	399,505	(199,753
7	July	New England Hydro Transmission - HQ Phase II	07/01/2020	07/31/2020	07/16/2020	07/15/2020	(1.0)	368,443	(368,443
8	August	New England Hydro Transmission - HQ Phase II	08/01/2020	08/31/2020	08/16/2020	08/14/2020	(2.0)	353,537	(707,074
9	September	New England Hydro Transmission - HQ Phase II	09/01/2020	09/30/2020	09/15/2020	09/15/2020	(0.5)	289,757	(144,879
10	October	New England Hydro Transmission - HQ Phase II	10/01/2020	10/31/2020	10/16/2020	10/15/2020	(1.0)	313,088	(313,088
11	November	New England Hydro Transmission - HQ Phase II	11/01/2020	11/30/2020	11/15/2020	11/17/2020	1.5	189,129	283,693
12	December	New England Hydro Transmission - HQ Phase II	12/01/2020	12/31/2020	12/16/2020	12/15/2020	(1.0)	214,815	(214,815
13	Subtotal	New England Hydro Transmission - HQ Phase II					(1.0)	\$ 3,699,701	\$ (3,624,629
14	January	Vermont Electric Transmission Co.	01/01/2020	01/31/2020	01/16/2020	01/21/2020	5.0	11,805	59,023
15	February	Vermont Electric Transmission Co.	02/01/2020	02/29/2020	02/15/2020	02/14/2020	(1.0)	9,909	(9,909
16	March	Vermont Electric Transmission Co.	03/01/2020	03/31/2020	03/16/2020	03/18/2020	2.0	12,271	24,541
17	April	Vermont Electric Transmission Co.	04/01/2020	04/30/2020	04/15/2020	04/21/2020	5.5	12,200	67,097
18	May	Vermont Electric Transmission Co.	05/01/2020	05/31/2020	05/16/2020	05/28/2020	12.0	7,322	87,861
19	June	Vermont Electric Transmission Co.	06/01/2020	06/30/2020	06/15/2020	06/19/2020	3.5	9,957	34,848
20	July	Vermont Electric Transmission Co.	07/01/2020	07/31/2020	07/16/2020	07/23/2020	7.0	12.064	84,450
20	August	Vermont Electric Transmission Co.	08/01/2020	08/31/2020	08/16/2020	08/21/2020	5.0	6,487	32,433
	September	Vermont Electric Transmission Co.	09/01/2020	09/30/2020	09/15/2020	09/18/2020	2.5	13,971	34,928
22	October	Vermont Electric Transmission Co.	10/01/2020	10/31/2020	10/16/2020	10/21/2020	5.0	12,525	62,626
23 24	November	Vermont Electric Transmission Co.	11/01/2020	11/30/2020	11/15/2020	11/25/2020	9.5	6,495	61,704
24	December	Vermont Electric Transmission Co.	12/01/2020	12/31/2020	12/16/2020	12/18/2020	2.0	13,560	27,121
	Subtotal	Vermont Electric Transmission Co.	12/01/2020	12/31/2020	12/10/2020	12/18/2020		\$ 128,565	\$ 566,724
27	January	NE Electric Transmission - HQ Phase I	01/01/2020	01/31/2020	01/16/2020	01/15/2020	(1.0)	8,158	(8,158
28	February	NE Electric Transmission - HQ Phase I	02/01/2020	02/29/2020	02/15/2020	02/13/2020	(2.0)	12,791	(25,582
29	March	NE Electric Transmission - HQ Phase I	03/01/2020	03/31/2020	03/16/2020	03/13/2020	(3.0)	7,996	(23,989
30	April	NE Electric Transmission - HQ Phase I	04/01/2020	04/30/2020	04/15/2020	04/15/2020	(0.5)	11,372	(5,686
31	May	NE Electric Transmission - HQ Phase I	05/01/2020	05/31/2020	05/16/2020	05/14/2020	(2.0)	10,449	(20,899
32	June	NE Electric Transmission - HQ Phase I	06/01/2020	06/30/2020	06/15/2020	06/15/2020	(0.5)	9,944	(4,972
33	July	NE Electric Transmission - HQ Phase I	07/01/2020	07/31/2020	07/16/2020	07/15/2020	(1.0)	7,725	(7,725
34	August	NE Electric Transmission - HQ Phase I	08/01/2020	08/31/2020	08/16/2020	08/13/2020	(3.0)	8,396	(25,189
35	September	NE Electric Transmission - HQ Phase I	09/01/2020	09/30/2020	09/15/2020	09/15/2020	(0.5)	8,632	(4,316
36	October	NE Electric Transmission - HQ Phase I	10/01/2020	10/31/2020	10/16/2020	10/15/2020	(1.0)	8,822	(8,822
37	November	NE Electric Transmission - HQ Phase I	11/01/2020	11/30/2020	11/15/2020	11/13/2020	(2.5)	9,694	(24,236
38	December	NE Electric Transmission - HQ Phase I	12/01/2020	12/31/2020	12/16/2020	12/15/2020	(1.0)	7,368	(7,368
39	Subtotal	NE Electric Transmission - HQ Phase I					(1.5)	\$ 111,348	\$ (166,941

40 Average

(0.8) \$ 3,939,613 \$ (3,224,847)

Docket No. DE 21-109 Dated: July 20, 2021 Atachment ELM-2 Page 15 of 15

#### Public Service Company of New Hampshire d/b/a Eversource Energy Retail Transmission Cash Working Capital Requirement Year Ending December 31, 2020 HQ ICC

		Begining of	End of	Midpoint of		Lead	Payment	Dollar
Line	Month	Service Period	Service Period	Service Period	Payment Date	Days	Amount	Weighted Days
		(A)	(B)	(C)	(D)	(E) =(D)-(C)	(F)	(G) = (E)*(F)
1	January	12/01/2019	12/31/2019	12/16/2019	02/24/2020	70.0 \$	(718,331) \$	(50,283,162)
2	February	01/01/2020	01/31/2020	01/16/2020	03/20/2020	64.0	(709,042)	(45,378,709)
3	March	02/01/2020	02/29/2020	02/15/2020	04/17/2020	62.0	(716,913)	(44,448,609)
4	April	03/01/2020	03/31/2020	03/16/2020	05/15/2020	60.0	(717,805)	(43,068,283)
5	May	04/01/2020	04/30/2020	04/15/2020	06/19/2020	64.5	(743,244)	(47,939,255)
6	June	05/01/2020	05/31/2020	05/16/2020	07/17/2020	62.0	(734,797)	(45,557,443)
7	July	06/01/2020	06/30/2020	06/15/2020	08/14/2020	59.5	(430,591)	(25,620,181)
8	August	07/01/2020	07/31/2020	07/16/2020	09/18/2020	64.0	(578,369)	(37,015,594)
9	September	08/01/2020	08/31/2020	08/16/2020	10/19/2020	64.0	(575,809)	(36,851,784)
10	October	09/01/2020	09/30/2020	09/15/2020	11/20/2020	65.5	(584,221)	(38,266,462)
11	November	10/01/2020	10/31/2020	10/16/2020	12/18/2020	63.0	(566,886)	(35,713,807)
12	December	11/01/2020	11/30/2020	11/15/2020	01/15/2021	60.5	(583,459)	(35,299,262)
13	Average				_	63.4 \$	(7,659,467) \$	(485,442,550)

#### 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 21-109

#### 1 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").

#### 7 Q. Have you previously testified before the Commission?

A. Yes, I have previously testified before the Commission in New Hampshire in the Docket No.
DE 20-085 TCAM filing, and have supported several New Hampshire rate and tariff filings,
including the Docket No. DE 19-057 distribution rate case. In addition, I have testified
numerous times in Connecticut at the Public Utilities Regulatory Authority.

#### 12 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.

#### 15 Q. What is the purpose of your testimony?

A. The purpose of my testimony is to propose transmission prices effective August 1, 2021
 under the TCAM. My testimony proposes specific rates and charges for transmission based

Testimony of Jennifer A. Ullram Docket No. DE 21-109 July 20, 2021 Page 2 of 4

on the transmission revenue requirement contained in the attachments to Ms. Menard's and
 Mr. Mathews' testimony.

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

4 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 and approved by the settlement agreement in the
Company's recent base distribution rate case in Docket No. DE 19-057. 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, 2.785 cents/kWh.

For Rate B, the Company continues to calculate rates consistent with the settlement 11 agreement in Docket No. DE 06-028. That settlement agreement provides that transmission 12 costs be recovered through a demand charge, which splits the demand charge into two 13 components for rate calculation purposes: a base component and an incremental component<sup>1</sup>. 14 To calculate the base component, a portion of the TCAM costs are allocated to Rate B based 15 on the class contribution to the Company's demands at the time of the corresponding monthly 16 system peaks. These costs are reconciled against actual revenue for the class, with any 17 resulting over- or under-recovery flowing into the rate calculation. The incremental 18 19 component of the rate is adjusted by the same percentage applied to all other rates

#### 20 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

<sup>&</sup>lt;sup>1</sup> For billing purposes, the two components are summed so only one demand charge is billed.

Testimony of Jennifer A. Ullram Docket No. DE 21-109 July 20, 2021 Page 3 of 4

1 total transmission revenue requirement for the forecast period included in Ms. Menard's 2 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 3 prior period was then added to the base component forecasted revenue requirement to 4 determine the total revenue requirement (Attachment JAU-2, Page 1, line 22). The Rate B 5 base component rate was then determined by dividing the total base component revenue 6 7 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 \$1.67 per kW or kVA per 8 9 month.

#### 10 Q. How did you calculate the base component reconciliation?

11 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 12 twelve-month period August 2020 through July 2021 by the base component ratio for the 13 same period. The base component reconciliation for the prior period August 2019 through 14 July 2020 was then added to the base component revenue requirement. The result is shown 15 on line 28 of JAU-2. The estimated base component revenue for the period August 2020 16 17 through July 2021 was then subtracted from the total base component revenue requirement to determine the base component reconciliation (in this case, an under-recovery of \$946,772). 18

#### 19 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.

Testimony of Jennifer A. Ullram Docket No. DE 21-109 July 20, 2021 Page 4 of 4

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

2 A. The transmission rate calculations were based on 2018 actual billing determinants. The forecasted TCAM rate of 2.785 cents/kWh provided in ELM-1 was multiplied by 2018 3 MWH sales to produce the target transmission revenue (Attachment JAU-3, line 15). The 4 Rate B base component revenue shown on Attachment JAU-4 was then subtracted from the 5 target transmission revenue which results in the amount to be recovered from all other 6 customers (Attachment JAU-3, line 17). Revenue and the resulting rates and charges for all 7 other customer classes were determined by adjusting all currently-effective revenue and rates 8 9 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 class 10 11 under this methodology is shown on Attachment JAU-3, lines 27 to 39.

#### 12 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 increase of \$13.41 per
month if the customer is taking Default Energy Service from Eversource. This impact
assumes no other changes. If the Commission approves the Company's TCAM proposal,
Stranded Cost Recovery Charge, Regulatory Reconciliation Adjustment and Step 2
Distribution Adjustment as filed the impact to a residential customer using 600 kWh per
month would be a total bill increase of \$10.42.

- 19 Q. Does this complete your testimony?
- 20 A. Yes, it does.

Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 D<mark>ated: July 20, 2021</mark> Attachment JAU-1 Page 1 of 1

#### TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION TRANSMISSION RATES PROPOSED FOR EFFECT ON AUGUST 1, 2021

12						-
13				(A)		(B)
14				Current	P	roposed
15				Rates		Rates
16				Effective	E	Effective
17	Rate	Blocks	08/	01/2020 (1)	08/0	01/2021 (2)
18						
19	R	All KWH	\$	0.03011	\$	0.03046
20						
21						
22	Uncontrolled Water Heating	All KWH	\$	0.02331	\$	0.02358
23						
24						
25	Controlled Water Heating	All KWH	\$	0.02331	\$	0.02358
26						
27						
28	R-OTOD	On-peak KWH	\$	0.03011	\$	0.03046
29		Off-peak KWH	\$	0.01966	\$	0.01989
30						
31						
32	G	Load charge (over 5 KW)	\$	7.77	\$	7.86
33						
34		First 500 KWH	\$	0.02807	\$	0.02840
35		Next 1,000 KWH	\$	0.01056	\$	0.01068
36		All additional KWH	\$	0.00566	\$	0.00573
37						
38						
39	Space Heating	All KWH	\$	0.02807	\$	0.02840
40						
41						
42	G-OTOD	Load charge	\$	5.12	\$	5.18
43		-				
44						
45	LCS	Radio-controlled option	\$	0.02331	\$	0.02358
46		8-hour option	\$	0.02331	\$	0.02358
47		10 or 11-hour option	\$	0.02331	\$	0.02358
48		·				
49						
50	GV	First 100 KW	\$	10.40	\$	10.52
51		All additional KW	\$	10.40	\$	10.52
52						
53						
54	LG	Demand charge	\$	10.24	\$	10.36
55		Ū.				
56						
57	B (3)	Demand charge	\$	1.59	\$	2.37
58		5				
59						
60	OL, EOL	All KWH	\$	0.02058	\$	0.02082
61	· -					
60						

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64 Notes:

65 (1) Current rates are based on a retail average transmission rate of 2.758 ¢/KWH.

66 (2) Proposed rates are based on a retail average transmission rate of 2.785 ¢/KWH.

67 (3)The calculation of the Rate B charge is shown on Attachment JAU-4. All other rates

68 have been calculated by adjusting current rates by an equal percentage necessary

69 to recover the remaining transmission revenue requirement.

1 2 3 4 5 6 7				Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 Dated: July 20, 2021 Attachment JAU-2 Page 1 of 5
8	TRANSMISSION COST ADJUSTME			CAM) CALCULATION
9	RATE B	CUS	TOMERS	
10 11				
12	Base Component Revenue Requirement			
13				
14	Total Transmission Revenue Requirement	\$	213,755,000	ELM-1, Page 1, Line 16
15				
16	Times Base Component Ratio		0.50734%	JAU-2, Page 2, Line 33
17		•		
18	Base Component Forecasted Revenue Requirement	\$	1,084,460	Line 14 x Line 16
19 20	Page Component Pagenciliation	\$	946,772	IALL 2 Dage 2 Line 22
20 21	Base Component Reconciliation	ψ	340,772	JAU-2, Page 3, Line 32
22	Base Component Revenue Requirement	\$	2,031,233	Line 18 + Line 20
23	Base component revenue requirement	Ψ	2,001,200	
24	Rate B Projected Billing Demand		1,219,754	
25			, -, -	
26	Rate B Base Component per kW or kVA	\$	1.67	Line 22/Line 24

1 Public Service Company of New Hampshire, 2 d/b/a Eversource Energy 3 Docket No. DE 21-109 4 Dated: July 20, 2021 5 Attachment JAU-2 6 Page 2 of 5 7 TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION 8 9 **RATE B CUSTOMERS** 10 11 12 13 14 Contribution to Coincident System Peak (KW) 15 Period Ending 7/31/21 16 Ratio of 17 Rate B to Total PSNH 18 Rate B **Total PSNH** 19 Aug-20 20 12,374 1,631,953 21 Sep 3,516 1,305,118 22 Oct 4,629 1,052,999 23 Nov 5,797 1,200,358 1,294,678 24 Dec 8,829 25 Jan 2021 7,075 1,248,430 26 Feb 3,264 1,254,109 27 Mar 1,441 1,224,574 Apr<sup>(1)</sup> 28 4,897 997,686 May (1) 29 1,419,554 11,928 Jun<sup>(1)</sup> 30 12,801 1,446,984 Jul <sup>(1)</sup> 31 3,561 1,714,299 32 33 Average 6,676 1,315,895 0.50734% 34 35

36 <sup>(1)</sup> Estimated data

1 2 3 4 5 6 7			Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 Dated: July 20, 2021 Attachment JAU-2 Page 3 of 5
8	TRANSMISSION COST ADJUSTMENT ME	CHANISM (TCAM) CALCU	ILATION
9	RATE B CUST	OMERS	
10			
11 12	Estimated Base Component Reconciliation, 12 months Ending July 31, 2020		
13	Estimated base component reconcination, 12 months Ending duty 51, 2020		
14	Prior Period Transmission Revenue Requirement:		
15			
16	Retail Transmision Operating Costs	\$ 215,757,751	ELM-1, Page 4, line 21 and Page 5, line 21
17	(Over)/Underrecovery, 12 month period ending 7/31/2020 Return on monthly (over)/underrecovery, 12 month period ending 7/31/2021	11,270,275	ELM-1, Page 4, line 44 ELM-1, Page 4, line 40 and Page 5, line 40
18	Return on monuliy (over)/underrecovery, 12 monul period ending 7/31/2021	32,801	ELM-1, Page 4, line 40 and Page 5, line 40
19 20	Prior Period Transmission Revenue Requirement	\$ 227,060,827	Sum of Lines 16 to 18
20	r nor r enou transmission revenue rrequirement	φ 221,000,021	Sum of Lines to to to
22	Times Base Component Ratio	0.50734%	JAU-2, Page 2, Line 33
23			-
24	Prior Period Base Component Revenue Requirement	\$ 1,151,966	Line 20 x Line 22
25 26	Base Component Reconciliation for 12-Month Period Ending 7/31/2020	418,263	JAU-2, Page 5, line 32
	base component reconciliation for 12-wohar Penod Ending 1/31/2020	410,203	5A0-2, Fage 5, III e 52
27 28	Total Base Component Revenue Requirement	\$ 1.570.229	Line 24 + Line 26
29		φ 1,570,225	
30	Base Component Revenue (actual through May 2021; June and July 2021 estimated)	623,457	
31			
32	Estimated Base Component Reconciliation, 12 months Ending 7/31/2021	\$ 946,772	Line 28 - Line 30

Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 Dated: July 20, 2021 Attachment JAU-2 Page 4 of 5

#### TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION RATE B CUSTOMERS

10				
11				
12	Contribution to Legacy NU System Peak (KW)			
13	Period Ending 7/31/2019			Ratio of
14				Rate B to
15		Rate B	Total PSNH	Total PSNH
16				
17	Aug-19	2,711	1,524,262	
18	Sep	2,663	1,208,957	
19	Oct	1,564	1,000,350	
20	Nov	7,479	1,217,750	
21	Dec	9,369	1,303,444	
22	Jan 2020	10,036	1,248,370	
23	Feb	4,214	1,170,844	
24	Mar	1,441	1,082,364	
25	Apr <sup>(1)</sup>	4,278	1,040,322	
26	May <sup>(1)</sup>	10,906	1,351,753	
27	Jun <sup>(1)</sup>	2,335	1,446,984	
28	Jul <sup>(1)</sup>	1,724	1,664,075	
29	Average	4,893	1,271,623	0.38480%

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1				Public Service Company of New Hampshire,
2				d/b/a Eversource Energy
3				Docket No. DE 21-109
4				Dated: July 20, 2021
5				Attachment JAU-2
6				Page 5 of 5
7				
8	TRANSMISSION COST ADJUSTMENT MECHANI		TCAM) CALCUL	ATION
9	RATE B CUSTOMERS	;		
10				
11	Actual Deca Commencent Deconstilication 40 months English July 24, 2020			
12 13	Actual Base Component Reconciliation, 12 months Ending July 31, 2020			
14	Prior Period Transmission Revenue Requirement:			
15	Thor Ferrou Transmission Revenue Requirement.			
16	Retail Transmision Operating Costs	\$	212,741,433	ELM-1, P4, Line 21 & 2020 ELM/DFB-1 P4, Line 21
17	(Over)/Underrecovery, period ending 7/31/2019	Ψ	(11,595,422)	2020 ELM-1, P3, Line 44
18	Return on monthly (over)/underrecovery, period Ending 7/31/2020		(261,894)	ELM-1, P4, Line 40 & 2020 ELM-1, P4, Line 40
19	· · · · · · · · · · · · · · · · · · ·		()	
20	Prior Period Transmission Revenue Requirement	\$	200.884.117	Sum of Lines 16 to 18
20	Thor Ferror Transmission Revenue Requirement	Ψ	200,004,117	Sum of Lines 10 to 10
22	Times Base Component Ratio		0.38480%	JAU-2, Page 4, Line 30
23			0.0010070	0/10 2, 1 ugo 4, Ellio 00
24	Prior Period Base Component Revenue Requirement	\$	773,010	Line 20 x Line 22
25		Ŷ	110,010	
26	Base Component Reconciliation for 12-Month Period Ending 7/31/2019		174,955	2020 JAU-2, P5, Line 32
27				
28	Total Base Component Revenue Requirement	\$	947.964	Line 24 + Line 26
29		Ψ	547,504	
30	Actual Base Component Revenue, 12 Month Period Ending 7/31/2020		529,701	
31	· · · · · · · · · · · · · · · · · · ·			
31	Actual Base Component Reconciliation, 12 months Ending 7/31/2020	\$	418,263	Line 28 - Line 30
52	Actual Dase Component Reconciliation, 12 months Ending 1/3 1/2020	φ	410,203	

Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 Dated: July 20, 2021 Attachment JAU-3 Page 1 of 1

#### TRANSMISSION COST ADJUSTMENT MECHANISM (TCAM) CALCULATION ALLOCATION OF AUGUST 1, 2020 TRANSMISSION REVENUE TO CLASS **BASED ON 2018 BILLING DETERMINANTS**

10		0/101	D ON LONG DI				
11							
12						Source	
13	2018 retail billed delivery sales			7,954,422	MWH		
14	Forecasted TCAM Rate			\$ 0.02785	per KWH	Attachment ELM-1, F	Page 1, Line 20
15	Target transmission revenue			<mark>\$ 221,531</mark>	(000)	Line 13 x Line 14	
16	Rate B Base Component Revenue			\$ 2,020		Attachment JAU-4, C	olumn C, Line 27
17	Transmission revenue to be recovered from a	all other c	lasses	<b>\$</b> 219,511	(000)	Line 15 - Line 16	
18							
19							
20							
21			(1)	(2)		(3)	(4)
22		_					
23			evenue at	08/01/2021			
24	Transmission revenue		8/01/2020	Revenue			nange
25	excluding Rate B Base Component	R	ate Level	Target	_	Amount	Percent Change
26		•		<b>A A B A A A A A A A A A A</b>		•	
27	Residential Rates R, R-OTOD	\$	94,847	<mark>\$ 95,938</mark>		\$ 1,091	1.1%
28 29	Constal Convice Dates C. C. OTOD		47 746	48,295		549	1.1%
29 30	General Service Rates G, G-OTOD		47,746	40,290		549	1.1%
30 31	Primary General Service Rate GV		43,917	44,422		505	1.1%
32	GV Rate B - incremental component only		43,917	25		0	
33	GV Nate B - Incremental component only		25	20		0	1.170
34	Large General Service Rate LG		28,904	29,237		332	1.1%
35	LG Rate B - incremental component only		813	822		9	
36			010				1.170
37	Outdoor Lighting Rates OL, EOL		798	807		9	1.1%
38							, <u></u>
39	Total (Sum of Lines 27 to 37)	\$	217,015	\$ 219,546		\$ 2,530	1.2%
40		•	,	+,		-,	
41							
42	Rate B Base Component						
43	GV Rate B - base component	\$	31	\$ 59		\$ 28	88.1%
44	LG Rate B - base component		1,043	1,961		918	88.1%
45	Total (Line 43 + Line 44)	\$	1,074	\$ 2,020		\$ 946	88.1%
46	, ,						
47							
48	Total, all customers (Line 39 + Line 45)	\$	218,089	<b>\$ 221,565</b>		\$ 3,476	1.6%
49							
50							
51	Total Rate B, incremental plus base:						
52	Rate GV: Line 32 + Line 43	\$	56	<mark>\$ 84</mark>		<mark>\$</mark> 28	
53	Rate LG: Line 35+ Line 44		1,855	2,783		927	<u>50.0%</u>
54	Total	\$	1,911	\$ 2,867		<mark>\$ 955</mark>	50.0%
55							
56							

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58 Notes:

(1) The result of applying rates effective August 1, 2020 to 2014 billing determinants. 59

(2) The Rate B base component was taken from Attachment JAU-4. Revenue targets for all other classes were calculated 60

(2) The rate blace component was taken non-rated ment 320-4. Report by adjusting current revenues for each class by an equal percentage.
(3) Column (2) - Column (1).
(4) Column (3) / Column (1). 61

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Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 Dated: July 20, 2021 Attachment JAU-4 Page 1 of 1

#### 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 2018 BILLING DETERMINANTS

14												
15		(A)		(B)	(C)	) = (A) x (B)		(D)	(E) =	(D) / (A)	(F) =	(B) + (E)
16							A	llocated			Tot	al Base
17		2018	E	Base	Re	venue from	Rev	enue from	Incr	emental		Plus
18		Billing	Con	nponent		Base	Inc	cremental	Con	nponent	Incr	emental
19		Demand	of	Rate	C	omponent	Cc	mponent	of	Rate		Rate
20												
21	Rate B customers on Rate GV	35,399	\$	1.67	\$	59,116	\$	24,789	\$	0.70	\$	2.37
22												
23		4 474 005	<u>^</u>	4.07	<b>•</b>	4 000 500	<b>•</b>	000 440	<b>•</b>	0.70	<b>•</b>	0.07
24	Rate B customers on Rate LG	1,174,005	\$	1.67	\$	1,960,588	\$	822,110	\$	0.70	\$	2.37
25												
26	Tatal Data D sustains and	4 000 404			<b>•</b>	0.040.705	<b>•</b>	0.40,000				
27 28	Total Rate B customers	1,209,404			\$	2,019,705	\$	846,898				
20												

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31 Column (B) is from Attachment JAU-2, Page 1, Line 26

32 Column (D) is from Attachment JAU-3, Column (B), Lines 32 and 35.

#### Comparison of Rates Effective August 1, 2020 and Proposed Rates for Effect August 1, 2021 for Residential Service Rate R

1 2 3 4 5 6													Ρ	Public Servi	ice (	Dated:	sour Io. E July chm	
7 8 9 10		Comparison of Rate	s E			t 1, 2020 and sidential Ser			s fo	or Effect Au	gus	t 1, 2021						
11 12 13	(A)	(B)		(C)		(D)		(E)		(F) Stranded		(G)		(H)		(1)		(J)
14 15 16	Effective Date	Charge		istribution Charge	Re	egulatory conciliation djustment	Tr	ansmission Charge		Cost Recovery Charge		System Benefits Charge		lectricity sumption Tax		Energy Service Charge		Total Rate
17 18 19 20 21	August 1, 2020		\$ <b>\$</b>	13.81 <b>0.04508</b>	\$	-	\$	0.03011	\$	0.00982	\$	0.00743	\$	-	\$	0.07068	\$ \$	13.81 <b>0.16312</b>
22 23 24 25	August 1, 2021 (Proposed)		\$ \$	13.81 <b>0.05116</b>	\$	(0.00016)	\$	0.03046	\$	0.01441	\$	0.00743	\$	-	\$	0.08826	\$ <b>\$</b>	13.81 0.19156
26 27 28 29	Calculation of 550	kWh monthly bill, by rate componen	ıt:									\$		Change 1 each		Change as a % of		
30 31 32		Distribution Regulatory Reconciliation Adjustmen	nt		\$	8/01/2020 38.60 -	0 \$	8/01/2021 41.95 (0.09)			\$ \$	Change 3.35 (0.09)	Co	mponent 8.7% 0.0%		Total Bill 3.2% -0.1%		
33 34 35 36		Transmission Stranded Cost Recovery Charge System Benefits Charge Electricity Consumption Tax				16.56 5.40 4.09		16.75 7.93 4.09 -				0.19 2.53 - -		1.1% 46.9% 0.0% 0.0%		0.2% 2.4% 0.0% 0.0%		
37 38 39 40		Delivery Service Energy Service Total			\$ \$	64.65 38.87 103.52	\$ \$	70.63 48.54 119.17			\$ \$	5.98 9.67 15.65		9.2% 24.9% 15.1%		5.8% 9.3% 15.1%		
40 41 42 43	Calculation of 600	kWh monthly bill, by rate componen	ıt:										%	Change		Change as		
44 45 46		Distribution			\$	8/01/2020 40.86	0	<u>8/01/2021</u> 44.51			\$	\$ Change 3.65		n each mponent 8.9%		a % of Total Bill 3.3%		
47 48 49 50		Regulatory Reconciliation Adjustmen Transmission Stranded Cost Recovery Charge System Benefits Charge	nt		\$	- 18.07 5.89 4.46		(0.10) 18.28 8.65 4.46			\$	(0.10) 0.21 2.76 -		0.0% 1.2% 46.9% 0.0%		-0.1% 0.2% 2.5% 0.0%		
51 52 53 54		Electricity Consumption Tax Delivery Service Energy Service Total			\$ \$	69.28 42.41 111.69	\$ \$	75.80 52.96 128.76			\$ \$	- 6.52 10.55 17.07		0.0% 9.4% 24.9% 15.3%		0.0% 5.8% 9.4% 15.3%		
55 56 57 58	Calculation of 650	kWh monthly bill, by rate componen	ıt:		φ	111.09	φ	120.70			φ	0	%	Change		Change as		

#### Calculation of 550 kWh monthly bill, by rate component:

						\$	in each	a % of
	08/	01/2020	08	3/01/2021	С	hange	Component	Total Bill
Distribution	\$	38.60	\$	41.95	\$	3.35	8.7%	3.2%
Regulatory Reconciliation Adjustment		-		(0.09)	\$	(0.09)	0.0%	-0.1%
Transmission		16.56		16.75		0.19	1.1%	0.2%
Stranded Cost Recovery Charge		5.40		7.93		2.53	46.9%	2.4%
System Benefits Charge		4.09		4.09		-	0.0%	0.0%
Electricity Consumption Tax		-		-		-	0.0%	0.0%
Delivery Service	\$	64.65	\$	70.63	\$	5.98	9.2%	5.8%
Energy Service		38.87		48.54		9.67	24.9%	9.3%
Total	\$	103.52	\$	119.17	\$	15.65	15.1%	15.1%

#### Calculation of 600 kWh monthly bill, by rate component:

	08/	01/2020	0	8/01/2021
Distribution	\$	40.86	\$	44.51
Regulatory Reconciliation Adjustment	\$	-		(0.10)
Transmission		18.07		18.28
Stranded Cost Recovery Charge		5.89		8.65
System Benefits Charge		4.46		4.46
Electricity Consumption Tax		-		-
Delivery Service	\$	69.28	\$	75.80
Energy Service		42.41		52.96
Total	\$	111.69	\$	128.76

		% Change	Change as			
	\$	in each	a % of			
	Change	Component	Total Bill			
\$ \$	3.65	8.9%	3.3%			
\$	(0.10)	0.0%	-0.1%			
	0.21	1.2%	0.2%			
	2.76	46.9%	2.5%			
	-	0.0%	0.0%			
	-	0.0%	0.0%			
\$	6.52	9.4%	5.8%			
	10.55	24.9%	9.4%			
¢	17.07	15.3%	15.3%			

#### Calculation of 650 kWh monthly bill, by rate component:

59					
60		08	/01/2020	0	8/01/2021
61	Distribution	\$	43.11	\$	47.06
62	Regulatory Reconciliation Adjustment		-		(0.10)
63	Transmission		19.57		19.80
64	Stranded Cost Recovery Charge		6.38		9.37
65	System Benefits Charge		4.83		4.83
66	Electricity Consumption Tax		-		-
67	Delivery Service	\$	73.89	\$	80.96
68	Energy Service		45.94		57.37
69	Total	\$	119.83	\$	138.33

\$ Change	% Change in each Component	Change as a % of Total Bill
\$ 3.95	9.2%	3.3%
\$ (0.10)	0.0%	-0.1%
0.23	1.2%	0.2%
2.99	46.9%	2.5%
-	0.0%	0.0%
-	0.0%	0.0%
\$ 7.07	9.6%	5.9%
11.43	24.9%	9.5%
<b>\$</b> 18.50	15.4%	15.4%

Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109

Dated: July 20, 2021

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#### Comparison of Rates Effective August 1, 2020 and Proposed Rates for Effect August 1, 2021 for Residential Service Rate R Transmission and Energy Service Only

							37 -										
11 12 13	(A)	(B)		(C)		(D)		(E)		(F) Stranded	(G)		(H)	(I)		(J)	
13					Pog	ulatory			``	Cost	Svstem	EL	ectricity	Energy			
14	Effective			istribution		nciliation	Tr.	ansmission			Benefits		,	Service		Tatal	
							116			Recovery		Con	sumption			Total	
16	Date	Charge		Charge	Adju	ustment		Charge		Charge	Charge		Tax	Charge		Rate	
17 18		<b>2</b> / / / / / / / / / / / / / / / / / / /	•												•		
19	August 1, 2020	Customer charge (per month)	\$	13.81											\$	13.81	
20		Charge per kWh	\$	0.04508	\$	-	\$	0.03011	\$	0.00982	\$ 0.00743	\$	-	\$ 0.07068	\$	0.16312	
21 22																	
23	August 1, 2021	Customer charge (per month)	\$	13.81											\$	13.81	
24 25	(Proposed)	Charge per kWh	\$	0.04508	\$	-	\$	0.03046	\$	0.00982	\$ 0.00743	\$	-	\$ 0.08826	\$	0.18105	

#### Calculation of 550 kWh monthly bill, by rate component:

 ·····								
						\$	% Change in each	Change as a % of
	08/	01/2020	08	3/01/2021	C	nange	Component	Total Bill
Distribution	\$	38.60	\$	38.60	\$	-	0.0%	0
Regulatory Reconciliation Adjustment		-		-		-	0.0%	0
Transmission		16.56		16.75		0.19	1.1%	C
Stranded Cost Recovery Charge		5.40		5.40		-	0.0%	(
System Benefits Charge		4.09		4.09		-	0.0%	(
Electricity Consumption Tax		-		-		-	0.0%	(
Delivery Service	\$	64.65	\$	64.84	\$	0.19	0.3%	(
Energy Service		38.87		48.54		9.67	24.9%	1
Total	\$	103.52	\$	113.38	\$	9.86	9.5%	ç

#### Calculation of 600 kWh monthly bill, by rate component:

	08/	/01/2020	0	8/01/2021
Distribution	\$	40.86	\$	40.86
Regulatory Reconciliation Adjustment		-		-
Transmission		18.07		18.28
Stranded Cost Recovery Charge		5.89		5.89
System Benefits Charge		4.46		4.46
Electricity Consumption Tax		-		-
Delivery Service	\$	69.28	\$	69.49
Energy Service		42.41		52.96
Total	\$	111.69	\$	122.45

		% Change	Change as
	\$	in each	a % of
	Change	Component	Total Bill
\$	-	0.0%	0.0%
	-	0.0%	0.0%
	0.21	1.2%	0.2%
	-	0.0%	0.0%
	-	0.0%	0.0%
	-	0.0%	0.0%
\$	0.21	0.3%	0.2%
	10.55	24.9%	9.4%
¢	10.76	9.6%	9.6%

# $\begin{array}{c} 26\\ 27\\ 28\\ 29\\ 30\\ 31\\ 2\\ 33\\ 34\\ 35\\ 36\\ 37\\ 38\\ 39\\ 41\\ 42\\ 44\\ 44\\ 46\\ 47\\ 89\\ 51\\ 52\\ 53\\ 45\\ 55\\ 55\\ 55\\ 58\\ \end{array}$ Calculation of 650 kWh monthly bill, by rate component:

59					
60		08/0	01/2020	08	/01/2021
61	Distribution	\$	43.11	\$	43.11
62	Regulatory Reconciliation Adjustment		-		-
63	Transmission		19.57		19.80
64	Stranded Cost Recovery Charge		6.38		6.38
65	System Benefits Charge		4.83		4.83
66	Electricity Consumption Tax		-		-
67	Delivery Service	\$	73.89	\$	74.12
68	Energy Service		45.94		57.37
69	Total	\$	119.83	\$	131.49

9	5	% Change in each	Change as a % of
Cha	nge	Component	Total Bill
\$	-	0.0%	0.0%
	-	0.0%	0.0%
	0.23	1.2%	0.2%
	-	0.0%	0.0%
	-	0.0%	0.0%
	-	0.0%	0.0%
\$	0.23	0.3%	0.2%
	11.43	24.9%	9.5%
\$	11.66	9.7%	9.7%

Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 Dated: July 20, 2021 Attachment JAU-6

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#### Comparison of Rates Effective February 1, 2021 and Proposed Rates for Effect August 1, 2021 for Residential Service Rate R

11																
12	(A)	(B)		(C)		(D)		(E)		(F)	(G)		(H)	(I)	(J)	
13									5	Stranded						
14					F	Regulatory				Cost	System	E	lectricity	Energy		
15	Effective		D	istribution	Re	econciliation	Tra	ansmission	F	Recovery	Benefits	Cor	nsumption	Service	Total	
16	Date	Charge		Charge	A	djustment		Charge		Charge	Charge		Tax	Charge	Rate	
17																
18																
19	February 1, 2021	Customer charge (per month)	\$	13.81											\$ 13.81	
20		Charge per kWh	\$	0.05116	\$	-	\$	0.03011	\$	0.01441	\$ 0.00743	\$	-	\$ 0.06627	\$ 0.16938	3
21																
22																
23	August 1, 2021	Customer charge (per month)	\$	13.81											\$ 13.81	1
24	(Proposed)	Charge per kWh	\$	0.05180	\$	(0.00016)	\$	0.03046	\$	0.00896	\$ 0.00743	\$	-	\$ 0.08826	\$ 0.18675	5

#### Calculation of 550 kWh monthly bill, by rate component:

8 9 10

 · · · · · · · · · · · · · · · · · · ·								
						\$	% Change in each	Chang a %
	02/	01/2021	08	/01/2021	С	hange	Component	Tota
Distribution	\$	41.95	\$	42.30	\$	0.35	0.8%	
Regulatory Reconciliation Adjustment		-		(0.09)		(0.09)	0.0%	
Transmission		16.56		16.75		0.19	1.1%	
Stranded Cost Recovery Charge		7.93		4.93		(3.00)	-37.8%	
System Benefits Charge		4.09		4.09		-	0.0%	
Electricity Consumption Tax		-		-		-	0.0%	
Delivery Service	\$	70.53	\$	67.98	\$	(2.55)	-3.6%	
Energy Service		36.45		48.54		12.09	33.2%	
Total	\$	106.98	\$	116.52	\$	9.54	8.9%	

#### Calculation of 600 kWh monthly bill, by rate component:

	02/	01/2021	0	8/01/2021
Distribution	\$	44.51	\$	44.89
Regulatory Reconciliation Adjustment		-		(0.10)
Transmission		18.07		18.28
Stranded Cost Recovery Charge		8.65		5.38
System Benefits Charge		4.46		4.46
Electricity Consumption Tax		-		-
Delivery Service	\$	75.69	\$	72.91
Energy Service		39.76		52.96
Total	\$	115.45	\$	125.87

		% Change	Change as
	\$	in each	a % of
(	Change	Component	Total Bill
\$	0.38	0.9%	0.3%
	(0.10)	0.0%	-0.1%
	0.21	1.2%	0.2%
	(3.27)	-37.8%	-2.8%
	-	0.0%	0.0%
	-	0.0%	0.0%
\$	(2.78)	-3.7%	-2.4%
	13.20	33.2%	11.4%
\$	10 42	9.0%	9.0%

#### Calculation of 650 kWh monthly bill, by rate component:

11									
12	(A)	(B)		(C)		(D)		(E)	
13									
14					R	egulatory			
15	Effective		D	istribution		conciliation	Tra	nsmission	
16	Date	Charge		Charge		djustment		Charge	
17		onargo		onargo		ajaotinont		onargo	
18									
19	February 1, 2021	Customer charge (per month)	\$	13.81					
20	February 1, 2021	Charge per kWh	φ \$	0.05116	\$		\$	0.03011	
		Charge per kwn	φ	0.05116	φ	-	φ	0.03011	
21									
22									
23	August 1, 2021	Customer charge (per month)	\$	13.81					
24	(Proposed)	Charge per kWh	\$	0.05180	\$	(0.00016)	\$	0.03046	
25									
26									
27	Calculation of 550	kWh monthly bill, by rate compo	nent:						
28									
29									
30					0'	2/01/2021	08	/01/2021	
31		Distribution			\$	41.95	\$	42.30	
32		Regulatory Reconciliation Adjustm	ont		φ	41.55	ψ	(0.09)	
32		Transmission	ent			16.56		(0.09)	
34		Stranded Cost Recovery Charge				7.93		4.93	
35		System Benefits Charge				4.09		4.09	
36		Electricity Consumption Tax			_	-		-	
37		Delivery Service			\$	70.53	\$	67.98	
38		Energy Service				36.45		48.54	
39		Total			\$	106.98	\$	116.52	
40									
41									
42	Calculation of 600	kWh monthly bill, by rate compo	nent:						
43									
44									
45					03	2/01/2021	08	/01/2021	
46		Distribution			\$	44.51	\$	44.89	
47		Regulatory Reconciliation Adjustm	ont		Ψ	4.51	Ψ	(0.10)	
48		Transmission	ent			18.07		18.28	
49		Stranded Cost Recovery Charge				8.65		5.38	
50		System Benefits Charge				4.46		4.46	
51		Electricity Consumption Tax			-	-		-	
52		Delivery Service			\$	75.69	\$	72.91	
53		Energy Service				39.76		52.96	
54		Total			\$	115.45	\$	125.87	
55									
56									
57	Calculation of 650	kWh monthly bill, by rate compo	nent:						
58									
59									
60					03	2/01/2021	08	/01/2021	
61		Distribution			¢ 02	47.06	\$	47.48	-
62			ont		φ	47.00	φ		
		Regulatory Reconciliation Adjustm	ent			40.57		(0.10)	
63		Transmission				19.57		19.80	
64		Stranded Cost Recovery Charge				9.37		5.82	
65		System Benefits Charge				4.83		4.83	
66		Electricity Consumption Tax				-		-	
67		Delivery Service			\$	80.83	\$	77.83	
68		Energy Service				43.08		57.37	
69									
69		Total			\$	123.91	\$	135.20	

	\$	% Change in each	Change as a % of		
Ch	nange	Component	Total Bill		
\$	0.42	0.9%	0.3%		
	(0.10)	0.0%	-0.1%		
	0.23	1.2%	0.2%		
	(3.55)	-37.9%	-2.9%		
	-	0.0%	0.0%		
	-	0.0%	0.0%		
\$	(3.00)	-3.7%	-2.4%		
	14.29	33.2%	11.5%		
\$	11.29	9.1%	9.1%		

#### Comparison of Rates Effective February 1, 2021 and Proposed Rates for Effect August 1, 2021 for Residential Service Rate R

												Ρι	ublic Service	Co	Dated: Ju Attachm	
	Comparison of Ra	ntes E			ry 1, 2021 a sidential Se			tes	for Effect A	ug	ust 1, 2021					
(A)	(B)		(C)		(D)		(E)		(F) Stranded		(G)		(H)		(I)	(J)
Effective Date	Charge	D	istribution Charge	Re	egulatory conciliation djustment	Т	ransmission Charge		Cost Recovery Charge		System Benefits Charge		Electricity onsumption Tax		Energy Service Charge	Total Rate
February 1, 2021	Customer charge (per month) Charge per kWh	\$ \$	13.81 0.05116	\$	-	\$	0.03011	\$	0.01441	\$	0.00743	\$	-	\$	0.06627	\$ 13.81 <b>\$0.16938</b>
August 1, 2021 (Proposed)	Customer charge (per month) Charge per kWh	\$ \$	13.81 0.05116	\$	-	\$	0.03046	\$	0.01441	\$	0.00743	\$	-	\$	0.08826	\$ 13.81 <b>\$0.19172</b>
Calculation of 550	kWh monthly bill, by rate compo	onent:	:									ġ	% Change		Change as	
											\$		in each		a % of	
	Distribution			\$	2/01/2021 41.95	\$	08/01/2021 41.95			\$	Change -	C	Component 0.0%		Total Bill 0.0%	
	Regulatory Reconciliation Adjustn	nent		Ψ	41.55	ψ	41.55			φ			0.0%		0.0%	
	Transmission				16.56		16.75				0.19		1.1%		0.2%	
	Stranded Cost Recovery Charge				7.93		7.93				-		0.0%		0.0%	
	System Benefits Charge				4.09		4.09				-		0.0%		0.0%	
	Electricity Consumption Tax Delivery Service			\$	- 70.53	\$	- 70.72			\$	- 0.19		0.0%		0.0%	
	Energy Service			Ψ	36.45	Ψ	48.54			ψ	12.09		33.2%		11.3%	
	Total			\$	106.98	\$	119.26			\$	12.00		11.5%		11.5%	
						_				_						
Calculation of 600	kWh monthly bill, by rate compo	onent:											% Change		Ohanana aa	
											\$		in each		Change as a % of	
				02	2/01/2021	(	08/01/2021				Change		Component		Total Bill	
	Distribution			\$	44.51	\$	44.51			\$	-		0.0%		0.0%	•
	Regulatory Reconciliation Adjustn	nent			-		-				-		0.0%		0.0%	
	Transmission				18.07		18.28				0.21		1.2%		0.2%	
	Stranded Cost Recovery Charge System Benefits Charge				8.65 4.46		8.65 4.46				-		0.0% 0.0%		0.0% 0.0%	
	Electricity Consumption Tax				4.40		4.40				-		0.0%		0.0%	
	Delivery Service			\$	75.69	\$	75.90			\$	0.21		0.3%		0.2%	
	Energy Service				39.76		52.96			_	13.20		33.2%		11.4%	
	Total			\$	115.45	\$	128.86			\$	13.41		11.6%		11.6%	
Calculation of 650	kWh monthly bill, by rate compo	nent														
	, 2, 120 compe											q	% Change		Change as	
											¢		in each		a 🕅 af	

#### Calculation of 550 kWh monthly bill, by rate component:

	02	/01/2021	08	/01/2021	с	\$ hange	% Change in each Component	Change as a % of Total Bill
Distribution	\$	41.95	\$	41.95	\$	-	0.0%	0.0%
Regulatory Reconciliation Adjustment		-		-		-	0.0%	0.0%
Transmission		16.56		16.75		0.19	1.1%	0.2%
Stranded Cost Recovery Charge		7.93		7.93		-	0.0%	0.0%
System Benefits Charge		4.09		4.09		-	0.0%	0.0%
Electricity Consumption Tax		-		-		-	0.0%	0.0%
Delivery Service	\$	70.53	\$	70.72	\$	0.19	<u>0.3</u> %	<u>0.2</u> %
Energy Service		36.45		48.54		12.09	33.2%	11.3%
Total	\$	106.98	\$	119.26	\$	12.28	<u>11.5</u> %	<u>11.5</u> %

#### Calculation of 600 kWh monthly bill, by rate component:

	02/	01/2021	08	3/01/2021
Distribution	\$	44.51	\$	44.51
Regulatory Reconciliation Adjustment		-		-
Transmission		18.07		18.28
Stranded Cost Recovery Charge		8.65		8.65
System Benefits Charge		4.46		4.46
Electricity Consumption Tax		-		-
Delivery Service	\$	75.69	\$	75.90
Energy Service		39.76		52.96
Total	\$	115.45	\$	128.86

	•	% Change	Change as
	\$	in each	a % of
	Change	Component	Total Bill
\$	-	0.0%	0.0%
	-	0.0%	0.0%
	0.21	1.2%	0.2%
	-	0.0%	0.0%
	-	0.0%	0.0%
	-	0.0%	0.0%
\$	0.21	0.3%	0.2%
	13.20	33.2%	11.4%
¢	13/1	11.6%	11.6%

#### Calculation of 650 kWh monthly bill, by rate component:

59					
60		02/0	01/2021	08	3/01/2021
61	Distribution	\$	47.06	\$	47.06
62	Regulatory Reconciliation Adjustment		-		-
63	Transmission		19.57		19.80
64	Stranded Cost Recovery Charge		9.37		9.37
65	System Benefits Charge		4.83		4.83
66	Electricity Consumption Tax		-		-
67	Delivery Service	\$	80.83	\$	81.06
68	Energy Service		43.08		57.37
69	Total	\$	123.91	\$	138.43

	\$	% Change in each	Change as a % of
	Change	Component	Total Bill
_	\$ -	0.0%	0.0%
	-	0.0%	0.0%
	0.23	1.2%	0.2%
	-	0.0%	0.0%
	-	0.0%	0.0%
	-	0.0%	0.0%
	\$ 0.23	0.3%	0.2%
	14.29	33.2%	11.5%
	\$ 14.52	11.7%	11.7%

Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 Dated: July 20, 2021 Attachment JAU-7 Page 1 of 2

Rate Changes Proposed for Effect on August 1, 2021

#### Impact of Each Change on Delivery Service Bills

9

10

11

Rate Changes Expressed as a Percentage of Total Delivery Revenue for Each Class

12	tate enaligee		si comago ci i ca					
13			Regulatory					Total
14			Reconciliation			System	Consumption	Delivery
15	Class	Distribution	Adjustment	Transmission	SCRC	Benefits	Tax	Service
16			-					
17	Residential	0.5%	-0.1%	0.3%	-4.4%	0.0%	0.0%	-3.7%
18								
19	General Service	0.5%	-0.1%	0.3%	-4.5%	0.0%	0.0%	-3.9%
20								
21	Primary General Service	0.3%	-0.1%	0.4%	-5.9%	0.0%	0.0%	-5.2%
22	GV Rate B	0.5%	-0.1%	7.4%	-3.8%	0.0%	0.0%	3.9%
23	Total Primary General Service	0.3%	-0.1%	0.4%	-5.9%	0.0%	0.0%	-5.2%
24								
25	Large General Service	0.3%	-0.1%	0.5%	-4.1%	0.0%	0.0%	-3.4%
26	LG Rate B	0.3%	-0.1%	19.2%	-4.6%	0.0%	0.0%	14.8%
27	Total Large General Service	0.3%	-0.1%	1.7%	-4.1%	0.0%	0.0%	-2.2%
28								
29	Outdoor Lighting Rate OL	0.7%	-0.2%	0.1%	-4.7%	0.0%	0.0%	-4.1%
30	Energy Efficient Outdoor Lt. Rate EOL	0.7%	-0.2%	0.1%	-6.1%	0.0%	0.0%	-5.5%
31	Total Outdoor Lighting	0.7%	-0.2%	0.1%	-5.2%	0.0%	0.0%	-4.6%
32								
33	Total Retail	0.4%	-0.1%	0.4%	-4.6%	0.0%	0.0%	-3.8%

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

1 2 3 4 5 6 7 8 9 10 11	Rat	Impact of Ea	ch Change on E	for Effect on Augu <b>3ills including Er</b> ntage of Total Re	nergy Service	Class	Public Ser	d/b/a Doo	of New Hampshire, Eversource Energy ket No. DE 21-109 ated: July 20, 2021 Attachment JAU-7 Page 2 of 2
12			Desulater					Total	
13 14			Regulatory Reconciliation			System	Consumption	Energy	Delivery and
15	Class	Distribution	Adjustment	Transmission	SCRC	Benefits	Tax	Service	Energy
16			,						
17	Residential	0.3%	-0.1%	0.2%	-2.8%	0.0%	0.0%	11.5%	9.1%
18									
19	General Service	0.3%	-0.1%	0.2%	-2.8%	0.0%	0.0%	12.6%	10.2%
20		0.00/	0.00/	0.00/	0.001	0.004	0.004	10.10	10.10
21	Primary General Service	0.2%	0.0%	0.2%	-3.0%	0.0%	0.0%	13.1%	10.4%
22	GV Rate B	0.3%	-0.1%	4.9%	-2.6%	0.0%	0.0%	9.1%	11.7%
23	Total General Service	0.2%	0.0%	0.2%	-3.0%	0.0%	0.0%	13.1%	10.4%
24		0.40/	0.0%	0.00/	4.00/	0.00/	0.00/	11.00/	40.00/
25 26	Large General Service LG Rate B	0.1%	0.0%	0.2% 9.0%	-1.9%	0.0%	0.0%	14.8% 14.5%	13.3%
		0.1%	0.0%	0.8%	-2.2%	0.0%	0.0%	14.5%	21.4%
27 28	Total Large General Service	0.1%	0.0%	0.8%	-1.9%	0.0%	0.0%	14.8%	13.8%
20 29	Outdoor Lighting Rate OL	0.6%	-0.2%	0.1%	-3.9%	0.0%	0.0%	5.9%	2.6%
30	Energy Efficient Outdoor Lt. Rate EOL	0.5%	-0.1%	0.1%	-4.8%	0.0%	0.0%	7.3%	3.0%
31	Total Outdoor Lighting	0.6%	-0.1%	0.1%	-4.2%	0.0%	0.0%	6.4%	2.7%
32		0.070	0.1.70	0.1.70		0.070	0.070	0	<b>L</b> ,
33	Total Retail	0.3%	-0.1%	0.3%	-2.8%	0.0%	0.0%	12.4%	10.1%

Public Service Company of New Hampshire, d/b/a Eversource Energy Docket No. DE 21-109 Dated: July 20, 2021 Attachment JAU-7A Page 1 of 2

Rate Changes Proposed for Effect on August 1, 2021

10

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#### Impact of Each Change on Delivery Service Bills Rate Changes Expressed as a Percentage of Total Delivery Revenue for Each Class Transmission and Energy Service Only

12	12 Transmission and Energy Service Only									
13 14			Regulatory					Total		
15			Reconciliation			System	Consumption	Delivery		
16	Class	Distribution	Adjustment	Transmission	SCRC	Benefits	Tax	Service		
17										
18	Residential	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%		
19										
20	General Service	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%		
21										
22	Primary General Service	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%		
23	GV Rate B	0.0%	0.0%	7.4%	0.0%	0.0%	0.0%	7.4%		
24	Total Primary General Service	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%		
25										
26	Large General Service	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.5%		
27	LG Rate B	0.0%	0.0%	<u>19.2%</u>	0.0%	0.0%	0.0%	19.2%		
28	Total Large General Service	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	1.7%		
29										
30	Outdoor Lighting Rate OL	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%		
31	Energy Efficient Outdoor Lt. Rate EOL	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%		
32	Total Outdoor Lighting	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%		
33	Total Datail	0.0%	0.0%	0.40/	0.0%	0.0%	0.0%	0.40/		
34	Total Retail	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%		

Public S	ervice Company of New Hampshire,
	d/b/a Eversource Energy
	Docket No. DE 21-109
	Dated: July 20, 2021
	Attachment JAU-7A
	Page 2 of 2

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

1 2 3 4 5 6 7 8 9			0	for Effect on Augu			Public Ser	d/b/a Doo D	of New Hampshire, Eversource Energy :ket No. DE 21-109 ated: July 20, 2021 Attachment JAU-7A Page 2 of 2
10 11	Bat			Bills including Er Intage of Total Re		Class			
12				Energy Service (		ondoo			
13					-				
14			Regulatory					Total	
15			Reconciliation			System	Consumption	Energy	Delivery and
16 17	Class	Distribution	Adjustment	Transmission	SCRC	Benefits	Tax	Service	Energy
18	Residential	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	11.5%	11.7%
19 20	General Service	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	12.6%	12.8%
21									
22	Primary General Service	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	13.1%	13.4%
23	GV Rate B	0.0%	0.0%	4.9%	0.0%	0.0%	0.0%	9.1%	14.0%
24	Total General Service	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	13.1%	13.4%
25			0.0%						
26	Large General Service	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	14.8%	15.0%
27	LG Rate B	0.0%	0.0%	9.0%	0.0%	0.0%	0.0%	14.5%	23.5%
28	Total Large General Service	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	14.8%	15.6%
29		0.00/	0.00/	0.10	0.00/	0.00/	0.00/	5.00/	0.00/
30	Outdoor Lighting Rate OL	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	5.9%	6.0%
31 32	Energy Efficient Outdoor Lt. Rate EOL	0.0%	0.0%	0.1% 0.1%	0.0%	0.0%	0.0%	7.3% 6.4%	7.4%
32 33	Total Outdoor Lighting	0.0%	0.0%	0.170	0.0%	0.0%	0.0%	0.470	6.5%
34	Total Retail	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	12.4%	12.6%

#### 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 21-109

1	Q.	Please state your name, business address and your present position.
2	A.	My name is David James Burnham. My business address is 56 Prospect Street,
3		Hartford, CT 06103. I am a Manager of ISO Policy and Economic Analysis at
4		Eversource Energy ("Eversource").
<b>5</b>	Q.	Have you previously testified before the Commission?
6	A.	Yes, I previously testified before the Commission in support of the Transmission
7		Cost Adjustment Mechanism ("TCAM") in Docket No. DE 20-085.
8	Q.	What are your current responsibilities?
8 9	<b>Q.</b> A.	<b>What are your current responsibilities?</b> I represent Eversource on several ISO New England and NEPOOL stakeholder
9		I represent Eversource on several ISO New England and NEPOOL stakeholder
9 10		I represent Eversource on several ISO New England and NEPOOL stakeholder committees, including those that focus on transmission-related topics. I am
9 10 11		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
9 10 11 12		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

1		oversee assessments of non-transmission alternatives for major transmission
2		projects.
3	Q.	Please describe your educational background.
4	A.	I hold a Bachelor of Engineering from Dartmouth College in Hanover, New
5		Hampshire, and a Master of Science in Electrical Engineering from the University
6		of Texas in Austin, Texas.
7	Q.	Please describe your professional experience.
8	A.	I have experience with transmission planning, project development, and ISO New
9		England markets. I joined Eversource as an electrical engineer supporting
10		economic analysis of major transmission projects and have held positions of
11		increasing responsibility within the transmission business. Prior to joining
12		Eversource, I was an Electrical Engineer within the Office of Electric Reliability at
13		the Federal Energy Regulatory Commission in Washington, DC.
14	Q.	What is the purpose of your testimony?
15	A.	The purpose of my testimony is to describe the transmission planning process at
16		ISO-NE and to provide a detailed description of the projects included in the LNS
17		rates that have been included as part of this TCAM filing consistent with the
18		directive of Order No. 25,912 dated June 28, 2016 in Docket No. DE 16-566.

Testimony of David James Burnham Docket No. DE 21-109 July 20, 2021 Page 3 of 4

1	Q.	Will anyone else be providing testimony in support of this filing?
2	A.	Yes. Jennifer A. Ullram is filing testimony in support of the proposed retail
3		transmission rates. In her testimony, Ms. Ullram will detail the rates applicable to
4		each individual rate class. Erica L. Menard and James E. Mathews are filing
<b>5</b>		testimony in support of the calculation of Eversource's TCAM rates effective
6		August 1, 2021 as well as the reconciliation of actual/forecast transmission costs
7		through the reconciliation period ending July 2021, and to describe the year-to-
8		year change in LNS and RNS rates.
9	Q.	What information have you provided to meet the requirements of Order No.
10		25,912, dated June 28, 2016, in Docket No. DE 16-566?
11	A.	The ISO-NE transmission planning process is a regionally-coordinated process
12		conducted periodically to reliably meet customer demand, system stability and
13		asset condition needs throughout the region. Broadly speaking, there is an
14		extensive stakeholder process to identify the various needs of the electrical system
15		and the potential solutions to those needs through the development of the regional
16		system plan. As part of that process, ISO-NE will review potential transmission
17		solutions and potential market alternatives. Eventually, a preferred solution is
18		
		selected to address the identified needs. Eversource employs similar methods to

Testimony of David James Burnham Docket No. DE 21-109 July 20, 2021 Page 4 of 4

1	A more complete description of these processes is contained in the last Least Cost
2	Integrated Resource Plan submitted on October 1, 2020 in Docket No. DE 20-161.
3	Bates pages 33-36 of that filing provide descriptions and links to information on
4	both the planning processes.
5	Additionally, as Attachment DJB-1, I have provided the Actual 2020 Projects in
6	Service greater than \$5 million included in Schedule 21-ES, Category A (Local
7	Network Service) for The Connecticut Light and Power Company ("CL&P"),
8	Public Service Company of New Hampshire ("PSNH"), and NSTAR Electric
9	Company (West) ("NSTAR(West)") that are included in the LNS expenses in this
10	filing. The attachment includes CL&P, PSNH and NSTAR(West) because all LNS
11	customers (including PSNH retail customers) pay an average rate under Schedule
12	21-ES. It should be noted that beginning January 1, 2022, in accordance with the
13	Settlement approved by FERC on December 28, 2020 in Docket No. ER20-2054-
14	000, each operating company's LNS costs will be billed to its LNS customers
15	within the state it operates; for example, PSNH's LNS costs will be billed only to
16	PSNH's LNS customers in New Hampshire. The attachment details the projects by
17	individual company, project title, total project investment amount and what portion
18	of the project is classified by ISO-New England as a Pool Transmission Facility
19	("PTF") investment.

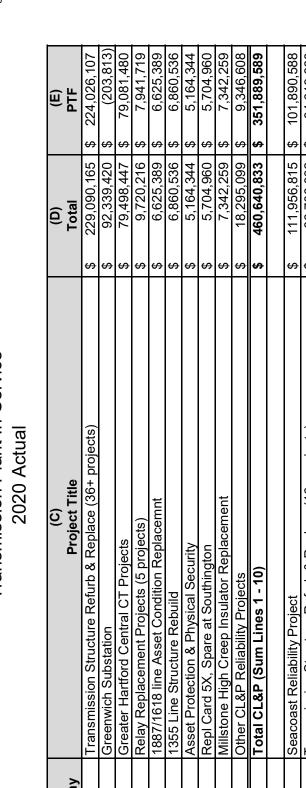
20 Q. Does this conclude your testimony?

21 A. Yes, it does.

## CL&P, PSNH, and NSTAR (West) Transmission Plant In-Service 2020 Actual

B

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Line	Company	Project Title		Total		PTF
-	CL&P	Transmission Structure Refurb & Replace (36+ projects)	\$	229,090,165	\$	224,026,107
2	CL&P	Greenwich Substation	\$	92,339,420	\$	(203,813)
3	CL&P	Greater Hartford Central CT Projects	\$	79,498,447	\$	79,081,480
4	CL&P	Relay Replacement Projects (5 projects)	\$	9,720,216	\$	7,941,719
5	CL&P	1887/1618 line Asset Condition Replacemnt	\$	6,625,389	\$	6,625,389
9	CL&P	1355 Line Structure Rebuild	\$	6,860,536	\$	6,860,536
7	CL&P	Asset Protection & Physical Security	\$	5,164,344	\$	5,164,344
8	CL&P	Repl Card 5X, Spare at Southington	\$	5,704,960	\$	5,704,960
6	CL&P	Millstone High Creep Insulator Replacement	\$	7,342,259	\$	7,342,259
10	CL&P	Other CL&P Reliability Projects	\$	18,295,099	Υ	9,346,608
11	CL&P	Total CL&P (Sum Lines 1 - 10)	\$	460,640,833	\$	351,889,589
12	PSNH	Seacoast Reliability Project	\$	111,956,815	ج	101,890,588
13	PSNH	Transmission Structure Refurb & Replace (16+ projects)	\$	86,706,332	\$	84,619,868
14	PSNH	M127 Line OPGW and Asset Condition Replacement	\$	11,202,165	\$	11,202,165
15	PSNH	Other PSNH Reliability Projects	\$	20,022,952	Υ	6,579,487
16	PSNH	Total PSNH (Sum Lines 12 - 15)	÷	229,888,264	\$	204,292,108
17	NSTAR (West)	Transmission Structure Refurb & Replace (27+ projects)	\$	63,112,409	Ŷ	63,071,091
18	NSTAR (West)	Pittsfield-Greenfield Area Solution Upgrades	\$	27,238,895	φ	27,238,895
19	NSTAR (West)	Total NSTAR (West) (Sum Lines 17 - 18)	÷	90,351,304	\$	90,309,986
ĊĊ		Totol CI & D DSNIL and NSTAD (Mood) /  [mo 11 ± 16 ± 10)		700 000 101		101 602
20		10tal CL&P, PONH, and NOLAR (West) (LINE 11 + 16 + 19)	<del>በ</del>	/80,880,401	A	646,491,682