

May 1, 2014

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888

RE: <u>Docket 3628 - 2013 Annual Service Quality Report, Electric Operations</u>

Dear Ms. Massaro:

Enclosed are ten (10) copies of National Grid's¹ performance results for 2013 under its Service Quality Plan ("Plan") as established in the above-referenced docket. Based on actual performance results, the Company has calculated a net offset of \$45,000 for calendar year 2013.

The Company's Plan is described in Attachment 1 to the Company's Agreement to Modify Performance Benchmarks ("Agreement") filed with the Rhode Island Public Utilities Commission ("PUC") on March 14, 2007, and approved by the PUC in Docket 3628. The Plan provides for penalties and offsets relating to performance standards in the areas of reliability and customer service. The service quality standards under the Plan became effective as of January 1, 2007.

This report is organized as follows:

- Section 1: This section provides a summary of each performance standard in the areas of reliability and customer service. Section 1 contains descriptions of each of the performance standards, the targeted performance levels for 2013 with their related dollar values, and the actual 2013 results with the applicable annual penalty or offset.
- <u>Section 2</u>: This section provides a summary calculation of the Company's annual penalty or offset for each of the performance standards for 2013. The annual net offset for 2013 of \$45,000 is shown in Column (i).

¹ Submitted on behalf of The Narragansett Electric Company, d/b/a National Grid (the "Company").

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• <u>Section 3</u>: The Plan requires the Company to report on additional aspects of service quality, including: (1) worst performing circuits; (2) trouble, non-outage calls received; (3) annual meter reading performance; and (4) information on Major Event Days. Section 3 summarizes the results of these reporting requirements.

Thank you for your attention to this filing. If you have any questions concerning this report, please do not hesitate to call me at (401) 784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosures

cc: Docket 3628 Service List Leo Wold, Esq. Steve Scialabba, Division

The Narragansett Electric Company, d/b/a National Grid

2013 Service Quality Report

May 1, 2014

Submitted to: Rhode Island Public Utilities Commission R.I.P.U.C. Docket No. 3628

Submitted by:



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RELIABILITY PERFORMANCE STANDARDS

Interruption Frequency and Duration

Under the Service Quality Plan, an interruption is defined as the loss of electric service to more than one customer for more than one minute. The interruption duration is defined as the period of time, measured in minutes, from the initial notification of the interruption event to the time when service has been restored to the customers. Interruptions are tracked using System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI). SAIFI is calculated by dividing the total number of customers interrupted by the total number of customers served. SAIFI measures the number of times per year the average customer experienced an interruption. This is an average, so in any given year some customers will experience no interruptions, and some will experience several interruptions. SAIDI measures the length of interruption time that the average customer experienced for the year. It is calculated by dividing the total customer minutes of interruption by the total number of customers served.

Certain events are defined as Major Event Days and are excluded from the calculation of reliability performance standards for the purpose of penalty and offset assessment. There were three days in 2013 that qualified as Major Event Days: January 31 and February 8-9, 2013.

2013 Frequency (SAIFI) Standard

2013 Frequency (SAIFI) Results

Frequency of Interruptions per Customer Offset Penalty) Offset		Frequency of Interruptions per Customer	Annual (Penalty) Offset
Greater than 1.18	(\$916,000)		
1.06-1.18	linear interpolation		
0.84-1.05	\$0	0.72	\$229,000
0.75-0.83	linear interpolation		
Less than 0.75	\$229,000		

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2013 Duration (SAIDI) Standard

2013 Duration (SAIDI) Results

Duration of Interruptions (minutes)	(Penalty) Offset	Duration of Interruptions (minutes)	Annual (Penalty) Offset
Greater than 89.9	(\$916,000)		
72.0-89.9	linear interpolation		
45.9-71.9	\$0	57.3	\$0
36.7-45.8	linear interpolation		
Less than 36.7	\$229,000		

CUSTOMER SERVICE PERFORMANCE STANDARDS

Customer Contact Survey

The customer contact survey results are based on responses from National Grid's Rhode Island customers from a survey performed by an independent third-party consultant, Opinion Dynamics Corporation (ODC). ODC surveys samples of customers who have contacted the call center quarterly in order to determine their overall level of satisfaction with their contact. Eight types of transactions are included in the survey, and the overall results are weighted based on the number of these transactions actually performed at the call center during the calendar year. The percent satisfied represents respondents who gave a Top-2 rating on a seven-point scale, where 1 means extremely dissatisfied and 7 means extremely satisfied.

2013 Customer Contact Standard

2013 Customer Contact Results

Percent Satisfied	(Penalty) Offset	Percent <u>Satisfied</u>	Annual (Penalty) <u>Offset</u>
Less than 74.5%	(\$184,000)		
74.5%-76.7%	linear interpolation	71.4%	(\$184,000)
76.8%-81.4%	\$0		
81.5%-83.7%	linear interpolation		
Greater than 83.7%	\$46,000		

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Telephone Calls Answered Within 20 Seconds

The calls answered performance standard reflects the annual average of calls answered within 20 seconds. "Calls answered" include calls answered by a customer service representative (CSR) and calls completed within the Voice Response Unit (VRU). The time to answer is measured once the customer makes a selection to either speak with a CSR or use the VRU.

2013 Calls Answered Standard

2013 Calls Answered Results

% Answered Within 20 Seconds	(Penalty) Offset	% Answered Within 20 Seconds	Annual (Penalty) Offset
Less than 53.5%	(\$184,000)		
53.5%-65.7%	linear interpolation		
65.8%-90.4%	\$0	77.1%	\$0
90.5%-100.0%	linear interpolation, to a maximum of \$46,000		

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National Grid

2013 Results of Service Quality Plan Calculation of Penalty/Offset

					One Std		One Std		Annual
	Potential	Potential	2013	Maximum	Dev. Worse		Dev. Better	Maximum	(Penalty)/
Performance Standard	Penalty	Offset	Results	Penalty	Than Mean	Mean	Than Mean	Offset	Offset
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Reliability - Frequency	\$ 916,000	\$ 229,000	0.72	1.18	1.05	0.94	0.84	0.75	\$229,000
Reliability - Duration	\$ 916,000	\$ 229,000	57.3	89.9	71.9	57.5	45.9	36.7	\$0
Customer Service - Customer Contact Survey	\$ 184,000	\$ 46,000	71.4%	74.5%	76.8%	79.1%	81.4%	83.7%	(\$184,000)
Customer Service - Telephone Calls Answered	\$ 184,000	\$ 46,000	77.1%	53.5%	65.8%	78.1%	90.4%	100.0%	\$0
Total Penalty/Offset	\$ 2,200,000	\$ 550,000							\$45,000

Notes

Columns (a), (b), and (d)-(h) are per the Amended Electric Service Quality Plan, RIPUC Docket No. 3628.

Column (c) represents the actual 2013 annual results for the performance standards listed in the first column.

Column (i) is calculated as follows:

- For Reliability Standards:

If Column (c) is between Column (g) and Column (e): \$0

If Column (c) is between Column (h) and Column (g): $[Column (g) - Column (c)] \div [Column (g) - Column (h)] \times Column (b)$ If Column (c) is between Column (e) and Column (d): $[Column (c) - Column (e)] \div [Column (d) - Column (e)] \times Column (e)$

If Column (c) is greater than Column (d): 100% of Column (a)
If Column (c) is less than Column (h): 100% of Column (b)

- For Customer Service Standards:

If Column (c) is between Column (e) and Column (g): \$0

If Column (c) is less than Column (d): 100% of Column (a)
If Column (c) is greater than Column (h): 100% of Column (b)

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ADDITIONAL REPORTING CRITERIA

Under the Company's Service Quality Plan, the following additional reporting criteria are required to be filed with the PUC.

1. **Reporting Requirement:** Each quarter, the Company will file a report of 5% of all circuits designated as worst performing on the basis of customer frequency.

Included in the report will be:

- 1. The circuit id and location.
- 2. The number of customers served.
- 3. The towns served.
- 4. The number of events.
- 5. The average duration.
- 6. The total customer minutes.
- 7. A discussion of the cause or causes of events.
- 8. A discussion of the action plan for improvements including timing.

Results: The Company filed its first quarter 2013 feeder ranking results on May 16, 2013, the second quarter results on September 5, 2013, the third quarter results on November 13, 2013, and the fourth quarter results on January 28, 2014.

2. **Reporting Requirement:** The Company will track and report monthly the number of calls it receives in the category of Trouble, Non-Outage. This includes inquiries about dim lights, low voltage, half-power, flickering lights, reduced TV picture size, high voltage, frequently burned-out bulbs, motor running problems, damaged appliances and equipment, computer operation problems, and other non-interruptions related inquiries.

Results: The Company filed the required Trouble, Non-Outage reports on a monthly basis during 2013, with the final report filed on April 29, 2014.

3. **Reporting Requirement:** The Company will report its annual meter reading performance as an average of monthly percentage of meters read.

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Results: During 2013, the Company's annual meter reading performance (as an average of monthly percentage of meters read) was 98.8%, compared to 98.1% during 2012, and 97.5% during 2011. The following table details the percentage of meters read per month for 2013, 2012, and 2011.

Narragansett Electric Company Monthly Percentage of Meters Read

	2013	2012	2011
January	99.0%	98.9%	97.8%
February	96.9%	99.0%	98.7%
March	99.0%	99.0%	99.0%
April	99.1%	99.1%	99.1%
May	99.1%	99.2%	99.2%
June	99.0%	99.2%	99.2%
July	99.0%	99.1%	99.1%
August	98.9%	99.0%	98.7%
September	98.9%	99.1%	82.0%
October	98.9%	99.1%	99.0%
November	99.0%	87.2%	98.9%
December	98.9%	99.0%	98.9%
YTD Average	98.8%	98.1%	97.5%

- 4. **Reporting Requirement:** For each event defined as a Major Event Day, the Company will prepare a report, which will be filed annually as part of the annual SQ filing, detailing the following information:
 - 1. Start date/Time of event.
 - 2. Number/Location of crews on duty (both internal and external crews).
 - 3. Number of crews assigned to restoration efforts.
 - 4. The first instance of mutual aid coordination.
 - 5. First contact with material suppliers.
 - 6. Inventory levels: pre-event/daily/post-event.
 - 7. Date/Time of request for external crews.
 - 8. Date/Time of external crew assignment.
 - 9. # of customers out of service by hour.
 - 10. Impacted area.
 - 11. Cause.
 - 12. Weather impact on restoration.
 - 13. Analysis of protective device operation.
 - 14. Summary of customers impacted.

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Results

IEEE Std. 1366-2003 identifies reliability performance during both day-to-day operations and Major Event Days. Major Event Days represent those few days during the year on which the energy delivery system experienced stresses beyond that normally expected, such as severe weather. A day is considered a Major Event Day if the daily SAIDI exceeds a threshold value, calculated using the IEEE methodology. For 2013 the T_{MED} value was 5.74 minutes of SAIDI (using IEEE Std. 1366-2003 methodology). There were three days during two separate storms that exceeded this threshold in 2013. These two storms, which occurred on January 31, 2013 and February 8 – February 9, 2013, are described below.

January 31 Winter Storm

1. Start Date and Time of event:

The storm began in the early morning on Thursday, January 31 with scattered interruptions starting at approximately 1:00 a.m. and peaked around 6:00 a.m. The peak reached 10,445 customers interrupted.

2. Number/Location of crews on duty (both internal and external crews):

Overnight on January 30-31, the Company had approximately 24 internal line crews (including two-person and single troubleshooter crews) and 10 tree crews on duty. During the day of January 31, the Company had approximately 85 internal line crews (including two-person and single troubleshooter crews), 22 external distribution line crews and 41 external tree crews on duty or staged throughout the state. These crews were based in the Company's operating offices in the Capital and Coastal districts or staged at Twin Rivers in Lincoln.

3. Number of crews assigned to restoration efforts:

At peak, the Company had the following crews performing restoration activities throughout the impacted areas in the state.

Location	Crew Type	# Crews
Rhode Island	Company Line	85 crews total
	Company Wire Down	57 crews total
	Company Substation/Transmission	18 crews total
	Contractor Line Personnel	22 crews total
	Contractor Tree	41 crews total

4. The first instance of mutual aid coordination:

The Company did not call for mutual aid coordination for this event

5. The first contact with material suppliers:

Contact with material suppliers was not required during this storm

6. Inventory levels: pre-event/daily/post-event

Inventory levels and issues are summarized in the table below. Balances represent actual day-end totals. The balances do not include "no cost", pre-capitalized items, such as transformers; these items are not reported as inventory on the balance sheet.

The inventory positions indicate those inventories held in Rhode Island and those allocated to Rhode Island stored in National Grid's Central Warehouse located in Whitinsville, MA.

	RI Inventory	<u>A</u>	llocated NEDC	Total Narrangansett Electric
<u>Date</u>	Locations		<u>Inventory</u>	<u>Inventory</u>
01/30/2013	\$ 1,037,795.98	\$	5,915,489.29	\$ 6,953,285.27

7. Date/Time of request for external Crews:

On January 30, 2013, prior to the onset of the storm, the Company started securing crews from its alliance vendors and other outside contractors to support restoration efforts for all of New England as part of its regional storm preparation, consistent with its ERP. The Company had a total of 22 distribution line contractor personnel positioned in Rhode Island.

8. Date/Time of external Crews assignment:

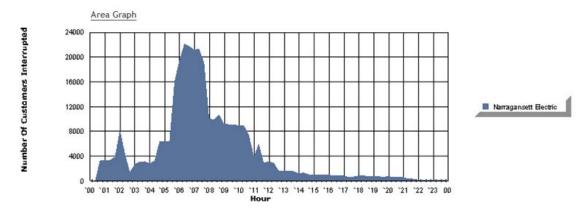
External distribution line crews were first assigned and began working on outages on January 31 at 8:00 a.m.

9. # of customers out by hour (graphs following):

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January 31, 2013 (Thursday)



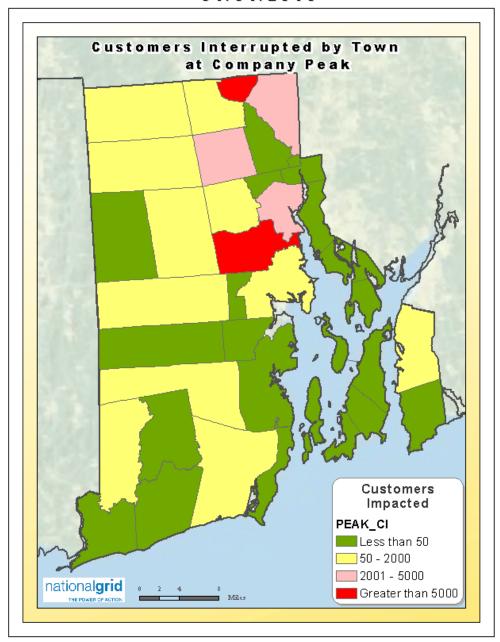


Interruptions Found for: Narragansett Electric

10. Impacted area:

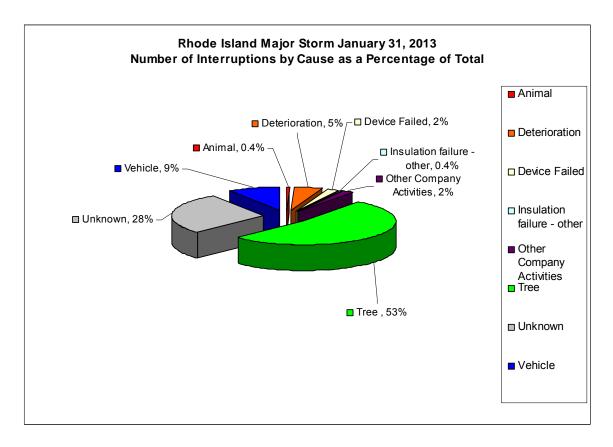
The following map shows the towns that were impacted by the storm and the customers interrupted during the storm.

Towns with Customers Interrupted 01/31/2013



11. Cause:

The winter storm on January 31 caused a lot of destruction to Rhode Island's electric infrastructure resulting in interruptions to customers. The causes of interruptions are shown in the table below.



12. Weather impact on restoration:

The weather did not have a significant impact on when full restoration could start. The system came through late in the evening of January 30 and into the morning of January 31. The Company was able to proceed fully with restoration by very early morning on January 31.

13. Analysis of Protective Device Operation:

National Grid maintains a wide array of protection and interrupting devices designed to separate faulted components from the electrical system while containing outages to the smallest area practicable. On the distribution system, those devices include fuse cutouts, reclosers, and circuit breakers of various designs. On the transmission system, interrupting devices include circuit breakers, air-break switches, and circuit switchers.

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Protection relays are used to detect the faults and operate the interrupting device(s) to isolate a faulted component(s).

For the distribution system, design standards exist that indicate how protection devices are to be deployed and coordinated with other devices. Distribution engineers evaluate such devices under normal and fault conditions. Where recent performance may indicate a need for improvement, National Grid performs engineering studies and makes improvements. During a major storm like this event, outages in the distribution system may be far too extensive to assess the function and coordination of individual protection devices in detail, as the focus of storm response is on service restoration. A meaningful analysis would be difficult to perform unless there were specific indications of protection equipment mis-operation.

Protection standards, guides and practices also exist and are followed in the design of the National Grid's transmission system. Post event analysis of all interruptions in the National Grid Bulk Electric System (BES) is performed to confirm proper operation of protection systems. If an improper operation is identified, further analysis is conducted to identify the cause, propose and implement a solution. In addition, National Grid undertakes analysis of transmission and substation protection devices and coordination where there is evidence of a mis-operation. The Company had no mis-operations at the Transmission and substation level in Massachusetts during this event

14. Summary of Customers Impacted:

January 31, 2013

During this storm, on January 31, 2013 Rhode Island experienced a total of 179 interruptions that affected 36,734 customers and 5,957,272 customer minutes of interruption. On average these interruptions resulted in 0.0.8 SAIFI, 12.28 minutes of SAIDI, and 162 minutes of interruption of customers affected. Since a SAIDI value of 12.28 minutes exceeded the threshold value of 5.74 minutes, January 31, 2013 qualified as a Major Event Day under the IEEE methodology.

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February 8 Nor'easter

Reference is made to Exhibit 1: Docket No. 2509 – Storm Contingency Fund, February 8, 2013 Nor'easter Report (referred to herein as "NEMO" or the "February 2013 Nor'easter") filed on May 8, 2013.

1. Start Date and Time of event:

The storm began in the mid-afternoon on Friday, February 8 with approximately 115,000 customers interrupted in Rhode Island by 10:00 p.m. and approximately 160,000 interrupted by midnight on the same day. This number of reported interruptions peaked at 169,139 customers on Saturday, February 9 at approximately 9:00 a.m.

2. Number/Location of crews on duty (both internal and external crews):

Overnight on February 8, approximately 22 Company (including two-person and single, troubleshooter crews) were available for restoration. In the morning of February 9, the Company had approximately 61 internal line crews (including two-person and single, troubleshooter crews), 74 external distribution line crews and 146 external tree crews on duty or staged throughout the state. These crews were based in the Company's operating offices in the Capital and Coastal districts or staged at CCRI in Warwick or Twin Rivers in Lincoln.

3. Number of crews assigned to restoration efforts:

At peak the Company had the following crews performing restoration activities throughout the impacted areas in the state.

Location	Crew Type	# Crews
Rhode Island	Company Line	85 crews total
	Company Wire Down	114 crews total
	Company Damage Appraiser	40 crews total
	Company Substation/Transmission	17 crews total
	Contractor Line Personnel	518 crews total
	Contractor Tree	301 crews total
	Contractor Wire Down	30 crews total
	Contractor Damage Appraiser	76 crews total
	Contractor Substation/Transmission	7 crews total

4. The first instance of mutual aid coordination:

In preparation for this event, National Grid participated in the first conference call convened by Northeast Mutual Assistance Group on February 7 at 3:00 p.m.

5. The first contact with material suppliers:

Contact with material suppliers was not required during this storm. Full outreach and pro-active purchase orders with material suppliers began on February 7 for this storm event.

6. Inventory levels: pre-event/daily/post-event

Inventory levels and issues are summarized in the table below. Balances represent actual day-end totals. The balances do not include "no cost", precapitalized items, such as transformers; these items are not reported as inventory on the balance sheet.

The inventory positions indicate those inventories held in Rhode Island and those allocated to RI stored in National Grid' Central Warehouse located in Whitinsville, MA.

	RIInventory	Δ	Ilocated NEDC	Total Narrangansett Electric
<u>Date</u>	<u>Locations</u>		<u>Inventory</u>	<u>Inventory</u>
02/07/2013	\$ 1,037,795.98	\$	5,706,989.73	\$ 6,744,785.71
02/10/2013	\$ 1,037,795.98	\$	5,756,507.60	\$ 6,794,303.58
02/11/2013	\$ 1,037,795.98	\$	5,756,768.02	\$ 6,794,564.00
02/12/2013	\$ 1,037,795.98	\$	5,750,299.39	\$ 6,788,095.37
02/13/2013	\$ 1,037,795.98	\$	5,774,243.38	\$ 6,812,039.36

7. Date/Time of request for external Crews:

On February 5, prior to the onset of the storm, the Company started securing crews from its alliance vendors and other outside contractors to support restoration efforts for all of New England as part of its regional storm preparation, consistent with its ERP. Ultimately, the Company had a total of 74 distribution line contractor personnel prepositioned in Rhode Island.

8. Date/Time of external Crews assignment:

External distribution line crews were assigned and began working outages on February 8 at 4:00 p.m.

9. # of customers out by hour (graphs following):

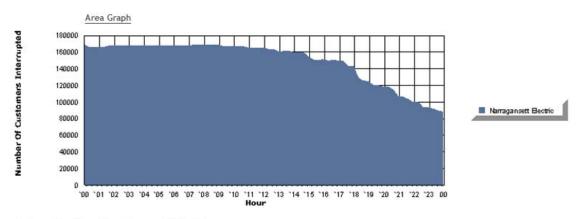
February 8, 2013 (Friday)



Interruptions Found for: Narragansett Electric

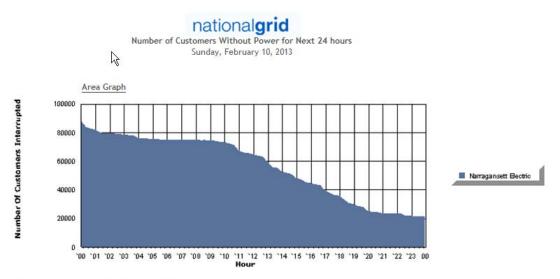
February 9, 2013 (Saturday)

nationalgrid Number of Customers Without Power for Next 24 hours Saturday, February 09, 2013



Interruptions Found for: Narragansett Electric

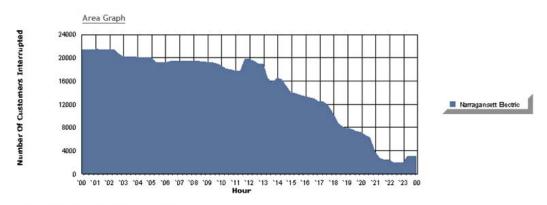
February 10, 2013 (Sunday)



Interruptions Found for: Narragansett Electric

February 11, 2013 (Monday)

nationalgrid Number of Customers Without Power for Next 24 hours Monday, February 11, 2013

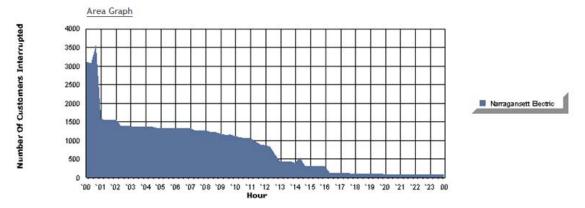


Interruptions Found for: Narragansett Electric

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February 12, 2013 (Tuesday)

nationalgrid Number of Customers Without Power for Next 24 hours Tuesday, February 12, 2013

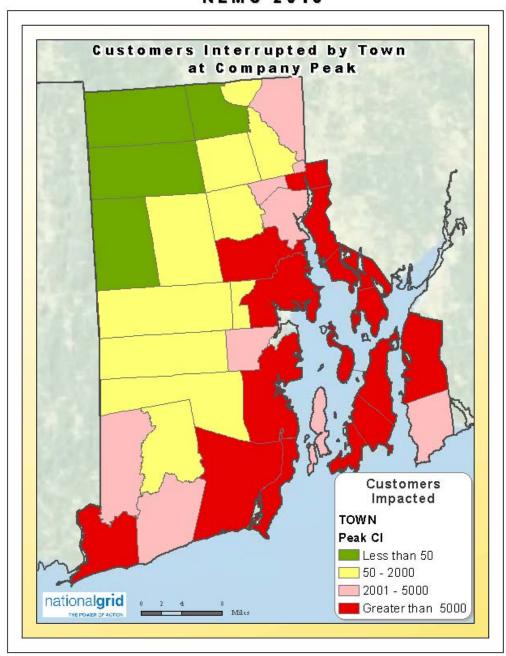


Interruptions Found for: Narragansett Electric

10. Impacted area:

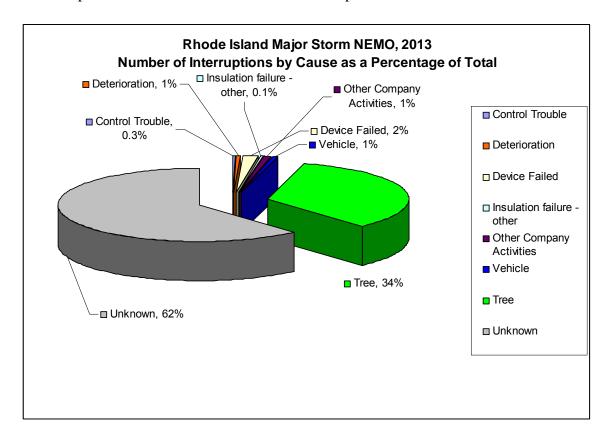
The following map shows the towns that were impacted by the storm and the customers interrupted during the storm.

Towns with Customers Interrupted NEMO 2013



11. Cause:

NEMO caused widespread destruction to Rhode Island's electric infrastructure resulting in interruptions to customers. The causes of interruptions are shown in the table below.



12. Weather impact on restoration:

Attachment 1, of the February 2013 Nor'easter Report, provides information on the weather from the February Nor'easter. The weather did have a slight impact on when full restoration could start. During the worst of the weather on February 8, restoration activities were limited to those that could be performed safely, particularly given the heavy snow, high winds, and near white-out conditions. By late in the morning of February 9, the Company was able to proceed fully with restoration.

13. Analysis of Protective Device Operation:

National Grid maintains a wide array of protection and interrupting devices designed to separate faulted components from the electrical system while containing outages to the smallest area practicable. On the distribution system, those devices include fuse cutouts, reclosers, and circuit breakers of various designs. On the transmission system,

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interrupting devices include circuit breakers, air-break switches, and circuit switchers. Protection relays are used to detect the faults and operate the interrupting device(s) to isolate a faulted component(s).

For the distribution system, design standards exist that indicate how protection devices are to be deployed and coordinated with other devices. Distribution engineers evaluate such devices under normal and fault conditions. Where recent performance may indicate a need for improvement, National Grid performs engineering studies and makes improvements. During a major storm as this event, outages in the distribution system may be far too extensive to assess the function and coordination of individual protection devices in detail, as the focus of storm response is on service restoration. A meaningful analysis would be difficult to perform unless there were specific indications of protection equipment mis-operation.

Protection standards, guides and practices also exist and are followed in the design of the National Grid's transmission system. Post event analysis of all interruptions in the National Grid Bulk Electric System (BES) is performed to confirm proper operation of protection systems. If an improper operation is identified, further analysis is conducted to identify the cause, propose and implement a solution. In addition, National Grid undertakes analysis of transmission and substation protection devices and coordination where there is evidence of a mis-operation. The Company had no mis-operations at the Transmission and substation level in Massachusetts during this event

14. Summary of Customers Impacted:

February 8, 2013

During the February 8, 2013 storm, Rhode Island experienced a total of 470 interruptions that affected 210,459 customers and 327,693,181 customer minutes of interruption. On average these interruptions resulted in 0.43 SAIFI, 674.59 minutes of SAIDI, and 1,557 minutes of interruption of customers affected. Since a SAIDI value of 674.59 minutes exceeded the threshold value of 5.74 minutes, February 8, 2013 qualified as a Major Event Day under the IEEE methodology.

February 9, 2013

On February 9, 2013, restoration activity in Rhode Island associated with the storm continued. Customers experienced a total of 282 interruptions that affected 17,714 customers and 19,474,663 customer minutes of interruption. On average these interruptions resulted in 0.04 SAIFI, 40.09 minutes of SAIDI, and 1,099 minutes of interruption of customers affected. Since a SAIDI value of 40.09 minutes exceeded the threshold value of 5.74 minutes, February 9, 2013 qualified as a Major Event Day under the IEEE methodology.

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February 10, 2013

On February 10, 2013, restoration activity in Rhode Island associated with the tropical Storm continued. Customers experienced a total of 252 interruptions that affected 2,153 customers and 1,954,016 customer minutes of interruption. On average these interruptions resulted in 0.00 SAIFI, 4.02 minutes of SAIDI, and 908 minutes of interruption of customers affected.

February 11, 12, 2013

On February 11, 2013, restoration activity in Rhode Island associated with the storm continued. Customers experienced a total of 272 interruptions that affected 7258 customers and 1,392,895 customer minutes of interruption. On average these interruptions resulted in 0.01 SAIFI, 2.87 minutes of SAIDI, and 192 minutes of interruption of customers affected. As reported in Docket No. 2509 NEMO Report filed on May 8, 2013, restoration activity continued through February 13. However, Major Event Day exemptions were not requested after February 9, 2013.

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nationalgrid

Jennifer Brooks Hutchinson Senior Counsel

May 8, 2013

VIA HAND DELIVERY & ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk Rhode Island Public Utilities Commission 89 Jefferson Boulevard Warwick, RI 02888

RE: Docket 2509 - Storm Contingency Fund

February 8, 2013 Nor'easter Summary Report

Dear Ms. Massaro:

In accordance with Order No. 15360 (August 19, 1997) in Docket 2509 and paragraph 4(b) of the Settlement approved by the Commission in that docket, I have enclosed one original and ten (10) copies of National Grid's¹ summary report on the planning and restoration activities associated with the February 8, 2013 Nor'easter (the "February 2013 Nor'easter" or the "storm"), which will qualify for inclusion in the Company's Storm Contingency Fund. Paragraph 4(b) of the Settlement requires the Company to file with the Commission within 90 days after the storm a report providing a description of the storm along with a summary of the extent of the damage to the Company's system, including the number of outages and length of the outages.

The February 2013 Nor'easter report is the first of five (5) summary reports that the Company will be filing with the Commission in connection with other storms that will likely also qualify for inclusion in the Company's Storm Contingency Fund. The Company anticipates filing these other summary reports over the course of the next month.

A supplemental report detailing the incremental restoration costs caused by the February 2013 Nor'easter will be submitted to the Commission once the total costs have been accumulated by the Company.

Thank you for your attention to this transmittal. If you have any questions, please feel free to contact me at (401) 784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosures

cc: Docket 2509 Service List

Leo Wold, Esq.

Steve Scialabba, Division

¹ The Narragansett Electric Company d/b/a National Grid (the "Company").

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Certificate of Service

I hereby certify that a copy of the cover letter and/or any materials accompanying this certificate were electronically transmitted and sent via U.S. Mail to the individuals listed below. Copies of this filing were hand delivered to the RI Public Utilities Commission.

May 8, 2013

Docket No. 2509 – National Grid – Storm Fund Service List as of 9/11/12

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STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

RHODE ISLAND PUBLIC UTILITIES COMMISSION

Docket 2509 – Storm Contingency Fund February 8, 2013 Nor'easter Report

NATIONAL GRID'S REQUEST FOR PROTECTIVE TREATMENT OF CONFIDENTIAL INFORMATION

National Grid¹ hereby requests that the Rhode Island Public Utilities Commission ("Commission") provide confidential treatment and grant protection from public disclosure of certain confidential, sensitive, and proprietary information submitted in this docket as permitted by Commission Rule 1.2(g) and R.I.G.L. § 38-2-2(4)(i)(B). National Grid also hereby requests that, pending entry of that finding, the Commission preliminarily grant National Grid's request for confidential treatment pursuant to Rule 1.2 (g)(2).

I. BACKGROUND

On May 8, 2013, National Grid filed with the Commission its summary report related to the February 8, 2013 Nor'easter (the "Report") in accordance with Order No. 15360 (August 19, 1997) in Docket 2509. The information for which the Company seeks confidential, protective treatment is contained in Attachments 2 and 4 (the "Confidential Attachments") to the Report. Confidential Attachment 2 of the Report contains confidential names and telephone and/or cell phone numbers of individuals integral to the

Exhibit 1 National Grid R.I.P.U.C. Docket No. 3628 2013 Service Quality Plan Results

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implementation of the Company's Electric Emergency Plan ("EEP"). Confidential

Attachment 4 contains customer names, addresses, account numbers, and phone numbers,

which information is confidential and proprietary to the customers. National Grid is

requesting protective treatment for the confidential and proprietary information contained

in the Confidential Attachments, which the Company has redacted.

II. LEGAL STANDARD

The Commission's Rule 1.2(g) provides that access to public records shall be

granted in accordance with the Access to Public Records Act ("APRA"), R.I.G.L.

§38-2-1, et seq. Under APRA, all documents and materials submitted in connection with

the transaction of official business by an agency is deemed to be a "public record," unless

the information contained in such documents and materials falls within one of the

exceptions specifically identified in R.I.G.L. §38-2-2(4). Therefore, to the extent that

information provided to the Commission falls within one of the designated exceptions to

the public records law, the Commission has the authority under the terms of APRA to

deem such information to be confidential and to protect that information from public

disclosure.

In that regard, R.I.G.L. §38-2-2(4)(i)(B) provides that the following types of

records shall not be deemed public:

Trade secrets and commercial or financial information obtained from a

person, firm, or corporation which is of a privileged or confidential nature.

The Rhode Island Supreme Court has held that this confidential information

exemption applies where disclosure of information would be likely either (1) to impair

¹ The Narragansett Electric Company d/b/a National Grid ("National Grid or "the Company").

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the Government's ability to obtain necessary information in the future; <u>or</u> (2) to cause substantial harm to the competitive position of the person from whom the information was obtained. <u>Providence Journal Company v. Convention Center Authority</u>, 774 A.2d 40 (R.I.2001).

The first prong of the test is satisfied when information is voluntarily provided to the governmental agency and that information is of a kind that would customarily not be released to the public by the person from whom it was obtained. <u>Providence Journal</u>, 774 A.2d at 47.

In addition, the Court has held that the agencies making determinations as to the disclosure of information under APRA may apply the balancing test established in <u>Providence Journal v. Kane</u>, 577 A.2d 661 (R.I.1990). Under that balancing test, the Commission may protect information from public disclosure if the benefit of such protection outweighs the public interest inherent in disclosure of information pending before regulatory agencies.

II. BASIS FOR CONFIDENTIALITY

Confidential Attachment 2 contains the telephone and/or cell phone numbers of various personnel integral to the effective functioning of the Company's EEP during the service restoration process. The Company treats this information as confidential and for internal use only as it generally relates to the privacy of the Company's personnel. In addition, there are a range of potential risks to public safety that arise from publicly disclosing the contact information of Company personnel in the context of the EEP. For example, the Company's EEP identifies key Company personnel by name and phone

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number. Armed with such information, an individual with malicious intent could, for example, pester those individuals with repeated phone calls, or impersonate those individuals in an attempt to mislead or manipulate the emergency response operations. In either case, such disruptions would hinder the Company's ability to carry out its emergency response operations and jeopardize public safety.

Confidential Attachment 4 contains confidential customer-specific information such as names, addresses, account numbers, and phone numbers that are treated as confidential within the Company and are not disseminated outside the Company.

Moreover, the Commission has recognized each customer's right to control dissemination of his or her account information, address, and other personal information. Such customer-specific information is proprietary to the customer and only the customer has the right to indicate whether such information should be available in the public domain.

Accordingly, the Company seeks protection for the telephone and/or cell phone numbers of its key personnel and certain customer-specific information that is confidential, commercially sensitive, and proprietary from public disclosure. This material warrants protection under R.I.G.L. §38-2-2(4)(i)(B) in order to preserve the privacy interests of the Company's key personnel in the service restoration efforts and its customers. In this case, the need to ensure the confidentiality of this commercially sensitive information outweighs any public interest in disclosure of the information. The Company has provided all other portions of Confidential Attachments 2 and 4 as a public document and has redacted only that information noted above.

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III. CONCLUSION

Accordingly, the Company requests that the Commission grant protective treatment to Confidential Attachments 2 and 4, that the information not be placed in the public docket, and that it only be disclosed to the Division of Public Utilities and Carriers pursuant to a Non-Disclosure Agreement.

WHEREFORE, the Company respectfully requests that the Commission grant its Motion for Protective Treatment as stated herein.

Respectfully submitted,

NATIONAL GRID

By its attorney,

Jennifer Brooks Hutchinson (RI Bar #6176)

lunger Burg Augh

National Grid

280 Melrose Street

Providence, RI 02907

(401) 784-7288

Dated: May 8, 2013

Exhibit 1 National Grid R.I.P.U.C. Docket No. 3628 2013 Service Quality Plan Results Page 8 of 141

National Grid

The Narragansett Electric Company

Report on
The February 8, 2013 Nor'easter
Preparedness, Damage
Assessment, and
Service Restoration Efforts

May 8, 2013

Docket No. 2509

Submitted to:

Rhode Island Public Utilities Commission

Submitted by:

nationalgrid

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REPORT ON BEHALF OF THE NARRAGANSETT ELECTRIC COMPANY d/b/a NATIONAL GRID ON THE FERUARY 8, 2013 NOR'EASTER PREPAREDNESS, DAMAGE ASSESSMENT, AND SERVICE RESTORATION EFFORTS

I. EXECUTIVE SUMMARY

The Narragansett Electric Company, d/b/a National Grid ("National Grid" or the "Company") presents the following report on the planning and restoration activities associated with the February 8, 2013 Nor'easter ("the February 2013 Nor'easter" or the "storm"), which affected Rhode Island and numerous states along the Eastern Seaboard on February 8-9, 2013. The February 2013 Nor'easter was a Level 5 emergency event that brought high winds and heavy snow causing significant damage to the Company's electric infrastructure and interrupting power to 238,611 (169,139 at peak) of the Company's customers in 37 of the Company's 38 communities in Rhode Island. In 11 of the Company's communities in Rhode Island, more than 90 percent of customers lost power. In addition, in 20 of the Company's communities, more than 50 percent of customers lost power.

The heavy snowfall, blizzard conditions, and extremely cold temperatures presented significant challenges for the Company and its customers. The amount of snowfall and the white-out conditions hindered travel and access to damaged equipment. Due to below freezing temperatures, it was critical that the Company restore electricity to its customers as soon as possible in order for their heating systems to operate. Anticipating the difficulties and risks associated with a winter storm of this magnitude, the Company enlisted approximately 930 external crews to assist with restoration. Despite the extreme conditions and significant damage, the Company restored power to 90 percent of its customers in 49 hours.

The Company began preparing for the February 2013 Nor'easter on Wednesday, February 2, 2013 with the first system and regional calls. The Company followed its Emergency Response Plan ("ERP") and mobilized employees and contractors for the restoration, using a damage forecast based on its experience in previous storms. The Company also contacted contractors from outside the Company's service territory in Rhode Island to secure resources for assistance with restoration; the Company also contacted other utilities to request additional resources. However, due to the worsening weather forecast, utilities across the Eastern Seaboard began holding back their contractor crews pending assessment of the storm impact in their own regions. At its peak, the Company ultimately used approximately 1,190 field crews to assist with restoration, including approximately 930 external crews as mentioned above. Many of these external crews travelled long distances before they arrived in Rhode Island. Notwithstanding these challenges, the Company restored power to 90 percent of its customers by Monday, February 11 at approximately 1:00 p.m.; all customers were restored by Wednesday, February 13 at approximately 9:00 p.m.

Most customers lost power on Friday, February 8 and during the early morning hours of Saturday, February 9. Damage assessment began before the storm was over. Restoration efforts began in earnest by noon on Saturday and continued throughout the week. Early efforts were primarily focused on public safety. As restoration efforts began, the Company followed its prioritization process, using all available resources. The Company made good progress in

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restoring power during the course of the week and all interrupted customers were restored by Wednesday, February 13 at approximately 9:00 p.m.

In accordance with the Company's ERP, a detailed review has been undertaken to identify what went well during the February 2013 Nor'easter, as well as opportunities for improvement. The storm response and restoration efforts reflected the improvements actions developed from previous storms and the ongoing collaboration with the public and private sectors, especially in the areas of communication, deployment of resources, and coordination with state and local emergency response agencies. As in Hurricane Sandy, the Company received positive feedback from the municipalities regarding the community liaison program, which was instituted to enhance communication with municipal officials. Positive feedback was also received regarding the use of the Strike Force units, which included Company operations staff and members of the State Police, National Guard, and Rhode Island Department Of Transportation ("RIDOT"). To enhance the use of these Strike Force units during snow events, it was found that coordination of snow removal activities with municipalities should be improved. The Community Liaison teams will address this issue with their communities during storm preparation activities as appropriate.

System wide actions based on previous storms continued to be refined during the February 2013 Nor'easter. The Company continued its use of new technologies during the February 2013 Nor'easter, which had been initially implemented during Hurricane Sandy, including Send Word Now, an employee notification tool, the Web EOC Incident Manager Software, and use of an iPad application to assist with damage assessment. The Company noted that posting and regularly updating when restoration efforts would begin on the Company's website aided communications with customers.

The Company also continued its efforts from Hurricane Sandy to improve coordination and communications with telecommunications companies through regular conference calls with telecommunications companies throughout the storm and stationing communications Company personnel in storm rooms and command centers to assist with the coordination of resources.

The Company is proud of its employees and contractors who worked safely and tirelessly to restore service following the February 2013 Nor'easter. The Company is also grateful for the support of customers, employees, state and local officials, and public safety officials, who experienced the effects of the February 2013 Nor'easter and were an integral part of the Company's restoration efforts.

II. THE STORM AND ITS IMPACT

A. Summary

On the evening of Thursday, February 7, two separate storms approached each other from opposite ends of the country. Low pressure developing near the Carolinas had abundant moisture and would eventually ride along the eastern seaboard, nearly making landfall along Cape Cod. Meanwhile, a separate system near Chicago had upper level support and was on a track toward New England. As the two storms phased together, they produced a significant Nor'easter on Friday, February 8. Snowfall was generally heaviest from Friday afternoon into Friday night. However, additional banding added to the snowfall in eastern New England on

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Saturday, February 9. The pattern of this system was reminiscent of Hurricane Sandy, when a cold front collided with the hurricane to enhance storm impacts. The storm was responsible for thousands of flight cancellations and left hundreds of thousands without power. In addition to heavy snow, the storm's strong pressure gradient yielded wind gusts along the New England South and East that were stronger than what Hurricane Sandy produced. Many locations reached gusts of 70-80 mph. These strong winds also produced a serious storm surge, and flooding was reported in parts of eastern Rhode Island.

B. Forecast

On Wednesday, February 6, the Telvent (Schneider Electric) forecast called for 6-12 inches of snow across most of Rhode Island for Friday through Saturday morning and for sustained winds of 15-30 mph and wind gusts as high as 60-65 mph across much of Rhode Island. On Thursday, February 7, the Telvent (Schneider Electric) forecast called for 6-12 inches in southern Rhode Island and 12-18 inches of snow across most of northern Rhode Island for Friday and into Saturday morning. The wind forecast on February 7 called for sustained winds of 25-35 mph and wind gusts on Friday night and into Saturday in the 50-60 mph range, especially in eastern Rhode Island. On Friday, February 8, the forecast called for 12-24 inches in southern Rhode Island and 15-24 inches of snow across most of northern Rhode Island for Friday and into Saturday morning. The wind forecast on February 8 called sustained winds of 25-40 mph and wind gusts on Friday night and into Saturday in the 45-55 mph range across most of Rhode Island.

C. Impact

The February 2013 Nor'easter was exceptional in that significant snowfall blanketed the Northeast. From southern New England to the Maine coastline, snow totals commonly reached 20-30 inches. Rhode Island had many communities in the 25 to 30 inch range, especially in the north and Central part of the state. Some examples include Glocester at 27.6 inches, Cumberland at 27.1 inches, Woonsocket at 26.4 inches, and Burrillville at 26 inches.

Locations from Long Island to the southern New England coastline were battered by strong winds in this storm. Eastern Rhode Island was hit hardest. The most intense wind gust in Rhode Island reached 99 mph in Narragansett. A listing of some of the top recorded wind gusts and sustained winds can be found in Figures 1 and 2 below.

Strong winds from this storm produced a damaging storm surge on the east coast of Rhode Island from Friday night into Saturday. The storm surge hit during low tide; however, if it had hit during high tide, the destruction could have been more severe.

Figure 1¹

Highest Sustained Winds - February 2013 Nor'easter				
Location Peak Susta				
Narragansett	68			
Providence	64			
Westerly	58			
Foster	51			
N. Kingstown	39			
Newport	37			
Tiverton	35			
Block Island	34			
Pawtucket	26			

Figure 2¹

Highest Wind Gusts – February 2013 Nor'easter				
Location Peak Gusts				
Narragansett	99			
Providence	95			
Westerly	89			
Foster	80			
N. Kingstown	55			
Block Island	53			
Newport	52			
Tiverton	51			
Pawtucket	39			

The storm impacted a total of 238,611 customers in the Company's service territory and 169,139 customers at its peak². Figure 3 below shows a map of percentage of customers

Source: Telvent (Schneider Electric)

² While the Company initially reported a peak of approximately 186,000 (on February 9 at 08:00) of its Rhode Island customers without power as a result of The February 2013 Nor'easter, it is important to note that this figure was based on the real time data available during the storm and prior to completion of the Company's validation process. During the storm, there was a time lag in posting restorations, and consequently, the numbers contained in this report are different from the raw data reported throughout the storm. The Company has validated its customer interruption data from the Company's Outage Management System ("PowerOn"), which is a tool used by the Company to restore customers, but is not the Company's final customer interruption reporting tool. The Company's Interruption Disturbance System ("IDS") is used for final reporting of interruptions. IDS receives data from PowerOn to create the record for each interruption, and the data is then reviewed for accuracy. This process removes duplicate events and adjusts interruption and restoration times to known switching events.

interrupted by town at the peak, which occurred on Saturday, February 9 at approximately 9:00 a.m. for the Company.

Figure 3

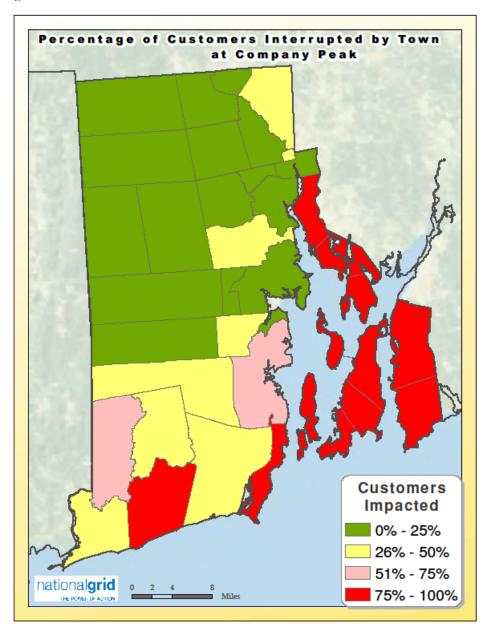
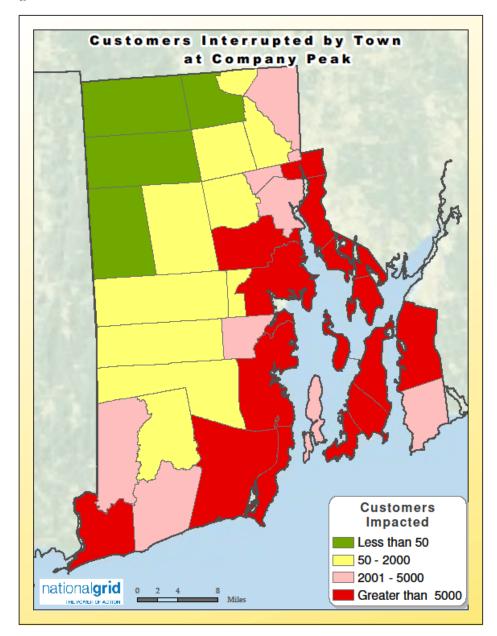


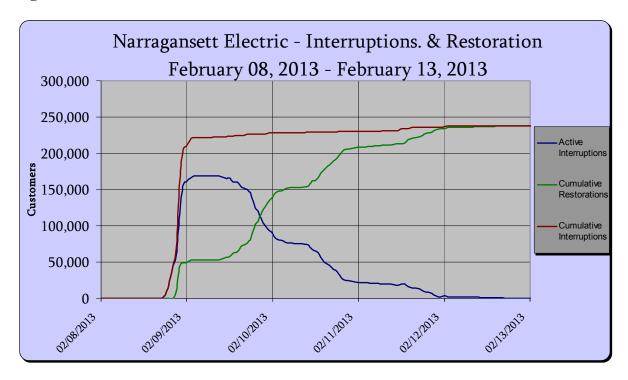
Figure 4 below shows the number of customers interrupted by town at the peak of the storm.

Figure 4



The storm began in the mid-afternoon on Friday, February 8 with approximately 115,000 customers interrupted in Rhode Island by 10:00 p.m. and approximately 160,000 interrupted by midnight on the same day. This number of reported interruptions peaked at 169,139 customers on Saturday, February 9 at approximately 9:00 a.m. Figure 5 below shows the customers interrupted and restored, by hour, from Friday, February 8, 2013 to Wednesday, February 13, 2013.

Figure 5



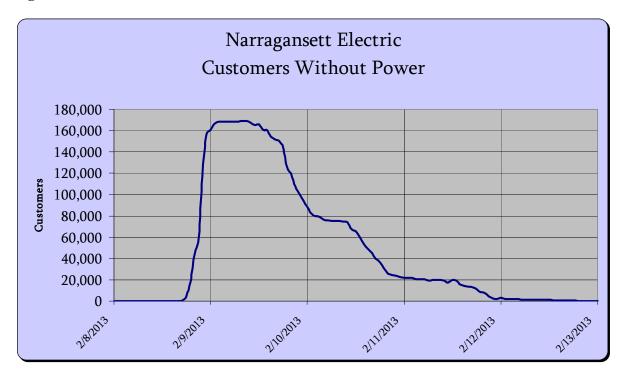
As a result of the storm, five transmission circuits were locked out, 10 transmission circuits were operated (trip/reclose), 16 sub-transmission circuits were locked out, 190 feeders were locked out, and a total of 293 distribution feeders were affected. The Company experienced interruptions in 37 of the 38 communities it serves in Rhode Island. Approximately 20 towns experienced greater than 5,000 customers interrupted. See Figure 6 below for reliability results for all Rhode Island communities.

Figure 6

		Peak Customers	Total Customers
Town	Customers Served	Interrupted	Interrupted
NEWPORT	15,007	14,773	28,945
PORTSMOUTH	9,069	9,069	25,837
EAST PROVIDENCE	22,026	17,270	17,447
MIDDLETOWN	7,983	7,983	15,980
CRANSTON	35,514	9,186	12,399
NARRAGANSETT	10,494	8,381	10,061
BRISTOL	10,312	9,653	9,714
PAWTUCKET	32,850	5,590	9,428
SOUTH KINGSTOWN	14,430	6,988	9,391
CUMBERLAND	15,002	4,055	9,327
WARWICK	40,703	6,367	8,286
TIVERTON	8,168	7,729	7,804
NORTH KINGSTOWN	13,060	6,924	7,656
WESTERLY	14,178	6,367	7,308
CENTRAL FALLS	7,182	2,549	6,682
BARRINGTON	6,825	6,335	6,382
JAMESTOWN	3,294	3,294	6,332
PROVIDENCE	70,609	4,443	6,082
WARREN	5,732	5,732	5,823
NORTH PROVIDENCE	15,978	3,931	5,479
CHARLESTOWN	5,709	4,566	4,725
LINCOLN	9,919	1,458	3,963
EAST GREENWICH	6,032	2,975	3,051
LITTLE COMPTON	2,557	2,557	3,033
HOPKINTON	3,857	2,117	2,561
JOHNSTON	13,355	1,677	1,831
EXETER	2,955	1,432	1,572
RICHMOND	3,303	979	1,046
COVENTRY	15,289	543	798
WEST WARWICK	14,880	444	510
WEST GREENWICH	2,688	103	429
SCITUATE	4,628	290	292
SMITHFIELD	8,661	116	263
WOONSOCKET	18,596	107	226
NORTH SMITHFIELD	5,747	2	109
GLOCESTER	4,513	7	36
FOSTER	2,017	1	1
BURRILLVILLE	2,589	-	-

Figure 7 below shows a timeline of the number of customers without power from Friday, February 8, 2013 to Thursday, February 13, 2013.

Figure 7



The following sections contain additional details and context regarding the Company's storm restoration efforts.

III. INCIDENT ANTICIPATION

A. Determination of Incident Classification

On Wednesday, February 6, at 1:30 p.m., prior to activation of the Incident Command System, a weather call was held during which Telvent (Schneider Electric) briefed the Company's executive team about potential weather scenarios and planning efforts for the possibility that The February 2013 Nor'easter would impact the Company's system in New England

The System Emergency Operations Center ("EOC") was located in Northborough, MA and the Regional EOC was located in Worcester, MA, providing support for the Company's entire New England region, including Rhode Island. The Regional Incident Commander was primarily responsible for establishing the projected and actual Incident Classification level for the February 2013 Nor'easter.

Factors considered in initially establishing or revising the expected incident classification level included:

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- Expected number of customers without service;
- Expected duration of the restoration event;
- Recommendations of the Planning Section Chief, Transmission and Distribution Control Centers, and other key staff;
- Current operational situation (number of outages, resources, supplies, etc.);
- Current weather conditions;
- Damage appraisals;
- Forecasted weather conditions;
- Restoration priorities;
- Forecasted resource requirements; and
- Forecasted scheduling and pace of restoration work crews.

The weather forecasts, along with operational knowledge of the electrical system and past weather events, were used to estimate the predicted percentage of customers without service. Please see Attachment 1 for copies of weather forecasts for New England (prepared for National Grid by Telvent (Schneider Electric)). Early in the planning process, the Company discussed preparations for a level 4 event in the New England Region. During System Conference Call #1 at 1:30 p.m. and New England Regional Conference Call #1 at 3:00 p.m. on Wednesday, February 6, the Company increased the anticipated event classification level to 5. Ultimately, the storm was classified as a level 5 event.

Through System and Regional storm conference calls, the System and New England Regional Incident Commanders communicated the incident classification to Company leadership and organizations that were anticipated to be engaged in restoration or support activities.

B. Activation of Incident Command System ("ICS")

In accordance with the ERP, National Grid activated the System Incident Commander as well as the System Incident Command team, including the three Regional Incident Commanders prior to System Conference Call #1 at 1:30 p.m. on Wednesday, February 6. The New England Regional Incident Command team was activated prior to the New England Regional Conference Call #1 at 3:00 p.m. on Wednesday, February 6. At that time, the Company was already planning to staff two branches in Rhode Island and had begun appointing a branch level ICS structure for each. By Thursday, February 7 at 12:00 a.m., the Company had appointed the ICS staff for both branches in Rhode Island. Copies of the Company's ICS charts and the names of employees that were activated to such positions prior to and during The February 2013 Nor'easter restoration efforts are included in Attachment 2.

C. Determination of Crew Needs and Pre-Staging

1. Distribution Line Crews

The Company uses its own transmission and distribution operation employees, Alliance vendors,³ and other outside contractors to restore service during Emergency Events.

a) Company Crews

With regard to its own employees, the Company had approximately 80 rated overhead line crews (including two-person line and single-person troubleshooters) at its disposal at the start of the February 2013 Nor'easter. This was the maximum peak number of rated Rhode Island crews available for restoration. The Company established a day shift and an overnight shift, both working 18 hour shifts. Approximately 75 percent of the available resources worked the day shift and 25 percent of the available resources worked the overnight shift. National Grid employees from other jurisdictions (New York and Massachusetts) were not available early in the event to assist with restoration because of the restoration efforts in their home jurisdictions. Ultimately, some New York crews assisted with restoration in Rhode Island.

b) Contractor Crews

Given the potential magnitude of the February 2013 Noreaster, on Tuesday, February 5, the Company called its Alliance vendor to inquire regarding crew availability. In addition, the Company contacted non-Alliance contractors. In total, 64 vendors were contacted to request contractor restoration support for New England.

Approximately 77 contractor crews were staged in Rhode Island as of Friday, February 8. By Monday, February 11, National Grid confirmed that there were up to 518 contractor crews staged in Rhode Island.

c) Mutual Assistance Crews

In addition to marshalling its own resources and securing resources from contractors, the Company attempted to secure resources through mutual assistance from fellow electric distribution companies. The mutual assistance process is facilitated through an agreement and guidelines developed by the Edison Electric Institute ("EEI"), which provides a framework for the sharing of crews and resources between member utilities. As a member of EEI, National Grid follows the EEI agreement and guidelines for both providing and requesting mutual assistance.

In preparation for the February 2013 Nor'easter, the EEI Mutual Assistance process was initiated on the morning of Thursday, February 7, when the Northeast Mutual Assistance Group

³ Alliance vendors are contractors who, after a competitive bid process, are awarded all or almost all of the contracted work within an area or within groups of areas based on their successful multi-year bid. They typically have a significant number of resources working daily on National Grid property and make those workers readily available for storm or emergency work.

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("NEMAG") and New York Mutual Assistance Group ("NYMAG") groups established conference calls to discuss the forecast. National Grid submitted a request for resources on these calls. Following the calls, the process to reach out to other RMAGs to assess resource availability was implemented. A joint NYMAG / NEMAG call occurred on the afternoon of Thursday, February 7 to allocate resources made available from other RMAGs. Through this call, Long Island Power Authority ("LIPA"), National Grid New England and Northeast Utilities were allocated contractor resources. There was another joint NYMAG / NEMAG call on Saturday, February 9. National Grid New England and LIPA were the only utilities requesting resources and were allocated the available contractor resources from RMAGs in the Great Lakes and Mid-Atlantic regions. Additional contractor resources were offered to National Grid on Saturday and Sunday, February 9 and 10, as the Company was the only requesting utility at that time. Contractor resources made available to National Grid on mutual aid calls assisted in the Rhode Island restoration; however, throughout the duration of the event, no utility-to-utility resources were made available on mutual aid calls. National Grid continued to participate in the mutual-aid process throughout the duration of the storm and actively participated in the contractor resource transfer discussions.

2. Transmission Line Crews

Prior to the storm, the Company had pre-staged 54 transmission line workers (5 crews) in hotels in Massachusetts and 11 transmission line workers (1 Crew) in Rhode Island. Further resources were obtained to deploy a total of 216 transmission line workers (22 crews) in New England, including a total of 63 in Rhode Island (6 crews).

3. <u>Vegetation Management and Tree Crews</u>

National Grid's forestry group, working at the direction of the Regional Planning Section Chief, used the weather projections to anticipate the number of forestry crews required to respond to the storm.

The Company had also completed a comprehensive assessment of its local forestry resources by Wednesday, February 6, prior to the onset of the February 2013 Nor'easter. The local forestry crew count used to provide baseline restoration support to the New England territory was approximately 152 distribution crews and 31 transmission crews, of which 39 distribution crews and 7 transmission crews were physically located in Rhode Island.

As the February 2013 Nor'easter progressed, the Company contacted forestry contractors to secure incremental forestry resources outside of the National Grid service territory. By end of the day on Friday, February 8, all local forestry distribution and transmission crews were on-site and/or committed to the National Grid response. Additional "off-property" forestry resources had also been secured and began arriving on Friday, February 8; these resources continued to arrive throughout the event. At peak, a compliment of 291 distribution forestry crews and 10 transmission forestry crews responded to the storm across Rhode Island. In total, approximately 301 transmission and distribution forestry crews were secured and supported the forestry restoration effort across Rhode Island.

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D. Logistics

The Logistics ICS roles were activated on the System Storm Call #1 at 1:30 p.m. on Wednesday, February 6, and the Vice President of Operations Support was activated to the emergency response role of System Logistics Officer. The logistics team was activated immediately following and instructed to instigate pre-event checklists and priority actions. In addition, the food and lodgings team was instructed to begin to secure hotel rooms and open restaurants, which they did.

The logistics team members participated on the System Storm Call #2 at 1:30 p.m. on Thursday, February 7, reported to Northborough on Friday, February 8, and provided support to the Incident Commander for the duration of the event.

Throughout the event, the team participated in daily system and twice-daily regional storm calls in addition to logistics team calls, enabling the logistics team to refine support plans during the incident and respond accordingly.

Regional demobilization plans were finalized at 12:00 p.m. on Wednesday, February 13, with official deactivation of the Logistics ICS roles occurring on the same day during System Storm Call #13.

1. Staging Sites

In anticipation of the pending weather event, the staging site core team members were contacted and activated on Wednesday, February 6. The core team notified all remaining team members on Thursday, February 7, to potentially staff multiple staging sites. On Thursday, February 7, the Company contacted Base Logistics, a third-party logistics vendor, to notify it that the Company might require its support.

The core team participated on subsequent system storm calls, held preliminary discussions with the Branch EOCs, and consulted with National Grid's project management and complex construction group, which is responsible for obtaining contractor line and forestry crews needed for restoration work, to obtain information regarding the number of crews planned to be deployed and their locations. On Thursday, February 7, the core team reviewed the list of pre-negotiated locations across the targeted area previously identified as staging sites and the Staging Site lead began making contacts with these locations to confirm their availability as stated in the pre-negotiated agreements.

The Company decided to establish staging sites in locations that would support restoration on a regional basis. On Wednesday, February 6, the Regional Incident Commander provided directions to establish staging sites at the following locations:

- Community College of Rhode Island in Warwick, RI
- Twin River Casino in Lincoln, RI

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Both sites were operational on Friday, February 8.

The staging site managers held discussions with property owners to discuss snow removal and determined whether any additional snow removal assistance would be required. The staging site team held daily conference calls to discuss on-going site logistics. The team also held discussions daily beginning Wednesday, February 6, with the meals and lodging team to identify hotels in close proximity to the staging sites and determine if busing to hotels from the sites would be required. In addition, the staging site team held discussions with inventory management and fleet management to confirm the locations of proposed staging sites, determine stock level requirements, and provide overnight fueling services.

On Thursday, February 7, the logistics team began procuring cots and linen kits for field operation centers in case personnel were not able to travel safely from these field locations. Cots were distributed to these locations on Friday, February 8.

On Thursday, February 7, the meals and lodging team arranged for the delivery of boxed lunches (beginning on Saturday, February 9) to staging sites and crew locations for crews to take with them at the start of the working day.

2. Meals and Lodging

After the System Storm Call at 1:30 p.m. on Wednesday, February 6, the lead for Regional Meals and Lodging was notified by the System Logistics Officer to activate the team and report to Northborough to secure hotel rooms and open restaurants. An initial staffing schedule was developed based on a four-day event; this was modified as the storm progressed.

On receipt of pre-event staging sites and the preliminary number of line crews supporting restoration efforts in New England, the meals and lodging team began acquiring hotel inventory based on this information. The meals and lodging team also opened an event in Resources on Demand ("RoD"), a software tool used during storm emergencies to track personnel working during an event. On Wednesday, February 6, the meals and lodging team communicated with the RoD intake team to ensure that their mailbox was being monitored for incoming crew sheets.

On the morning of Thursday, February 7, the meals and lodging team was fully operational. The team reported to Northborough on Friday, February 8 and was instructed to come prepared to stay at least through the following Sunday, February 10. The team began 24-hour coverage of the meals and lodging room beginning Friday morning, February 8. The team compiled a list of available restaurants at 3:00 p.m., which was continuously updated as more information from the field was communicated to the meals and lodging team. Concurrent with this activity there was on-going communication with the project management and construction group, forestry, transmission, and other groups supporting service restoration, identifying arriving line crews and necessary lodging. Updates regarding hotel inventory were provided to logistics leads as requested, and, by the end of the day on Wednesday, February 6, meals and lodging sent out a report of hotel inventory for three nights starting Thursday, February 7 to logistics leads along with contact information for emergency calls. This effort continued throughout the restoration.

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As part of the meals and lodging team, hotel ambassadors began working side by side with the lodging group beginning Wednesday, February 6. Each ambassador was responsible for serving as the National Grid point of contact at their assigned hotel and for collecting receipts and invoices from hotel and restaurants to facilitate post-storm reconciliation. The hotel ambassador team was fully operational on February 7, utilizing five ambassadors throughout three hotels in Rhode Island. Those numbers increased steadily as restoration resources arrived in the region.

The meals and lodging team participated in all System and Regional storm calls throughout the event in addition to providing regular status updates and communicating daily with the groups requiring support.

3. <u>Inventory Management</u>

The Company's inventory management group ensures that adequate materials and resources are engaged to provide effective material supply during the storm. Inventory management contacted materials suppliers beginning Thursday, February 7, to begin preparations for material needs, including notification of potential off-hour delivery of materials throughout the upcoming week. Inventory management also asked the Company's procurement team to place a team of strategic buyers on-call, who worked under the direction of its material planning group to begin ordering anticipated material needs beginning on Thursday, February 6 and continuing throughout the February 2013 Nor'easter.

Materials on hand were adequate to address all needs during the restoration, and there were no instances of material shortages during the entire storm. During the storm, materials were fed directly from the New England Distribution Center to the crew locations, staging sites, and affected operations warehouses. Staging sites were used to locate materials in close proximity to the damaged areas. These sites were Community College of Rhode Island ("CCRI") in Warwick, RI and Twin Rivers Casino ("Twin Rivers") in Lincoln, RI.

Before the storm, all stock rooms were reviewed for adequate material levels. Inventory management personnel were present on the system storm calls to respond to any material-related issues or inquiries. Central coordination of materials was provided by the Director of Inventory Management beginning on Friday, February 8. Twelve-hour shifts were used and the warehouses were covered for 24 hours each day. Many replenishment deliveries were accomplished during nighttime hours so that staging sites were stocked and ready for deployment of crews at 6:00 a.m. daily.

Inventory management was prepared with storm kits and yard kits ready to be deployed as necessary. Storm kits were sent to each of the staging sites in advance of the demand.

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4. Fleet Management

Based on the predicted storm size and impact, as discussed on system storm calls, fleet management conducted a staffing review and resource level evaluation for the remainder of the weekend and into the week. These meetings commenced on Thursday, February 7. The Company decided to begin round-the-clock staffing for fleet operations beginning Saturday, February 9, and consecutive 12-hour shifts were then established at Massachusetts and Rhode Island fleet garage locations.

Fleet management conducted a comprehensive availability review of all vehicles and equipment that were under repair. All vehicles and equipment that could be used for restoration purposes were reprioritized, as the Company's goal was to have these vehicles and equipment available for service by Friday evening, February 8.

Fleet management also evaluated vehicle travel and the potential need to procure more than a single tank of fuel per day in light of the complexity of the weather forecast. With this in mind, fleet management raised the transaction limit of the Company's fuel card provider, assuring preparedness for vehicle gasoline and diesel procured at fueling stations. Additionally, anticipating the potential for staging sites, fleet management contracted with third-party suppliers for on-site fueling at various staging sites and hotel sites to replenish diesel directly into trucks during off-hours. The meals and lodging team provided a list to fleet management on a daily basis, indicating which hotels would be occupied. Fleet management also interacted daily with the staging site lead to determine whether there were any changes in staging site fueling requirements. In addition, fleet management contacted vehicle material suppliers to reaffirm their stock levels of spare parts and revalidating off hours coverage to support fleet needs.

Fleet management contacted rental vehicle and equipment suppliers to establish availability of restoration-type equipment and all-terrain vehicles. Rental vehicles for damage assessment and wires-down needs were also forecasted during the period commencing Thursday, February 7 and placed on reserve. Rental vehicle deliveries began Thursday, February 7 at multiple sites and were available for dispatch beginning Friday, February 8.

The fleet group participated in multiple storm calls. Plan modifications were discussed and adjustments made as the forecast and storm progressed. Additionally, fleet services conducted departmental calls for its specific group to assure it was in alignment and sharing relevant storm preparedness information.

IV. DAMAGE APPRAISAL

The storm damage appraisal process is performed to collect and assess information through visual observation of physical damage such as wires down and poles broken on overhead distribution and transmission lines following a storm event. Information obtained through damage appraisal is then combined with data obtained from the Company's outage management system (PowerOn), through customer-reported troubles, and information from other sources. The storm damage appraisal process is used to formulate an assessment of the appropriate level of storm response by National Grid management. Information collected from the storm damage appraisal process is also used to create the construction work packages, which identify and describe individual "jobs" to be assigned to available line crews and tree crews in the restoration effort.

A. Transmission

1. <u>Transmission Damage Assessment Process</u>

The Company's transmission damage assessment process is aligned with the transmission control center and transmission storm room in Northborough. The control center and transmission storm room work to ensure that transmission circuits that experience permanent or temporary faults are prioritized for patrol, damage assessment, repair and return into service. Trouble on the transmission system is usually first detected by the relay protection schemes at the substation and communicated through system alarms to the transmission control center. The control center performs an analysis of the system security and reliability implications of the trouble condition. Based on that analysis and a determination of the criticality of the affected circuit, the circuit is prioritized for patrol and damage assessment.

On Friday, February 8, the first day of the storm, no aerial patrols of the transmission system were possible due to weather conditions. The first patrols occurred on Saturday, February 9, 2013 at 6:00 a.m. and were performed by foot, vehicle, and air. There were approximately 11 transmission line workers (one crew) that were also pre-staged in Rhode Island overnight in hotels in order to respond to damage assessed by foot patrols and vehicles. When it was safe, these resources were assigned foot patrols through the Branch EOC based on the priority set by the control center. Helicopters were deployed to the New England region. Each helicopter vendor was assigned a spotter from National Grid to ride with the pilot. For safety reasons, their patrols were divided into regional areas and their flight paths along transmission corridors in Rhode Island and adjoining states affected by the storm were coordinated with the transmission control center.

Restoration of the sub-transmission system followed a similar process. The Company utilized distribution damage assessors to review portions of the sub-transmission system from the roadways on Saturday, February 9, as weather conditions were not conducive to helicopter patrols. Portions of 15 circuits were patrolled and repairs on the damage found began immediately. The results of the ground patrols were coordinated with aerial patrols as described below for those sections of the circuits that were not accessible from the roadway. Twelve

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circuits from 13 kV to 35kV on rights-of-way were patrolled by aerial survey, repaired and returned to service. The aerial patrol of sub-transmission circuits was conducted in parallel with the other Transmission flight patrols and all the sub transmission aerial patrols were completed on Sunday, February 10.

2. Transmission Damage

On February 8, at 7:12 p.m., the storm began impacting National Grid's Massachusetts, Rhode Island, and Vermont transmission systems. The storm impacted the following transmission assets in Rhode Island

- 5 115kV lines tripped and remained open
- 4 115kV lines tripped and reclosed automatically
- 1 69kV lines tripped and reclosed automatically

Details for the five 115kV line outages are below

- E183E Lock/out 2/8/13 at 20:16: Wampanoag to Brayton Point
 Line re-energized from Brayton Point to Warren, Mink St and Wampanoag at
 17:21 on 2/9/13
 E183E & W Brayton Bristol Phillipsdale No damage located
 Snow packed insulators on Bristol tap and West of Reid Street
 31,500 customers impacted
- E183W Lock/out 2/8/13 at 21:21 : Franklin Square Wampanoag (R.I.)
 Line re-energized 2/9/13 at 13:10.
 Damage report: Tree down by Barneyville Road
 Brayton-Bristol Phillipsdale No damage located
 Snow packed insulators on Bristol tap and West of Reid Street
 14,300 customers impacted
- F184 Lock/out 2/8/13 at 21:09: Brayton Pt Reed St -West St. 2 Tap (MA/RI)
 Line fully re-energized 2/9/13 at 1822
 Damage report: structure 5 on the ground outside Warren Substation / Structure repairs completed 2/10 at1900
 24,900 customers impacted
- L14 Lock/out 2/8/13 at 20:51: Substations affected; Bellrock, Tiverton, Dexter, Bates Line fully re-energized 2/10/13 at 12:19

 Damage report: Tree on line at structure 21 & 22 outside Bellrock Sub.
- M13 Lock/out 2/8/13 at 22:11 : Dexter/Somerset (MA/RI)
 Line re-energized 2/9/13 at 10:42
 Damage report: No damage found
 66,100 customers impacted due to both the L14 & M13 lines being locked out

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In cases where both transmission lines supplying a station were out of service, the transmission control center performed switching to isolate the faulted section of the line and restored one or both of the transmission supplies to the station while the faulted section was repaired. In cases where both transmission supplies were out of service, both lines were isolated for repairs and lines were restored as soon as repairs were completed. The damage to the transmission lines was largely caused by fallen trees that resulted in damaged conductors, crossarms, and structures. Examples include:

• L14/M13 – The L14 and M13 115kV transmission lines supply the Bates substation. With the loss of either line, the out-o-service customer load at Bates can be transferred remotely from the Transmission Control Center using the Energy Management System (EMS) to the line that remains in service. When the L14 line tripped out of service, the Bates customer load was transferred to the M13 line. When the M13 line locked out later in the night, all Bates customers were without a transmission supply. The M13 line was safely returned to service prior to the L14 line and the Bates customer load was restored.

Other events/disturbances did not have transmission switching to pick up customers. Lines were isolated for repairs and lines were restored as soon as repairs were completed.

Transmission line restoration in Rhode Island occurred as follows:

- 4 lines restored on February 9
- 1 line restored on February 10

Sixteen sub-transmission circuits became de-energized during the storm. The circuits were ground-patrolled and also patrolled by aerial survey, repaired and returned to service.

The aerial patrol of sub-transmission circuits was conducted in parallel with the other Transmission flight patrols and all the sub-transmission aerial patrols were completed on Sunday, February 10.

B. Distribution

1. Damage Assessment Process

The Company established distribution damage appraisal operations in one location in Rhode Island-- Providence. The damage assessment group was staffed for 24-hour operations.

The Company began preparing or damage assessment on Thursday, February 7, and, on Friday, February 8, it worked on tasks that included initial staff assignments, requests for vehicles, setting up telecommunications, securing materials including assessment forms and feeder prints, and reviewing critical feeder priorities. Prior to the onset of the storm, on Friday February 8, at 7:00 a.m., the Company opened the damage assessment office in Providence. The day support staff and the damage assessors reported and conducted training sessions on the data collection systems, outage management system, work processes, and field damage assessment

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skill-sets. The night support staff reported at 3:00 p.m., and conducted similar training on the collection and outage management systems, as well as a refresher on the preparation of work packages for line crews, tree crews, and damage assessors. The damage assessment night support staff worked throughout the night during the storm. They supported operations as directed by the Regional Restoration Branch Team, prioritized feeders, and prepared damage assessor packages.

The damage assessors reported back to the locations beginning at 6:00 a.m. on Saturday, February 9 to begin patrols on the prioritized distribution feeders. At the peak of restoration, 116 damage assessors worked in Rhode Island to perform field appraisals. The Company shifted resources as needed through the restoration effort. The Providence office stayed open until Monday, February 11.

Damage assessment patrols were performed in multiple phases. During Phase 1, the patrollers collected restoration requirements for 3-Phase Circuit Mainlines. Damage assessment began as early as was safe to drive on Saturday, February 9 at approximately 9:30 a.m. Phase 1 damage assessment was completed within 24 hours.

During Hurricane Sandy, the Company did a limited test of its recently completed technology to collect storm damage assessment data using electronic devices, such as an iPad, and mobile devices such as cell phones with Android and iPhone operating systems. This technique was successfully carried forward for this storm and used in parallel with the Company's traditional process to help set Estimated Time for Restoration ("ETR").

The Branch Teams for the assessment offices determined through the prioritization process that Phase 2 patrols would not be required and decided instead to immediately support Branch Operations with more granular pre-feeder sweep and restoration activities. These tasks included assessment of wires down and 911 calls to alleviate the need of having line crews go to these calls, the assessment of specific outage calls (trouble orders) to ensure that line crews were efficiently focused on the right restoration priorities, and in-service calls of potential damage and other hazards.

The damage assessment night staff teams created work packets for restoration activities prioritized by severity, including specific trouble orders and maps. For each feeder, two work packets were created, one for tree crews and one for line construction crews. These work packages were ready each morning by 5:00 a.m. and provided for assignment to the appropriate crews.

2. Distribution Damage

The Branch Teams prioritized the damage assessment activities for specific feeders to receive Phase 1 assessments. In areas showing less damage during Phase 1 patrols, the Branch Teams moved the damage assessment staff onto specific trouble orders, and in some cases, assessment of 911 and wires-down calls.

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By design, not every feeder receives a Phase 1 patrol. Therefore, the number of damaged facilities collected as part of the damage assessment process is a representative sample to allow the Branch Team to formulate the appropriate level of storm response by National Grid management and to use as one of several criteria to determine ETRs. As discussed above, in this storm, damage assessment data was not used to create work packets. The damage assessment data returned from the electronic process through the use of iPads was used to set ETRs, and after one full day of Phase 1 Patrols, damage assessors were reassigned to immediately support Branch Operations with more granular pre-feeder sweep and restoration activities.

The damage to the distribution system in this storm was comprised of primary, secondary and services down, broken crossarms and poles, trees or tree limbs on primary, secondary or services and blown fuses. While the damage to the distribution infrastructure itself was not as severe as in prior storms, the damage that did occur was widespread. The Company experienced interruptions in 37 of the 38 communities it serves in Rhode Island. Approximately 20 towns experienced greater than 5,000 customers interrupted. Of the approximately 400 distribution feeders in Rhode Island, a total of 293 distribution feeders were affected, and 190 of those feeders were locked out.

V. RESTORATION

A. Timing and Priority of Service

The Company implemented the system of prioritization for restoration found in the ERP, focusing first on public safety and then on the overall goal of maximizing customer restoration when lines were energized. The Company prioritized its workforce to focus on repairing transmission lines, substations, sub-transmission, and initial mainline distribution work, balancing resources between areas with the most damage to provide electricity sources to the largest areas without power. Alternate or back-up supplies received a lower priority if the area already had a supply line in service. Therefore, affected areas that lacked a source of supply due to transmission or substation interruptions were not initially assigned distribution restoration crews until transmission/substation work could be completed. Instead, as a means of prioritized restoration, crews were sent into distribution areas initially only where transmission had not been interrupted and where the ensuing repairs to the distribution system restored aggregate customers to service. The Company next prioritized restoration of service to distribution lines, and by the end, was repairing service lines that may have only fed a single customer. The Company gave priority and consideration to critical facilities and made efforts to restore service to its life support customers as quickly as conditions warranted, also as set forth in the ERP.

B. Restoration Coordination

1. Decentralized Service Restoration

On Friday, February 8, the Company decentralized its storm restoration efforts associated with the February 2013 Nor'easter. On that day, the Company opened the following Branch EOCs, with storm and wires-down rooms opened in each Branch EOC:

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- 1. Providence supporting the Capital area opened at approximately 8:00 a.m.
- 2. North Kingstown supporting the Coastal Area opened at approximately 7:00 p.m.

When service restoration neared completion in each of the affected areas, the decentralized storm and wires-down rooms' responsibilities transitioned back to the Northborough control center and the resources moved to the areas as directed by the Incident Commander. The Providence decentralized storm and wires-down room transitioned back to normal operations on Tuesday, February 12 at approximately 7:00 p.m. The North Kingstown decentralized storm and wires-down room returned to normal operations on Wednesday, February 13 at approximately 10:00 p.m.

2. Wires-Down Coordination and Priority 911 Calls

Priority 1 wires-down calls from public safety officials are answered in the Northborough Regional Control Center. Priority 2 and 3 wires-down calls from public safety officials are answered by the Customer Call Center in Northborough. The Police and Fire ETA call-back process for Police and Fire calls with a standby condition noted (priority 1, 2 and 3) were handled in the decentralized Storm rooms. The Police and Fire Coordinator and support personnel were activated in the Storm Rooms to handle the call-back activities and the communication of crew-estimated time of arrival for the priority calls while the Providence Storm room was open.

The decentralized wires-down rooms located in the Branch EOCs coordinate the responses to the wires-down calls, dispatching wires-down appraisers and cut and clear crews when necessary. The employees assigned to staff the wires-down rooms were scheduled for 12-hour shifts, providing 24-hour coverage for the duration of the event. The wires-down room was assigned a wires-down coordinator, who was responsible for the overall operation of the wires-down function in Rhode Island. In addition to providing coordination of the wires-down resources, the wires-down coordinator worked directly with the Storm Room Lead at their respective locations to ensure effective and efficient use of the available resources and appropriate coverage of police and fire calls indicating a "stand by" condition existed.

The Company activated the Providence wires-down room on Friday, February 8, 2013 starting at approximately 7:30 a.m., staffing that room and also staffing field crews (including wires-down appraisers and cut/clear personnel). The peak number of wires-down field appraisers and cut/clear crews working was 144 crews. The wires-down room was de-mobilized and transitioned back to the Providence Storm Room at 5:00 p.m. on Tuesday, February 12, 2013.

C. Personnel Resources

The Company's resources during and after the storm event are provided in <u>Attachment 3</u>. As noted previously, the Company planned for resources for the February 2013 Nor'easter well in advance of the onset of the storm in Rhode Island. This advance planning allowed the

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Company to secure resources from as far away as the Midwest, Mid-South, and Canada. Although the Company's ability to secure additional crews was hampered by the demand for utility crews throughout New England, ultimately, the Company was able to restore service to over 90 percent of its customers by Monday, February 11 at approximately 1:00 p.m.

At peak, approximately 1,190 field crews⁴ were used to restore power to customers, including approximately 930 external crews and 260 internal crews. This peak number of crews includes Transmission and Distribution Line, Vegetation Management, Wires Down, Damage Appraisal, and Substation personnel.

The Company's crew contingent included qualified former National Grid employees that are under contract to the Company through a service provider to supplement the Company's workforce during storm events. The Company elected to activate this resource pool during The February 2013 Nor'easter. This is common practice and National Grid has used this resource pool during major storms over the past several years.

D. Safe Work Practices

National Grid prioritizes employee, public, and contractor safety. During storm restoration efforts, the Company's collective focus on injury and incident prevention is at its highest level. The Company's ICS designates a lead position for a System Safety, Health and Environment ("SHE") Officer as well as a Regional Safety and Health Officer and Environmental Officer. The Company's SHE organization provides leadership roles at both the System and Regional areas of responsibility. Safety plans are integrated into operational planning and response efforts before the storm actually impacts the Company's service territory.

National Grid assembled a robust safety team with well-established areas of responsibility and a solid reporting hierarchy made up of experienced and certified Safety Professionals. The SHE organization prides itself on establishing a communication structure to ensure areas for improvement and trends (positive or negative) are shared in real-time with each of its contract partners.

The Safety team communicates daily safety messages to work groups using a variety of communication vehicles. Safety reminders, noteworthy injuries, or non-compliance issues are communicated as part of work packages that are delivered to field workforces daily.

Additionally, National Grid Safety coordinated daily conference calls with in-house and contract safety representatives brought in to assist in the Company's restoration efforts. The daily call also focused on safety performance, trends and/or questions originating from workers on the ground. At the height of the storm, approximately 36 safety representatives across all of New England participated on the conference calls The Company's contract partners considered this daily call to be a best practice, which they have not experienced working in other parts of the country under similar conditions.

⁴ Crews are typically two or three-person, although there are some one-person crews in damage assessment, wires down (appraisers), and d-line (troubleshooters). The transmission crews typically include six to ten people.

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As contract partners arrived, and prior to beginning work, each organization was provided a safety orientation. Throughout each day, in-house safety professionals conducted crew visits with the purpose of observing safety compliance. As a proactive step, the Company's System SHE officer reached out to Occupational Safety and Health Administration ("OSHA") offices to establish a partnership with the local OSHA offices. OSHA did not provide Compliance Officers for this storm, but they were available if needed by the safety staff.

The injury and incident prevention efforts in Rhode Island were primarily from slips, trips, and falls during this restoration effort. In total, the Company had six injuries reported with four of those being from slip and falling. Of those six injuries the Company had zero lost-time injuries, but four of those resulted in restricted-duty work. There were four motor vehicle incidents reported, each of which was minor. One of the Company's biggest safety risks was slip, trips, and falls because of the ice and snow conditions while crews worked to restore power.

In summary, the safety effort and subsequent results were successful, with minimal injuries to employees, contractors, and the Company's mutual aid partners.

VI. COMMUNICATIONS DURING AND AFTER THE EVENT

A. Communication Regarding Estimated Times for Restoration ("ETR")

During the February 2013 Nor'easter, the Company posted ETRs, once developed, on its website using its Outage Central page, which provided real time ETR updates approximately every 15 minutes.

National Grid first communicated ETRs on Saturday February 9, 2013 at 6:00 p.m. The ETRs were shown on the Company's Outage Central web page in map format. The Company subsequently provided ETR updates through Outage Central three times per day from Saturday, February 9 through Tuesday, February 12. After 1:00 a.m. on Wednesday, February 13, ETR information was updated on a real-time basis in Outage Central.

In addition, the Company communicated ETRs through media outlets. Throughout the restoration, National Grid's media relations team provided local news media with ETRs for their communities and continually reinforced to reporters the 24/7 availability of Outage Central for the most current ETRs. The Company attempted to reinforce when communicating ETRs that restoration times were estimated, and may be different in certain areas where damage was particularly extensive or where customers needed to make repairs to customer equipment so power could be safely restored. The media team also explained that the ETR indicates when the final customer will be restored and customers will be restored on a continual basis in the intervening time.

B. Intra-Company

The first Regional Storm Call was held on Wednesday, February 6 at 3:00 p.m. After this first call, Regional Storm Calls were held twice daily beginning on Thursday, February 7

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through Tuesday, February 12. The last storm call was held on the morning of Wednesday, February 13 at 9:00 a.m.

Communications were issued each day to field crews with both restoration and safety information. Communications centered on the unique nature of the storm – blizzard conditions – and the safety of the Company's workforce during the height of the storm. Communications kept employees informed throughout the event about working conditions, safety precautions, and the condition of the Company's system. After the worst of the storm passed, communications updated employees regarding the Company's progress and kept them engaged around any potential safety precautions necessary for both their own safety and the safety of the public.

C. Public Officials

1. Governor's Office

The Company's Vice President of Government Affairs had continuous contact with the Governor's office, with the Governor, with members of the Rhode Island General Assembly, and with the staff and members of the Rhode Island Congressional delegation before and in the aftermath of the February 2013 Nor'easter .

2. Rhode Island Public Utilities Commission (the "Commission"), Division of Public Utilities and Carriers ("Division"), Rhode Island Emergency Management Agency ("RIEMA")

Beginning early in the morning on Friday, February 8 and continuing through the restoration effort, the Company responded to various inquiries from the Commission and the Division, and provided periodic updates to the Commission and the Division, and others on restoration expectations and status. The Company reported outage information multiple times each day through phone calls and email reports.

The Company's RIEMA liaisons were stationed at RIEMA's offices in Warwick beginning on Friday, February 8 until approximately 11:00 p.m. on Monday, February 11. The RIEMA liaison maintained communications with the other emergency support functions at RIEMA as well as other first responders. The Company's RIEMA liaisons researched and responded to questions and raised priorities to the appropriate parties.

3. <u>Municipalities</u>

The Company opened the municipal room on Friday, February 8 at 7:00 a.m. The municipal room was opened to effectively manage and communicate with the large number of impacted communities in Rhode Island.

This municipal room was established in Providence and was co-located with the Company's branch operations response personnel. This arrangement afforded efficient access to key restoration personnel in researching and communicating the priorities of the municipalities.

The Company deployed National Grid community liaisons to work with the city or town's emergency, safety and public officials as a dedicated liaison. These community liaisons were resources supporting specific communities and enabled direct communications back into the Company's branch municipal room, public information coordinators, and branch operations personnel. The Company's liaisons worked with town officials to review prioritized locations and provide any further details about any concerns raised by the community. Throughout the event, the Company worked closely with local safety and elected officials to address specific details concerning the number of outages, locations experiencing outages within their city or town, daily updates on outage statistics, and information of restoration progress and estimated times of restoration.

Municipal calls were held daily beginning Friday, February 8 until completion of the restoration activities in each region, as indicated in the table below.

Location	Pre-event Feb 7	Feb 9	Feb 10	Feb 11
Providence	1:30 p.m.	11:00 a.m.	11:00 a.m.	11:00 a.m.

As the Providence branch completed restoration, a final municipal call was held with instructions on communications with the Company should any new issues arise.

Throughout the event, the Company worked closely with the municipalities to align restoration with the public safety needs of the community. The mutual priority for both the Company and municipalities was to clear live wires and relieve municipal safety personnel from stand-by roles with trained and qualified National Grid resources. The Company implemented the Strike Force units with the State Police, National Guard and the local municipalities to clear roads and address wires down issues more rapidly. The Company then worked with municipalities to prioritize restoration of critical facilities (i.e. hospitals, shelters), critical infrastructure (i.e. communications, water and sewer stations) and critical /sensitive customers (i.e. major elderly complexes, nursing homes). The local municipal room staff leads and the branch public information coordinator were active participants in the prioritization activities within each division

D. Customers

1. Communications During and After the Storm Event

The Company communicated with customers during and after the February 2013 Nor'easter through its call center, its website, direct email, and social media. The Company monitored social media channels from 6:00 a.m. to 11:00 p.m. throughout the event, posting messages, sharing resources, and responding to customer issues. This included, but was not

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limited to, communications in the following subject areas: 1) information for customers on how to stay safe during the storm; 2) information on what the Company was doing to respond to the storm; 3) information for customers on how to contact the Company; 4) information for customers on how to receive text message alerts and updates from the Company; 5) updates on the Company's damage assessment and restoration efforts; and 6) updates on ETRs. The Company's outbound communications to its customers were updated and posted very frequently during the storm, often multiple times within an hour.

During the February 2013 Nor'easter, the Company's call center staff noted, on an anecdotal basis, a decrease in customer calls compared to prior storms and a more positive tone to the calls. A sampling of customer compliments that the Company received during the storm is included as Attachment 4.

2. <u>Contact with Life Support Customers</u>

The Company manually monitored life support customers who lost power during the storm. In addition to contacts it made prior to the storm, the Company continued its efforts to contact these customers daily during the event starting on Friday, February 8. On Wednesday, February 13, a final outbound call was made to all life support customers, asking that they contact the Company if their power was not yet restored.

E. Media

The Company began its Rhode Island media relations activities in support of National Grid's restoration efforts on Thursday, February 7 at 7:00 a.m., as the storm began bearing down on Rhode Island, and continued until the final customers were restored. Beginning on Thursday, February 7, media relations conducted and recorded radio news briefings with stations around the state. Later in the day, the President of the Rhode Island Jurisdiction conducted several television news interviews discussing the storm preparation process and advising customers of steps they should take to prepare for possible service interruptions. Starting on Friday, February 8, the media relations team engaged in the following activities

- issued daily news releases about restoration progress and safety messages
- fielded reporter inquiries about power outages
- arranged for news media to film restoration work
- arranged for two, live television news segments from the Providence Storm and Wires-Down Rooms
- conducted several live and taped interviews with various media outlets.

In addition to the media interviews and tapings arranged by the Company, the President of the Rhode Island Jurisdiction participated in several news conferences at RIEMA and at the statehouse to provide timely updates on the restoration process. Media Relations continued to provide live and pre-recorded radio and television updates throughout restoration. These updates gave many customers real-time communication during the storm and advanced the Company's messages on ETRs, safety, and the Company's service restoration process.

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Media Relations assigned staff to the Providence Branch EOC on Saturday, February 8 and Sunday, February 9. Media Relations also staffed the Northborough EOC with at least six personnel from Friday, February 8 through Monday, February 11. On Tuesday and Wednesday, February 12 and 13, Media Relations staff members continued to field media inquiries. National Grid's public relations agency also provided remote support to the Rhode Island restoration. Ultimately, from February 6 through February 13, the Company's Media Relations staff fielded or initiated 175 media calls.

During the restoration, the Company's Public Information Officer (PIO) hosted daily internal communications calls to provide current and consistent messaging. Additionally, the PIO circulated daily messaging, including talking points and restoration highlights.

VII. CONSIDERATIONS FOR IMPROVEMENT

After a major event, the Company conducts a review to determine what worked well during the response as well as areas for improvement. Improvement opportunities from the event are described in this section.

Send Word Now, the Company's newly implemented notification tool, improved coordination and communications during the storm by alerting employees of their storm assignments and reporting locations. In addition, it improved the coordination and notification process for key storm conference calls, ensuring that all necessary call participants were fully aware of calls for which their participation was required. In the future, the Company will provide additional training and communications on the use of the tool through periodic drills and exercises, including the Company's annual New England Restoration Exercise for 2013.

The Company also used a web-base tool, Incident Manager, powered by Web EOC, at the System Incident Command Level for the February 2013 Nor'easter. Incident Manager/Web EOC provided greater visibility for the Command and General Staff to the significant events, activities, and communications during the storm. It improved the ability to manage information efficiently and effectively. This tool was originally rolled out during Hurricane Sandy, and the Company has been adding additional information and enhancing the tool to capture key activities since then. For this event, the Company added System Level Position checklists to the tool. In the future, the Company plans to provide Incident Manager training to Regional and Branch emergency and ICS positions, investigate the use of the status boards feature on Incident Manager, and investigate the use of the Incident Manager Simulator Manager feature in upcoming emergency drills and exercises.

During the February 2013 Nor'easter, the Company's damage assessment data collection process continued using iPads to collect storm damage data, building on positive results from previous events. Given the positive results of this trial, the Company will consider expanding the use of iPads or similar technology to include statistical damage assessment to improve the accuracy and timeliness of the storm damage data collected during events.

The Company again received positive feedback from the municipalities regarding the deployment of the community liaisons and the use of the Strike Force units. To enhance the use

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of the Strike Force units during snow events, coordination of snow removal activities with municipalities could be improved. The Community Liaison teams will address this issue with their communities during storm preparation activities as appropriate.

While snow removal activities at the Company's Twin Rivers staging site was effective, the Company recognized that improve coordination of snow removal activities at its CCRI staging site was required. In future snow storm events, snow removal equipment, and salt and sand will be located at each staging site before the event as necessary.

VIII. CONCLUSION

The February 2013 Nor'easter was a level 5 event that brought high winds and heavy snow fall causing significant damage to the Company's distribution infrastructure in Rhode Island. The Company is pleased with its successful restoration efforts, which resulted in greater than 90 percent of its Rhode Island customers being restored within 49 hours of the storm's impact. Nonetheless, the Company continues to look for opportunities to learn and improve its restoration efforts following each emergency event and will incorporate additional areas identified for improvement into future restoration plans.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE_Forecast
Subject: National Grid New England Forecast
Date: Monday, February 04, 2013 6:07:46 AM

Attachments: NATCHIELLIHIM

Forecast For New England from Schneider Electric

For National Grid

Date: February 4, 2013

Time: 6:00 AM EST

Forecaster: Andrew Thut

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High

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Nantucket	High	High	High
Rhode Island	High	High	High
Western Massachus	setts High	High	High

CURRENT CONDITIONS: Skies are partly to mostly cloudy with northwest winds at 5-15 mph.

Temperatures are in the teens and 20s.

SYNOPSIS: Conditions will become windy today with gusts of 25-35 mph and isolated gusts to 40

mph. Overnight a weak disturbance will bring a chance for light snow along the southern New

England coast but accumulation will be minimal. Another clipper will offer a chance for light

snow from Tuesday night into Wednesday.

WIND IMPACT: Isolated, peak wind gusts will have potential to reach 40 mph across Bay State

North, Metro Boston, and northern Bay State South from 10am to 6pm on Monday.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Lows tonight will reach the single digits in the Bay State West and North

& Granite divisions. On Tuesday night isolated locations near the VT border in North & Granite may fall into the single digits.

SNOW IMPACT: None.

ICE IMPACT: None.

FLOOD IMPACT: None.

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TODAY: Partly to mostly cloudy and blustery with flurries possible in the Berkshires. Winds

out of the west at 10-20 mph with gusts of 25-35 mph. Isolated gusts to 40 mph possible during

the afternoon. High temperatures in the 20s and 30s.

TONIGHT: Mostly cloudy and breezy with light snow showers and flurries possible in RI and

southeast MA. 1/2" or less is possible in southern portions of Ocean State and Bay State

South, as well as Cape Cod, while up to 1" is possible on Nantucket. Winds out of the west at

10-20 mph with gusts of 25-35 mph during the evening and still the possibility for isolated

gusts up to 40 mph early, then decreasing to 7-15 mph with gusts to 20 mph by late night. Low

temperatures in the single digits to lower teens in Bay State West and North & Granite, while

teens and lower 20s will be found elsewhere.

TOMORROW: Light snow showers or flurries will be possible in Cape Cod and Ocean State during

the morning. Accumulation will reach an inch or less. Otherwise dry conditions are expected.

Winds will shift to the west-northwest at 5-12 mph. Highs will be in the 20s and 30s.

TOMORROW NIGHT: Light snow is expected in North and Granite and Bay State West. Chances will

be highest after midnight. Accumulation will be less than an inch. Winds will be out of the

east at 5-10 mph. Lows will mainly be in the teens and 20s, although lows may dip into the

single digits near the VT border in North and Granite

DAYS 3-5: Light scattered snow showers will be possible throughout New England Wednesday but

accumulation will be below hazard levels. High pressure will roll in to provide dry weather

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Thursday but another system will draw in a chance for light snow from Thursday night into Friday. Temperatures will be near to slightly below normal Wednesday, seasonable Thursday and slightly above average Friday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE_Forecast
Subject: National Grid New England Forecast
Date: Monday, February 04, 2013 7:33:32 PM

Attachments: NATCHIE LEILHTM

Forecast For New England from Schneider Electric

For National Grid

Date: February 4, 2013

Time: 7:30 PM EST

Forecaster: Scott Dumblauskas

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High

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Nantucket	High	High	High
Rhode Island	High	High	High
Western Massachusetts	High	High	High

CURRENT CONDITIONS: Skies are clear to partly cloudy across New England this evening. Winds are out of the west at 12-22 mph with gusts 30 mph. Temperatures are in the lower 20s to upper 20s.

SYNOPSIS: Winds will gradually diminish through this evening, with gusts to 30 mph possible

early on. A chance for light snows exists across the southern areas tonight, with another

clipper system giving all areas a threat for light snow Tuesday night into Wednesday. The

potential exists for a storm system late-week and into the weekend, but forecast models are

very split on the possible solutions.

WIND IMPACT: None.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Lows tonight will reach the single digits in the Bay State West and North

& Granite divisions. On Tuesday night isolated locations near the VT border in North & Granite may fall into the single digits.

SNOW IMPACT: None.

ICE IMPACT: None.

FLOOD IMPACT: None.

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TONIGHT: Light snow showers and flurries are possible in Ocean State and southeastern

Massachusetts well after midnight. Accumulations up to 1 inch possible over Nantucket, with up

to one-half inch elsewhere. Winds will be in the range of 10-20 mph with gusts to 30 mph this

evening. Winds will decrease after midnight to 6-12 mph. Low temperatures in the single digits

to lower teens in Bay State West and North & Granite, while teens and lower 20s will be found elsewhere.

TOMORROW: Light snow showers or flurries will be possible in Cape Cod and Ocean State during

the morning. Accumulation will reach an inch or less. Otherwise dry conditions are expected.

Winds will shift to the west-northwest at 5-12 mph. Highs will be in the 20s and 30s.

TOMORROW NIGHT: Light snow is expected in North and Granite and Bay State West. Chances will

be highest after midnight. Accumulation will be less than one inch. Winds will be out of the

east at 5-10 mph. Lows will mainly be in the teens and 20s, although lows may dip into the

single digits near the VT border in North and Granite

DAYS 3-5: Light scattered snow showers will be possible throughout New England Wednesday but

accumulation will be below hazard levels. High pressure will roll in to provide dry weather

Thursday but another system will draw in a chance for light snow from Thursday night into

Friday. Temperatures will be near to slightly below normal Wednesday, seasonable Thursday and slightly above average Friday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIELLE HTM

Forecast For New England from Schneider Electric

For National Grid

Date: February 5, 2013

Time: 6:00 AM EST

Forecaster: J Wegwerth

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	High	High	High

CURRENT CONDITIONS: Skies are partly to mostly cloudy. Winds are light and variable.

Temperatures are in the upper single digits and lower 10s in North and Granite and the middle

10s to middle 20s elsewhere.

SYNOPSIS: A weak disturbance will bring chances for light snow showers to southern New England

through the day. A weak clipper will bring chances for light snow showers across the region

tonight into Wednesday morning. Dry conditions are then expected through the day Thursday

with high pressure in control. A developing system will bring chances for light snow Thursday

night into Friday morning. Snow will intensify Friday across the region before winding down

Saturday morning. Hazard level snow will be possible with this system. Winds may reach

hazard levels in eastern Massachusetts. Dry conditions will return Saturday afternoon for

most, but snow may linger in the Cape and Islands of Massachusetts through Saturday afternoon/evening.

WIND IMPACT: None.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will rise above 10 degrees in the North and Granite Division

by 8am-10am this morning. Lows tonight may fall into the single digits in northwestern North

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and Granite for a brief period.

SNOW IMPACT: None.

ICE IMPACT: None.

FLOOD IMPACT: None.

TODAY: Skies will be partly to mostly cloudy. Light snow showers/flurries will be possible in

Ocean State, Bay State South, and Cape Cod this morning with flurries possible this afternoon.

Accumulation will be less than 1 inch. Otherwise, dry conditions are expected. Winds will

be out of the west-northwest becoming variable at 5-12 mph. Highs will be in the lower 20s to middle 30s.

TONIGHT: Skies will be partly to mostly cloudy. Light snow showers/flurries will be possible

in Ocean State, Cape Cod, Bay State South, and Metro Boston this evening and tonight. Light

snow showers/flurries will develop in North and Granite and Bay State West after midnight.

Accumulation will be less than 1 inch. Little to no accumulation will be possible in Metro

Boston. Winds will be out of the east becoming south at 5-10 mph. Lows will be in the single

digits to upper 10s North and Granite, and the middle 10s to middle 20s elsewhere.

TOMORROW: Skies will become partly cloudy. Light snow showers/flurries will diminish by noon

with little to no additional snow accumulation. Winds will be out of the west at 8-15 mph

with gusts of 20-25 mph. An isolated 30 mph gust may occur. Highs will be in the upper 20s

to middle 30s in North and Granite and Bay State West and the middle to upper 30s elsewhere.

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TOMORROW NIGHT: Skies will be mostly clear. Winds will be out of the north at 5-15 mph. Lows

will be in the single digits North and Granite and Bay State West, the lower to middle 20s in

Cape Cod, and the middle 10s to lower 20s elsewhere.

DAYS 3-5: Dry conditions will continue through Thursday evening. Light snow will arrive

across the region Thursday night into Friday morning. Snow will intensify across the region

on Friday before winding down from northwest to southeast Saturday morning and afternoon.

Snow accumulation looks like it is likely to reach hazard levels with several inches expected

across most of the region. If current trends hold, snowfall amounts may be significant.

However, there is a chance that rain may mix in across Ocean State, Bay State South, and Cape

Cod Friday late afternoon/evening for a short time, but this will likely change back to snow.

Winds may reach hazard levels in eastern Massachusetts on Friday, but currently looks to

remain just below hazard levels elsewhere. High pressure will bring dry conditions for most

Saturday afternoon and for all Saturday evening and overnight.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 5, 2013

Time: 1:00 PM EST

Forecaster: G Loulis

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	High	High	High

CURRENT CONDITIONS: Skies are variably cloudy with variable winds at 3-8 mph. Light snow is ongoing in Bay State South, Ocean State, Cape Cod, and Nantucket. Temperatures range from the upper teens to upper 20s.

SYNOPSIS: Light snow showers are possible this afternoon and tonight with accumulation staying

under hazard levels. Attention then turns to a potentially strong system that will bring snow

Thursday night into Friday, heaviest during the day on Friday. The snow could linger into

Saturday morning across eastern MA but it will likely end elsewhere.

Several inches of snow

are forecast across the service territory. Amounts could be raised higher, especially across

eastern MA if the storm intensifies. But we could also see rain mix with snow and that may

drastically alter snow totals so confidence is low.

WIND IMPACT: None.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Wednesday night into Thursday morning, low temperatures of 5° to 9° are

possible across North/Granite and Bay State West. Temperatures will be under 10° from about

3AM-7AM.

SNOW IMPACT: None.

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ICE IMPACT: None.

FLOOD IMPACT: None.

THIS AFTERNOON: Light snow showers are possible across Bay State South, Ocean State, Cape Cod,

and Nantucket with about half an inch of accumulation possible through 7PM. Other areas will

be dry. Winds will be variable at 5-12 mph. Highs will range from the mid 20s to low 30s.

TONIGHT: A weak disturbance will bring light snow showers to the entire service territory.

Total accumulation will be a quarter inch to 1 inch. Winds will be out of the east becoming

south at 5-10 mph. Lows will range from the low 10s to mid 20s.

TOMORROW: Skies will become partly cloudy with dry weather taking over. Winds will be out of

the west at 8-15 mph with gusts of 20-25 mph. An isolated 30 mph gust may occur. Highs will

be in the upper 20s to middle 30s in North and Granite and Bay State West and the middle to upper 30s elsewhere.

TOMORROW NIGHT: Skies will be mostly clear. Winds will be out of the north and northwest at

5-15 mph. Lows will be in the single digits North and Granite and Bay State West, the lower to

middle 20s in Cape Cod, and the middle 10s to lower 20s elsewhere.

DAYS 3-5: Dry conditions will continue through Thursday evening. Attention then turns to a

potentially strong system that will bring snow Thursday night into Friday, heaviest during the

day on Friday. The snow could linger into Saturday morning across eastern MA but it will

likely end elsewhere. Several inches of snow are forecast across the service territory.

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Amounts could be raised higher, especially across eastern MA, where 10+" are possible if the

storm intensifies enough. At this point, forecast confidence is low though, especially for RI

and eastern MA where there may be rain mixing in which could drastically lower snow totals.

Winds may reach hazard levels in eastern MA on Friday, but currently looks to remain just

below hazard levels elsewhere. High pressure will bring dry conditions for most Saturday

afternoon and for all of Saturday night. Saturday evening and overnight. Temperatures will be

near to below normal.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 5, 2013

Time: 7:30 PM EST

Forecaster: G Loulis

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
WIND SPEED		1		
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	2
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	2
	Rhode Island	1	1	1
	Western Massachusetts	1	1	2
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	High	High	High

CURRENT CONDITIONS: Skies are variably cloudy across New England this evening with variable

winds at 3-8 mph. Scattered light snow is on-going across parts of Bay State South, Ocean

State, Cape Cod, and Nantucket. Temperatures range from the upper teens to upper 20s.

SYNOPSIS: Light snow showers are possible tonight with accumulation staying under hazard

levels. Attention then turns to a potentially very strong system that will bring snow later

Thursday night and especially on Friday, heaviest during the day on Friday into Friday night.

The snow could linger into Saturday morning across eastern MA but it will likely end

elsewhere. Several inches of snow are forecast across the service territory. Amounts could be

raised much higher, especially across eastern MA if the storm intensifies. But we could also

see rain mix with wet snow and that may drastically alter snow totals so confidence is low. In

addition, hazard level winds will likely be reached and exceeded.

WIND IMPACT: None.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Wednesday night into Thursday morning, low temperatures of 5° to 9° are

possible across North/Granite and Bay State West. Temperatures will be under 10° from about 3AM-7AM.

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SNOW IMPACT: None.

ICE IMPACT: None.

FLOOD IMPACT: None.

TONIGHT: A weak disturbance will bring light snow showers to the entire service territory.

Total accumulation will be one-quarter inch to 1 inch. Winds will be out of the east becoming

south at 5-10 mph. Lows will range from the lower teens to the middle 20s.

TOMORROW: Skies will become partly cloudy with dry weather taking over. Winds will be out of

the west at 8-15 mph with gusts of 20-25 mph. An isolated 30 mph gust may occur. Highs will

be in the upper 20s to middle 30s in North and Granite and Bay State West and the middle to upper 30s elsewhere.

TOMORROW NIGHT: Skies will be mostly clear. Winds will be out of the north and northwest at

5-15 mph. Lows will be in the single digits North and Granite and Bay State West, the lower to

middle 20s in Cape Cod and the middle teens to lower 20s elsewhere.

DAYS 3-5: Dry conditions will continue through Thursday evening.

Attention then turns to a

potentially strong system that will bring snow Thursday night into Friday, heaviest during the

day on Friday. The snow could linger into Saturday morning across eastern MA but it will

likely end elsewhere. Several inches of snow are forecast across the service territory.

Amounts could be raised much higher, especially across eastern MA, where 10+" are possible if

the storm intensifies enough. At this point, forecast confidence is low though, especially for

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RI and eastern MA where there may be rain mixing in which could drastically lower snow totals.

Winds will likely reach and exceed hazard levels in eastern MA and elsewhere on Friday and

Friday night. High pressure will bring dry conditions for Saturday night. Temperatures will be

near to below normal through the extended period.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIER LINE

Forecast For New England from Schneider Electric

For National Grid

Date: February 6, 2013

Time: 6:00 AM EST

Forecaster: J Wegwerth

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	2
	Eastern Massachusetts	1	1	3
	Nantucket	1	1	3
	Rhode Island	1	1	2
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	2
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	Medium
	Eastern Massachusetts	High	High	Medium
	Nantucket	High	High	Medium

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Rhode Island	High	High	Medium
Western Massachusetts	High	High	Medium

CURRENT CONDITIONS: Skies are cloudy. Scattered snow showers are ongoing. Winds are calm.

Temperatures are in the upper 10s to lower 20s in North and Granite and Bay State West and the

lower 20s to lower 30s elsewhere.

SYNOPSIS: Light snow showers will exit New England by this afternoon with dry conditions then

persisting through Thursday evening. Thursday night, light snow will gradually develop across

the region. Light snow will gradually intensify becoming moderate to heavy during the day

Friday, through Friday night, and into Saturday. Snow will wind down Saturday afternoon with

dry conditions developing Saturday evening and especially Saturday night. Snowfall amounts of

a half a foot to a foot and a half will be possible. Hazard winds will be likely for many

areas, especially the New England coast later Friday and Saturday. Dry and non-hazard

conditions are expected on Sunday and Sunday night as high pressure takes hold.

WIND IMPACT: None.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Low temperatures will fall into the single digits in North and Granite and

Bay State West between 10pm and 1am tonight in the higher terrain and after 1am to 3am in the

lower terrain. Temperatures will remain below 10 degrees until 10am in

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Bay State West and until 12pm to 1pm Thursday in North and Granite.

SNOW IMPACT: None.

ICE IMPACT: None.

FLOOD IMPACT: None.

TODAY: Skies will become partly cloudy. Scattered light snow showers and flurries will

diminish by noon. Snow accumulation will be under 1 inch. Winds will be out of the west at

8-18 mph with gusts of 20-30 mph. Isolated 35 mph gusts may occur. Highs will be in the

middle 20s to middle 30s North and Granite and the lower 30s to upper 30s elsewhere.

TONIGHT: Skies will be mostly clear. Winds will be out of the north at 5-15 mph with gusts of

18-25 mph possible in coastal areas. Lows will be in the single digits north and Granite and

Bay State West and the 10s to lower 20s elsewhere.

TOMORROW: Expect increasing clouds. Winds will be out of the north becoming east at 4-10 mph.

Highs will be in the upper 10s to lower 20s North and Granite and Bay State West and the

lower 20s to lower 30s elsewhere.

TOMORROW NIGHT: Becoming cloudy. Light snow will develop after 2am-4am. Snow accumulation

will be less than 1 inch, except up to 1-2 inches in northern North and Granite. Winds will

be out of the east at 8-18 mph. Lows will be in the 10s to lower 20s North and Granite and

Bay State West and the upper 10s to lower 30s elsewhere.

DAYS 3-5: On Friday and through the day Saturday, two systems will

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phase together over the

region with moderate to heavy snow developing across much of the region during the day Friday

and lasting into Saturday. Total accumulation of 6 inches to 18 inches is looking more likely

through the event, depending on where the heaviest snow bands set up. There is some potential

for a wintry mix or even rain to limit accumulation in the southern coast of New England.

Snow will gradually wind down during the day Saturday as high pressure moves in. Dry

conditions are expected region wide by Saturday evening or overnight. Winds will be gusty

with this system as well late Friday and into Saturday with gusts around 25-40 mph likely.

Isolated higher gusts around 50-55 mph may occur along the immediate New England coast with a

gust to 60 mph not out of the question in Nantucket before winding down later Saturday. Dry

and non-hazard conditions are expected Sunday and Sunday night.

Temperatures will be within 5

degrees of normal on Friday, 3-8 degrees below normal on Saturday, and near normal on Sunday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 6, 2013

Time: 1:00 PM EST

Forecaster: G Loulis

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	2
	Eastern Massachusetts	1	1	3
	Nantucket	1	1	3
	Rhode Island	1	1	3
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	2
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	Medium
	Eastern Massachusetts	High	High	Medium
	Nantucket	High	High	Medium

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Rhode Island	High	High	Medium
Western Massachusetts	High	High	Medium

CURRENT CONDITIONS: Skies are mostly cloudy across western NH and western MA with clear to

partly cloudy skies elsewhere. A few flurries are ongoing in the Berkshires. Temperatures

range from the upper 20s to upper 30s.

SYNOPSIS: Light snow showers will exit western New England by the late afternoon hours with

dry conditions then persisting tonight through Thursday evening. Thursday night, light snow

will gradually develop across the region. Light snow will gradually intensify becoming

moderate to heavy during the day Friday, through Friday night, and into Saturday. Snow will

wind down Saturday afternoon with dry conditions developing Saturday evening and especially

Saturday night. Snowfall amounts of a half a foot to a foot and a half will be possible.

Hazard winds will be likely for many areas, especially the New England coast later Friday and

Saturday. Dry and non-hazard conditions are expected on Sunday and Sunday night as high pressure takes hold.

WIND IMPACT: None.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Low temperatures will fall into the single digits in North and Granite and

Bay State West between 10PM and 1AM tonight in the higher terrain and after 1am to 3am in the

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lower terrain. Temperatures will remain below 10° degrees until 10AM in Bay State West and until 12PM or 1PM Thursday in North and Granite.

SNOW IMPACT: None.

ICE IMPACT: None.

FLOOD IMPACT: None.

THIS AFTERNOON: Variably cloudy. Flurries are possible across the Berkshires with a trace of

accumulation possible. Winds will be out of the west at 8-18 mph with gusts of 20-30 mph.

Isolated 35 mph gusts may occur. Highs will be in the middle 20s to middle 30s North and

Granite and the lower 30s to upper 30s elsewhere.

TONIGHT: Skies will be mostly clear. Winds will be out of the north at 5-15 mph with gusts of

18-25 mph possible in coastal areas. Lows will be in the single digits north and Granite and

Bay State West and the 10s to lower 20s elsewhere.

TOMORROW: Expect increasing clouds. Winds will be out of the north becoming east at 4-10 mph.

Highs will be in the upper 10s to lower 20s North and Granite and Bay State West and the lower

20s to lower 30s elsewhere.

TOMORROW NIGHT: Becoming cloudy. Light snow will develop after 2AM or 4AM, mainly across

North/Granite and Bay State West. Snow accumulation will be less than 1 inch, except up to 1-2

inches in northern North and Granite. Winds will be out of the east at 8-18 mph. Lows will be

in the 10s to lower 20s North and Granite and Bay State West and the upper 10s to lower 30s elsewhere.

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DAYS 3-5: On Friday and through the day Saturday, two systems will phase together to generate

one large winter storm over the region, with moderate to heavy snow developing across much of

the region during the day Friday and lasting into Saturday. Areas west of I-91 will see the

steady snow develop by 8AM Fri with areas east of I-91 getting into steady precipitation by

11AM. For Ocean State, Cape Cod, and Nantucket, precipitation could start out as rain then

change to all snow by 5-6PM. But other areas in the service territory should see all snow. The

snow will end in the Berkshires by mid-day Sat but for other areas it will continue until

sometime between 4PM and 8PM Sat, ending latest on Cape Cod and Nantucket. Storm total

snowfall of about 6-12" is forecast for Ocean State, Cape Cod, and Nantucket. About 8-15" is

forecast for Bay State South, Metro Boston, and in Bay State West along and south of I-90.

Amounts of 10-18" are forecast for Bay State West north of I-90, as well as Bay State North

and North/Granite. As for winds, sustained speeds will increase to 10-25 mph with gusts of

25-40 mph for most areas after 1-2PM Fri afternoon, but gusts could reach 45 mph across Cape

Cod and Nantucket after 1-2PM Fri. Winds will increase further after 7PM Fri and stay high

through about 7PM Sat for most areas. Sustained winds will be 15-30 mph across the service

territory, perhaps occasionally 30-40 mph across Cape Cod and Nantucket. Gusts of 35-45 mph

will be common across interior parts of the service territory, with gusts of 45-55 mph for

Ocean State and areas east of I-495. We could see some peak gusts of 60-65 mph anywhere along

the MA coastline. The high winds will diminish fairly quickly after 7PM Sat evening for most

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areas. Locations west of I-91 may see winds diminish as early as 3-4PM Sat. There is still a

great deal of uncertainty with this storm. Some model guidance is indicating two feet or more

of snow for eastern New England, so we may have to raise amounts with future updates. But at

this point we are confident that a heavy snow event is in store for New England. Details on

snow amounts should be more fine-tuned by Thu evening. Dry and non-hazard conditions are

expected Sunday and Sunday night. Temperatures will be within 5 degrees of normal on Friday,

3-8 degrees below normal on Saturday, and near normal on Sunday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 7, 2013

Time: 6:00 AM EST

Forecaster: S Rocheford

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
WIND SPEED		1		-
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	2	2
	Eastern Massachusetts	1	3	3
	Nantucket	1	3	4
	Rhode Island	1	3	3
	Western Massachusetts	1	2	2
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	2
	Rhode Island	1	1	1
	Western Massachusetts	1	3	2
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	Medium	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	High	Medium	High

CURRENT CONDITIONS: Skies are clear, with light and variable winds. Temperatures range from

the upper single digits in the west to the lower 20s near the coast.

SYNOPSIS: Expect dry conditions through around midnight. Light snow will arrive after

midnight and will spread across nearly the entire service area by daybreak Friday. Snow will

increase in coverage during the day Friday, with moderate to heavy snow from Friday afternoon

through Saturday afternoon. Precipitation will mix with and change over to rain for a brief

while Friday afternoon/evening over Cape Cod/South Shore and Coastal Ocean State. Snow will

taper off Saturday evening, with dry conditions taking over Saturday night. Hazard winds are

likely in all areas Friday evening through early Saturday night, and will be strongest along

the coast Friday night into Saturday morning. Dry and non-hazard conditions are expected

Sunday and Sunday night. The next system will arrive Monday and will be accompanied by rain

possibly mixing with snow early in the day. Dry conditions may return Monday night.

WIND IMPACT: Hazard wind gusts will develop in coastal areas after 3pm Friday and will spread

into interior portions of New England after midnight Friday, continuing through daybreak

Saturday. Sustained wind speeds Friday evening into Friday night will range from 20-30 mph in

Granite/North and Bay State West, and from 25-35 mph elsewhere. Gusts will reach 35-45 mph in

Granite/North and Bay State West, 40-50 mph in most other areas. Peak

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gusts of 55-65 mph are expected over Cape Cod/Nantucket, with 50-55 mph in other coastal areas.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will climb back out of the single digits in Granite/North and

Bay State West by 10am this morning. Temperatures will hover near 10 degrees from 9pm

tonight-5am Friday in northern Granite/North, and could briefly drop to 8-9 degrees for an

hour or two during this period. Temperatures will rise back into the teens by 6am Friday in all of Granite/North.

SNOW IMPACT: Light snow will spread across the service area between midnight tonight daybreak

Friday. Snow will continue in nearly all areas throughout the day Friday and into Friday

night, and will be moderate to heavy from the afternoon onwards. Snow will change over to

rain in the afternoon/evening over Cape Cod/Nantucket, southern Bay State South, and southern

Ocean State, but will switch back after midnight Friday night.

Accumulations through daybreak

Saturday will be 3-6" in Cape Cod/Nantucket and southern Ocean State, 5-11" in northern Ocean

State and southern Bay State South, 12-18" in Bay State West and Granite/North, and 14-20" in

Bay State North, Metro Boston, and northern Bay State South.

ICE IMPACT: None.

FLOOD IMPACT: Tidal impacts are as follows: Metro Boston: Seas 2-4ft Fri, 4-7ft Fri night.

Bay State North/Bay State South/Cape Cod: Seas 4-7ft Fri, 9-14ft Fri

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night. Nantucket: Seas 4-7ft Fri, 6-9ft Fri night. These higher tides could result in some coastal flooding issues in these areas.

TODAY: Dry conditions with increasing clouds. Winds out of the north in the morning will

become more easterly in the afternoon and evening. Wind speeds will range from 6-12 mph, with

a few gusts of 15-20 mph out over Cape Cod/Nantucket. Temperatures will be 20s and lower 30s.

TONIGHT: Cloudy with light snow spreading east across the service area from midnight to 6am.

Winds will be out of the east at 8-18 mph, with gusts of 20-25 possible by daybreak. Lows

will be in the teens and lower 20s, and could briefly drop into the upper single digits in

northern Granite/North.

TOMORROW: Increasingly heavy snow throughout the day in most areas. Snow will change over to

rain in the afternoon/evening over Cape Cod/Nantucket, southern Bay State South, and southern

Ocean State. See the SNOW IMPACT area above for details about snow accumulation. Winds will

be out of the east-northeast at 20-30 mph, with gusts of 30-45 mph developing after 3pm.

Hazard gusts will be out over Cape Cod/Nantucket. Highs will be in the 20s and lower 30s in

the west and 30s in the east.

TOMORROW NIGHT: Moderate to heavy snow all night along with hazard winds. See the SNOW and

WIND IMPACT areas above for details about snow accumulation and wind gusts. Lows will range

from the upper teens and lower 20s in the west to the middle to upper 20s in the east.

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DAYS 3-5: Snow will continue across the service area Saturday morning and will slowly taper

off from west to east in the afternoon/evening. Additional snow accumulations of 6-10" are

likely from eastern Granite/North to Cape Cod/Nantucket and in Ocean State, while Bay State

West picks up another 3-9". Strong winds will continue throughout the daytime Saturday, and

will be especially strong in the morning. Gusts of 35-50 mph will be common across interior

parts of the service territory, with gusts of 50-60 mph Ocean State and areas east of I-495.

Peak gusts of 60-65 mph are likely along the MA coastline, and could reach 70-75 mph out over

Cape Cod/Nantucket. The high winds will diminish fairly quickly after 7PM Saturday.

Additional tidal impacts Saturday are as follows: Eastern MA...3-6ft Sat, 2-4ft Sat night.

Bay State North/Bay State South/Cape Cod: Seas 7-10ft Sat, 4-7ft Sat night. Nantucket: Seas

4-7ft Sat, 2-4ft Sat night. Dry conditions and non-hazard winds are expected Sunday and

Sunday night. The next system will move through during the daytime Monday, bringing mostly

rain, possibly mixed with some snow. Snow may be close to hazard criteria in portions of

Granite/North. Winds are not expected to be an issue. Drier conditions should return Monday

night. Temperatures will be 3-10 degrees below normal Saturday, 4-9 degrees below normal

Sunday, and up to 7 degrees above normal Monday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 7, 2013

Time: 1:00 PM EST

Forecaster: G Loulis

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	2	2
	Eastern Massachusetts	1	3	3
	Nantucket	1	3	4
	Rhode Island	1	3	3
	Western Massachusetts	1	2	2
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	3	3
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	Medium	Medium
	Eastern Massachusetts	High	Medium	Medium
	Nantucket	High	Medium	Medium

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Rhode Island	High	Medium	Medium
Western Massachusetts	High	Medium	Medium

CURRENT CONDITIONS: Skies are variably cloudy with winds out of the north at 3-15 mph. There

are a few gusts of 20-25 mph from Concord NH southeast across Boston MA and Cape Cod.

Temperatures are in the teens and 20s.

SYNOPSIS: Expect dry conditions through around midnight. Light snow will arrive after

midnight and will spread west to east across the service territory between 2am and 6am Friday

morning. Snow will increase in coverage during the day Friday, with moderate to heavy snow

from Friday afternoon through Saturday afternoon. Precipitation will mix with and change over

to rain for a brief period Friday afternoon/evening over Cape Cod/South Shore and Coastal

Ocean State. Snow will taper off Saturday evening, with dry conditions taking over Saturday

night. Hazard winds are likely in all areas Friday evening through early Saturday night, and

will be strongest along the coast Friday night into Saturday morning. Dry and non-hazard

conditions are expected Sunday and Sunday night. The next system will arrive Monday and will

be accompanied by rain possibly mixing with snow early in the day. Dry conditions may return

Monday night.

WIND IMPACT: Hazard wind gusts will develop in coastal areas after 3pm Friday and will spread

into interior portions of New England after midnight Friday, continuing through daybreak

Saturday. Sustained wind speeds Friday evening into Friday night will range from 20-30 mph in

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Granite/North and Bay State West, and from 25-35 mph elsewhere. Gusts will reach 35-45 mph in

Granite/North and Bay State West, 40-50 mph in most other areas. Peak gusts of 50-60 mph are

expected over Cape Cod/Nantucket, with 55 mph in other coastal areas.

Winds will also be

strong through the day Saturday (7AM through 7PM). Sustained speeds will be 15-30 mph for

most areas, and as high as 35-40 mph for Cape Cod and Nantucket.

Gusts of 35-50 mph will be

common across interior parts of the service territory, with gusts of 50-60 mph Ocean State and

areas east of I-495. Peak gusts of 60-65 mph are likely along the MA coastline, and could

reach 70-75 mph out over Cape Cod/Nantucket. Timing for those peak gusts of 60-75 mph would

be about 7AM-12PM Saturday. The high winds will diminish fairly quickly after 7PM Saturday.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will hover near 10 degrees from 9pm tonight-5am Friday in

northern Granite/North, and could briefly drop to 8-9 degrees for an hour or two during this

period. Temperatures will rise back into the teens by 6am Friday in all of Granite/North.

SNOW IMPACT: Light snow will spread across the service area between midnight tonight daybreak

Friday. Snow will continue in nearly all areas throughout the day Friday and into Friday

night, and will be moderate to heavy from the afternoon onwards. Snow will change over to

rain in the afternoon/evening (2-8PM) over Cape Cod/Nantucket, southern Bay State South, and

southern Ocean State, but will switch back after midnight Friday night and

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continue through

mid-day Saturday, with snow ending from west to east between 3PM and 9PM. Storm-total

accumulations will be 6-12" in Cape Cod/Nantucket and southern Ocean State, 12-18" in northern

Ocean State and southern Bay State South, and 18-24" for the rest of the service territory

(northern and western Bay State South, Metro Boston, Bay State North, Bay State West,

North/Granite). Note that we may see locally higher amounts in northern Bay State South, Metro

Boston, Bay State North, Bay State West, and North/Granite. Snow consistency will be wet for

Cape Cod and Nantucket, normal to wet for Ocean State, Bay State South, Metro Boston, and Bay

State North, and then normal for North/Granite and Bay State West.

ICE IMPACT: None.

FLOOD IMPACT: Tidal impacts through Sat night are as follows: Metro Boston: Seas 2-4ft Fri,

4-7ft Fri night, 3-6ft Sat, 2-4ft Sat night. Bay State North/Bay State South/Cape Cod: Seas

3-6ft Fri, 9-14ft Fri night, 7-10ft Sat, 4-7ft Sat night. Nantucket: Seas 4-7ft Fri, 6-9ft

Fri night, 4-7ft Sat, 2-4ft Sat night. These higher tides could result in some coastal

flooding issues in these areas.

THIS AFTERNOON: Dry conditions with increasing clouds. Winds out of the north in the morning

will become more easterly in the afternoon and evening. Wind speeds will range from 6-18 mph,

with a few gusts of 20-25 mph across eastern areas. High temperatures will be 20s and lower 30s.

TONIGHT: Cloudy with light snow spreading east across the service area from 2AM to 6AM.

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Accumulation through 6AM should be less than an inch. Winds will be out of the east at 8-18

mph, with gusts of 20-25 possible by daybreak. Lows will be in the teens and lower 20s, and

could briefly drop into the upper single digits in northern Granite/North.

TOMORROW: Increasingly heavy snow throughout the day in most areas. Snow will change over to

rain in the afternoon/evening over Cape Cod/Nantucket, southern Bay State South, and southern

Ocean State between roughly 2pm and 8pm. See the SNOW IMPACT area above for details about

snow accumulation. Winds will be out of the east-northeast at 20-30 mph, with gusts of 30-45

mph developing after 3pm. Hazard gusts will be out over Cape Cod/Nantucket. Highs will be in

the 20s and lower 30s in the west and 30s in the east.

TOMORROW NIGHT: Moderate to heavy snow all night along with hazard winds. See the SNOW and

WIND IMPACT areas above for details about snow accumulation and wind gusts. Lows will range

from the upper teens and lower 20s in the west to the middle to upper 20s in the east.

DAYS 3-5: Snow will continue across the service area Saturday morning and will slowly taper

off from west to east in the afternoon/evening, ending as early as 3PM in the Berkshires and

around 9PM across Cape Cod. For simplicity we have included snow, wind, and coastal flood

impacts for the entire event in the SNOW, WIND, and FLOOD IMPACT sections so refer to those

sections for details on total snow accumulation, winds, and tides. The high winds will

diminish fairly quickly after 7PM Saturday. Dry conditions and non-hazard winds are expected

Sunday and Sunday night. The next system will move through during the daytime Monday,

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bringing mostly rain, possibly mixed with some snow. Snow may be close to hazard criteria in

portions of Granite/North. Winds are not expected to be an issue. Drier conditions should

return Monday night. Temperatures will be 3-10 degrees below normal Saturday, 4-9 degrees

below normal Sunday, and up to 7 degrees above normal Monday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 7, 2013

Time: 7:30 PM EST

Forecaster: G Loulis

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
		1		<u> </u>
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	2	2
	Eastern Massachusetts	1	3	3
	Nantucket	1	3	4
	Rhode Island	1	3	3
	Western Massachusetts	1	2	2
SNOW	Central Massachusetts	2	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	3	3	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	Medium	Medium
	Eastern Massachusetts	High	Medium	Medium
	Nantucket	High	Medium	Medium

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Rhode Island	High	Medium	Medium
Western Massachusetts	High	Medium	Medium

CURRENT CONDITIONS: Skies are mostly cloudy with east winds of 5-15 mph. Temperatures range from the upper teens to mid 20s.

SYNOPSIS: Expect dry conditions through around midnight. Light snow will arrive after

midnight and will spread west to east across the service territory between 2am and 6am Friday

morning. Snow will increase in coverage during the day Friday, with moderate to heavy snow

from Friday afternoon through Saturday afternoon. Precipitation will mix with and change over

to rain for a brief period Friday afternoon/evening over Cape Cod/South Shore and Coastal

Ocean State. Snow will taper off Saturday evening, with dry conditions taking over Saturday

night. Hazard winds are likely in all areas Friday evening through early Saturday night, and

will be strongest along the coast Friday night into Saturday morning. Dry and non-hazard

conditions are expected Sunday and Sunday night. The next system will arrive Monday and will

be accompanied by rain possibly mixing with snow early in the day. Dry conditions may return Monday night.

WIND IMPACT: Hazard wind gusts will develop in coastal areas after 3pm Friday and will spread

into interior portions of New England after midnight Friday, continuing through daybreak

Saturday. Sustained wind speeds Friday evening into Friday night will range from 20-30 mph in

Granite/North and Bay State West, and from 25-35 mph elsewhere. Gusts will reach 35-45 mph in

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Granite/North and Bay State West, 40-50 mph in most other areas. Peak gusts of 50-60 mph are

expected over Cape Cod/Nantucket, with 55 mph in other coastal areas. Winds will also be

strong through the day Saturday (7AM through 7PM). Sustained speeds will be 15-30 mph for

most areas, and as high as 35-40 mph for Cape Cod and Nantucket. Gusts of 35-50 mph will be

common across interior parts of the service territory, with gusts of 50-60 mph Ocean State and

areas east of I-495. Peak gusts of 60-65 mph are likely along the MA coastline, and could

reach 70-75 mph out over Cape Cod/Nantucket. Timing for those peak gusts of 60-75 mph would

be about 7AM-12PM Saturday. The high winds will diminish fairly quickly after 7PM Saturday.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will hover near 10 degrees from 9pm tonight-5am Friday in

northern Granite/North, and could briefly drop to 8-9 degrees for an hour or two during this

period. Temperatures will rise back into the teens by 6am Friday in all of Granite/North.

SNOW IMPACT: Light snow will spread across the service area between 2AM-6AM Friday. Snow will

continue in nearly all areas throughout the day Friday and into Friday night, and will be

moderate to heavy from the afternoon onwards. Snow will change over to rain in the

afternoon/evening (2-8PM) over Cape Cod/Nantucket, southern Bay State South, and southern

Ocean State, but will switch back after midnight Friday night and continue through mid-day

Saturday, with snow ending from west to east between 3PM and 9PM.

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Storm-total accumulations

will be 6-12" in Cape Cod/Nantucket and southern Ocean State, 12-18" in northern Ocean State

and southern Bay State South, and 18-24" for the rest of the service territory (northern and

western Bay State South, Metro Boston, Bay State North, Bay State West, North/Granite). Note

that we may see locally higher amounts in northern Bay State South, Metro Boston, Bay State

North, Bay State West, and North/Granite. Snow consistency will be wet for Cape Cod and

Nantucket, normal to wet for Ocean State, Bay State South, Metro Boston, and Bay State North,

and then normal for North/Granite and Bay State West.

ICE IMPACT: None.

FLOOD IMPACT: Tidal impacts through Sat night are as follows: Metro Boston: Seas 2-4ft Fri,

4-7ft Fri night, 3-6ft Sat, 2-4ft Sat night. Bay State North/Bay State South/Cape Cod: Seas

3-6ft Fri, 9-14ft Fri night, 7-10ft Sat, 4-7ft Sat night. Nantucket: Seas 4-7ft Fri, 6-9ft

Fri night, 4-7ft Sat, 2-4ft Sat night. These higher tides could result in some coastal

flooding issues in these areas.

TONIGHT: Cloudy with light snow spreading east across the service area from 2AM to 6AM.

Accumulation through 6AM should be less than an inch. Winds will be out of the east at 8-18

mph, with gusts of 20-25 possible by daybreak. Lows will be in the teens and lower 20s, and

could briefly drop into the upper single digits in northern Granite/North.

TOMORROW: Increasingly heavy snow throughout the day in most areas. Snow will change over to

rain in the afternoon/evening over Cape Cod/Nantucket, southern Bay State South, and southern

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Ocean State between roughly 2pm and 8pm. See the SNOW IMPACT area above for details about

snow accumulation. Winds will be out of the east-northeast at 20-30 mph, with gusts of 30-45

mph developing after 3pm. Hazard gusts will be out over Cape Cod/Nantucket. Highs will be in

the 20s and lower 30s in the west and 30s in the east.

TOMORROW NIGHT: Moderate to heavy snow all night along with hazard winds. See the SNOW and

WIND IMPACT areas above for details about snow accumulation and wind gusts. Lows will range

from the upper teens and lower 20s in the west to the middle to upper 20s in the east.

DAYS 3-5: Snow will continue across the service area Saturday morning and will slowly taper

off from west to east in the afternoon/evening, ending as early as 3PM in the Berkshires and

around 9PM across Cape Cod. For simplicity we have included snow, wind, and coastal flood

impacts for the entire event (Fri/Sat) in the SNOW, WIND, and FLOOD IMPACT sections so refer

to those sections for details on total snow accumulation, winds, and tides. The high winds

will diminish fairly quickly after 7PM Saturday. Dry conditions and non-hazard winds are

expected Sunday and Sunday night. The next system will move through during the daytime

Monday, bringing mostly rain, possibly mixed with some snow. Snow may be close to hazard

criteria in portions of Granite/North. Winds are not expected to be an issue. Drier

conditions should return Monday night. Temperatures will be 3-10 degrees below normal

Saturday, 4-9 degrees below normal Sunday, and up to 7 degrees above normal Monday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 8, 2013

Time: 6:00 AM EST

Forecaster: N Hamblin

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
		<u> </u>		
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	2	2	1
	Eastern Massachusetts	3	3	1
	Nantucket	4	4	1
	Rhode Island	3	3	1
	Western Massachusetts	2	2	1
SNOW	Central Massachusetts	3	2	1
	Eastern Massachusetts	1	1	1
	Nantucket	3	2	1
	Rhode Island	1	1	1
	Western Massachusetts	3	3	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	High	High	High

CURRENT CONDITIONS: Isolated areas of flurries are in place across portions of Bay State

West/North. Dry weather is in place elsewhere. Temperatures are in the upper 10s to near 32.

SYNOPSIS: A major winter storm/blizzard will bring major impacts to the region later today

through Saturday. Heavy snow and damaging winds will be likely across a good portion of the

service area. The peak of the impacts should be this evening through early Saturday morning.

We should see the storm relent gradually later Saturday. Quiet weather should return on

Sunday for cleanup and restoration. A system will bring a wintry mix to the region on Monday.

WIND IMPACT: Winds will reach hazard levels this afternoon. Onshore winds should increase

shortly after sunset and stay at the strongest levels through Saturday morning. Sustained

winds of 25-45 mph, with frequent gusts of 45-60 mph, will be possible across Cape Cod and

Nantucket. Isolated peak gusts of 60-70 mph will be possible. Peak gusts should decrease

during the afternoon and evening, going below hazard levels by 2am. Sustained winds should

increase to 25-40 mph, with frequent gusts of 45-55 mph, across Metro Boston, Bay State South,

Bay State North (east of I-95), and Ocean State later this afternoon through Saturday morning.

Isolated peak gusts of 55-60 mph will be possible. Winds will diminish later Saturday, going

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below hazard levels by 10pm Saturday. Finally, winds will be sustained at 20-35 mph, with

gusts of 40-50 mph across Bay State North (west of I-95), North & Granite, and Bay State West

later this afternoon through Saturday morning. Winds should diminish later Saturday, going

below hazard levels by 6pm.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will drop to below 10 degrees by midnight Saturday night

across Bay State West, North & Granite, and Bay State North, west of I-93. Temperatures will

take until 10am Sunday to return to 10 degrees.

SNOW IMPACT: Light snow will spread across the service area during the morning hours. Snow

should increase in intensity from south to north later this afternoon and this evening. The

heaviest snow should occur this evening and tonight. Some heavy snow could linger across the

Cape/Islands early Saturday morning. Snow will change over to rain in the afternoon/evening

(2-8PM) over Cape Cod/Nantucket, along with southern Bay State South, but will switch back

after midnight tonight. Storm-total accumulations will be 6-12" in Cape Cod/Nantucket and

Ocean State, 12-18" in northern Ocean State and southern Bay State South, and 18-24" for the

rest of the service territory (northern and western Bay State South, Metro Boston, Bay State

North, Bay State West, North/Granite). Note that we may see locally higher amounts of up to 30

inches across northern Bay State South, Metro Boston, Bay State North, Bay State West, and

North/Granite. Snow consistency will be wet for Cape Cod and Nantucket,

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normal to wet for

Ocean State, Bay State South, Metro Boston, and Bay State North, and then normal for

North/Granite and Bay State West. Snow should transition to normal consistency after midnight to 4am tonight west to east.

ICE IMPACT: None.

FLOOD IMPACT: Tidal impacts through Sat night are as follows: Metro

Boston: Seas 2-4ft Fri,

4-7ft Fri night, 3-6ft Sat, 2-4ft Sat night. Bay State North/Bay State

South/Cape Cod: Seas

3-6ft Fri, 9-14ft Fri night, 7-10ft Sat, 4-7ft Sat night. Nantucket: Seas 4-7ft Fri, 6-9ft

Fri night, 4-7ft Sat, 2-4ft Sat night. These higher tides could result in some coastal

flooding issues in these areas.

TODAY: Light snow showers this morning will increase as the day progresses. Snow should

change to rain during the afternoon across southern Bay State South, Cape Cod, and Nantucket.

See the SNOW IMPACT area above. Winds will increase this afternoon. See the WIND IMPACT

SECTION above for details. Highs will climb into the 30s to near 40.

TONIGHT/TOMORROW: The storm will peak over the service area tonight and early tomorrow

morning. Rain will change to snow across Cape Cod, southern Bay State South, and Nantucket

from west to east tonight. Snow should taper off during the afternoon and evening hours from

west to east. See SNOW, WIND, FLOOD impacts for details about the storm. Temperatures will

be in the upper 10s and 20s for most of the region by sunrise. Readings will be in the upper

20s and 30s for Bay State South, Cape Cod, and Nantucket.

Temperatures will hold steady or

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even fall during the day on Saturday, ending up in the 10s and 20s by sunset.

TOMORROW NIGHT: Dry weather is expected after 10pm. Winds will go below hazard levels during

the evening hours. Winds could gust to 20-30 mph across Metro Boston, Bay State North, Cape

Cod, and Nantucket through the night. Lows will reach the single digits and 10s for most.

Readings will be in the mid 10s to near 20 on Cape Cod and Nantucket.

DAYS 3-5: Dry weather and no hazard conditions are expected on Sunday and Sunday night.

Sunday should be a good day for cleanup and restoration. The next system will bring

precipitation to the region on Monday. It may start out as a wintry mix of snow, sleet, and

freezing rain across most of the region, except for southern Ocean State and Cape

Cod/Nantucket. This should change to rain. Ice accretions will be below hazard levels.

Winds will be below hazard levels. Dry weather should return on Monday night and Tuesday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 8, 2013

Time: 1:00 PM EST

Forecaster: B Howell

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
WIND SPEED		1		
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	2	2	1
	Eastern Massachusetts	3	3	1
	Nantucket	4	4	1
	Rhode Island	3	3	1
	Western Massachusetts	2	2	1
SNOW	Central Massachusetts	2	2	1
	Eastern Massachusetts	1	1	1
	Nantucket	2	2	1
	Rhode Island	1	1	1
	Western Massachusetts	3	3	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	High	High	High

CURRENT CONDITIONS: Skies are cloudy with snow showers. Winds are from the north-northeast

across Bay State North and North and Granite at 7-14 mph. Winds are from the east across the

remainder of the region at 10-20 mph with gusts to 20-30 mph, highest across Coastal Boston,

Bay State South and Cape Cod. Temperatures are in the upper 10s to low 30s.

SYNOPSIS: A major winter storm/blizzard will bring major impacts to the region this afternoon

through Saturday. Heavy snow and damaging winds will be likely across a good portion of the

service area. The peak of the impacts should be this evening through early Saturday morning.

We should see the storm relent gradually later Saturday. Quiet weather should return on

Sunday for cleanup and restoration. A system will bring a wintry mix to the region on Monday.

WIND IMPACT: Winds will reach hazard levels this afternoon. Onshore winds should increase

shortly after sunset and stay at the strongest levels through Saturday morning. Sustained

winds of 25-45 mph, with frequent gusts of 45-60 mph, will be possible across Cape Cod and

Nantucket. Isolated peak gusts of 60-70 mph will be possible. Peak gusts should decrease

during the afternoon and evening, going below hazard levels by 2am.

Sustained winds should

increase to 25-40 mph, with frequent gusts of 45-55 mph, across Metro Boston, Bay State South,

Bay State North (east of I-95), and Ocean State later this afternoon

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through Saturday morning.

Isolated peak gusts of 55-60 mph will be possible. Winds will diminish later Saturday, going

below hazard levels by 10pm Saturday. Finally, winds will be sustained at 20-35 mph, with

gusts of 40-50 mph across Bay State North (west of I-95), North & Granite, and Bay State West

later this afternoon through Saturday morning. Winds should diminish later Saturday, going

below hazard levels by 6pm.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will drop to below 10 degrees by midnight Saturday night

across Bay State West, North & Granite, and Bay State North, west of I-93. Temperatures will

take until 10am Sunday to return to 10 degrees.

SNOW IMPACT: Snow should increase in intensity from south to north later this afternoon and

this evening. The heaviest snow should occur this evening and tonight. Some heavy snow could

linger across the Cape/Islands early Saturday morning. Snow will change over to rain in the

afternoon/evening (2-8PM) over Cape Cod/Nantucket, along with southern Bay State South, but

will switch back after midnight tonight. Storm-total accumulations will be 3-8" across far

southeastern Cape Cod and Nantucket, 6-12" in most of Cape Cod, 12-24" in southern Ocean

State, and 15-24" for the rest of the service territory (northern Ocean State, northern and

western Bay State South, Metro Boston, Bay State North, Bay State West, North/Granite). Note

that we may see locally higher amounts of up to 30 inches across Bay State South, Metro

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Boston, Bay State North, Bay State West, and North/Granite. Snow consistency will be wet for

Cape Cod and Nantucket, normal to wet for Ocean State, Bay State South, Metro Boston, and Bay

State North, and then normal for North/Granite and Bay State West. Snow should transition to

normal consistency after midnight to 4am tonight west to east.

ICE IMPACT: None.

FLOOD IMPACT: Tidal impacts through Sat night are as follows: Metro Boston: Seas 2-4ft Fri,

4-7ft Fri night, 3-6ft Sat, 2-4ft Sat night. Bay State North/Bay State South/Cape Cod: Seas

3-6ft Fri, 9-14ft Fri night, 7-10ft Sat, 4-7ft Sat night. Nantucket: Seas 4-7ft Fri, 6-9ft

Fri night, 4-7ft Sat, 2-4ft Sat night. These higher tides could result in some coastal

flooding issues in these areas.

THIS AFTERNOON: Snow showers will increase as the day progresses. Snow should change to rain

during the afternoon across southern Bay State South, Cape Cod, and Nantucket. See the SNOW

IMPACT area above. Winds will increase this afternoon. See the WIND IMPACT SECTION above for

details. Highs will climb into the upper 20s to near 40.

TONIGHT/TOMORROW: The storm will peak over the service area tonight and early tomorrow

morning. Rain will change to snow across Cape Cod, southern Bay State South, and Nantucket

from west to east tonight. Snow should taper off during the afternoon and evening hours from

west to east. See SNOW, WIND, FLOOD impacts for details about the storm. Temperatures will

be in the upper 10s and 20s for most of the region by sunrise. Readings will be in the upper

20s and 30s for Bay State South, Cape Cod, and Nantucket.

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Temperatures will hold steady or even fall during the day on Saturday, ending up in the 10s and 20s by sunset.

TOMORROW NIGHT: Dry weather is expected after 10pm. Winds will go below hazard levels during

the evening hours. Winds could gust to 20-30 mph across Metro Boston, Bay State North, Cape

Cod, and Nantucket through the night. Lows will reach the single digits and 10s for most.

Readings will be in the mid 10s to near 20 on Cape Cod and Nantucket.

DAYS 3-5: Dry weather and no hazard conditions are expected on Sunday and Sunday night.

Sunday should be a good day for cleanup and restoration. The next system will bring

precipitation to the region on Monday. It may start out as a wintry mix of snow, sleet, and

freezing rain across most of the region, except for southern Ocean State and Cape

Cod/Nantucket. This should change to rain. Ice accretions will be below hazard levels.

Winds will be below hazard levels. Dry weather should return on Monday night and Tuesday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 8, 2013

Time: 7:30 PM EST

Forecaster: B Howell

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	2	2	1
	Eastern Massachusetts	3	3	1
	Nantucket	4	4	1
	Rhode Island	3	3	1
	Western Massachusetts	2	2	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	2	1	1
	Rhode Island	1	1	1
	Western Massachusetts	3	1	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	High	High	High

CURRENT CONDITIONS: Skies are cloudy with snow over the area.

Winds are from the northeast

sustained at 20-30 mph with gusts to 45-60 mph, highest in coastal areas of eastern

Massachusetts. Temperatures are in the low 20s to mid 30s.

SYNOPSIS: A major winter storm/blizzard will bring major impacts to the region tonight through

Saturday. Heavy snow and damaging winds will be likely across a good portion of the service

area. The peak of the impacts should be this evening through early Saturday morning. We

should see the storm relent gradually later Saturday. Quiet weather should return on Sunday

for cleanup and restoration. A system will bring a wintry mix to the region on Monday.

WIND IMPACT: Strong, hazard level onshore winds will be seen now through Saturday morning.

Sustained winds of 25-45 mph, with frequent gusts of 45-60 mph, will be possible across Cape

Cod and Nantucket. Isolated peak gusts of 60-70 mph will be possible. Peak gusts should

decrease during the afternoon and evening Saturday, going below hazard levels by 2am.

Sustained winds of 25-40 mph, with frequent gusts of 45-55 mph, will be seen across Metro

Boston, Bay State South, Bay State North (east of I-95), and Ocean State tonight through

Saturday morning. Isolated peak gusts of 55-60 mph will be possible. Winds will diminish

later Saturday, going below hazard levels by 10pm Saturday. Finally, winds will be sustained

at 20-35 mph, with gusts of 40-50 mph across Bay State North (west of I-

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95), North & Granite,

and Bay State West later this afternoon through Saturday morning. Winds should diminish later

Saturday, going below hazard levels by 6pm.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will drop to below 10 degrees by midnight Saturday night

across Bay State West, North & Granite, and Bay State North, west of I-93. Temperatures will

take until 10am Sunday to return to 10 degrees.

SNOW IMPACT: The heaviest snow will be seen this evening and tonight. Some heavy snow could

linger across the Cape/Islands early Saturday morning. Snow will change over to rain this

evening (by 8PM) over Cape Cod/Nantucket, along with southern Bay State South, but will switch

back after midnight tonight. Storm-total accumulations will be 3-8" across far southeastern

Cape Cod and Nantucket, 6-12" in most of Cape Cod, 12-24" in southern Ocean State, and 15-24"

for the rest of the service territory (northern Ocean State, northern and western Bay State

South, Metro Boston, Bay State North, Bay State West, North/Granite). Note that we may see

locally higher amounts of up to 30 inches across Bay State South, Metro Boston, Bay State

North, Bay State West, and North/Granite. Snow consistency will be wet for Cape Cod and

Nantucket, normal to wet for Ocean State, Bay State South, Metro Boston, and Bay State North,

and then normal for North/Granite and Bay State West. Snow should transition to normal

consistency after midnight to 4am tonight west to east.

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ICE IMPACT: None.

FLOOD IMPACT: Tidal impacts through Sat night are as follows: Metro Boston: Seas 2-4ft Fri,

4-7ft Fri night, 3-6ft Sat, 2-4ft Sat night. Bay State North/Bay State South/Cape Cod: Seas

3-6ft Fri, 9-14ft Fri night, 7-10ft Sat, 4-7ft Sat night. Nantucket: Seas 4-7ft Fri, 6-9ft

Fri night, 4-7ft Sat, 2-4ft Sat night. These higher tides could result in some coastal

flooding issues in these areas.

TONIGHT/TOMORROW: The storm will peak over the service area tonight and early tomorrow

morning. Rain will change to snow across Cape Cod, southern Bay State South, and Nantucket

from west to east tonight. Snow should taper off during the afternoon and evening hours from

west to east. See SNOW, WIND, FLOOD impacts for details about the storm. Temperatures will

be in the upper 10s and 20s for most of the region by sunrise. Readings will be in the upper

20s and 30s for Bay State South, Cape Cod, and Nantucket.

Temperatures will hold steady or

even fall during the day on Saturday, ending up in the 10s and 20s by sunset.

TOMORROW NIGHT: Dry weather is expected after 10pm. Winds will go below hazard levels during

the evening hours. Winds could gust to 20-30 mph across Metro Boston, Bay State North, Cape

Cod, and Nantucket through the night. Lows will reach the single digits and 10s for most.

Readings will be in the mid 10s to near 20 on Cape Cod and Nantucket.

DAYS 3-5: Dry weather and no hazard conditions are expected on Sunday and Sunday night.

Sunday should be a good day for cleanup and restoration. The next system will bring

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precipitation to the region on Monday. It may start out as a wintry mix of snow, sleet, and

freezing rain across most of the region, except for southern Ocean State and Cape

Cod/Nantucket. This should change to rain. Ice accretions will be below hazard levels.

Winds will be below hazard levels. Dry weather should return on Monday night and Tuesday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 9, 2013

Time: 6:00 AM EST

Forecaster: S Rocheford

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	2	1	1
	Eastern Massachusetts	3	1	1
	Nantucket	3	1	1
	Rhode Island	2	1	1
	Western Massachusetts	2	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	2	1	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	Medium	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	Medium	High	High

CURRENT CONDITIONS: Cloudy with snow. Winds are from the north-northeast at 15-30 mph with gusts of 15-30 mph inland 30-50 mph along the coast and over Cape Cod. Temperatures are in the upper teens and lower 20s.

SYNOPSIS: The major winter storm/blizzard will gradually come to an end today, but the strong

winds will remain and issue through the evening. Quiet weather will return Sunday for cleanup

and restoration. A system will bring a mostly rain the region Monday, with some wintry mix

possible in Bay State West and in Granite/North. Dry conditions will return Monday night and

should last through Wednesday.

WIND IMPACT: Strong, hazard level winds out of the northwest are expected to return to the

entire service area during the daylight hours today. Sustained winds of 25-40 mph, with gusts

of 40-60 mph are expected across Cape Cod and Nantucket. Peak gusts near 65 mph are possible

before noon today. Peak gusts should decrease during the afternoon and evening Saturday,

falling below hazard levels by 1-2am Sunday. Sustained winds of 15-30 mph, with gusts of

30-45 mph are expected across Metro Boston, Bay State South, Bay State North (east of I-95),

and Ocean State now through 8pm. Peak gusts of 50 mph are possible along the coast. Finally,

winds will be sustained at 15-25 mph, with gusts of 25-40 mph across Bay State North (west of

I-95), North & Granite, and Bay State West through 6pm. Peak gusts could approach 45 mph in

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these areas.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will drop to below 10 degrees by 9pm tonight across Bay State

West, North & Granite, and Bay State North, west of I-93 and will not recover into the teens

until around 10-11am Sunday. Lows in these areas will range from -11 to 0 degrees.

Meanwhile, most of Metro Boston, Bay State South, and Ocean State will fall below 10 degrees

from 3-8am Sunday. Temperatures are expected to drop back into the upper single digits from

11pm Sunday-2am Monday in Granite/North and Bay State West.

SNOW IMPACT: Snow will slowly taper off this morning, ending in Ocean State and Bay State West

by 1-2pm, Granite/North by 2-3pm, in Bay State North, Bay State South and Metro Boston by

3-4pm, and Cape Cod/Nantucket by 7-8pm. Additional accumulations will range from 1-4 inches

in Bay State West, Ocean State, and Granite/North, heaviest amounts in eastern portions of

each region. Accumulations will range from 3-6 inches in Bay State North, Metro Boston, and

Bay State South, and 6-9 inches in Cape Cod/Nantucket. Snow consistency will be dry in

North/Granite, normal/wet in Cape Cod/Nantucket, and normal/dry in all other areas.

ICE IMPACT: None.

FLOOD IMPACT: Tidal impacts through Sat night are as follows: Metro Boston: Seas 3-6ft Sat,

2-4ft Sat night. Bay State North/Bay State South/Cape Cod: Seas 7-10ft Sat, 4-7ft Sat night.

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Nantucket: Seas 4-7ft Sat, 2-4ft Sat night. These higher tides could result in some coastal flooding issues in these areas.

TODAY: Cloudy with snow gradually ending from west to east. See SNOW, WIND, FLOOD impacts for details about the storm. Highs will be in the 20s in most areas, but could reach 30 degrees in Cape Cod/Nantucket.

TONIGHT: Snow will end in all areas by 8pm and dry conditions will take over for the rest of

the night. Skies will clear from west to east. The last of the hazard gusts will end by

1-2am and northwest winds will fall to 8-17 mph with a few lingering gusts of 20-25 mph out

over Cape Cod/Nantucket. Lows will range from the negative single digits in western areas to

teens out over Cape Cod/Nantucket.

TOMORROW: Dry and clear. Winds will be out of the northwest at 6-13 mph. Highs will be in the upper 20s and lower 30s.

TOMORROW NIGHT: Dry with increasing clouds. Winds will be light and variable. Lows will

range from the upper single digits and lower teens in Granite/North and Bay State West to the

upper teens and lower 20s over Cape Cod/Nantucket.

DAYS 3-5: The next system will bring precipitation to the region Monday. Precipitation will

start out as a wintry mix of snow, sleet, and freezing rain across Bay State West and

Granite/North, with rain elsewhere. Ice accretions will be below hazard levels. Winds will

be below hazard levels. Dry weather should return Monday night through Wednesday.

Temperatures will be above normal Monday and Tuesday, and near to

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slightly above normal Wednesday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 9, 2013

Time: 1:00 PM EST

Forecaster: B Howell

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
WIND OF ELD	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
		<u> </u>	ļ.	
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	2	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	Medium	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	Medium	High	High

CURRENT CONDITIONS: Cloudy with snow and blowing snow. Winds are from the north-northwest at

15-25 mph with gusts of 30-40 mph inland with gusts to 35-45 mph along the coast and over Cape

Cod. Temperatures are in the upper teens and lower 20s.

SYNOPSIS: Snow will continue to taper off this afternoon with dry conditions expected this

evening. Winds will remain breezy through this evening as well. Quiet conditions will then

be seen for Sunday into Sunday night. A system will bring mostly rain the region starting

early Monday morning with some wintry mix possible in Bay State West and in Granite/North.

This system will move out Monday night leaving dry conditions for Tuesday through Wednesday night.

WIND IMPACT: Strong, hazard level winds will continue into this evening. Sustained winds of

20-30 mph with gusts of 35-45 mph are expected across Cape Cod and Nantucket. Winds are

expected to fall below hazard levels by 1-2AM tonight. Sustained winds of 15-25 mph, with

gusts of 30-40 mph are expected across Metro Boston, Bay State South, Bay State North (east of

I-95), and Ocean State now through 8PM. Finally, winds will be sustained at 10-20 mph, with

gusts of 25-35 mph across Bay State North (west of I-95), North & Granite, and Bay State West through 6PM.

THUNDERSTORM IMPACT: None.

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PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will drop to below 10 degrees by 9pm tonight across Bay State

West, North & Granite, and Bay State North, west of I-93 and will not recover into the teens

until around 10-11am Sunday. Lows in these areas will range from -11 to 0 degrees.

Meanwhile, most of Metro Boston, Bay State South, and Ocean State will fall below 10 degrees

from 3-8am Sunday. Temperatures may briefly drop back into the upper single digits from 11pm

Sunday-2am Monday in Granite/North and northern areas of Bay State West.

SNOW IMPACT: Additional snow accumulations of 1-3 inches will be possible across Cape Cod

through 9-10PM this evening. Snow consistency will be dry normal in Cape Cod.

ICE IMPACT: None.

FLOOD IMPACT: Tidal impacts through tonight are as follows: Metro Boston: Seas 3-6ft Sat,

2-4ft Sat night. Bay State North/Bay State South/Cape Cod: Seas 7-10ft Sat, 4-7ft Sat night.

Nantucket: Seas 4-7ft Sat, 2-4ft Sat night. These higher tides could result in some coastal

flooding issues in these areas.

THIS AFTERNOON: Cloudy with snow gradually ending from west to east. Additional accumulations

will be under 2 inches across most of the region. See SNOW, WIND, FLOOD impacts for details

about the storm. Highs will be in the 20s in most areas, but could reach 30 degrees in Cape

Cod/Nantucket.

TONIGHT: Snow will end across Cape Cod by 10pm and dry conditions will take over for the rest

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of the night. The last of the hazard gusts will end by 1-2am and northwest winds will fall to

8-17 mph with a few lingering gusts of 20-25 mph out over Cape Cod/Nantucket. Lows will range

from the negative single digits in western areas to teens and low 20s out over Cape

Cod/Nantucket.

TOMORROW: Dry and clear. Winds will be out of the northwest at 6-12 mph. Highs will be in the mid 20s to lower 30s.

TOMORROW NIGHT: Mainly dry with increasing clouds. A few light snow showers will be possible

after 4AM across the Bay State West area. Winds will become southerly at 5-10 mph. Lows will

range from the upper single digits and lower teens in Granite/North and Bay State West to the

upper teens and lower 20s over Cape Cod/Nantucket. Lows will most likely occur around

midnight with temperatures holding steady or slowly warming through the early morning hours.

DAYS 3-5: The next system will bring precipitation to the region Monday. Precipitation will

start out as a wintry mix of snow, sleet, and freezing rain across Bay State West and

Granite/North, with rain elsewhere. Ice accretions will be below hazard levels. Winds will

be below hazard levels. Dry weather should return late Monday night through Wednesday.

Temperatures will be above normal Monday and Tuesday, and near to slightly above normal Wednesday.

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From: WeatherDelivery@telventdtn.com
To: Tornifoglio, Keith; DivOpsNE Forecast
Subject: National Grid New England Forecast

Attachments: NATCHIEFE THE MATCHIEFE THE MAT

Forecast For New England from Schneider Electric

For National Grid

Date: February 9, 2013

Time: 7:30 PM EST

Forecaster: B Howell

NE EII	REGION	DAY 1	DAY 2	DAY 3
WIND SPEED	Central Massachusetts	1	1	1
WIND SELLD	Eastern Massachusetts	1	1	1
		<u> </u>		
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
WIND GUST	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
SNOW	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
ICE	Central Massachusetts	1	1	1
	Eastern Massachusetts	1	1	1
	Nantucket	1	1	1
	Rhode Island	1	1	1
	Western Massachusetts	1	1	1
CONFIDENCE	Central Massachusetts	High	High	High
	Eastern Massachusetts	High	High	High
	Nantucket	High	High	High

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Rhode Island	High	High	High
Western Massachusetts	High	High	High

CURRENT CONDITIONS: Skies range from mostly clear in the west to partly to mostly cloudy in

the east. A few snow showers are lingering across Cape Cod. Winds are from the northwest at

10-20 mph with gusts of 30-40 mph across Cape Cod and Nantucket.

Elsewhere, winds are from

the northwest at 8-14 mph with gusts to 20-25 mph. Temperatures are in the upper teens and

lower 20s.

SYNOPSIS: Dry conditions are expected for tonight outside of a few lingering snow showers

across Cape Cod. Winds will remain breezy in eastern areas into the early morning hours.

Quiet conditions will then be seen for Sunday into Sunday night. A system will bring mostly

rain the region starting early Monday morning with some wintry mix possible in Bay State West

and in Granite/North. This system will move out Monday night leaving dry conditions for

Tuesday through Wednesday night.

WIND IMPACT: Hazard level winds will continue into this evening across Cape Cod. Sustained

winds of 15-25 mph with gusts of 30-40 mph are expected across Cape Cod and Nantucket. Winds

are expected to fall below hazard levels by 11PM tonight.

THUNDERSTORM IMPACT: None.

PRECIPITATION IMPACT: None.

TEMPERATURE IMPACT: Temperatures will drop to below 10 degrees by 9-11PM tonight across Bay

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State West, North & Granite, and Bay State North, west of I-93 and will not recover into the

teens until around 10-11AM Sunday. Lows in these areas will range from - 11 to 0 degrees.

Meanwhile, most of Metro Boston, Bay State South, and Ocean State will fall below 10 degrees

from 3-8AM Sunday. Temperatures may briefly drop back into the upper single digits from 11PM

Sunday-2AM Monday in Granite/North and northern areas of Bay State West.

SNOW IMPACT: None.

ICE IMPACT: Any ice accretion from freezing rain on Monday morning will be 0.10 inches or less.

FLOOD IMPACT: None.

TONIGHT: Snow showers will end across Cape Cod by 10pm and dry conditions will take over for

the rest of the night. The last of the hazard level wind gusts will end by 11pm and northwest

winds will diminish to 8-17 mph with a few lingering gusts of 20-25 mph across Cape

Cod/Nantucket. Lows will range from the negative single digits in western areas to teens and

lower 20s out over Cape Cod/Nantucket.

TOMORROW: Dry and clear. Winds will be out of the northwest at 6-12 mph. Highs will be in the middle 20s to lower 30s.

TOMORROW NIGHT: Mainly dry with increasing clouds. A few snow showers will be possible after

4AM across the Bay State West area. Winds will become southerly at 5-10 mph. Lows will range

from the upper single digits and lower teens in Granite/North and Bay State West to the upper

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teens and lower 20s over Cape Cod/Nantucket. Lows will most likely occur around midnight with temperatures holding steady or slowly warming through the early morning hours.

DAYS 3-5: The next system will bring precipitation to the region Monday. Precipitation will

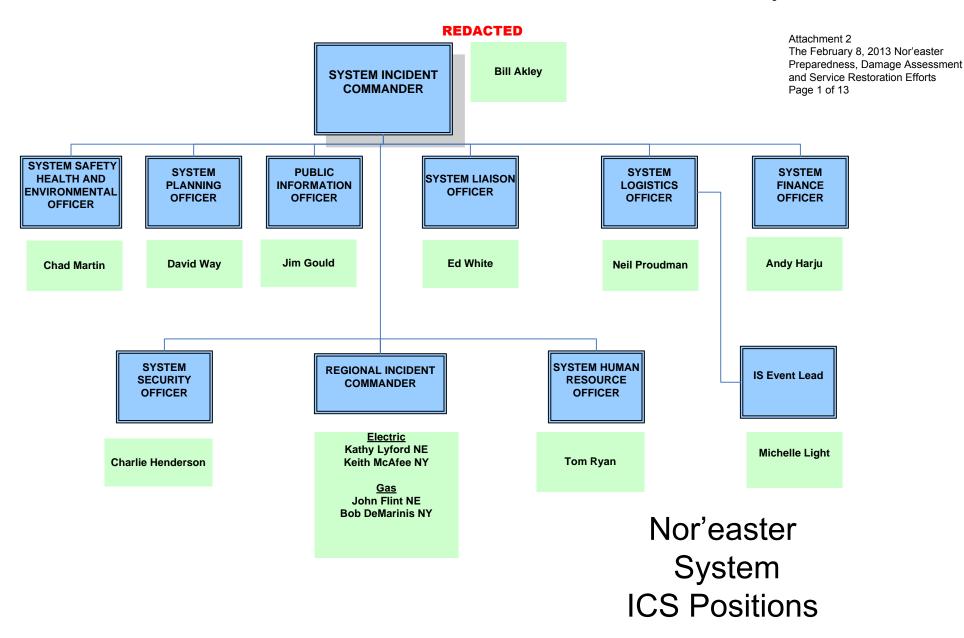
start out as a wintry mix of snow, sleet, and freezing rain across Bay State West and

Granite/North, with rain elsewhere. Ice accretions will be below hazard levels. Winds will

be below hazard levels. Dry weather should return late Monday night through Wednesday.

Temperatures will be above normal Monday and Tuesday, and near to slightly above normal Wednesday.

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02/08/2013

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February Nor'Easter - New England Regional ICS Staff - Rev 1 (02/07/2013)

Incident Commander	
Kathy Lyford	
Liaison Officer	
Altea Fazzone	
Public Information Officer	
James Gould	
Safety and Health Officer	
Timothy Woycik	
Environmental Officer	
Peter Harley	
Security Officer	
John Jackson	
Planning Section Chief	
John Gavin	
Ryan Constable	-
Logistics Section Chief	
Brian Schuster	
Finance Section Chief	
Christopsher Paglia	
Human Resources Section Chie	f
Kass Geraghty	

February Nor'Easter - New England Branch ICS Staff - Rev 1 (02/07/2013)

<u>Branch</u>	<u>Branch Director</u>	<u>Phone</u>		
Rhode Island	Mike Hrycin			
280	280 Melrose St. Providence, RI			
Brockton	Jeff Merritt			
100 East Ashland Street, Brockton, MA				
Hopedale	Mary Fuller			
245 South Main Street, Hopedale, MA				
Malden	Andrew Schneller			
170	0 Medford St, Malden, N	MA		
North Andover	Dan Bunszell			
1101 Turnpike Street, North Andover, MA				
Worcester	Tim O' Leary			
939 Southbridge St, Worcester, MA				

Operations Coord	<u>Shift</u>	<u>Phone</u>
Walter M cDonald	Day	
Raymond Rosario	Night	
ay Locke	Day	
Greg Lundhal	Night	
ohn Adams	Day	
Kevin Peltier	Night	
Paul Brochu	Day	
oe Lamachia	Night	
Bob Harding	Day	
Ted Teal	Night	
Paul Sibley	Day	
Tim Moore	Day	
Mark Dombroski	Night	
		•

<u>Planning Coord</u>	<u>Shift</u>
Claire Livingston	Day
Gary Gelineau	Night
Joe Carey	Day
Joe Henry	Night
John Williams	Day
Ted Lombardi	Night
Jim Patterson	Day
Ron Ambrose	Night
Bob Pendrake	Day
Mark Phillips	Night
Jon Gonyor	Day
Mark Domino	Day
Sonny Anand	Night
_	

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ps Liaison Coordiator	Phone	1	<u>Liaison Coordiator</u>	Ph
evin Rennick			John Isberg	
eepak Vishnu			Joe Cardinal	
		1		
harles Kosinski			Bill Jones	
,			Bob Russell	
ВА			Dan Cameron	
ВА			Kevin Kelly	
ynn Westerlind			Lynn Westerlind	

Safety and Health Coord	<u>Phone</u>
Jennifer L. Casey	
Denise Blanchette	
Denise Blanchette	
Rich Paradie	
David Beattie	
Mark Bouvier	
Jeffrey McPherson (far West)	

February Nor'Easter - New England Storm Room Leads - Rev 1 (02/07/2013)

<u>Branch</u>	<u>Storm Room Leads</u>		
Providence			
Brockton			
			To be confirmed
Malden			
North Andover			

Env. Coordinator	<u>Phone</u>
Bill Howard	
Deb Blanch	
Tim Smith	
Beverly Auxford-Paiva	
_	
Josh Holden	
Joanne Lupa	

Security Coord	
Anthony Itrich	
Anthony Itrich	
Anthony Itrich	
Brad Newman	
Brad Newman	
Brad Newman	

ogistics Coord	Phone
reg Berman	
evin Mahoney	
ean Sullivan	
hn Warchol	
nthia DeCambre	
race Walsh	
m Goslant	
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<u>FIIOIIE</u>
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taffed Number	See System HR Section Chief

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> Attachment 2 The February 8, 2013 Nor'easter Preparedness, Damage Assessment and Service Restoration Efforts Page 3 of 13

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The February 8, 2013 Nor'easter
Preparedness, Damage Assessment
and Service Restoration Efforts
Page 4 of 13

February Nor'Easter - New England Regional ICS Staff - Rev 2 (02/07/2013)

Incident Commander	
Kathy Lyford	
Liaison Officer	
Altea Fazzone	
Public Information Officer	
James Gould	
Safety and Health Officer	
Bo Maryyanek	
Environmental Officer	
Peter Harley	
Security Officer	
John Jackson	
Planning Section Chief	
John Gavin	
Ryan Constable	
Logistics Section Chief	
Brian Schuster	
Finance Section Chief	
Christopsher Paglia	
Human Resources Section C	
Kass Geraghty	

February Nor'Easter - New England Branch ICS Staff - Rev 2 (02/07/2013)

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<u>Branch</u>	<u>Branch Director</u>	Phone	Operations Coord	<u>Shift</u>	<u>Phone</u>	<u>Planning Coord</u>	<u>Snift</u>	<u>Phone</u>	Ops Liaison Coordiator	<u>Phone</u>	<u>Liaison Coordiator</u>	Phone	Safety and Health Coord	Env. Coordinator
Rhode Island	Mike Hrycin		Walter M cDonald	Day		Claire Livingston	Day		Kevin Rennick		John Isberg		Tim Woycik	Bill Howard
	280 Melrose St. Providence	, RI	Raymond Rosario	Night		Gary Gelineau	Night							
Brockton	Jeff Merritt		Jay Locke	Day		Joe Carey	Day		Deepak Vishnu		Joe Cardinal		Steve Hart	Deb Blanch
100	East Ashland Street, Brockt	on <u>,</u> MA	Greg Lundhal	Night		Joe Henry	Night							
Hopedale	Mary Fuller		John Adams	Day		John Williams	Day		Charles Kosinski		Bill Jones		Allison Fleming	Tim Smith
245	South Main Street, Hopeda	le, MA	Kevin Peltier	Night		Ted Lombardi	Night				Bob Russell			
Malden	Andrew Schneller		Paul Brochu	Day		Jim Patterson	Day		TBA		Dan Cameron		Thomas Marr	Beverly Auxford-Paiva
	170 Medford St, Malden, N	//A	Joe Lamachia	Night		Ron Ambrose	Night							
North Andover	Dan Bunszell		Bob Harding	Day		Bob Pendrake	Day		Alex Mango		Kevin Kelly		John Cameron	Josh Holden
1101	urnpike Street, North And	over, MA	Ted Teal	Night		Mark Phillips	Night							
Worcester	Tim O' Leary		Paul Sibley	Day		Jon Gonyor	Day		Lynn Westerlind		Lynn Westerlind		Bo Maryyanek	Joanne Lupa
93	Southbridge St, Worceste	r, MA	Tim Moore	Day		Mark Domino	Day							
			Mark Dombroski	Night		Sonny Anand	Night							

February Nor'Easter - New England Storm Room Leads - Rev 2 (02/07/2013)

<u>Branch</u>	Storm Room
Providence	Dave Evans (Day)
	John Castro (Day)
	Jack Carey (Night)
Brockton	Hernan Yepez (Day)
	Chris Raymond (Night)
Hopedale	Roger Cox (Day)
	Chris Montalto (Night)
Malden	Chris Radzik (Day)
	Anne Wyman (Night)
North Andover	Dan Marceau (Day)
	Jason Dwyer (Night)
Worcester	John Skrzypczak (Day)
	Jim Kehrer (Night)

Phone	Security Coord	<u>Phone</u>	<u>Logistics Coord</u>	<u>Phone</u>	<u>Finance</u>	<u>IS Coord</u>	<u>Phone</u>	HR Coor
	Anthony Itrich		Greg Berman		Parker Capwell			
			Kevin Mahoney					
	Anthony Itrich		Sean Sullivan		Art Edwards			
_	Anthony Itrich		John Warchol		Parker Capwell			
	Brad Newman		Cynthia DeCambre		Chris Paglia	Michelle Light / Tracy Perkins		See System HR Section
			Grace Walsh					Chief
	Brad Newman		Kim Goslant		Chris Paglia			
			Megan Tipper					
	Brad Newman		Philip Quan		Paula Markarian			

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Attachment 2

The February 8, 2013 Nor'easter
Preparedness, Damage Assessment
and Service Restoration Efforts
Page 6 of 13

REDACTED

February Nor'Easter - New England Regional ICS Staff - Rev 3 (02/09/2013)

Incident Commander	
Kathy Lyford	
Liaison Officer	
Altea Fazzone	
Public Information Officer	
James Gould	
Safety and Health Officer	
Bo Maryyanek	
Environmental Officer	
Peter Harley	
Security Officer	
John Jackson	
Planning Section Chief	
John Gavin	
Ryan Constable	
Logistics Section Chief	
Brian Schuster	
Finance Section Chief	
Christopsher Paglia	
Human Resources Section Chi	ef
Kass Geraghty	

February Nor'Easter - New England Regional ICS Staff - Rev 3 (02/09/2013)

<u>Branch</u>	<u>Branch Director</u>	<u>Phone</u>					
Providence	Mike Hrycin						
280 Melrose St. Providence, RI							
North Kingstown	Ray Rosario						
4145 Qual	4145 Quaker Lane, North Kingstown, RI						
Brockton	Jeff Merritt						
100 East A	shland Street, Brockton	, MA					
Hopedale	Mary Fuller						
245 South	Main Street, Hopedale,	MA					
Malden	Andrew Schneller						
170 1	Nedford St, Malden, MA						
North Andover	CLOSED AT 4PM 2/9/2013						
1101 Turnpike Street, North Andover, MA							
Worcester	CLOSED AT 5PM 2/9/2013						
939 Sou	thbridge St, Worcester, I	MA					

Operations Coord	<u>Shift</u>	<u>Phone</u>				
Gary Bourque	Day					
Paul Sibley	Night					
Wally McDonald	Day					
Ed O' Rourke	Night					
Jay Locke	Day					
Greg Lundhal	Night					
John Adams	Day					
Kevin Peltier	Night					
Paul Brochu	Day					
Joe Lamachia	Night					
CLOSED AT 4PM 2/9/2013						
CLOSED AT 5PM 2/9/2013						

<u>Planning Coord</u>	<u>Shift</u>	Phone				
Gary Gelineau	Day					
Mario Carlino	Night					
Claire Livingston	Day					
Mark Domino	Night					
loe Carey	Day					
loe Henry	Night					
ohn Williams	Day					
Геd Lombardi	Night					
lim Patterson	Day					
Ron Ambrose	Night					
CLOSED AT 4PM 2/9/2013						
CLOSED AT 5P	M 2/9/20)13				

Ops Liaison Coordiator	<u>Phone</u>			
Kevin Rennick				
Paul Stasiuk				
Deepak Vishnu				
Charles Kosinski				
TBA				
CLOSED AT 4PM 2/9/2013				
CLOSED AT 5PM 2/9/2013				

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CLOSED AT 4PM 2/9/2013					
CLOSED AT 5PM 2/9/2013					

afety and Health Coord	<u>Phone</u>	
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CLOSED AT 4PM 2/9/	2013	
CLOSED AT 5PM 2/9/	2013	Ī

<u>ordinator</u>	<u>Phone</u>		Security Coord	<u> </u>
ard			Anthony Itrich	
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th		Ī	Anthony Itrich	
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Auxford-Paiva			Brad Newman	
CLOSED AT 4PM 2	2/9/2013		CLOSED AT 4PN	1 2/9/
CLOSED AT 5PM 2/9/2013			CLOSED AT 5PN	л 2/9/
•	•			

February Nor'Easter - New England Regional ICS Staff - Rev 3 (02/09/2013)

<u>Branch</u>	Storm Room L	<u>eads</u>	
Providence	John Castro (Day)		
	Jason Dwyer (Night)		
North Kingstown	Dave Evans (Day)		
	Jack Carey (Night)		
Brockton	Hernan Yepez (Day)		
	Chris Raymond (Night)		
Hopedale	Roger Cox (Day)		
	Chris Montalto (Night)		
Malden	Chris Radzik (Day)		
	Anne Wyman (Night)		
North Andover	Transferred to Northboro @ 4PM		
Worcester	Transferred to Northbor	o @ 5PM	

Operations Coord Support	<u>Shift</u>	Phone
Parker Capwell	Day	
Bob Pendrake	Day	
John Cerulli	Night	
Bob Ball	Day	
Dave Smith	Day	
Tim Lowkes	Night	

Planning Coord Support	<u>Shift</u>	<u>Phone</u>
Diane Mansi	Day	
Alan Salk	Day	
Mike Grant	Night	
Diane Edwards	Day	
Tim Moore	Night	

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REDACTED

Logistics Coord	Phone	<u>Finance</u>	<u>Phone</u>
Kevin Mahoney		Parker Capwell	
		I	
Greg Berman		Parker Capwell	
Sean Sullivan	_	Art Edwards	
		I.	
John Warchol		Parker Capwell	
		Ī	
Cynthia DeCambre		Chris Paglia	
Grace Walsh			
CLOSED AT 4P	M 2/9/2013	CLOSED AT 4	4PM 2/9/2013
CLOSED AT 5P	M 2/9/2013	CLOSED AT S	5PM 2/9/2013

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REDACTED

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February Nor'Easter - New England Regional ICS Staff - Rev 4 (02/10/2013)

Incident Commander	
Kathy Lyford	
Liaison Officer	
Altea Fazzone	
Public Information Officer	
James Gould	
Safety and Health Officer	
Bo Maryyanek	
Environmental Officer	
Peter Harley	
Security Officer	
John Jackson	
Planning Section Chief	
John Gavin	
Ryan Constable	
Logistics Section Chief	_
Brian Schuster	
Finance Section Chief	
Christopsher Paglia	
Human Resources Section Chief	
Kass Geraghty	

February Nor'Easter - New England Regional ICS Staff - Rev 4 (02/10/2013)

<u>Branch</u>	Branch Director	<u>Phone</u>
Providence	Mike Hrycin	
28	0 Melrose St. Providence	, RI
North Kingstown	Ray Rosario	
4145 C	uaker Lane, North Kingst	own, RI
Brockton	Jeff Merritt	
100 Ea	st Ashland Street, Brockt	on, MA
Hopedale	Mary Fuller	
245 Sc	outh Main Street, Hopeda	ile, MA
Malden	CLOSED AT 2:30	PM 2/10/2013
1	70 Medford St, Malden, N	ЛΑ
North Andover	CLOSED AT 4P	M 2/9/2013
1101 Tu	rnpike Street, North And	over, MA
Worcester	CLOSED AT 5P	M 2/9/2013
939 9	outhbridge St, Worceste	r, MA

and and Count	CL:O	Dhara
perations Coord	<u>Shift</u>	<u>Phone</u>
ary Bourque	Day	
aul Sibley	Night	
/ally McDonald	Day	
d O' Rourke	Night	
ay Locke	Day	
reg Lundhal	Night	
ohn Adams	Day	
evin Peltier	Night	
CLOSED AT 2:30	OPM 2/10/201	13
CLOSED AT 41	PM 2/9/2013	
CLOSED AT 51	PM 2/9/2013	
	•	•

<u>Planning Coord</u>	<u>Shift</u>	Phone
Gary Gelineau	Day	
Mario Carlino	Night	
Claire Livingston	Day	
Mark Domino	Night	
Joe Carey	Day	
Joe Henry	Night	
John Williams	Day	
Ted Lombardi	Night	
CLOSED AT 2:30	PM 2/10/	2013
CLOSED AT 4P	M 2/9/20)13
CLOSED AT 5P	M 2/9/20)13

Ops Liaison Coordiator	<u>Phone</u>	Liaison Coordi
Kevin Rennick		John Isberg
Paul Stasiuk		John Isberg
Deepak Vishnu		Joe Cardinal
Charles Kosinski		Bill Jones
		Bob Russell
CLOSED AT 2:30PM	2/10/2013	CLOSED AT
CLOSED AT 4PM 2	/9/2013	CLOSED
CLOSED AT 5PM 2	/9/2013	CLOSED

		_
iaison Coordiator	<u>Phone</u>	Safety and Health
ohn Isberg		Jen Casey
ohn Isberg		Tim Woycik
oe Cardinal		Steve Hart
ill Jones		Allison Fleming
ob Russell		
CLOSED AT 2:30P	M 2/10/2013	CLOSED /
CLOSED AT 4PN	л 2/9/2013	CLOSE
CLOSED AT 5PN	л 2/9/2013	CLOSE

CLOSED AT 2:30PM 2/10/2013

CLOSED AT 4PM 2/9/2013

CLOSED AT 5PM 2/9/2013

Env. Coordinator	<u>Phone</u>		Security Coord	<u>Phone</u>
Bill Howard			Anthony Itrich	
Bill Howard		h	Anthony Itrich	
		Γ		
Deb Blanch			Anthony Itrich	
		i		
Tim Smith			Anthony Itrich	
CLOSED AT 2:30PM	2/10/2013		CLOSED AT 2:30P	M 2/10/2013
CLOSED AT 4PM 2	2/9/2013		CLOSED AT 4PN	л 2/9/2013
CLOSED AT 5PM 2	2/9/2013		CLOSED AT 5PM	И 2/9/2013

February Nor'Easter - New England Regional ICS Staff - Rev 4 (02/10/2013)

<u>Branch</u>	Storm Roo	m Leads
Providence	John Castro (Day)	
	Jason Dwyer (Night)	
North Kingstown	Dave Evans (Day)	
	Jack Carey (Night)	
	'	
Brockton	Hernan Yepez (Day)	
	Chris Raymond (Night)	
Hopedale	Roger Cox (Day)	
	Chris Montalto (Night)	
Malden	Transferred to Northbor	o @ 2:30PM - 2/10
North Andover	Transferred to Northbor	o @ 4PM - 2/9
Worcester	Transferred to Northbor	o @ 5PM - 2/9

Operations Coord Support	<u>Shift</u>	Phone
Parker Capwell	Day	
Bob Pendrake	Day	
John Cerulli	Night	
Bob Ball	Day	
Dave Smith	Day	
Tim Lowkes	Night	

Planning Coord Support	<u>Shift</u>	<u>Phone</u>
Diane Mansi	Day	
Alan Salk	Day	
Mike Grant	Night	
Diane Edwards	Day	
Tim Moore	Night	

Exhibit 1 National Grid R.I.P.U.C. Docket No. 3628 2013 Service Quality Plan Results Page 119 of 141

REDACTED

Logistics Coord	<u>Phone</u>	<u>Finance</u>	<u>Phone</u>	
Kevin Mahoney		Parker Capwell		
Greg Berman		Parker Capwell		
Sean Sullivan		Art Edwards		
John Warchol		Parker Capwell		
Joint Warchor		raikei Capweii		
CLOSED AT 2:30PM 2/10/2013		CLOSED AT 2:30PM 2/10/2013		
CLOSED AT 4PM 2/9/2013		CLOSED AT 4PM 2/9/2013		
CLOSED AT 5PM	и 2/9/2013	CLOSED AT 5PM 2/9/2013		

Attachment 2 The February 8, 2013 Nor'easter Preparedness, Damage Assessment and Service Restoration Efforts Page 9 of 13

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REDACTED

Attachment 2 The February 8, 2013 Nor'easter Preparedness, Damage Assessment and Service Restoration Efforts Page 10 of 13

February Nor'Easter - New England Regional ICS Staff - Rev 5 (02/11/2013)

Incident Commander	
Kathy Lyford	
Liaison Officer	
Altea Fazzone	
Public Information Officer	
James Gould	
Safety and Health Officer	
Bo Maryyanek	
Environmental Officer	
Peter Harley	
Security Officer	
John Jackson	
Planning Section Chief	
John Gavin	
Ryan Constable	
Logistics Section Chief	
Brian Schuster	
Finance Section Chief	
Christopsher Paglia	
Human Resources Section Chief	
Kass Geraghty	

February Nor'Easter - New England Regional ICS Staff - Rev 5 (02/11/2013)

<u>Branch</u>	<u>Branch Director</u>	Phone
Providence	Mike Hrycin	
28	Melrose St. Providence	, RI
North Kingstown	Ray Rosario	
4145 Q	uaker Lane, North Kings	town, RI
Brockton	Jeff Merritt	
100 Eas	st Ashland Street, Brockt	on, MA
Hopedale	Mary Fuller	
245 So	uth Main Street, Hopeda	ale, MA
Malden	CLOSED AT 2:30	PM 2/10/2013
17	O Medford St, Malden, I	MA
North Andover CLOSED AT 4PM 2/9/2013		
1101 Tui	npike Street, North And	over, MA
Worcester	CLOSED AT 5P	M 2/9/2013
939 S	outhbridge St, Worceste	er, MA

perations Coord	<u>Shift</u>	Phone		
ary Bourque	Day			
aul Sibley	Night			
ally McDonald	Day			
d O' Rourke	Night			
y Locke	Day			
reg Lundhal	Night			
m O'Leary	Day			
evin Peltier	Night			
CLOSED AT 2:30PM 2/10/2013				
CLOSED AT 4PM 2/9/2013				
CLOSED AT 5PM 2/9/2013				

Planning Coord	<u>Shift</u>	<u>Phone</u>		
Gary Gelineau	Day			
Mario Carlino	Night			
Claire Livingston	Day			
Mark Domino	Night			
Joe Carey	Day			
Joe Henry	Night			
John Williams	Day			
Ted Lombardi	Night			
CLOSED AT 2:30PM 2/10/2013				
CLOSED AT 4P	M 2/9/20)13		
CLOSED AT 5P	M 2/9/20)13		

Ops Liaison Coordiator	<u>Phone</u>
Kevin Rennick	
Paul Stasiuk	
Deepak Vishnu	
Charles Kosinski	
CLOSED AT 2:30PM	2/10/2013
CLOSED AT 4PM	2/9/2013
CLOSED AT 5PM	2/9/2013

<u>Liaison Coordiator</u>	Phone	Safety and Healti
John Isberg		Jen Casey
John Isberg		Tim Woycik
Joe Cardinal		Steve Hart
Bill Jones		Allison Fleming
Bob Russell		
CLOSED AT 2:30F	PM 2/10/2013	CLOSED
CLOSED AT 4PI	M 2/9/2013	CLOSE
CLOSED AT 5PI	M 2/9/2013	CLOSE

CLOSED AT 2:30PM 2/10/2013

CLOSED AT 4PM 2/9/2013

CLOSED AT 5PM 2/9/2013

Env. Coordinator	<u>Phone</u>	l	Security Coord	<u>Phone</u>
Bill Howard			Anthony Itrich	
		Ĺ		
Joanne Lupa			Anthony Itrich	
		L		
Deb Blanch			Anthony Itrich	
		Ī		
Tim Smith			Anthony Itrich	
		L		
CLOSED AT 2:30PM	2/10/2013		CLOSED AT 2:30P	M 2/10/2013
CLOSED AT 4PM 2	2/9/2013		CLOSED AT 4PN	1 2/9/2013
CLOSED AT 5PM 2/9/2013			CLOSED AT 5PN	л 2/9/2013

	Security Coord	<u>Phone</u>
	Anthony Itrich	
	Anthony Itrich	
	Anthony Itrich	
ı		
I	Anthony Itrich	
	CLOSED AT 2:30P	M 2/10/2013
	CLOSED AT 4PM 2/9/2013	

February Nor'Easter - New England Regional ICS Staff - Rev 5 (02/11/2013)

<u>Branch</u>	<u>Storm Room Leads</u>		
Providence	John Castro (Day)		
	Jason Dwyer (Night)		
	_		
North Kingstown	Dave Evans (Day)		
	Jack Carey (Night)		
Brockton	Hernan Yepez (Day)		
	Chris Raymond (Night)		
Hopedale	Roger Cox (Day)		
	Chris Montalto (Night)		
Malden	Transferred to Northboro @ 2:30PM - 2/10		
North Andover	Transferred to Northboro @ 4PM - 2/9		
Worcester	Transferred to Northboro @ 5PM - 2/9		

Operations Coord Support	<u>Shift</u>	Phone
Parker Capwell	Day	
Bob Pendrake	Day	
John Cerulli	Night	
Bob Ball	Day	
Dave Smith	Day	
Tim Lowkes	Night	

Planning Coord Support	Shift	Phone
Diane Mansi	Day	
Alan Salk	Day	
Mike Grant	Night	
Diane Edwards	Day	
Tim Moore	Night	

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REDACTED

Logistics Coord	Phone	<u>Finance</u>	Phone
Kevin Mahoney		Parker Capwell	
Greg Berman		Parker Capwell	
Sean Sullivan		Art Edwards	
John Warchol		Parker Capwell	
CLOSED AT 2:30PM 2/10/2013		CLOSED AT 2:30	OPM 2/10/2013
CLOSED AT 4PM 2/9/2013		CLOSED AT 4	PM 2/9/2013
CLOSED AT 5P	M 2/9/2013	CLOSED AT 5	PM 2/9/2013

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February Nor'Easter - New England Regional ICS Staff - Rev 6 (02/12/2013)

Incident Commander
Kathy Lyford
Liaison Officer
Altea Fazzone
Public Information Officer
James Gould
Safety and Health Officer
Bo Maryyanek
Environmental Officer
Peter Harley
Security Officer
John Jackson
Planning Section Chief
John Gavin
Ryan Constable
Logistics Section Chief
Brian Schuster
Finance Section Chief
Christopsher Paglia
Human Resources Section Chief
Kass Geraghty

February Nor'Easter - New England Regional ICS Staff - Rev 6 (02/12/2013)

<u>Branch</u>	<u>Branch Director</u>	<u>Phone</u>		
Providence	Mike Hrycin			
280	Melrose St. Providence	, RI		
North Kingstown	Ray Rosario			
4145 Qı	uaker Lane, North Kingst	own, RI		
Brockton	Jeff Merritt			
100 East Ashland Street, Brockton, MA				
Hopedale	CLOSED AT 7AM 2/12/2013			
245 South Main Street, Hopedale, MA				
Malden	CLOSED AT 2:30 PM 2/10/2013			
170 Medford St, Malden, MA				
North Andover	CLOSED AT 4PM 2/9/2013			
1101 Turnpike Street, North Andover, MA				
Worcester	CLOSED AT 5PM 2/9/2013			
939 Southbridge St, Worcester, MA				

Operations Coord	<u>Shift</u>	<u>Phone</u>		
Gary Bourque	Day			
Paul Sibley	Night			
Wally McDonald	Day			
Ed O' Rourke	Night			
Jay Locke	Day			
Greg Lundhal	Night			
CLOSED AT 7AM 2/12/2013				
CLOSED AT 2:30PM 2/10/2013				
CLOSED AT 4PM 2/9/2013				
CLOSED AT 5PM 2/9/2013				

Plummy Cooru	<u>Shijt</u>	<u>PHONE</u>		
Gary Gelineau	Day			
Mario Carlino	Night			
Claire Livingston	Day			
Mark Domino	Night			
loe Carey	Day			
loe Henry	Night			
CLOSED AT 7AM 2/12/2013				
CLOSED AT 2:30PM 2/10/2013				
CLOSED AT 4P	M 2/9/20	13		
CLOSED AT 5P	M 2/9/20	13		
•	<u> </u>			

ı	Ops Liaison Coordiator	<u>Pnone</u>	
	Kevin Rennick		
Ī			
ļ	Paul Stasiuk		
	Deepak Vishnu		
ļ			
	CLOSED AT 7AM 2/12/2013		
	CLOSED AT 2:30PM 2/10/2013		
	CLOSED AT 4PM 2/9/2013		
	CLOSED AT 5PM 2/9/2013		
-			

<u>Liaison Coordiator</u>	<u>Phone</u>	Safety and Health Coord	<u>Phone</u>	Env. Coordinator	Phone
ohn Isberg		Jen Casey		Bill Howard	
ohn Isberg		Tim Woycik		Joanne Lupa	
oe Cardinal		Steve Hart		Deb Blanch	
CLOSED AT 7AN	1 2/12/2013	CLOSED AT 7AM 2/12	2/2013	CLOSED AT 7AM 2	/12/2013
CLOSED AT 2:30F	M 2/10/2013	CLOSED AT 2:30PM 2/2	CLOSED AT 2:30PM 2/10/2013		2/10/2013
CLOSED AT 4PI	M 2/9/2013	CLOSED AT 4PM 2/9/2013		CLOSED AT 4PM 2	2/9/2013
CLOSED AT 5PI	M 2/9/2013	CLOSED AT 5PM 2/9/2013		CLOSED AT 5PM 2	2/9/2013

	Security Coord	<u>Phone</u>		
	Anthony Itrich			
	Anthony Itrich			
	Anthony Itrich			
	CLOSED AT 7A	M 2/12/2013		
	CLOSED AT 2:30	CLOSED AT 2:30PM 2/10/2013		
	CLOSED AT 4P	M 2/9/2013		
į	CLOSED AT 5P	CLOSED AT 5PM 2/9/2013		

February Nor'Easter - New England Regional ICS Staff - Rev 6 (02/12/2013)

<u>Branch</u>	Storm Roo	<u>m Leads</u>	
Providence	John Castro (Day)		
	Jason Dwyer (Night)		
North Kingstown	Dave Evans (Day)		
	Jack Carey (Night)		
Brockton	Hernan Yepez (Day)		
	Chris Raymond (Night)		
Hopedale	Transferred to Northboro @ 6:30AM - 2/12		
Malden	Transferred to Northboro @ 2:30PM - 2/10		
North Andover	Transferred to Northboro @ 4PM - 2/9		
Worcester	Transferred to Northbor	o @ 5PM - 2/9	

Operations Coord Support	<u>Shift</u>	Phone
Parker Capwell	Day	
Bob Pendrake	Day	
John Cerulli	Night	
Bob Ball	Day	
Dave Smith	Day	
Tim Lowkes	Night	

Planning Coord Support	<u>Shift</u>	<u>Phone</u>
Diane Mansi	Day	
Alan Salk	Day	
Mike Grant	Night	
Diane Edwards	Day	
Tim Moore	Night	

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REDACTED

Logistics Coord	<u>Phone</u>	<u>Finance</u>		Phone
Kevin Mahoney		Parker Capwell		
Greg Berman		Parker Capv	vell	
Sean Sullivan		Art Edwards		
CLOSED AT 7AM 2/12/2013		CLOSE	O AT 7AM	2/12/2013
CLOSED AT 2:30PM 2/10/2013		CLOSED	AT 2:30PI	M 2/10/2013
CLOSED AT 4PM 2/9/2013		CLOSE	D AT 4PN	1 2/9/2013
CLOSED AT 5PM	И 2/9/2013	CLOSED AT 5PM 2/9/2013		

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Attachment 3 February 8, 2013 Nor'easter - Rhode Island Resources

	Peak Crews
Resource Type	Working
Number of Company Line Crews (1)	85
Number of Company Tree Crews (2)	
Number of Company Wire Down Crews (3)	114
Number of Company Damage Appraiser Crews (4)	40
Number of Company Substation Crews (5)	14
Number of Company Transmission Crews (6)	3
Total Company	256
Number of Contractor Line Crews (2)	518
Number of Contractor Tree Crews (2)	301
Number of Contractor Wire Down Crews (3)	30
Number of Contractor Damage Appraiser Crews (4)	76
Number of Contractor Substation Crews (5)	_
Number of Contractor Transmission Crews (6)	7
Total Contractor	932
Number of In-State Mutual Aid Line Crews (2)	-
Number of In-State Mutual Aid Tree Crews (2)	-
Number of In-State Mutual Aid Wire Down Crews (3)	-
Number of In-State Mutual Aid Damage Appraiser Crews (4)	-
Number of In-State Mutual Aid Substation Crews (5)	-
Number of In-State Mutual Aid Transmission Crews (6) Total In-State Mutual Aid	-
Number of Out-of-State Mutual Aid Line Crews (2)	-
Number of Out-of-State Mutual Aid Tree Crews (2)	
Number of Out-of-State Mutual Aid Wire Down Crews (3)	<u>-</u>
Number of Out-of-State Mutual Aid Damage Appraiser Crews (4)	<u>-</u>
Number of Out-of- State Mutual Aid Substation Crews (5)	<u> </u>
Number of Out-of- State Mutual Aid Transmission Crews (6)	_
Total Out-of-State Mutual Aid	-
Peak Number of Crews Working	1,188

Note: All resources are reported as crews

- (1) Typically 2-person crews, but also include single troubleshooters
- (2) Typically 2-person crews, but may also include some 3-person crews
- (3) Wire Appraisers are 1-person crews, Cut and Clear are 2-person crews
- (4) Typically 2-person crews, but may also include some 1-person crews
- (5) Typically 2-person crews
- (6) Typically 6-10 person crews

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Attachment 4
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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Monday, February 11, 2013 6:19 PM

To: Concemi, Nancy Subject: Customer Compliments

This came through via Right Now emails

Not a question....just a big THANK YOU for all the hours of hard work that restored everyone with heat and power. You're all awesome.

Eric Hanlon national**grid**

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Monday, February 11, 2013 5:56 PM

To: Concemi, Nancy Subject: Customer Compliments

This came through via Customer Service emails

Thank you so much. The power is on. I hope it will be ok through the night. Thank you $\,$

Eric Hanlon

nationalgrid

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Monday, February 11, 2013 5:52 PM

To: Concemi, Nancy Subject: Customer Compliments

This came through via the Customer Service inbox

Eric: Power restored. Thank you for the quick response.

Eric Hanlon national**grid**

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Monday, February 11, 2013 4:32 PM

To: Concemi, Nancy Subject: Customer Compliments

This came through via Right Now emails

just want to thank you for the great job getting the power turned back on in North Kingstown

Eric Hanlon national**grid**

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Monday, February 11, 2013 10:27 AM

To: Concemi, Nancy Subject: Customer Compliments

This came through via Right Now emails

A huge compliment and gratitude to everyone involved in restoring power during the recent blizzard in the northeast. Considering the intensity of the storm and number of outages, I think everyone did a tremendous job. Huge appreciation to all

Tiverton, RI

Eric Hanlon national **grid**

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Sunday, February 10, 2013 7:30 PM

To: Concemi, Nancy Subject: Customer Compliments

This came through via Right Now emails

I just want to say a great big thank you to all the empolyees of national grid. I know this has been hellacious for all of you and most people are very impatient. You guys and gals are amazing for taking time away from your families to take care of us... Again just a great big thank you ...bless you all...

Eric Hanlon national**grid**

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Sunday, February 10, 2013 6:47 PM

To: Concemi, Nancy Subject: Customer Compliments

This came through via Right Now emails

To Whom It May Concern,

Thank you for getting the electricity back on in Warwick. I am very grateful and appreciate all the effort you went to during the Blizzard `13 to make this happen. God Bless,

Eric Hanlon

nationalgrid

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Sunday, February 10, 2013 6:29 PM

To: Concemi, Nancy Subject: Customer Compliment

This came through via Right Now emails

I know that many customers take time to complain during the restoration process with the storm. I just wanted to take a moment to compliment you. While my service was interrupted I only had to wait a few hours for it to be restored. The fact that I could barely dig out my car but you had people out working to get my service restored it amazing. Please pass on my thanks to those who had to endure the weather, the long hours and the people at their wits end during this difficult time.

Eric Hanlon national**grid**

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Sunday, February 10, 2013 4:24 PM

To: Concemi, Nancy Subject: Customer Compliments

This came through via Right Now emails

Lost power yesterday 2/8 at about 9:30 PM. Powere restored this evening. Thank you Thank you. Now i have Heat!!!!



Eric Hanlon national**grid**

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Scanlon, Joanne M.

REDACTED

From: Hanlon, Eric

Sent: Sunday, February 10, 2013 3:47 PM

To: Concemi, Nancy Subject: Customer Compliment

This came through via Right Now emails

no category appropriate for my comments-just wanted to say thanks for your hard work in this storm-power back on less than 24 hrs after going out-I know you do the best you can considering that mother nature is in charge-I think you get lots of complaints but not enough compliments

Eric Hanlon national**grid**

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Scanlon, Joanne M.

REDACTED

Hernandez, Sharen L From:

Monday, February 11, 2013 9:46 AM Concemi, Nancy COMPLIMENT! Sent:

To: Subject:

Attachments: Picture (Metafile) Exhibit 1
National Grid
R.I.P.U.C. Docket No. 3628
2013 Service Quality Plan Results



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Scanlon, Joanne M.

REDACTED

From: Jay, Mary

Sent: Monday, February 11, 2013 10:14 AM

To: Concemi, Nancy

Subject: - Customer Compliment

called in to thank everyone for getting her power back on. Cust said that she is in her sixties, lives alone in a rural area and she is not one for emotion but she was crying when lost power. She was afraid, but the power was restored quicker than she thought. It was restored yesterday and she just wanted thank National Grid for all their efforts, from the linemen and crews to the people answer the phones.

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Scanlon, Joanne M.

REDACTED

From: Jay, Mary

Sent: Sunday, February 10, 2013 9:10 AM

To: Concemi, Nancy

- Customer Compliment

Comments: wanted to thank all the men and women who have worked to help get power back on. Cust understands that it takes time to get power back and when people get anxious then tend to get upset and we hear from so many of those people. But in this case, she knows that the line crews are pushed to their limits, taken away from their families and she wanted to find some way to thank them. They did get their electricity on after 28 hours, but she wants us to know there are people who understand and appreciate our efforts. Cust also said they were never at a critical situation, person who took outage call was very courteous and she wishes she could do something for all of the workers.

Thank you.

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02/11/2013 08:05 PM

02/11/2013 08:05 PM

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REDACTED

Reference # 130211-000577

Status Unresolved

Assigned To Northboro Jennifer Morrissey

Product

Rhode Island Electric SLA

Not specified

Queue Northboro CS

Date Created 02/11/2013 08:05 PM

Date Initial Solution Response None

Last Updated 02/13/2013 08:35 AM

Customer SmartSense 0 (on -3 to +3 scale)

Staff SmartSense 0 (on -3 to +3 scale)

Contact Us Email feedback

Thank you

Discussion Thread

Auto-Response

The following answers might help you immediately.

Title: Planned Power Outage

Link: https://nationalgrid-rhodeisland.custhelp.com/app/answers/detail/a_id/205

Title: Planned Power Outage - Supplemental Information

Link: https://nationalgrid-rhodeisland.custhelp.com/app/answers/detail/a_id/213

Title: Planned Power Outage - Life Support Customers

Link: https://nationalgrid-rhodeisland.custhelp.com/app/answers/detail/a_id/211

Title: Planned Power Outage - Cold Weather

Link: https://nationalgrid-rhodeisland.custhelp.com/app/answers/detail/a_id/212

Title: Planned Power Outage Work

Link: https://nationalgrid-rhodeisland.custhelp.com/app/answers/detail/a_id/209

Customer

Good Evening, I just wanted to thank the very hard working men and women that restored power to RI, specifically our neighborhood in North Kingstown as a result of the blizzard. We lost power Friday night because a tree fell on the wires knocking out our entire neighborhood. We assumed power would not be restored until early to mid week since a large tree was causing this mess. We were so relieved and shocked that the tree was cut and power was back on Sunday evening! Having a two year old, it was scary to watch the thermostat drop so quickly. We eventually had to leave the house Saturday night but came back to our cozy home within 24 hours.

Thank you so very much for your hard, hard work. You guys gave us an enjoyable end to our weekend.

Primary Contact

First Name: Last Name: Organization: Login: Contact Type: Email: Email - Alternate #1: Email - Alternate #2: Office Phone: Mobile Phone: Assistant Phone: **Home Phone:** Street Citv State/Province **Postal Code** Country

Additional Information

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Scanlon, Joanne M.

REDACTED

From: Morrissey, Jennifer B.

Sent: Sunday, February 10, 2013 12:28 PM

To: Concemi, Nancy Subject: Compliment accT#

calling to say that the power has been restored and wants to thank us for getting done quickly as wasn't expecting service until tomorrow 2/11.

Thanks

Jen

Gennifer Marrissey
national grid

nationalgrid Sr. Cust Srvc Rep III Northborough 508-357-4691 Ex 54691

Jennifer.Morrissey@us.ngrid.com

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Scanlon, Joanne M.

REDACTED

From:

OConnor, Deborah A. Sunday, February 10, 2013 2:29 PM Sent:

To: Concemi, Nancy Subject: Compliment

Nancy,

Mary just gave me another compliment

wife during restoration. She can be reached, if necessary at

calling to compliment our line crew on their work

Thanks

Deb O