THE STATE OF NEW HAMPSHIRE BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DOCKET NO. DE 23-XXX PETITION FOR RECOVERY OF STORM EXPENSES

PREPARED TESTIMONY OF MARISA B. PARUTA AND DEAN C. DESAUTELS

On behalf of Public Service Company of New Hampshire d/b/a Eversource Energy

May 1, 2023

TABLE OF CONTENTS

1	I.	INTRODUCTION	3
2	II.	QUALIFYING EVENT OVERVIEW AND COST ANALYSIS	. 10
3	III.	MAJOR STORM AND PRE-STAGING EVENTS	. 20
4	IV.	CONCLUDING REMARKS	. 6 4

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1 I. INTRODUCTION

- 2 Q. Ms. Paruta, please state your name, position, and business address.
- 3 A. My name is Marisa B. Paruta. My business address is 107 Selden Street, Berlin,
- 4 Connecticut. I am employed by Eversource Energy Service Company as the Director of
- New Hampshire Revenue Requirements and in that position, I provide service to Public
- 6 Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or the
- 7 "Company").
- 8 Q. Please provide your educational and professional background.
- 9 A. I received a Bachelor of Science degree in accounting from the University of Connecticut
- School of Business. I started my career at Arthur Andersen in the client audit and assurance
- practice, continuing at Deloitte in the same practice. I joined Northeast Utilities,
- 12 Eversource's predecessor, and worked in the accounting organization through multiple
- positions leading to the Director of Corporate Accounting and Financial Reporting. I
- moved to the Regulatory and Revenue Requirements team in my current position in June
- 15 2021. I have been with Eversource Energy for over 20 years.
- 16 Q. Have you previously testified before the Commission?
- 17 A. Yes. I have provided testimony in multiple dockets.

1 Q. What are your current responsibilities?

- I am currently responsible for the coordination and implementation of revenue requirements calculations for Eversource, as well as the rate and regulatory filings associated with Eversource's default Energy Service ("ES"), Stranded Cost Recovery Charge ("SCRC"), Transmission Cost Adjustment Mechanism ("TCAM"), System Benefits Charge ("SBC"), Regulatory Reconciliation Adjustment mechanism ("RRA"), and Distribution Rates.
- 8 Q. Mr. Desautels, please state your name, position, and business address.
- 9 A. My name is Dean C. Desautels. My business address is 780 North Commercial Street,
 10 Manchester, New Hampshire. I am employed by Eversource Energy Service Company as
 11 the Manager of Emergency Preparedness and in that position, I provide service to the
 12 Company.
 - O. Please provide your educational and professional background.

- I have worked in the utility industry for 22 years with the last 7 years as Manager of
 Emergency Preparedness for Eversource Energy's New Hampshire Electric Operations. I
 have previously held similar positions for Eversource Energy in Connecticut and National
 Grid in Massachusetts. I hold a Bachelor of Science in Electrical Engineering from
 Norwich University and a Certificate of Business Leadership from Worcester
 Polytechnical Institute's School of Industrial Management.
- 20 Q. Have you previously testified before the Commission?
- A. Yes. I provided testimony in support of the Company's 2021 and 2022 petitions for recovery of storm costs docketed as DE 21-089 and DE 22-031.

1 Q. What are your current responsibilities?

- 2 A. I am currently responsible for the Company's Emergency Response Plan ("ERP"), 3 including coordinating for preparedness, response, and recovery activities for emergency
- 4 incidents, including severe weather events.

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5 Q. What is the purpose of your joint testimony?

A. Our testimony presents information for Commission review on nine pre-staging and storm response events and associated costs that occurred between January 2022 and July 2022.

The storm events are all eligible for storm-fund deferral treatment pursuant to the Major Storm Cost Reserve ("MSCR") mechanism established in Docket No. DE 99-099 and the pre-staging criteria approved in Docket No. DE 12-320.

Q. Is the Company proposing a rate to take effect as a result of this filing?

No. At this time, the Company is not proposing a rate for effect as part of this filing. The Company is requesting that the storm costs be reviewed for accuracy and approved for recovery. As filed in the Company's letter in Docket No. DE 22-031 on April 17, 2023, the MSCR fund has been depleted to zero as a result of the storm costs approved in that docket. Any additional funding to the MSCR will be applied against the unrecovered balance, including carrying costs, from the storm costs approved in Docket No. DE 22-031 until such costs have been recovered. Historically, the Company would request approval for storm costs to be recovered through the MSCR; however, given there are no funds to apply, the Company will request approval to defer the storm costs in this docket, plus carrying charges, to the storm cost asset account #186430 until the Company has recovered the approved costs and associated carrying charges.

Q. Please provide a brief history of the Major Storm Cost Reserve and describe its evolution.

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- The MSCR was first established in Docket No. DE 99-099. Pursuant to the settlement A. 3 agreement approved by the Commission in that docket (the "DE 99-099 Settlement 4 Agreement"), the Company is allowed to defer costs attributable to pre-staging and 5 restoration efforts derived from severe weather events that meet the criteria mentioned 6 previously. The DE 99-099 Settlement Agreement provided annual funding of \$3.0 million 7 for the MSCR, for the purpose of covering the incremental costs associated with severe 8 weather events. The Commission authorized Eversource to increase the funding level to 9 10 \$3.5 million annually in Docket No. DE 09-035. The annual funding level was further increased to \$7 million annually pursuant to Order No. 25,382 2012) issued in Docket No. 11 DE 12-110. 12
 - The Commission allowed for inclusion of pre-staging costs in Docket No. DE 12-320. As discussed in greater detail below, pursuant to Order No. 25,465 in Docket No. DE 12-320, the Commission allowed pre-staging events that had a "high" probability of reaching "Level 3" according to the Energy Event Index ("EEI") to be eligible for recovery under the MSCR. Under Order No. 25,534 (June 27, 2013) in Docket No. DE 13-127, Eversource was authorized to increase the funding level to \$12.0 million annually; this level of funding was confirmed in Order No. 26,433 issued in Docket No. DE 19-057. Order No. 26,433 also permits the Company to file for a separate, temporary amortization of storm costs for storm events that exceed \$25 million per event, which may include a request to recover costs for repair or damage due to such storm events through a surcharge (the Storm Cost Adjustment Mechanism).

- Q. Has the Company experienced storm events that have resulted in costs that exceed \$25 million per event in the last year, which would qualify for separate treatment, in accordance with Order No. 26,433 in Docket No. DE 19-057?
- 4 A. Yes, there were three major storm events that occurred in the months of December 2022, January 2023, and March 2023 that exceeded \$25 million per event. The weather event of 5 December 23rd through 27th was associated with a significant winter storm that produced 6 7 damaging winds across the region. The storm event impacted 293,255 Eversource New Hampshire customers. The weather event of January 20th through 26th was associated with 8 a significant winter storm with back-to-back fronts that produced 12-18 inches of heavy, 9 wet snow across regions of the state. The storm impacted 299,704 Eversource New 10 Hampshire customers. The weather event of March 14th through 15th was associated with 11 a significant winter storm which produced 2-3 feet of heavy snow across regions of the 12 state. The storm impacted 235,351 Eversource New Hampshire customers. The Company 13 is currently evaluating the option to file for a separate, temporary amortization for these 14 three storms to recover the costs through the Storm Cost Adjustment Mechanism surcharge, 15 as permitted in Order No. 26,433 in Docket No. DE 19-057. Based on the information 16 available as of this filing, the Company estimates the three storms' cumulative cost will be 17 at least approximately \$130 million. The cumulative cost estimate is preliminary and 18 subject to change based on several factors, including estimated vendor invoices not yet 19 received, a thorough review of the supporting documentation, and a determination on the 20 amounts that qualify for treatment as capital assets. 21
- Q. Please define the requirements for a weather event to be applicable for recovery within the MSCR.
- A. For all impending storms, Eversource receives an EEI from its outside vendor, DTN. The

EEI provides highly detailed weather forecasts by region and zone for the Eversource service area. DTN's EEI forecast includes all relevant weather metrics needed to determine the likely severity and location of an impending severe storm. The EEI ranks the strength of the storm on a scale from 1 to 5, where 5 will be the most severe and cause the most damage, and then applies a likelihood against the forecasted strength of the storm.

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Pursuant to the criteria established in Docket No. DE 12-320, pre-staging costs can be recovered through the MSCR if the weather event has a "high" (greater than 60% based on the forecast) probability of reaching "Level 3" or stronger, according to the EEI. *See* DE 12-320, Order No. 25,465, at 4 (2013). For non-pre-staging events, a Major Storm is defined as an event that results in either: (a) 10% or more of Eversource's retail customers being without power in conjunction with more than 200 reported troubles; or (b) more than 300 reported troubles during the event. *See* Order No. 25,465, at 1.

Q. Can you please list the storm events, which are the subject of this filing?

A. In this filing, the Company is presenting information supporting the costs for nine storm and pre-staging events that occurred from January 2022 through July 2022: (1) January 17, 2022 Pre-Staging event; (2) January 29, 2022 Pre-Staging event; (3) February 4, 2022 Pre-Staging event; (4) February 25, 2022 Pre-Staging event; (5) March 8, 2022 Major Storm; (6) March 11, 2022 Pre-Staging event; (7) April 20, 2022 Major Storm; (8) July 21, 2022 Major Storm; and (9) July 24, 2022 Pre-Staging event (collectively, the "Storm Events").

- Q. Are there any 2022 Storm Events that occurred but are not included in this filing because their costs are not yet "finalized"?
- 22 A. Yes. There were Storm Events that occurred in November and December 2022 that were

excluded from this filing because the Company has not yet finalized their costs.

Q. How does the Company determine whether or not the costs of a Storm Event are 2 "finalized"? 3

- A Storm Event's costs are considered "finalized" when there are no longer any 4 A. unvouchered liabilities ("UVLs") charged to the work order. UVLs are used to record or 5 estimate the liability that exists for work performed for the Company, but for which an 6 actual invoice has not yet been received.
- Does the Company's filing of finalized storm costs guarantee that a relevant charge 8 Q. will not be received after costs have been filed for recovery? 9
- No. Even though the process in place for tracking, revising, and finalizing storm costs is 10 A. relatively reliable, there is still the possibility for a relevant charge to be received after the 11 storm costs have been filed. This situation could occur if invoices were received, and a 12 liability was not recorded or applied. The Company will include these late charges in 13 subsequent annual storm cost recovery filings. 14
- Q. Are there any relevant charges that have been recorded for prior Storm Events that 15 have been previously audited? 16
- A. No. 17

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- How is this filing organized? 18 Q.
- This filing is organized to facilitate the efficient review of costs by the Commission. To A. 19 achieve this objective, the Company has developed exhibits that organize the costs incurred 20 21 for each storm into the following format: (1) summary of costs by storm; and (2) summary of costs by category by storm. Documentation and supporting backup analysis will be 22 made available upon request. 23

Following this introduction is a review of each qualifying storm and associated costs by category in Section II. Section II also describes the review process that is undertaken to analyze charges from outside vendors to ensure that costs are accurate and reasonable. In Section III, it describes the Major Storms and Pre-Staging Events and then Section IV provides concluding remarks.

6 II. QUALIFYING EVENT OVERVIEW AND COST ANALYSIS

Q. For the Storm Events that have yet to be audited, please provide the total amount of storm costs included in this filing.

As illustrated in the table below, the Company incurred storm-related preparation and response costs totaling approximately \$15.2 million in relation to the nine Storm Events listed. These amounts have been adjusted for any costs capitalized within utility plant on the Company's books and do not include the carrying charge associated with the costs incurred. Including the carrying charge associated with the timing of each of these expenditures, the total cost as of March 31, 2023 was approximately \$15.9 million.

Storm	Direct Costs	Carrying Costs 03/31/2023	Total Cost 03/31/2023
01/17/2022 Pre-Staging	\$ 1,597,348	\$ 81,312	\$ 1,678,660
01/29/2022 Pre-Staging	\$ 2,732,181	\$ 141,244	\$ 2,873,425
02/04/2022 Pre-Staging	\$ 113,700	\$ 5,863	\$ 119,563
02/25/2022 Pre-Staging	\$ 167,602	\$ 9,505	\$ 177,107
03/08/2022 Major Storm	\$ 988,412	\$ 55,149	\$ 1,043,561
03/11/2022 Pre-Staging	\$ 2,321,704	\$ 100,222	\$ 2,421,926
04/20/2022 Major Storm	\$ 2,108,810	\$ 97,791	\$ 2,206,601
07/21/2022 Major Storm	\$ 4,248,649	\$ 136,353	\$ 4,385,002
07/24/2022 Pre-Staging	\$ 953,632	\$ 30,060	\$ 983,693
Total	\$ 15,232,040	\$ 657,500	\$ 15,889,539

Q. Did the Company review the incremental storm expenses to ensure the amounts

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identified are accurate and correctly attributable to each event?

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Yes. The Company undertook a thorough review of invoices and costs recorded to the Company's system in relation to these events. In conducting that review, the Company carefully examined the charges to confirm that the costs are incremental costs directly attributable to the emergency response and not otherwise represented or recoverable in any other distribution rate, charge, or tariff.

Moreover, all the costs presented for recovery in this filing were reasonably and necessarily incurred to prepare for and respond to the Storm Events. The costs in this filing were incurred to make the repairs necessary to address the damage caused by those severe weather events and support the restoration effort or to prepare for the potential severe weather event.

Q. What is the Company's primary tool for accounting for storm restoration costs?

During the pre-storm planning process for a pending ERP event, the Company establishes storm work orders within its financial system to capture costs as those costs are incurred. All applicable costs are captured in the work order. For example, as employees work on restoration efforts, all their event-related work hours are charged to the appropriate work order, which allows for the tracking of storm costs.

To capture costs incurred by employees in fulfilling their storm duties, the Company utilizes procurement cards. The purpose of these purchases is to acquire needed items that are not typically maintained in inventory and are not capital items or for expenses related to food and lodging where the Company does not have an established purchase order. Examples of these types of items include tape and slings needed to make an area safe. Procurement cards allow employees to make immediate purchases from vendors, while

simultaneously providing management line-of-sight supervisory ability to monitor charges and assess whether the charges are appropriate and includable for storm-cost recovery. For an ERP event, corporate procurement cards are used to ensure that costs are segregated and recorded directly to specific storm-related accounts on the Company's accounting books and records. Receipts for all purchases are required for submission into the Company system. The Company's systems also allow for supervision of the card use for all corporate procurement cards.

Q. Are capitalized storm costs excluded from this request for recovery?

A.

Yes. In a Major Storm event, capital costs are incurred in relation to the restoration and/or replacement of distribution equipment damaged by the storm. Capital work occurs in two phases of the storm: (1) during the initial phase of the storm, in the days immediately following the storm when the Company is working to restore power to customers efficiently and safely; and (2) during the non-emergency, post-storm restoration phase, which can last well after the event date, as permanent repairs are made to replace temporary repairs made to restore power immediately following the storm.

In general terms, work is considered capital under utility general accounting principles where a unit of property is either replaced or newly installed. During the initial phase of the storm, there is a significant level of activity occurring, all with a paramount focus on a safe and expeditious restoration. Therefore, initially all material and labor are charged to the expense work order established for the event to track costs for the storm event. After the storm, all material charges are reviewed and any units of property are moved to a capital work order, along with the associated labor costs. As a result, the costs submitted in this filing for recovery through rates are exclusive of any capitalized costs incurred to make

storm-related repairs. All capital costs are simply reflected within utility plant subject to the ordinary distribution ratemaking process.

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The following is a summary of the process for capitalizing materials used during a storm: All restoration costs are initially accumulated in an expense work order specific to that event. Once the costs have been collected in the work order, the material issued or charged to the storm expense work order is reviewed to identify capital units of property (retirement units). Based upon the units of property identified, an estimate is developed of the work performed during a storm that should be capitalized. This estimating process utilizes information from the Company's work management system, such as man-hour estimates, to develop the installed cost associated with the replacement of capital units of property during the storm restoration. The installed cost of the capital units of property is estimated at a high level (labor, vehicles, material, overheads), not at a transactional level. Once the capitalized costs are determined, they are transferred from the storm expense work order to a separate capital work order and ultimately closed to the appropriate plant accounts. This process has been used by Eversource for many years and deemed appropriate by the Commission and the Department of Energy, to capitalize material costs during a Major Storm event as it would be burdensome to charge each capital item to a unique work order as is the case when work is performed in a non-storm restoration situation.

- Q. In Docket No. DE 18-058, Audit Staff and Staff recommended removing certain charges deemed to be "Media Communications." Are these costs included in the schedules for these weather events?
- A. No. The final revenue requirement in Docket No. DE 19-057 included an adjustment of \$69,523 made to the 2018 test year to incorporate costs associated with West Interactive

into the base distribution revenue requirement and cost of service. West Interactive costs incurred during the test year were associated with media communication efforts on behalf of the Company during storm response, as media communication efforts were defined during that time. Since West Interactive costs were incorporated into base distribution rates, costs related to media communions, similar to the services provided during that time, are considered non-incremental and are excluded from the storm cost recovery filings.

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Q. Would you please provide an overview of the costs that are included for review in this filing, by cost category?

Yes. The Company has organized the costs relating to each storm event into four categories. These categories are: (1) charges from external contractors, outside vendors, procurement cards, and other logistical charges; (2) incremental storm related payroll costs, payroll related overheads and taxes, and employee expenses; (3) incremental vehicle costs; and (4) materials and supply costs. The table below identifies costs for each storm in these categories as of March 31, 2023.

	ernal Contractors / utside Vendors /	yroll, Overheads I Taxes, Employee	Vehicle	N	laterials &	т	otal Direct	Carrying	otal with
Storm	ocurement Cards	 Expenses	xpenses		Supplies	Ī	Costs	Charges	Charges
01/17/2022 Pre-Staging	\$ 1,434,530	\$ 127,466	\$ 35,352	\$	-	\$	1,597,348	\$ 81,312	\$ 1,678,660
01/29/2022 Pre-Staging	\$ 2,300,627	\$ 347,449	\$ 84,105	\$	-	\$	2,732,181	\$ 141,244	\$ 2,873,425
02/04/2022 Pre-Staging	\$ 71,174	\$ 24,870	\$ 17,656	\$	-	\$	113,700	\$ 5,863	\$ 119,563
02/25/2022 Pre-Staging	\$ 145,161	\$ 9,896	\$ 12,546	\$	-	\$	167,602	\$ 9,505	\$ 177,107
03/08/2022 Major Storm	\$ 499,701	\$ 444,358	\$ 39,133	\$	5,221	\$	988,412	\$ 55,149	\$ 1,043,561
03/11/2022 Pre-Staging	\$ 2,186,961	\$ 105,377	\$ 29,366	\$	-	\$	2,321,704	\$ 100,222	\$ 2,421,926
04/20/2022 Major Storm	\$ 1,438,236	\$ 549,709	\$ 118,778	\$	2,087	\$	2,108,810	\$ 97,791	\$ 2,206,601
07/21/2022 Major Storm	\$ 2,585,943	\$ 1,229,268	\$ 430,891	\$	2,546	\$	4,248,649	\$ 136,353	\$ 4,385,002
07/24/2022 Pre-Staging	\$ 879,838	\$ 50,872	\$ 22,918	\$	4	\$	953,632	\$ 30,060	\$ 983,693
Total	\$ 11,542,172	\$ 2,889,265	\$ 790,744	\$	9,858	\$	15,232,040	\$ 657,500	\$ 15,889,539

Documentation and/or analyses for each of these categories will be made available upon request. Each one of these categories is further discussed and described below.

Docket DE 19-057, Final Revenue Requirement at Bates 16, line 29 (January 22, 2021).

- Q. For the first category of costs identified as external contractors, outside vendors, procurement cards, and other logistical charges, please explain what types of costs are included in this category?
- A. This category encompasses any external product or service required by the Company to

 prepare for and execute the restoration effort. The total costs incurred in this category for

 the Storm Events were approximately \$11.5 million. The costs billed to Eversource in this

 category are divided into three primary classifications: (1) overhead line and service

 crews; (2) vegetation management services; and (3) "other." "Other" costs include the

 following categories: environmental, communications, police detail, transportation,

 professional logistics, and food and lodging expenses.
- 11 Q. Would you explain what types of costs are incurred in relation to overhead line and service crews, and vegetation management services?
- 13 A. Yes. Costs incurred in the classification of overhead line crews are for repair crews called
 14 in to work on the overhead system to restore power to customers. Within this category,
 15 there are two types of resources: (1) professional line contractors and service crews
 16 engaged to work on the Eversource system during severe weather emergency periods; and
 17 (2) mutual aid line crews obtained from other electric utilities.
 - Costs incurred in the classification of vegetation management are for the crews that are responsible for the safe removal of trees, branches, and other similar debris that have created outages along Eversource's system. These resources are professional contractors engaged to work on the Eversource system during severe weather emergency periods.
 - Q. How are the rates for these three types of crews established?

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A. The rates paid to contractors who work on the Eversource system during non-emergency periods are established through a negotiated purchase order process, which defines the rate

structure. The rates for external contract crews hired for the exclusive purpose of the storm are also established through the negotiated purchase order process. The rates for mutual aid crews are established through the Edison Electric Institute's Governing Principles Covering Emergency Assistance Arrangements Between Edison Electric Institute Member Companies. The guiding principle of mutual aid is that a utility is compensated based on its cost to provide services to another utility.

A.

Q. What is the internal review process that is followed to verify that invoiced costs from external contractors and outside vendors are correct?

The Resource Acquisition Section of Eversource's ERP is comprised of individuals who are responsible for the procurement of contractor resources. The Resource Acquisition Section works in partnership with the Logistics Section and the Company's Procurement Department to secure contractors at the direction of the Incident Commander and Electric Operations Section Chief, with input from the other ERP section chiefs, as appropriate. As part of the procurement process, rates and mobilization/demobilization procedures are negotiated and agreed to with the vendor. In addition, throughout the event, Eversource supervisors are specifically assigned to the external crews to oversee the work of external resources. Each day, the contractors prepare timesheets, which are verified and signed off by the designated Eversource supervisor to ensure that the indicated work hours are accurate.

After the event, each contractor hired by Eversource to perform storm-related services renders invoice(s) related to those services. The invoice detail is initially reviewed by Eversource clerical personnel, who are responsible for verifying that accurate (contract) rates are charged for each job classification based on the rates negotiated. The clerical

employee also verifies the mathematical accuracy of the calculations on the bill, as well as whether the hours on the invoice align with the hours reported to the Company (or recorded by the Company) during the event. After this initial review, the invoices are further reviewed by an Eversource supervisor prior to approval of the invoice in accordance with the Company's Delegation of Authority.

During the review of these invoices, if discrepancies are identified or additional information is needed, Eversource personnel contact the vendor and, if adequate supporting documentation is not available, invoice charges are rejected in part or in total, as appropriate. In addition, if discrepancies are identified that resulted in over- or undercharging, Eversource works with the vendors to reconcile and receive/pay the appropriate amount due.

Q. How are procurement card and other logistical costs compiled?

A.

As described above, to capture costs incurred by employees in fulfilling their storm duties, the Company utilizes procurement cards. The costs charged to the procurement cards, as well as other logistical costs, are compiled by utilizing the specific storm work order within its financial system as these costs are incurred. A large portion of the procurement card costs relate to lodging and meals for external contractors working on the system. The Company also provides meals and lodging for internal crews and support staff who may have to travel some distance from home or work extended hours to perform restoration work within the Eversource service territory.

Q. How are lodging and meals procured and tracked?

A. The Logistics Section of the ERP is responsible for arranging lodging for internal and

external personnel. In advance of a storm event, the Logistics section coordinates with hotels across the system to validate the availability of rooms depending on the size of the event. As rooms are needed, the hotels with sufficient availability in the areas where contractor resources will be assigned are called to book lodging. All invoices associated with meals and lodging are reviewed by the Logistics Section and signed off by the manager in charge of the group to ensure that the Company only pays for lodging and charges related to the storm.

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In most cases, lodging arrangements are paid for using a procurement card. All cardholders are responsible for the charges on their procurement card and are required to provide receipts along with the associated statements to their managers for final review and approval. Procurement cards are also utilized to pay for meals or food brought into the area work centers for those employees working there. The Logistics Section coordinates the meal arrangements at the various area work centers. Meals and water as needed are also purchased by individuals who have their own designated procurement cards.

Q. For the second category of costs identified as incremental storm related payroll costs, how have costs been compiled for this category?

The costs incurred for payroll and payroll-related costs were approximately \$2.9 million. This includes direct payroll costs for all Eversource affiliated companies as well as payroll-related overheads and taxes for affiliates that would not have been incurred by Eversource except for the need to conduct the storm-response effort. Employee expenses are also included in this category. Costs eligible for reimbursement include meals, mileage, and travel expenses for those employees working the storm event who may not have a procurement card or as contractually obligated.

Direct payroll costs include the labor costs for union and non-union personnel. Employees are required to account for each hour worked every day. Employees in the field with a designated timekeeper fill out a paper or online timesheet with their hours worked, using the appropriate storm work order. The timesheet is reviewed and approved by the employee's supervisor and entered into Eversource's time and attendance system by a clerical employee in the office. Employees with access to Eversource's time and attendance system enter their own time directly, using the appropriate storm work order, and supervisors review and approve payroll in that system.

A.

For the union personnel discussed above, the actual costs related to their worked hours is based on the applicable collective bargaining agreement(s). Exempt employee time is captured and tracked in the same storm account. Since exempt employees are not routinely paid for overtime, this time entry is for tracking purposes only. During multi-day restoration weather events, exempt employees are typically required to work an extensive number of hours over their typical work week and can receive emergency response compensation for overtime hours, consistent with Eversource storm pay policy.

Q. Has the Company removed overtime costs associated with storm-related capital work?

Yes. As mentioned above, the Company uses a capitalization process that estimates the labor costs associated with the capital units of property installed and removed during a restoration event. Factored into that estimation is an assumption that all work is performed under adverse weather conditions and on overtime. Therefore, overtime is removed from the storm costs when labor costs are transferred from the expense work order to the capital work order. Overheads and loaders, including vehicle cost allocations, are applied to the

- labor and material costs capitalized.
- 2 Q. For the third category of costs identified as vehicle expenses, please explain the costs incurred due to vehicles.
- A. Vehicle costs are incurred when a Company vehicle is needed to perform restoration work or, in the case of pre-staging, is deployed in advance of the anticipated weather to be ready to respond to the most affected areas as they emerge. The costs allocated for use of vehicles during the restoration work were approximately \$791,000.
- **Q.** For the fourth category of costs identified as materials and supplies, how are costs compiled for this category?
- 10 A. The costs incurred for materials and supplies were approximately \$10,000. The materials
 11 and supplies category represents the incremental costs associated with the materials used
 12 to restore power and repair storm damage. Typically, these are small items like tape, nuts
 13 and bolts, and short sections of wire, safety, and protective equipment. Also included in
 14 these amounts are store and lobby stock items purchased during a storm event. Costs
 15 associated with capitalized materials are appropriately removed from the costs included in
 16 this category.

III. MAJOR STORM AND PRE-STAGING EVENTS

18 **January 17, 2022 Pre-Staging Event**

- 19 Q. Please describe the storm forecast.
- A. The weather event of January 17, 2022 was associated with a strong coastal storm anticipated to bring mixed precipitation and hazard level winds to the Northeast portion of the United States. Beginning on Wednesday, January 12th, the Company began monitoring a potential coastal event based on DTN's extended range forecasts indicating a developing

winter storm capable of producing rain, snow, and high winds from midnight on Monday, January 17th, through Tuesday, January 18th. Forecasts from DTN, StormGeo, and the National Weather Service throughout the week indicated increasing confidence in a potentially impactful event. DTN forecasts on Friday, January 14th, indicated the potential for EEI Level 2 snow across New Hampshire's Northern and Western operating regions beginning on Sunday, January 16th. Additionally, the extended forecast indicated the developing system might produce a strong Nor'easter impacting the region through Monday and Tuesday of the following week. DTN forecasts on Saturday, January 15th increased snow potentials in Northern and Western regions to EEI Level 3 with medium confidence, while also indicating an increasing potential for hazard level winds and snow across the entire region.

	Region	Day 1	Day 1	Day 3
Energy Event Inde Audit Time: January 15, Parasse Wood Speed Wood-Gest Confidence Level	CT Central CT Eastern	1 1	1 1	1 1
	OT Western	1 1	1 1	1
	MA Capa MV		1 1	1
	MA Metroliperon	1 1	1 1	1
	B&A MintroWord	1 1	1 1	1
	MA South	1 1	1	1
	MA West Mass	1 1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1
	NH Sputhern	1	1	1
	NH Western	1	1	1
Wind/Gust	CT Central	1	1	2
	CT Eastern	1	1	2
	CT Western	1	1	2
	MA CapaNrV	2	1	
	MA Metroliperon	1	1	2
	MA MetroWest	1 1	1 1	2
	MA South MA West Mass	1 1	1 1	2
	NH Central	1 1	1 1	1
	NH Eastern	- +	1 1	2
	NH Northern	- i - i	1 1	1
	NH Southern	- i - i	1 1	1
	NH Western	1 1	1 1	1
Soow	CT Central	1	1	1
	OT Eastern	1	1	1
	OT Western	1	1	1
	MA Capa/MY	1	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1	1	1
	MA South	1	1	1
	MA West Mass	1	1	2
	NH Control	1	1	2
	NH Eastern	1	1	1
	NH Northern	1	1	3
	NH Southern	1 1	1 1	1
	NH Western CT Central	1 1	1 1	1
108	CT Eastern	1 1	1 1	1
	CT Western	- +	1	-
	MA CappiMY	- i - i	1 1	1
	MA Mintrollipsion	1 1	1 1	1
	B&A MintroWest	1 1	1	1
	MA South	1 1	1	1
	MA West Mass	1 1	1 1	1
	NH Central	1 1	1	1
	NH Eastern	1 1	1	1
	NH Northern	1 1	1	1
	NH Southern	1 1	1	1
	NH Western	1	1	1
Confidence Level	CT Central	High	High	Modern
	CT Eastern	High	Modium	Medium
	CT Western	High	Modium	Modern
	MA Capa MY	Modum	High	Modern
	MA MetroBorton	High	High	Modern
	MA MetroWest	High	High	Modum
	MA South	High	High	Modum
	MA West Mass NH Central	High High	Modium	Medium
	NH Engiren	High	High	Modum
	NH Northern	High	High High	Modern
	NH Southern	High	High	Modum
	NH Western	High	High	Modum

SNOW IMPACT MONDAY:

one will her meneral.									
Snow Accumulation	NH Northern	NH Western	NH Central	NH Southern	NH Eastern				
Snow Amount	6-12"	5-12"	3-8"	1-5"	Tr-3"				
Snow Ratio	8:1-14:1 (Nrm)	7:1-12:1 (Wet-Nrm)	6:1-10:1 (Wet-Nrm)	6:1-10:1 (Wet-Nrm)	5:1-8:1 (Wet)				
Start Time	01/17 0300	01/17 0100	01/17 0200	01/17 0100	01/17 0200				
End Time	01/18 1200	01/17 1400	01/17 1300	01/17 1000	01/17 0900				
Chance of EEI-2/3/4 Snow	90%/60%/10%	90%/50%/10%	50%/10%/-	-	-				

WIND IMPACT MONDAY:

THE INITION MONEY.									
Strong Winds (EEI-2+)	NH Northern	NH Western	NH Central	NH Southern	NH Eastern				
Average Gusts	35 mph	35 mph	35 mph	35 mph	40 mph				
Coverage of Gusts EEI-2+	20%	20%	20%	20%	50%				
Start of Gusts EEI-2+	01/17 0800	01/17 0700	01/17 0700	01/17 0700	01/17 0600				
End of Gusts EEI-2+	01/17 1400	01/17 1200	01/17 1200	01/17 1200	01/17 1400				
Max Gusts	45 mph	45 mph	45 mph	45 mph	50 mph				
Chance of EEI-2 Gusts	20%	20%	20%	20%	50%				

The forecasts throughout the day Saturday, January 15th, and Sunday, January 16th, continued to indicate the development of a significant Nor'easter that would bring hazard level wind and snow to the region early Monday and into Tuesday. By midday Sunday, January 16th, DTN had increased the potential of hazard level winds to EEI Level 3 for New Hampshire's Eastern operating region with high confidence and raised confidence for EEI Level 3 snow in the Northern operating region. Storm Briefings issued by the National Weather Service in Gray, Maine indicated high confidence in significant impacts from wind, snow, and coastal flooding with Winter Storm Warnings, Winter Weather Advisories, and High Wind Warnings issued across the state.

	Dep 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CT Eastern 1		
CT Vereinem 1		
MA.A. CayanfrV 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
MAA MeteoRelation 1		
MAA Meter/Winst 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
MA South 1 MA South MA South	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1
RN Contrail 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1
RN Central 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1
Net Eastern 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1
Not Southern 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1
NH Southern 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1
CT Certrial 2	1 1 1 1 1 1 1 1 1	1 1
GT Eastern 2 GT Vereitern 2 GT Vereitern 2 MA Capecht V MA Macebotrann 3 MA Materbotrann 3 MA Materbotrann 3 MA Vereitern 3 MA Capeth 3 MA Capeth 3 MA Capeth 3 MA Vereit Massa 2 NH Costnat 1 NH Eastern 3 NH Materbotran 1 NH Morbatran 1 NH Morbatran 1	1 1 1 1 1	
CT Visionism 2 NAA CapachEV	1 1 1	1
MA. Capen VY	1 1	
MA Materioralization 3	1 1	1
MA Meter/West 2	1	1
MA - South 3	1	1
MA Veen Name 2		1
NH Central 1		1
NH Eastern 3		1
NH Northern 5 NH Southern 2	1	1
NH Southern 2	1	1
		1
	.1	1
		1
naw CT Central 1	1	1
CT Eastern 1	1	1
CT Western 2	- 1	1
MA Cape/MV 1	1	1
MA MetroBoston 1 MA MetroWest 1	1	1
	1	1
MA South 1 MA Work Mass	1	1
NH Central 2	1	1
NH Central 2	-1	1
NH Northern 3	-	1
NH Northern 3	-	1
NH Western 3	-	1
OR CT Central 1	-	1
CT Eastern 1	-	<u> </u>
CT Western 1	-	1
MA Cape/MV 1	- i	i :
MA MetroBoston 1	-i-	i :
MA MetroWest 1	- i	<u> </u>
MA South 1	-	i i
MA West Mass	- 1	i i
NH Central 1	1	<u> </u>
NH Eastern 1	-	1
NH Northern 1	1	1
NH Southern 1	- 1	1
NH Western 1	1	1
onfidence Level CT Central Medium	High	High
CT Eastern Modure		High
CT Western Medium	High	High
MA CapeMV High	High	High
MA MetroBoston Hodi	High	High
IVA MetroWest Medium	High	High
MA South High	High	High
MA West Mass	High	High
NH Central Medium		High
NH Eastern High	High	
NH Northern High	High	High
NH Southern Medium		
NH Western Medium	High	High



Predictive impact forecasts issued through DTN's Storm Impact Analytics (SIA) and the University of Connecticut's (UConn) Outage Prediction Model (OPM) as early as Thursday, January 13th, also began indicating the potential for a significant impact to regional utilities due to the storm. Predictive model guidance throughout the four days leading up to the event generally anticipated an impact of 250 to 500 trouble spots across the State of New Hampshire, with a 20% risk of up to 700-800 trouble spots.

Q. What preparations did the Company make in anticipation of a major restoration event?

A. The Company began building situational awareness on Wednesday, January 12th, through a multi-state call to discuss the developing storm system and potential impacts to the region. New Hampshire Incident Management Team (IMT) calls were initiated on Thursday, January 13th, in order to develop a pre-event preparedness plan, which included the assessment of available resources. Additional efforts were focused on the assessment

of all available resources in the region due to the storm's anticipated impact over the Martin Luther King, Jr. holiday on Monday, January 17th. NH IMT calls were conducted daily over the three days preceding the storm with a full activation of the Eversource NH Incident Command Center (ICC) on Monday, January 17th at 0600 for an anticipated ERP Level 4 event.

Eversource NH activated all internal line resources to be on property for 0500 on January 17th prior to the storm's anticipated impact. Additionally, the company secured 95 contractor line crews and 90 vegetation management crews to support restoration activities. The company also activated internal Service Crews, Wire Guard Crews, and Damage Assessors to be on property Monday, January 17th, to support response and recovery efforts.

The company initiated internal preparedness communications with the publication of a Preparedness Briefing on Thursday, January 13th, with additional briefings issued on the 14th and 16th. Communications to external stakeholders, including medically coded customers, municipal partners, as well as the Department of Energy, and Homeland Security and Emergency Management staff, were initiated on Friday, January 14th and updated periodically in the days preceding the storm's impact.

Q. Did the Company experience outages during this event?

19 A. The Eversource system experienced the following impact as detailed in the table below:

Total #	Peak #	Total	Peak	Percentage	Total
Events	Events	Customers	Customers	Affected	Restoration
		Interrupted	Interrupted	(Peak)	
124	48	19,137	2,436	0.4%	3.5%

1 Q. Does this event qualify for cost recovery?

- 2 A. Yes, pursuant to the pre-staging cost recovery criteria established in Docket No. DE 12-
- 3 320, this event met the "Level 3" and "high" probability requirements as shown in the DTN
- 4 forecasts described above.

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5 January 29, 2022 Pre-Staging Event

6 Q. Please describe the storm forecast.

A. The weather event of January 29, 2022 was associated with a very strong coastal storm anticipated to bring significant snowfall to the region. Beginning on Monday, January 24th, the Company began receiving indications of a potential strong Nor'Easter expected to develop off the East Coast with anticipated widespread impacts across the region. Risks included both hazardous snowfall levels as well as strong, damaging winds. DTN forecasts on Thursday, January 27th, indicated the potential for EEI Level 4 snowfall across Eversource New Hampshire's Eastern operating region and EEI Level 3 snow across Southern and Central regions. Additionally, EEI Level 2 winds were forecast across New Hampshire's Eastern and Southern operating regions, with additional indication that many areas of New Hampshire might experience wind gusts up to 55 mph.

	Region	Day 1	Day 2	Day 3
	CT Certral	- 1	1	1
The second	CT Eastern	1 1	1 1	- 1
56	CT Western	1 1	1 1	1
	MA Capa WY	1 1	1 1	2
	MA Metrolication	1 1	1	
	MA Mintro/West		1 1	
	MA South	1 1	1 1	
	MA West Mass		1 1	
	NH Central	1 1	1 1	1
	NH Easiern	1 1	1 1	1
	NH Northern	1 1	1 1	1
		1 1	1 1	
	NH Southern			
	NH Western	1	1	1
Wind/Guit:	CT Central	1 1	1 1	1
	CT Eastern	1 1	1 1	2
	CT Western	1 1	1 1	- 1
	MA Capa MY	1 1	1 1	3
	MA Metroliperion	1	1	2
	IMA Mintro/West	1 1	1 1	1
	MA South	1 1	1 1	3
	MA West Mass	1 1	1 1	1
	NH Central	1 1	1 1	- 1
	NH Eastern	1 1	1 1	2
	NH Northern	1 1	1 1	- 1
	NH Sputhern	1 1	1 1	2
	NH Western	1 1	1 1	1
Sany	CT Certral	1 1	1 1	3
2028	CT Eastern		1 1	3
	CT Western	1 1	1 1	-
		1 1	1 1	
	MA Capa MV	1 1	1 1	4
	MA Metrollogion	1		4
	MA MetroWest	1	1	4
	MA South	1	1	- 4
	MA West Mass	1	1	1
	NH Circlesi	1	1	3
	NH Eastern	1	1	4
	NH Northern	1	1 1	1
	NH Sputhern	1	1	3
	NH Western	1	1	2
ion	CT Central	1 1	1 1	1
	CT Eastern	1 1	1 1	- 1
	CT Western	1 1	1 1	- 1
	MA Cape/MY	1 1	1 1	1
	MA Metrolication	- + +	 	-
	MA MintroWest	- + -	1 1	
	MA South		1 1	
	I may weared			1
	MAN Million Change		1 1	- 4
	MA West Mass		1 1	1
	NH Central	1 1	1 1	1
	NH Central NH Eastern	1 1	1 1	1
	NH Central NH Eastern NH Northern	1 1	1 1	1 1
	NH Control NH Eastern NH Northern NH Southern	1 1	1 1	1 1
	NH Central NH Eastern NH Northern NH Southern NH Western	1 1	1 1 1	1 1 1
Confidence Level	NH Central NH Seatern NH Northern NH Scuthern NH Western NH Western CT Central	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 Wedham
Confidence Level	NH Central NH Eastern NH Northern NH Southern NH Western	1 1	1 1 1	1 1 1
Ccelidason Level	NH Central NH Seatern NH Northern NH Scuthern NH Western NH Western CT Central	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 Wedham
Ccelidanon Level	NH Constal NH Constal NH Constan NH Hordman NH Southern NH Western CT Constal CT Except	1 1 1 1 1 85gh	† † † † † † † † † † † † † † † † † † †	1 1 1 1 Necket
Confidence Level	NH Control NH Castern NH Facthern NH Seathern NH Seathern CT Caster CT Caster CT Easter CT Easter	1 1 1 1 16gh High High	† † † † † † † † † † † † † † † † † † †	1 1 1 Necket Necket
Ccelidason Leuni	NH Contool NH Gastern NH Rocthorn NH Southern NH Wessern C'T Gastral C'T Eastern C'T Western MA CapaNM'	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 Necker Necker Necker Necker
Confidence Level	NH Constal NH Eastern NH Hardman NH Hardman NH Seathern NH Western CT Cestral CT Eastern CT Eastern MA Copolitiv MA Metablicate MA Alexandrate MA Metablicate MA Metablicat	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1420 1420 1420 1420 1420	Hecker Hecker Hecker Hecker Hecker Hecker
Coefidanon Lewis	NH Constal NH Eastern NH Hotchern NH Southern NH Wessern CT Gestral CT Eastern CT Western MA Coppe Mer BAA Meteod Series MA Resouthern MA Reseat	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1	Hecker Hecker Hecker Hecker Hecker Hecker Hecker
Ceelideson Level	NH Constal NH Castern NH Castern NH Recthorn NH Southern NH Western CT Caster CT Executy CT Executy CT Executy HA Capable HA Capable HA Capable HA Melecidicate HA South HA South HA South HA Wester HA South HA South	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 14520 14520 14520 14520 14520 14520 14520 14520 14520	Hecker Hecker Hecker Hecker Hecker Hecker Hecker
Centidason Lewid	NH Control NH Gestren NH Hordman NH Hordman NH Gestren NH Western CT Cestrel CT Execon CT Execon CT Execon CT Here HA Copn-NH MA Mencolles to HA Mencolles HA Fires HA Fires HA Fires HA Fires HA Wester HA Wester HA Hord HA Fires HA Fires HA Wester HA Hord	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Hecker Hecker Hecker Hecker Hecker Hecker Hecker Hecker
Centidenco Leuri	NH Control NH Eastern NH Hacthorn NH Southern NH Southern NH Western NH Western CT Centrel CT Western CT Western MA Capon Mr/ MA Alencod sets MA South MA Mencod sets MA Western	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Hecker Hecker Hecker Hecker Hecker Hecker Hecker Hecker Hecker Hecker
Costidence Level	NH Control NH Gestren NH Hordman NH Hordman NH Gestren NH Western CT Cestrel CT Execon CT Execon CT Execon CT Here HA Copn-NH MA Mencolles to HA Mencolles HA Fires HA Fires HA Fires HA Fires HA Wester HA Wester HA Hord HA Fires HA Fires HA Wester HA Hord	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Hecker Hecker Hecker Hecker Hecker Hecker Hecker Hecker

NOW	POTENTIAL	SATURDAY	SUNDAY	AM:
_		and the state of	THE PERSON NAMED IN	

Snow Accumulation SatiSun AM	Nill Northern	MII Western	MII Central	NII Southern	NII Castern
Snow Amount	2-8"	3-9"	6-12*	7-14"	7-16"
Start Time	1/29 1100	1/29 0700	1/29 0000	1/29 0600	1/29 0600
End Time	1/30 0000	1/30 0500	1/30 0600	1/30 0600	1/30 0700
Timing of Heaviest Sinov	SAT 1588-SUN 0200	SAT 1300-SAT 2300	SAT 1366-SUN 0000	SAT 1298-SUN 0000	SAT 1100-SUN 0100
Snow Resis	16-24:1	15-22:1	15-21:1	14-19:1	12-18:1
Chances for EE1-2/3/4 Snowfell	30%/10%/-	50%/20%/-	90%/50%/10%	100%/90%/90%	100%/90%/99%

WIND POTENTIAL SATURDAY-SUNDAY AM:

Strong Winds (CEI-2-) SatiSun Alii	NII Narthern	NII Wastern	NII Cantral	NII Southern	NII Castern
Average Gusta	26 mph	30 mph	31 mph	34 mph	38 mph
Coverage of Gueta EEI-2+	%.	20%	30%	40%	50%
Start of Gueta EEI-2+	-	01/29 1600	01/29 1500	01/29 1400	01/29 1200
End of Gueta EE+2+	-	01138 0300	01/29 2200	01/29 2200	01/29 2300
Max Gurts	42 mph	45 mph	47 mph	50 mph	55 mph
Chance of EEI-2/3 Gusts	4	20%/-	30%/-	50%/-	70%/10%

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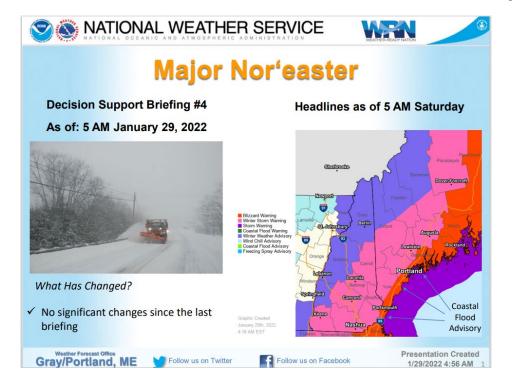
1

Forecasts issued throughout the day on Friday, January 28th extended the potential for EEI

Level 4 snow in the Eastern region through January 29th and 30th as well as increased the

confidence level to High. Additionally, EEI Level 3 snow totals in the Central and Southern regions were extended in duration with increased confidence. By the morning of Saturday, January 29th, snow predictions in the Southern region were also increased to EEI Level 4. The National Weather Service in Gray, Maine issued a series of Winter Weather Advisories, Winter Storm Warnings, and Blizzard Warnings across the state for the potential of significant impacts for the approaching major Nor'Easter.

wiid Time: January 29,	2022 EUU AM ED I		Forecaster: h	41001-0014016
arameter.	Region	Day 1	Day 2	Day 3
ind Sipned	CT Central	1	1	1
	OT Eastern	1	1	1
	CT Western	1	1	1
	MA Capa/MY	2	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1 1	1	1
	MA South MA West Mass	1 1	1 1	1 1
	NH Control	1 1	1 1	1 1
	NH Eastern		1 1	1 1
	NH Northern	1 1	1 1	1 1
	NH Southern	1 1	1 1	1 1
	NH Western	1	1	1
ind/Guet	CT Central	1 1	1	1
	CT Eastern	2	1	1
	CT Western	1	1	1
	MA Capolifity	4	4	1 1
	MA MetroBoston	2	2	1 1
	MA South	2	3	1 1
	MA West Mass	1	1 1	1 1
	NH Central	1 1	1 1	1 1
	NH Englern	2	1	1 1
	NH Northern	1 1	1	1
	NH Southern	2	1	1 1
	NH Western	1	1	1
NO.	CT Central	3	1	1
	CT Eastern CT Western	4	1 1	1 1
	MA Capabity	4	4	1
	MA Metroliceion		1	1
	MA MintroWest	4	4	1
	MA South	5	5	1
	MA West Mass	2	1	1 1
	NH Control	3	3	1
	NH Eastern	4	4	1
	NH Northern	2	2	1
	NH Southern	4	4	1
0	NH Western CT Central	2	2	1 1
a	CT Eastern	1 1	1 1	1 1
	CT Western	 	1 1	1 1
	MA Capn/MY	1 1	1 1	1
	MA Metrolipaton	1 1	1 1	1 1
	MA Mintro/West	1 1	1 1	1 1
	MA South	1 1	1	1 1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1 1
	NH Southern NH Western	1 1	1 1	1 1
relidence Level	CT Central	Medium	High	High
	CT Eastern	Medius	High	High
	CT Western	Medium	High	High
	MA CapaNiV	Medium	Medium	High
	MA MetroBoston	Medium	Medium	High
	MA MetroWest	Medium	High	High
	MA South	High	High	High
	MA West Mass	High		High
	NH Central	High		High
	NH Eastern	High	High	High
	NH Northern	Medium	Medium	High
	NH Southern NH Western	Medium	Medium	High High



Predictive impacts forecasts issued through DTN's SIA and the UConn's OPM beginning on Tuesday, January 25th, indicated the potential for a significant impact to regional utilities due to the storm. Predictive model guidance throughout the four days leading up to the event generally anticipated an impact of 150 to 300 trouble spots across the State of New Hampshire, with a 20% risk of up to 300-500 trouble spots.

Q. What preparations did the Company make in anticipation of a major restoration event?

The Company began building situational awareness on Tuesday, January 25th through a multi-state call to discuss the developing storm system and potential impacts to the region. New Hampshire IMT calls were initiated on Wednesday, January 26th, in order to develop a pre-event preparedness plan, which included the assessment of available resources. These calls were conducted daily over the three days preceding the storm, with a full activation of the Eversource NH ICC on Saturday, January 29th at 0600 for an anticipated

- 1 ERP Level 4 event.
- 2 Eversource NH activated all internal line resources to be on property on Saturday, January
- 3 29th, prior to the storm's anticipated impact. Additionally, the company secured 135
- 4 contractor line crews and 90 vegetation management crews to support restoration activities.
- 5 The company also activated internal Service Crews, Wire Guard Crews, and Damage
- 6 Assessors to be on property on January 29th to support response and recovery efforts.
- 7 The company initiated internal preparedness communications with the publication of a
- Preparedness Briefing on Thursday, January 26th, with additional briefings issued on the
- 9 27th and 28th. Communications to external stakeholders, including medically coded
- customers, municipal partners, as well as the Department of Energy, and Homeland
- Security and Emergency Management staff, were initiated on Thursday, January 27th, and
- updated periodically in the days preceding the storm's impact.

13 Q. Did the Company experience outages during this event?

14 A. The Eversource system experienced the following impacts as detailed in the table below:

Total #	Peak #	Total	Peak	Percentage	Total
Events	Events	Customers	Customers	Affected	Restoration
		Interrupted	Interrupted	(Peak)	
13	3	271	70	0.01%	0.05%

Q. Does this event qualify for cost recovery?

- 17 A. Yes, pursuant to the pre-staging cost recovery criteria established in Docket No. DE 12-
- 320 this event met the "Level 3" and "high" probability requirements as shown in the DTN
- 19 forecasts provided above.

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February 4, 2022 Pre-Staging Event

2 Q. Please describe the storm forecast.

A. The weather event of February 4, 2022 was associated with a strong winter storm anticipated to bring significant snowfall across portions of the upper Midwest, New York, and New England. Beginning on Monday, January 31st, the Company began receiving indications of the potential strong winter storm developing across the Ohio Valley and bringing the potential of hazard level snow and ice to portions of the service territory. Risks included both snowfall up to a foot and radial icing up to 0.10 inch. DTN forecasts on Tuesday, February 1st indicated the potential for EEI Level 3 snowfall across all five Eversource New Hampshire operating regions toward the end of the week, however the confidence in remaining at this level was low due to the dynamic nature of the developing storm.

Energy Event Index for EVERSOURCE ENERGY	Your forecast administrator: psstorm@eversource.com
Valid Time: February 1, 2022 6:00 AM EST	Forecaster: tony.dello

Personneiter	Region	Day 1	Day 2	Day 3
Wind Speed	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1 1	1	1
	MA Cape/MV	1 1	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1 1	1	1
	MA South	1	1	1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1
	NH Southern	1	1	1
	NH Western	1	1	1
Vind/Gust	CT Central	1 1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	1	1	1
	NA MetroWest	1 1	1 1	1
	MA South	<u> </u>	1	1
	MA West Mass	- i i	1	1
	NH Central	- i	1 1	1
	NH Eastern	1 1	1 1	1
			-	
	NH Northern		1	1
	NH Southern	1	1	1
	NH Western	1 1	1	1
indw	CT Central	1	1	1
	CT Eastorn	1	1	1
	CT Western	1	1	1
	MA Cape/MV	1	1	1
	NA MetroBoston	1	1	1
	MA MetroWest	1	1	1
	MA South	1	1	1
	MA West Mass	- i	1	1
	NH Central	1	1	
		1	1	3
	NH Eastern		-	_
	NH Northern	1	1	3
	NH Southern	1	1	3
	NH Western	1	1	3
bis	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1 1	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	<u> </u>	1	1
	MA MetroWest	1 1	1	1
	MA South	1 1	1	1
	MA West Mass	- i	1	1
	NH Central			1
	NH Contral NH Eastern	1 1	1 1	1
		1 1		_
	NH Northern	1	1	1
	NH Southern	1	1	1
	NH Western	1	1	1
Confidence Level	CT Central	High	High	Medium
	CT Eastern	High	High	Medium
	CT Western	High	High	Medium
	MA Cape/MV	High	High	High
	MA MetroBoston	High	High	Medium
	NA MetroWest	High	High	Medium
	MA South	High	High	High
	MA West Mass			Law
		High	High	
	NH Central	High	High	Law
	NH Eastern	High	High	Law
	NH Northern	High	High	Law
	NH Northern NH Southern	High High	High High	Law

SNOW/ICE IMPACT THU-FRI:

Redial Ice Accreton	NH Northern	NH Western	NH Central	NH Southern	NH Existen
Radial Ice Accretion Amount	Tr-0.05*	Tr-0.10*	Tr-0.08*	Tr-0.12*	Tr-0.10*
Start Time	02/03 1000	02/03 1500	02/03 1700	02/03 1900	02/03 1800
End Time	02/04 0300	02/04 0600	02/04 0700	02/04 0800	02/04 0800
Chances for EEI-2 Radial los	-	20%	-	30%	20%
Snow Accumulation	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Total Snow Amount	7-16"	7-15"	6-13"	6-11"	5-13"
Start Time	02/03 0700	02/03 1700	02/03 1700	02/03 2000	02/03 1800
End Time	02/04 1500	02/04 1500	02/04 1600	02/04 1600	02/04 1700
Snow Ratio	10-19:1	9-17:1	9-17:1	8-15:1	7-17:1
Chances for EEI-2/3/4 Snowfall	100%/70%/40%	90%/80%/30%	80%/60%/20%	80%/50%/-	70%/50%/109

Forecasts issued throughout the day on Wednesday, February 2nd, increased the potential for snowfall in the Northern region to EEI Level 4 and extended the duration of hazard snowfall impacts through February 3rd and into February 4th. By the morning of February 3rd, snow predictions for EEI Level 4 totals in the Northern region and EEI Level 3 totals in the Central region reached high confidence for the period of Thursday the 3rd through Friday the 4th. Additionally, the Western region was identified with a 40% risk of up to 0.25 inches of radial icing. The National Weather Service in Gray, Maine also issued a series of Winter Storm Warnings and Winter Weather Advisories across the state for the potential of significant snow and mixed precipitation impacts across the state.

arameter	Region	l Saud	Day 2	Day 3
Wind Speed	CT Central	Day 1	539.2	Day 2
Tree aprens	CT Eastern	1 1	1 1	1 1
	CT Western	1 1	1 1	1 1
	MA Capn/MY	1 1	1	1 1
	MA Metrolipates	1 1	1 1	1 1
	BLA MintroWest	1 1	1	1 1
	MA Sicurit	1 1	1	1 1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1
	NH Sputhern	1	1	1
	NH Western	1	1	1
Wind/Guet	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1 1
	MA Capa MY	1	1	1 1
	MA MetroBoston	1	1	1
	MA MintroWest	1 1	1	1 1
	MA South MA West Mass	1 1	1	1 1
	NH Control	1 1	1 1	1 1
	NH Cerema NH Eastern	1 1	1 1	1 1
	NH Northern		1	1
	NH Southern		1	1 1
	NH Western		1	1 1
inte	CT Central	1 1	1	1 1
	CT Eastern	1 1	1 1	1 1
	CT Western	1 1	1 1	1 1
	MA Cape/MY	1 1	1 1	1 1
	MA Metrolipates	1 1	1	1 1
	MA MistroWest	1	1	1 1
	MA South	1	1	1 1
	MA West Mass	1 1	1 1	1 1
	NH Control	3	3.	1
	NH Eastern	1	1	1
	NH Northern	4	4	1
	NH Southern	1	1	1
	NH Western	2	2	1
58	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	2	1
	MA Capa/MY	1	1 1	1
	MA MetroBoston	1	1	1
	MA Mintro/West	1	1	1
	MA South	1	1	1
	MA West Mass	2	2	1 1
	NH Central	1	1	1
	NH Eastern	1	1	1 1
	NH Northern	1 1	1 1	1 1
	NH Southern NH Western	1	1 1	1 1
Confidence Level	CT Central	High	Medium	High
Constitution Lines	CT Eastern	High	Vedur	High
	CT Western	Medium	Vedur	High
	MA Cape/MY	High	Victor	High
	MA Metrolipsion	High	Medium	High
	MA MetroWest	High	Medium	High
	MA South	High	Medium	High
	MA West Mass	Medium	Medium	High
	NH Central	High	Medium	High
	NH Eastern	Medium	Medium	High
	NH Northern	High	High	High

Event Forecast Table for Eversource NH

Event Forecast Table for Eversource INH						
Low Temperatures	NH Northern	NH Western	NH Central	NH Southern	NH Eastern	
Minimum Temperatures	14F	24F	26F	35F	32F	
Time of 10 degrees Start Time	-	-	-	-	-	
Time of 10 degrees End Time	-	-	-	-	-	
Radial Ice Accretion THU-FRI	NH Northern	NH Western	NH Central	NH Southern	NH Eastern	
Radial Ice Accretion Amount	Tr-0.02"	0.05-0.25"	0.05-0.20"	0.05-0.20"	Tr-0.15"	
Start Time	ONGOING	02/03 1500	02/03 1800	02/04 0000	02/04 0000	
End Time	02/03 1800	02/04 0600	02/04 0600	02/04 0900	02/04 0900	
Chances for EEI-2 Radial Ice	%	40%	30%	30%	20%	
Snow Accumulation	NH Northern	NH Western	NH Central	NH Southern	NH Eastern	
Total Snow Amount THU-FRI	8-16"	1-8"	1-8"	1-6"	Tr-6"	
Start Time	ONGOING	02/04 0300	02/04 0300	02/04 0300	02/04 0600	
End Time	02/04 1500	02/04 1500	02/04 1500	02/04 1800	02/04 2100	
Snow Ratio	9-19:1	7-18:1	7-17:1	6-16:1	6-16:1	
Chances for EEI-2/3/4 Snowfall	100%/80%/50%	50%/10%/-	40%/10%/-	30%/10%/-	30%/10%/-	
Strong Winds (EEI-2+)	NH Northern	NH Western	NH Central	NH Southern	NH Eastern	
Average Gusts	14 mph	12 mph	14 mph	16 mph	18 mph	
Coverage of Gusts EEI-2+	%	%	%	%	%	
Start of Gusts EEI-2+	-	-	-	-	-	
End of Gusts EEI-2+	-	-	-	-	-	
Max Gusts	30 mph	20 mph	20 mph	20 mph	25 mph	
Chance of EEI-2 Gusts	%	%	%	%	%	

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Predictive impacts forecasts issued through DTN's SIA and the UConn OPM beginning on Wednesday, February 2nd, also began indicating the potential for moderate impacts to regional utilities due to the storm. Predictive model guidance throughout the two days leading up to the event generally anticipated an impact of 60 to 120 trouble spots across the State of New Hampshire, with a 15% risk of up to 300-500 trouble spots.

What preparations did the Company make in anticipation of a major restoration event?

9 A. The Company began building situational awareness on Tuesday, February 1st, with the 10 issuance of its first Weather Advisory and a multi-state call to discuss the developing storm 11 system and potential impacts to the region. New Hampshire Planning and Operations calls were initiated on Wednesday, February 2nd, in order to develop a pre-event preparedness plan, which included the assessment of available resources. These calls were conducted daily over the two days preceding the storm with a full activation of the Eversource NH Incident Command Center (ICC) on Saturday, January 29th, at 0600 for an anticipated ERP Level 4 event.

Eversource NH verified the availability of 88 internal line resources and 110 vegetation management crews to be on property through the day on Friday, February 4th. Additionally, the company verified the availability of approximately 35 additional local contractor crews and internal Service Crews, Wire Guard Crews, and Damage Assessor crews to support restoration activities as needed.

Q. Did the Company experience outages during this event?

12 A. The Eversource system experienced the following impacts as detailed in the table below:

Total #	Peak #	Total	Peak	Percentage	Total
Events	Events	Customers	Customers	Affected	Restoration
		Interrupted	Interrupted	(Peak)	
99	40	8,414	2,932	0.5%	1.5%

Q. Does this event qualify for cost recovery?

15 A. Yes, pursuant to the pre-staging cost recovery criteria established in Docket No. DE 12-16 320, this event met the "Level 3" and "high" probability requirements as shown in the DTN 17 forecasts described above.

February 25, 2022 Pre-Staging Event

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19 Q. Please describe the storm forecast.

20 A. The weather event of February 25, 2022 was associated with a strong winter storm

anticipated to bring significant snowfall across portions of the Northeastern United States
and Eastern Canada. Beginning on Monday, February 21st, the Company began receiving
indications of the potential strong winter storm developing across portions of New England
and bringing the potential of hazard level snow and ice to portions of the service territory.
Risks would likely include both snowfall amounts over a foot and radial icing up to 0.15
inch. DTN forecasts on Wednesday, February 23 rd , indicated the potential for EEI Level
3 snowfall across all five of Eversource New Hampshire's operating regions toward the
end of the week and into the weekend.

alid Time: February 23, 2	022 7:00 PM EST		Forecaste	Forecaster: jordan.oconne	
arameter	Region	Day 1	Day 2	Day 3	
Vind Speed	CT Central	1	1	1	
	CT Eastern	1	1	1	
	CT Western	1	1	1	
	MA Cape/MV	1	1	1	
	MA MetroBoston	1	1 1	1	
	MA MetroWest	1	1	1	
	MA South	1	1 1	1	
	MA West Mass	1	1	1	
	NH Central	1	1	- 1	
	NH Eastern	1	1	1	
	NH Northern NH Southern	1	1 1	1 1	
	NH Western	1	1 1		
rind/Gust	CT Central	1	1 1		
indraw:	CT Eastern	1	1 1	- 1	
	CT Western	- i	 		
	MA Cape/MV	1 1	1 1	1	
	MA MetroBoston	1 1	1 1	1	
	MA MetroWest	1 1	1 1	1	
	MA South	1 1	1 1	1	
	MA West Mass	1 1	1 1	1	
	NH Control	1 1	1 1	1	
	NH Eastern	1 1	1 1	1	
	NH Northern	1 1	1 1	1	
	NH Southern	1 1	1 1	1	
	NH Western	1 1	1 1	1	
naw	CT Central	1	1	2	
	CT Eastern	1	1	2	
	CT Western	1 1	1	2	
	MA Cape/MV	1	1	1	
	MA MetroBoston	1	1	3	
	MA MetroWest	1	1	3	
	MA South	1	1	1	
	MA West Mass	1	1	3	
	NH Central	1 1	1	3	
	NH Eastern	1	1	3	
	NH Northern	1	1	3	
	NH Southern	1	1	3	
	NH Western	1	1	3	
on and	CT Central	1	1 1	1	
	CT Eastern CT Western		1 1	1	
	MA Cape/MV	1	1 1		
	MA MetroBoston	1	1 1		
	MA Metrodoston	1	1 1		
	MA South	1	1 1		
	MA West Mass	1	 	-i	
	NH Central	1	 	1	
	NH Eastern	1 1	1 1		
	NH Northern	1	1 1	1	
	NH Southern	1 1	1 1	1	
	NH Western	1 1	1 1	1	
onfidence Level	CT Central	High	High	Medium	
	CT Eastern	High	High	Medium	
	CT Western	High	High	Medium	
	MA Cape/MV	High	High	Medium	
	NA MetroBoston	High	High	Medium	
	NA MetroWest	High	High	Medium	
	MA South	High	High	Medium	
	MA West Mass	High	High	Medium	
	NH Central	High	High	Medium	
	NH Eastern	High	High	Medium	
	NH Northern	High	High	Medium	
	NH Southern	High	High	Medium	

	_		_	_	
3now Accumulation Friday	NH Northern	NH Western	NH Central	NH Southern	NH Eactern
Snow Amount	6-12"	7-14"	7-14"	7-14"	6-12"
Start Time	02/25 0800	02/25 0400	02/25 0500	02/25 0400	02/25 0500
End Time	02/25 2200	02/25 2100	02/25 2100	02/25 2100	02/25 2100
Snow Ratio	Normal-Dry	Normal	Normal	Normal	Normal
Chance of EEI-2/3/4 Snow	70%/50%/10%	80%/60%/30%	80%/60%/20%	80%/60%/20%	80%/60%/10%

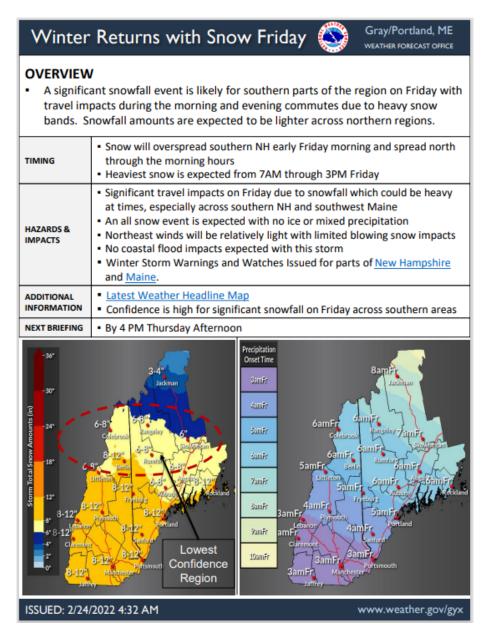
Forecasts issued on Thursday, February 24th, increased the confidence to a high likelihood of the forecast remaining at EEI Level 3 snowfall levels across all New Hampshire operating regions. The National Weather Service in Gray, Maine also issued

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- as series of Winter Storm Warnings and Winter Weather Advisories across the state for the
- 2 potential of significant snow and mixed precipitation impacts across the region.

alid Time: February 24,			i diddini.	jordan.oconn
Parameter	Region	Day 1	Day 2	Day 3
Vind Speed	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	1	1	1
	WA MetroWest	1	1	1
	MA South	1	1	1
	MA West Mass	1	1	1
	NH Central	1	1	1 1
	NH Eastern	1 1	1	1 1
	NH Northern	1	1	1
	NH Southern	1	1	1 1
Vind/Cust	NH Western	1 1	1 1	1 1
Vind/Gust	CT Central CT Eastern	1 1	1	1 1
	CT Western	1	1	+ +
	MA Cape/MV	1 1	1	
	MA MetroBoston		-	+ +
	MA MetroWest	 	<u> </u>	+ +
	MA South	1	1	+ +
	MA West Mass	1	1	1 1
	NH Central		1	+ +
	NH Eastern	1 1	1	+ +
	NH Northern	1 1	1	1 1
	NH Southern	1 1	1	+ +
	NH Western	1 1	1	1 1
naw	CT Central	1 1	2	1
	CT Eastern	1	2	1
	CT Western	1	2	1
	MA Cape/MV	1	1	1
	MA MetroBoston	1	3	1
	MA MetroWest	1	3	1
	MA South	1 1	1	1
	MA West Mass	1	3	1
	NH Central	1	3	1
	NH Eastern	1	3	1
	NH Northern	1	3	1
	NH Southern	1	3	1
	NH Western	1	3	1
100	CT Central	1	1	1
	CT Eastern	1	1	1 1
	CT Western	1	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	1 1	1 1	+ +
	MA MetroWest MA South	- 1	1	+ +
	MA West Mass	- 1	1 1	1 1
	NH Central		1 1	1 1
	NH Central NH Eastern	1 1	1 1	1 1
	NH Northern		1	+ +
	NH Southern	- + +	1	
	NH Western		1	+ +
onfidence Level	CT Central	High	Medium	High
	CT Eastern	High	Medium	High
	CT Western	High	Medium	High
	MA Cape/MV	High	Medium	High
	MA MetroBoston	High	High	High
	MA MetroWest	High	High	High
	MA South	High	Medium	High
	MA West Mass	High	High	High
	NH Central	High	High	High
	NH Eastern	High	High	High
	NH Northern	High	High	High
	NH Southern	High	High	High
	NH Western	High	High	High



Predictive impacts forecasts issued through DTN's SIA and the UConn OPM issued beginning on Wednesday, February 22nd, also began indicating the potential for moderate impacts to regional utilities due to the storm. Predictive model guidance throughout the two days leading up to the event generally anticipated an impact of 60 to 120 trouble spots across the State of New Hampshire.

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Q. What preparations did the Company make in anticipation of a major restoration event?

A. The Company began building situational awareness on Wednesday, February 23rd, with the issuance of its first Weather Advisory and a multi-state call to discuss the developing storm system and potential impacts to the region. New Hampshire Planning and Operations calls were initiated the same day to develop a pre-event preparedness plan, which included the assessment of available resources. Eversource verified the availability of 88 internal line resources and 110 vegetation management crews to be on property through the day on Friday, February 25th. Additionally, the Company verified the availability of 30 additional local contractor crews as well as internal Service Crews, Wire Guard Crews, and Damage Assessor crews to support restoration activities as needed.

12 Q. Did the Company experience outages during this event?

13 A. The Eversource system experienced the following impacts as detailed in the table below:

Total #	Peak #	Total	Peak	Percentage	Total
Events	Events	Customers	Customers	Affected	Restoration
		Interrupted	Interrupted	(Peak)	
8	3	447	207	0.5%	1.5%

Q. Does this event qualify for cost recovery?

16 A. Yes, pursuant to the pre-staging cost recovery criteria established in Docket No. DE 12-17 320 this event met the "Level 3" and "high" probability requirements as shown in the DTN 18 forecasts described above.

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March 7-8, 2022 Major Storm Event

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2 O. Please describe the storm forecast.

The weather event of March 7-8, 2022 was associated with a strong storm system forecasted to bring heavy, wet snow, ice, and hazard level winds to portions of the Midwest, Great Lakes and Northeastern United States. On Thursday, March 3rd DTN forecasts included an extended range outlook for the potentially strong system developing during the early portions of the following week. Forecasts from Friday, March 4th, through Sunday March 6th, continued to indicate the development of a system capable of producing a mix of snow, ice, and rain across a large portion of the state as well and the potential for hazard level wind gusts. DTN forecasts on Monday, March 7th, included the risk of EEI 2 wind gusts for portions of Massachusetts, however New Hampshire remained at a Level 1 for all potential hazards. The forecast discussion for New Hampshire did include a 30% risk of EEI Level 2 gusts for New Hampshire's Northern operating region for late Monday, March 7th, into early Tuesday, March 8th.

Event Forecast Table for Eversource NH

Low Temperatures	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Minimum Temperatures	18F	30F	30F	35F	35F
Time of 10 degrees Start Time	-	-	-	-	-
Time of 10 degrees End Time	-	-	-	-	-
Radial Ice Accretion	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Radial Ice Accretion Amount	-	-	-	-	-
Start Time	-	-	-	-	-
End Time	-	-	-	-	-
Chance of EEI-2 Ice Accretion	-	-	-	-	-
Snow Accumulation	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Snow Amount	Tr-3"	Tr-1/2"	-	-	-
Start Time	NOW	03/06 2200	-	-	-
End Time	03/08 1100	03/07 0700	-	-	-
Snow Ratio	7-12:1	5-10:1	-	-	-
Chance of EEI-2 Snow	-	-	-	-	-
Strong Winds (EEI-2+)	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Average Gusts	33 mph	28 mph	28 mph	27 mph	27 mph
Coverage of Gusts EEI-2+	30%	%	%	%	%
Start of Gusts EEI-2+	03/07 2100	-	-	-	-
End of Gusts EEI-2+	03/08 0800	-	-	-	-
Max Gusts	47 mph	42 mph	42 mph	42 mph	42 mph
Chance of Gusts EEI-2+	30%	%	%	%	%

The National Weather Service in Gray, Maine issued a Daily Decision Support Briefing

on Monday, March 7th, indicating the potential of light snow and freezing rain over higher elevations and the risk of wind gusts up to 50 mph early Tuesday, March 8th.

Predictive impacts forecasts issued through DTN's SIA and the UConn OPM beginning on Monday, March 7th, also began indicating the potential for moderate impacts to regional utilities due to the storm. Predictive model guidance throughout the day leading up to the event generally anticipated an impact of 80 -160 trouble spots across the State of New Hampshire, with a 20% risk of trouble spots up to 300.

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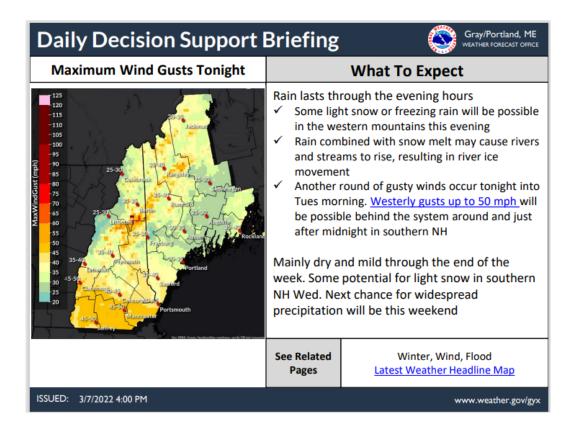
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- 9 Q. What preparations did the Company make in anticipation of a Major Storm restoration event?
- 11 A. The Company began building situational awareness on Monday, March 7th, with a weather 12 update and planning call with New Hampshire leadership. A weather update was also 13 provided on the daily Reliability Call with a focus on the potential of hazard level wind

- gusts across the southern portion of the state. Additionally, the Company confirmed crew
- staffing levels of all internal and on-system contracted line and vegetation management
- 3 resources.

4 Q. Did the Company experience outages during this event?

5 A. The Eversource system experienced the following impacts as detailed in the table below:

Total # Events	Peak # Events	Total Customers	Peak Customers	Percentage Affected	Total Restoration
		Interrupted	Interrupted	(Peak)	
336	159	48,885	17,417	3.2%	9%

6 Q. Does this event qualify for cost recovery?

- 7 A. Yes, using the major storm criteria established in Order No. 25,465, this event qualifies for
- 8 cost recovery through the MSCR because the total number of outage events exceeded the
- 9 300 reported troubles threshold.

10 March 11-13, 2022 Pre-Staging Event

11 Q. Please describe the storm forecast.

- 12 A. The weather event of March 11-13, 2022 was associated with a strong winter storm
- anticipated to bring hazard level snowfall and strong winds to portions of the Ohio Valley,
- Mid-Atlantic, and the Northeast. Beginning on Monday, March 7th, the Company began
- receiving indications of the potential winter storm anticipated to impact the region form
- Saturday into Sunday with the risk of hazard level winds, rain, and snow. DTN forecasts
- for Tuesday, March 8th, and Wednesday, March 9th, included a description of a rapidly
- intensifying low pressure system capable of producing damaging thunderstorms, mixed
- 19 precipitation, and strong winds across the entire state.

Thunderstorms (Saturday)	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Probability of Occurrence	10%	20%	20%	30%	30%
Percent of Region Impacted	10%	20%	20%	40%	40%
Start Time	03/12 1100	03/12 0900	03/12 1000	03/12 0900	03/12 0900
End Time	03/12 1400	03/12 1300	03/12 1400	03/12 1400	03/12 1500
Lightning amounts	Low	Low	Low	Low	Low
T-storm Gusts	30-40 mph	30-40 mph	30-40 mph	35-45 mph	35-45 mph
Chances for EEI-2 T-storm Gusts	-	-	-	20%	20%

Snow Accumulation	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Snow Amount	2-15"	2-7"	2-4"	1-3"	Tr-2"
Start Time	03/12 0600	03/12 1200	03/12 1500	03/12 1600	03/12 1800
End Time	03/13 0800	03/12 2100	03/12 2200	03/12 2200	03/12 2300
Snow Ratio	6-22:1	6-9:1	6-9:1	5-8:1	5-8:1
Chance of EEI-2/3/4 Snow	70%/40%/20%	30%/-/-	-/-/-	-/-/-	-/-/-

Strong Winds Sat-Sun (EEI-2+)	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Average Gusts	30 mph	30 mph	32 mph	32 mph	34 mph
Coverage of Gusts EEI-2+	30%	30%	40%	40%	50%
Start of Gusts EEI-2+	03/12 2300	03/12 2100	03/12 2100	03/12 2100	03/12 1900
End of Gusts EEI-2+	03/13 0800	03/13 0700	03/13 0700	03/13 0800	03/13 1000
Max Gusts	45 mph	46 mph	48 mph	48 mph	50 mph
Chance of Gusts EEI-2+	20%	30%	50%	50%	60%

The DTN forecasts on Thursday, March 10th, indicated the potential for EEI Level 3

mixed precipitation and strong winds impacting the region on Saturday, March 12th, and

into Sunday, March 13th. Winter Strom Warnings and Winter Weather Advisories were

snowfall across New Hampshire's Northern operating region and EEI Level 2 for the Western region. Additionally, EEI Level 2 winds were forecast for New Hampshire's Central, Southern, and Eastern operating regions. By Friday, March 11th, DTN had extended the risk of EEI Level 3 snow to include both the 12th and 13th and increased confidence to high. Also, the risk of EEI Level 2 snow in Western and EEI Level 2 winds for the Eastern region were also extended from Saturday into Sunday. The National Weather Service in Gray, Maine also issued a storm briefing indicating the potential of

issued for portions of the region.

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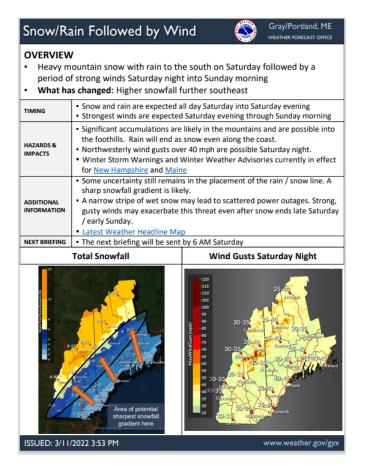
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Valid Time: March 11, 2				Forecaster: tanner.verstege		
Parameter	Ragion	Day 1	Day 2	Day 3		
Wind Speed	CT Central	1	1	1		
	CT Eastern	1 1	1	1		
	CT Western	1	1	1		
	MA Cape/MV	1 1	1	1		
	MA Mintrollination	1	1	1		
	MA MintroWest	1	1	1		
	MA South	1 1	1	1		
	MA West Mass	1	1	1		
	NH Cirrital	1	1	1		
	NH Eastern	1	1	1 1		
	NH Northern					
	NH Southern	1	1	1 1		
Wind/Gust	NH Western CT Central	1	1			
Wind/Guir:		1 1	1 1	1 1		
	OT Eastern	- 1	1 1	1 1		
	CT Western MA Cape/MY	- 1 1	2	2		
	MA Metrollogion	- 1 1	- 1	1		
	MA MistroWest		1 1	1 1		
		- 1 1		9		
	MA South	1 1	2			
	MA West Mass NH Central	1 1	1 1	1 1		
	NH Eastern	1 1		2		
	NH Northern	1 1	1	1		
	NH Southern	- 1 1	1	1		
	NH Wostern	- 1 1	1	1		
Sasw	CT Central	1 1	1	1 1		
anne.	OT Eastern	1 1	1	1 1		
	CT Western	1 1	1	1 1		
	MA Cape/MY	- 1 1	1 1	1 1		
	MA Metrolipsion	1 1	1	1 1		
	MA Missowwest	1 1	1 1	1 1		
	MA South	1 1	1 1	1 1		
	MA West Mass	1 1	2	2		
	NH Central	1 1	1	1 1		
	NH Eastern	1 1	1 4	1 4		
	NH Northern	1 1	3	3		
	NH Southern	1 1	1	1		
	NH Wastern	1 1	2	2		
ion	CT Certini	1 1	1	1		
	CT Eastern	1 1	1	1 1		
	CT Western	1 1	1 1	1 1		
	MA Cape/MY	1 1	1 1	1		
	MA Mintrollination	1 1	1 1	1		
	MA MistroWest	1 1	1 1	1		
	MA South	1 1	1	1		
	MA West Mass	1 1	1	1		
	NH Central	1	1	1		
	NH Eastern	1 1	1 1	1		
	NH Northern	1 1	1 1	1		
	NH Sputhern	1 1	1	1		
	NH Western	1 1	1	1		
Confidence Level	CT-Central	High	High	High		
	OT Eastern	High	High	High		
	CT Western	High	Medium	High		
	MA Cape/MY	High	Medium	High		
	MA Mintrollipation	High	High	High		
	MA MistroWest	High	High	High		
	MA South	High	Medium	High		
	MA West Mass	High	Medium	High		
	NH Central	High	Medium	High		
	NH Eastern	High	High	High		
	NH Northern	High	High	High		
	NH Southern	High	High	High		
	NH Wastern	High				



Predictive impacts forecasts issued through DTN's SIA and the UConn OPM beginning on Thursday, March 10th, also began indicating the potential for moderate impacts to regional utilities due to the storm. Predictive model guidance throughout the two days leading up to the event generally anticipated an impact of 70-140 trouble spots across the State of New Hampshire with a 25% risk of up to 300 trouble spots.

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A.

Q. What preparations did the Company make in anticipation of a major restoration event?

The Company began building situational awareness on Thursday, March 10th, with the issuance of its first Weather Advisory and a multi-state call to discuss the developing storm system and potential impacts to the region. New Hampshire IMT calls were initiated on

March 10th in order to develop a pre-event preparedness plan, which included the assessment of available resources. These calls were conducted daily over the two days preceding the storm with a partial activation of the Eversource New Hampshire ICC on Sunday, March 13th, at 1000 for an anticipated ERP Level 4 event.

Eversource New Hampshire developed a staffing plan to have restoration resources on system for the duration of the event; these resources included 86.5 internal line and 143 contracted line crews. Additionally internal and contracted Transmission crews, internal Service Crews, internal Wire Down Guards crews, and internal Damage Assessor crews were coordinated to provide response and recovery support throughout the event duration. The company initiated internal preparedness communications with the publication of a

Preparedness Briefing on Thursday, March 10th, with additional briefings issued on the 11th and 12th. Communications to external stakeholders, including medically coded customers, municipal partners, as well as the Department of Energy, and Homeland Security and Emergency Management staff were initiated on Friday, March 11th, and updated periodically in the days preceding the storm impacts.

Q. Did the Company experience outages during this event?

17 A. The Eversource system experienced the following impacts as detailed in the table below:

Total #	Peak #	Total	Peak	Percentage	Total
Events	Events	Customers	Customers	Affected	Restoration
		Interrupted	Interrupted	(Peak)	
68	26	20,332	3,700	0.7%	3.8%

Q. Does this event qualify for cost recovery?

20 A. Yes, pursuant to the pre-staging cost recovery criteria established in Docket No. DE 12-

- 320, this event met the "Level 3" and "high" probability requirements as shown in the DTN
- 2 forecasts provided above.

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April 19-20, 2022 Major Storm Event

- 4 Q. Please describe the storm forecast.
- The weather event of April 19-20, 2022 was associated with a strong coastal storm 5 A. forecasted to bring strong winds and heavy, wet snow to portions of New York and New 6 England. On Friday, April 15th, DTN's extended forecasts indicated the potential for a 7 strong low-pressure system developing off the East Coast over the next 4-5 days. The 8 system had the potential to produce widespread snow, rain, and hazard level winds. By 9 Sunday, April 17th, the DTN forecast included EEI Level 2 wind gusts for New 10 Hampshire's Eastern and Northern operating regions on Tuesday, April 19th. The forecast 11 on Monday, April 18th, expanded the potential of EEI Level 2 winds to also include the 12 Southern and Western operating regions. Forecasts issued early on Tuesday, April 19th, 13 remained consistent regarding the potential risk of hazard winds; however the 1300 14 forecast dropped all EEI Level 2 threats for the 19th and added hazard wind risks for 15 Northern and Western regions on the 20th. 16

Energy Event Index for EVERSOURCE ENERGY

Your forecast administrator: psstorm@eversource.com

Valid Time: April 19, 2022 6:00 AM EDT

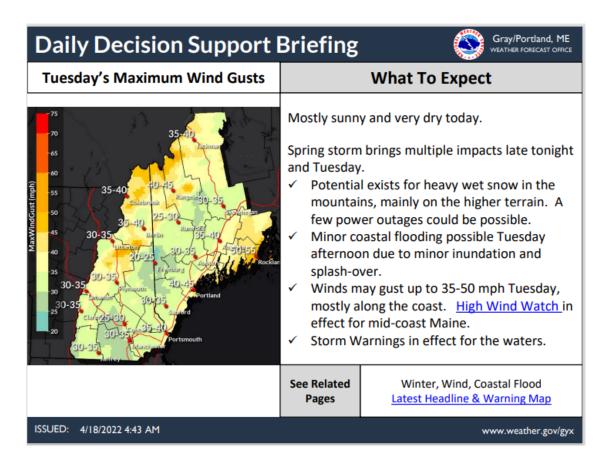
Forecaster: hunter.anderson

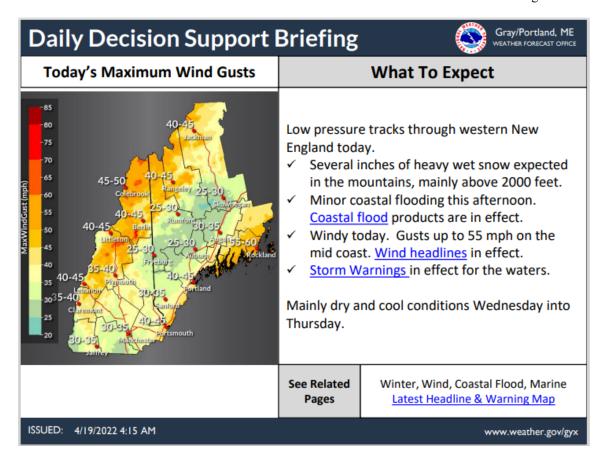
Parameter	Region	Day 1	Day 2	Day 3
Wind Speed	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1
	MA Cape/MV	2	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1	1	1
	MA South	1	1	1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1
	NH Southern	1	1	1
	NH Western	1	1	1
Wind/Gust	CT Central	2	1	1
	CT Eastern	2	1	1
	CT Western	1	1	1
	MA Cape/MV	3	1	1
	MA MetroBoston	2	1	1
	MA MetroWest	2	1	1
	MA South	3	1	1
	MA West Mass	2	1	1
	NH Central	1	1	1
	NH Eastern	2	1	1
	NH Northern	2	1	1
	NH Southern	2	1	1
	NH Western	2	1	1
Confidence Level	CT Central	Medium	High	High
	CT Eastern	High	High	High
	CT Western	Medium	High	High
	MA Cape/MV	High	High	High
	MA MetroBoston	Medium	High	High
	MA MetroWest	Medium	High	High
	MA South	Medium	High	High
	MA West Mass	Medium	Medium	High
	NH Central	Medium	High	High
	NH Eastern	Medium	High	High
	NH Northern	High	High	High
	NH Southern	Medium	High	High
	NH Western	Medium	High	High

Energy Event Index for EVERSOURCE ENERGY Your forecast administrator: psistorm@eversource.com
Valid Time: April 19, 2022 1:00 PM EDT Forecaster: nick.lesser1

Parameter	Region	Day 1	Day 2	Day 3
Wind Speed	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1	1	1
	MA South	1	1	1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1
	NH Southern	1	1	1
	NH Western	1	1	1
Mind/Gust	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1
	MA Cape/MV	2	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1	1	1
	MA South	2	1	1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	2	1
	NH Southern	1	1	1
	NH Western	1	2	1
Confidence Level	CT Central	High	High	High
	CT Eastern	High	High	High
	CT Western	High	High	High
	MA Cape/MV	Medium	High	High
	MA MetroBoston	Medium	High	High
	MA MetroWest	Medium	High	High
	MA South	Medium	High	High
	MA West Mass	High	Medium	High
	NH Central	High	High	High
	NH Eastern	High	High	High
	NH Northern	High	Medium	High
	NH Southern	High	High	High
	NH Western	High	Medium	High

The National Weather Service in Gray, Maine issued a Daily Decision Support Briefing on Monday, April 18th, indicating the potential for a multi-impact spring storm bringing wet snow and high winds to the region over the next two days. The NWS issued a series of winter storm and wind related watches and advisories effective through Wednesday, April 20th, for much of the region.





Predictive impact forecasts issued through DTN's SIA and the UConn OPM issued beginning on Sunday, March 17th, also began indicating the potential for moderate impacts to regional utilities due to the storm. Predictive model guidance throughout the two days leading up to the event generally anticipated an impact of 150-300 trouble spots across the State of New Hampshire with a 25% risk of up to 500 trouble spots.

A.

Q. What preparations did the Company make in anticipation of a major restoration event?

The Company began building situational awareness on Sunday, April 17th, with the issuance of its first Weather Advisory. A multi-state call was held the following day to discuss the developing storm system and potential impacts to the region. New Hampshire Planning and Operations calls were initiated on Monday, March 18th, in order to develop a

pre-event preparedness plan, which included the assessment of available resources, and these calls were conducted daily over the two days preceding the storm. The company developed a staffing plan to have restoration resources on system for the duration of the event; these resources included 96 internal line and 66 contracted line crews. Additionally, internal and contracted Transmission crews, internal Service Crews, internal Wire Down Guards crews, and internal Damage Assessor crews were coordinated to provide response and recovery support throughout the event duration.

8 Q. Did the Company experience outages during this event?

9 A. The Eversource system experienced the following impacts as detailed in the table below:

Total # Events	Peak # Events	Total Peak Customers Customers		8	
		Interrupted	Interrupted	(Peak)	
310	102	32,115	10,008	1.8%	5.9%

Q. Does this event qualify for cost recovery?

A. Yes, using the major storm criteria established in Order No. 25,465, this event qualifies for cost recovery through the MSCR because the total number of outage events exceeded the 300 reported troubles threshold.

July 21-22, 2022 Major Storm Event

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16 Q. Please describe the storm forecast.

A. The weather event of July 21-22, 2022 was associated with the passage of a cold front and associated strong and severe thunderstorms following a prolonged heat wave across the region. Beginning on Friday, July 15th, DTN's extended forecast indicated the potential for a major cold front and accompanying hazardous thunderstorms for the following week.

Forecasts issued from the 16th through the 18th included forecast discussions focusing on the developing potential of strong thunderstorms with damaging winds across the region on Thursday, July 21st. On Tuesday, July 19th, the DTN forecast included the potential for EEI Level 2 winds across all five New Hampshire operating regions. While confidence was medium in the wind threat remaining at Level 2, forecast discussions indicated a 50% chance of all areas experiencing wind gusts in the 35-45 mph range or higher.

Valid Time: July 19, 2022 7:00 PM EDT		Forecaster: teresa.deutchm				
Parameter	Region	Day 1	Day 2	Day 3		
Wind Speed	CT Central	1	1	1		
	CT Eastern	1	1	1		

Parameter	Region	Day 1	Day 2	Day 3
Wind Speed	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1	1	1
	MA South	1	1	1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1
	NH Southern	1	1	1
	NH Western	1	1	1
Wind/Gust	CT Central	1	1	2
	CT Eastern	1	1	2
	CT Western	1	1	2
	MA Cape/MV	1	1	1
	MA MetroBoston	1	1	2
	MA MetroWest	1	1	2
	MA South	1	1	1
	MA West Mass	1	1	2
	NH Central	1	1	2
	NH Eastern	1	1	2
	NH Northern	1	1	2
	NH Southern	1	1	2
	NH Western	1	1	2
Confidence Level	CT Central	High	High	Medium
	CT Eastern	High	High	Medium
	CT Western	High	High	Medium
	MA Cape/MV	Medium	High	Medium
	MA MetroBoston	High	High	Medium
	MA MetroWest	High	High	Medium
	MA South	High	High	Medium
	MA West Mass	High	High	Medium
	NH Central	High	High	Medium
	NH Eastern	High	High	Medium
	NH Northern	High	High	Medium
	NH Southern	High	High	Medium
	NH Western	High	High	Medium

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Thunderstorms Thursday	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Probability of Occurrence	40%	40%	40%	40%	40%
Percent of Region Impacted	40%	40%	30%	30%	30%
Start Time	07/21 1300	07/21 1300	07/21 1400	07/21 1400	07/21 1500
End Time	07/21 2300	07/21 2300	07/21 2300	07/22 0000	07/22 0100
Lightning Amounts	Low-Medium	Low-Medium	Low-Medium	Low-Medium	Low-Medium
T-storm Gusts	35-50 mph	35-45 mph	35-45 mph	35-45 mph	35-45 mph
Chance of EEI-2 Storm Gusts	50%	50%	50%	50%	50%

DTN forecasts issued on Wednesday, July 20th, and Thursday, July 21st, remained consistent with the potential risk of EEI Level 2 winds across all New Hampshire operating regions. Forecast discussions indicated an increased probability of all regions of the state experiencing maximum thunderstorm-related wind gusts in the 45-60 mph range. The National Weather Service in Gray, Maine issued a storm briefing indicating the potential for strong to severe thunderstorms and the Storm Prediction Center's (SPC) Convective Outlook had placed the entire state at a Slight Risk for severe weather on Thursday, July 21st. At approximately 1330 hours on July 21st, the NWS began issuing a series of Severe Thunderstorm and Tornado Warnings as hazardous conditions developed across the state, including damaging wind gusts and hail. A total of twenty Severe Thunderstorm Warnings and updates were issued between 1333 hours and 1741 hours on July 21st.

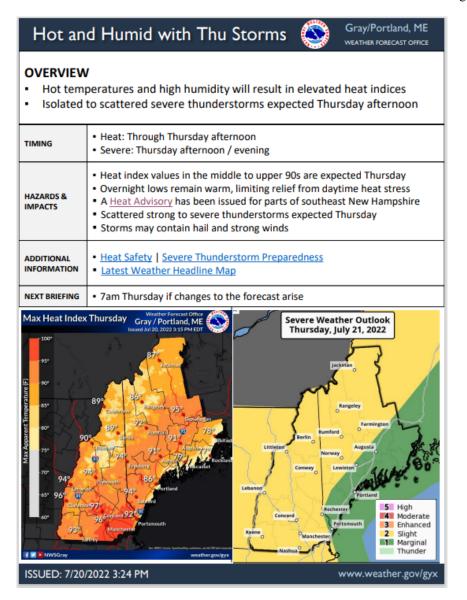
Energy Event Index for EVERSOURCE ENERGY
Valid Time: July 21, 2022 1:00 PM EDT

Your forecast administrator: psstorm@eversource.com
Forecaster: ryan.niemann

Parameter	Region	Day 1	Day 2	Day 3
Wind Speed	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1	1	1
	MA South	1	1	1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1
	NH Southern	1	1	1
	NH Western	1	1	1
//ind/Gust	CT Central	2	1	1
	CT Eastern	2	1	1
	CT Western	2	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	2	1	1
	MA MetroWest	2	1	1
	MA South	1	1	1
	MA West Mass	2	1	1
	NH Central	2	1	1
	NH Eastern	2	1	1
	NH Northern	2	1	1
	NH Southern	2	1	1
	NH Western	2	1	1
Confidence Level	CT Central	Medium	High	High
	CT Eastern	Medium	High	High
	CT Western	Medium	High	High
	MA Cape/MV	Medium	High	High
	MA MetroBoston	Medium	High	High
	MA MetroWest	Medium	High	High
	MA South	Medium	High	High
	MA West Mass	Medium	High	High
	NH Central	Medium	High	High
	NH Eastern	Medium	High	High
	NH Northern	Medium	High	High
	NH Southern	Medium	High	High
	NH Western	Medium	High	High

Event Forecast Table for Eversource NH

High Temperatures Wednesday	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Maximum Temperatures	89F	91F	95F	93F	95F
Time of 90 degrees Start Time	-	07/21 1400	Ongoing	Ongoing	Ongoing
Time of 90 degrees End Time	-	07/21 1700	07/21 1700	07/21 1800	07/21 1800
Thunderstorms Thursday	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Probability of Occurrence	60%	60%	60%	50%	50%
Percent of Region Impacted	50%	50%	50%	40%	40%
Start Time	07/21 1400	07/21 1400	07/21 1500	07/21 1500	07/21 1600
End Time	07/21 2000	07/21 2000	07/21 2100	07/21 2200	07/21 2200
Lightning Amounts	Low-Medium	Low-Medium	Low-Medium	Low-Medium	Low-Medium
T-storm Gusts	45-60 mph	45-60 mph	45-60 mph	45-60 mph	45-60 mph
Chance of EEI-2/3 Storm Gusts	60%/30%	60%/30%	60%/30%	60%/30%	60%/30%
Strong Winds (EEI-2+)	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Average Gusts	16 mph	16 mph	16 mph	18 mph	18 mph
Coverage of Gusts EEI-2+	%	%	%	%	%
Start of Gusts EEI-2+	-	-	-	-	-
End of Gusts EEI-2+	-	-	-	-	-
Max Gusts	25 mph	25 mph	25 mph	30 mph	30 mph
Chance of EEI-2+ Gusts	%	%	%	%	%



Predictive impact forecasts issued through DTN's SIA and the UConn OPM beginning on Tuesday, July 19th, also began indicating the potential for moderate impacts to regional utilities due to the storm. Predictive model guidance throughout the two days leading up to the event generally anticipated an impact of 80-160 trouble spots across the State of New Hampshire with a 20% risk of up to 300 trouble spots.

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Q. What preparations did the Company make in anticipation of a major restoration

event?

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A. The Company began building situational awareness with the issuance of its first Weather Advisory on Wednesday, July 20th. The Company initiated weather update and planning calls with New Hampshire leadership beginning on July 20th, and full New Hampshire Incident Management Team Calls on July 21st. New Hampshire IMT calls were conducted daily through the completion of the restoration efforts and into the planning for another anticipated severe weather event on July 25th, 2022. The New Hampshire ICC was fully activated at 1600 on July 21st for an ERP Level 4 event.

Eversource NH confirmed the availability of 89 internal line crews and 28 contracted line crews to be on property throughout the day on July 21st. All resources were held past the normal working hours in anticipation of severe weather impacts. Additionally, the company secured an additional 59 contractor line crews immediately following the initial impacts to support restoration activities. The company also activated internal Service Crews, Wire Guard Crews, and Damage Assessor crews to support response and recovery efforts.

Q. Did the Company experience outages during this event?

17 A. The Eversource system experienced the following impacts as detailed in the table below:

Total #	Peak #	Total	Peak	Percentage	Total
Events	Events	Customers	Customers	Affected	Restoration
		Interrupted	Interrupted	(Peak)	

18 Q. Does this event qualify for cost recovery?

19 A. Yes, using the Major Storm cost recovery criteria established in Order No. 25,465, this 20 event qualifies for cost recovery through the MSCR because the total number of outage events exceeded the 300 reported troubles threshold.

July 24, 2022 Pre-Staging Event

A.

Q. Please describe the storm forecast.

The weather event of July 25, 2022 was associated with the passage of a cold front and associated strong and severe thunderstorms following a prolonged heat wave across the region. Beginning on Wednesday, July 21st, DTN's extended forecast indicated the potential for a major cold front and accompanying hazardous thunderstorms for the end of the weekend and the early part of the following week. Forecasts issued for July 21st and the 22nd included forecast discussions highlighting the development of a second cold front and the potential of strong thunderstorms with damaging winds across the region on Sunday, July 24th, into Monday, July 25th. On Saturday, July 23rd, DTN forecasts included the potential for EEI Level 2 winds across all New Hampshire operating regions, except for the Northern region, for the 24th and 25th. While confidence was medium for the wind threat remaining at Level 2, forecast discussions indicated a risk of all areas experiencing thunderstorm-related wind gusts in the 35-55 mph range or higher.

Parameter	Region	Day 1	Day 2	Day 3
Wind Speed	CT Central	1	1	1
	CT Eastern	1	1	1
	CT Western	1	1	1
	MA Cape/MV	1	1	1
	MA MetroBoston	1	1	1
	MA MetroWest	1	1	1
	MA South	1	1	1
	MA West Mass	1	1	1
	NH Central	1	1	1
	NH Eastern	1	1	1
	NH Northern	1	1	1
	NH Southern	1	1	1
	NH Western	1	1	1
Wind/Gust	CT Central	1	2	2
	CT Eastern	1	1	2
	CT Western	1	2	2
	MA Cape/MV	1	1	1
	MA MetroBoston	1	1	2
	MA MetroWest	1	1	2
	MA South	1	1	2
	MA West Mass	1	2	2
	NH Central	1	2	2
	NH Eastern	1	2	2
	NH Northern	1	2	1
	NH Southern	1	2	2
	NH Western	1	2	2
Confidence Level	CT Central	High	Medium	Medium
	CT Eastern	High	Medium	Medium
	CT Western	High	Medium	Medium
	MA Cape/MV	High	High	Medium
	MA MetroBoston	High	Medium	Medium
	MA MetroWest	High	Medium	Medium
	MA South	High	High	Medium
	MA West Mass	High	Medium	Medium
	NH Central	High	Medium	Medium
	NH Eastern	High	Medium	Medium
	NH Northern	High	Medium	Medium
	NH Southern	High	Medium	Medium
	NH Western	High	Medium	Medium

Thunderstorms Sunday	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Probability of Occurrence	60%	40%	40%	30%	30%
Percent of Region Impacted	30%	30%	20%	20%	20%
Start Time	07/24 1100	07/24 1500	07/24 1600	07/24 1700	07/24 1700
End Time	07/25 0600	07/25 0300	07/24 2100	07/24 2200	07/24 2300
Lightning Amounts	Low-Moderate	Low-Iso Mod	Low	Low	Low
T-storm Gusts	40-55 mph	40-55 mph	35-50 mph	35-50 mph	35-50 mph
Chance of EEI-2/3 Storm Gusts	60%/20%	50%/15%	50%/10%	50%/10%	50%/5%

Thunderstorms Monday	NH Northern	NH Western	NH Central	NH Southern	NH Eastern
Probability of Occurrence	50%	60%	60%	60%	60%
Percent of Region Impacted	20%	30%	30%	40%	30%
Start Time	07/25 1100	07/25 1100	07/25 1200	07/25 1200	07/25 1300
End Time	07/25 2200	07/25 2000	07/25 2000	07/25 2100	07/25 2200
Lightning Amounts	Low-Iso Mod	Low-Mod	Low-Mod	Low-Mod	Low-Mod
T-storm Gusts	35-55 mph	45-60 mph	45-60 mph	45-60 mph	45-60 mph
Chance of EEI-2/3 Storm Gusts	40%/20%	50%/30%	50%/30%	60%/30%	50%/30%

DTN forecasts issued on Sunday, July 24th, decreased the potential for severe storms on 3 the 24th, but increased the potential on the 25th. By the morning of Monday, July 25th, DTN 4 had increased the risk of hazard level winds for New Hampshire's Southern and Eastern

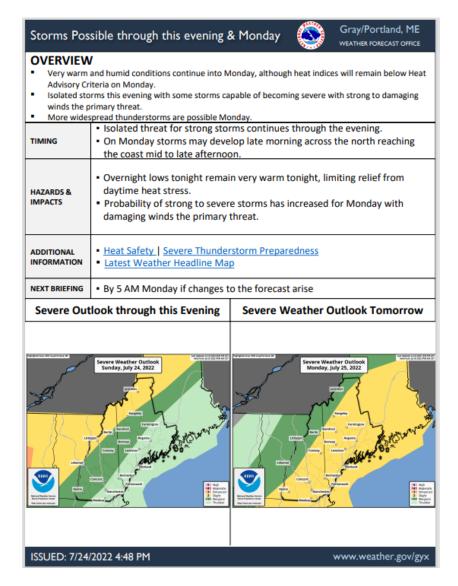
operating regions to EEI Level 3 with high confidence. The other operating regions

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remained at EEI Level 2. The National Weather Service in Gray, Maine issued a storm briefing indicating the potential for strong to severe thunderstorms and the SPC Convective Outlook had placed portions of the state at Slight Risk for severe weather on both Sunday, July 24th, and Monday, July 25th. At approximately 1100 hours on July 25th, the NWS began issuing a series of Severe Thunderstorm Warnings as hazardous conditions developed across the state, including damaging wind gusts and hail. A total of four Severe Thunderstorm Warnings and updates were issued between 1104 hours and 1426 hours on July 25th.

•,	for EVERSOURCE ENERGY	Tour forecast administra	recast administrator: <u>psstorm@eversource.c</u> Forecaster: hunter.anders		
Valid Time: July 25, 2022					
Parameter	Region	Day 1	Day 2	Day 3	
Wind Speed	CT Central	1	1	1	
	CT Eastern	1	1	1	
	CT Western	1	1	1	
	MA Cape/MV	1	1	1	
	MA MetroBoston	1	1	1	
	MA MetroWest	1	1	1	
	MA South	1	1	1	
	MA West Mass	1	1	1	
	NH Central	1	1	1	
	NH Eastern	1	1	1	
	NH Northern	1	1	1	
	NH Southern	1	1	1	
	NH Western	1	1	1	
//ind/Gust	CT Central	2	1	1	
	CT Eastern	3	1	1	
	CT Western	2	1	1	
	MA Cape/MV	2	1	1	
	MA MetroBoston	3	1	1	
	MA MetroWest	3	1	1	
	MA South	2	1	1	
	MA West Mass	2	1	1	
	NH Central	2	1	1	
	NH Eastern	3	1	1	
	NH Northern	2	1	1	
	NH Southern	3	1	1	
	NH Western	2	1	1	
Confidence Level	CT Central	Medium	High	High	
	CT Eastern	Medium	High	High	
	CT Western	Medium	High	High	
	MA Cape/MV	Medium	High	High	
	MA MetroBoston	High	High	High	
	MA MetroWest	High	High	High	
	MA South	Medium	High	High	
	MA West Mass	High	High	High	
	NH Central	High	High	High	
	NH Eastern	High	High	High	
	NH Northern	Medium	High	High	
	NH Southern	High	High	High	
	NH Western	Medium	High	High	



Predictive impact forecasts issued through DTN's SIA and the UConn OPM issued
beginning on Saturday, July 23rd, also began indicating the potential for moderate impacts
to regional utilities due to the storm. Predictive model guidance throughout the two days
leading up to the event generally anticipated an impact of 200-400 trouble spots across
the State of New Hampshire with a 30% risk of up to 500 trouble spots.

- **Q.** What preparations did the Company make in anticipation of a major restoration event?
- 9 A. The Company began coordinating preparedness actions for the July 24-25th severe weather

risk in parallel with the response to the July 21st - 22nd Major Storm event. New Hampshire IMT calls were scheduled throughout the weekend prior to the event to address both the restoration coordination and event preparedness. Incident Action Plans published to guide recovery objectives and actions also included pre-staging considerations in anticipation of a second, significant event. Resources completing restoration activities through July 23rd and 24th were transitioned to preparedness activities in anticipation of the anticipated storm impacts on the 24th and 2 5th. The New Hampshire ICC was activated at 1800 on July 24th in preparation for an ERP Level 4 event.

Eversource NH confirmed the availability of 84 internal line crews and 83 contracted line crews to be on property throughout the day on July 24th. Resources were scheduled to provide overnight coverage on the 24th in anticipation of late day storms. Additionally, the Company activated internal Service Crews, Wire Guard Crews, and Damage Assessor Crews to support response and recovery efforts.

Q. Did the Company experience outages during this event?

15 A. The Eversource system experienced the following impacts as detailed in the table below:

Total # Events	Peak # Events	Total Customers Interrupted	Peak Customers Interrupted	Percentage Affected (Peak)	Total Restoration
167	206	13,089	3,493	0.6%	2.4%

16 Q. Does this event qualify for cost recovery?

17 A. Yes, pursuant to the pre-staging cost recovery criteria established in Docket No. DE 12-18 320, this event met the "Level 3" and "high" probability requirements as shown in the DTN 19 forecasts described above.

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IV. CONCLUDING REMARKS

- Q. Were the costs presented in this filing for recovery reasonably and prudently incurred for pre-staging and to restore power to customers following Major Storm events as described above?
- 5 A. Yes. All costs that the Company has presented in this filing were incurred as part of its efforts to prepare for and respond to the storm conditions caused by the Major Storms or 6 7 for pre-staging efforts. As previously mentioned, each of these events met or exceeded the 8 threshold required to be recoverable through Eversource's MSCR. Significant resources were needed to prepare for the Storm Events and to restore power in a reasonable 9 timeframe. The actions taken by Eversource to prepare for and respond to the weather 10 events described were appropriate and effective, and resulted in the restoration of power in 11 12 a reasonably prompt manner. Therefore, the costs that were incurred to achieve those results are eligible for recovery through the Company's MSCR. 13
- 14 Q. Does this complete your testimony?
- 15 A. Yes, it does.