

May 10, 2017

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 9, 2017 Summary Report**

Dear Ms. Massaro:

In accordance with Rhode Island Public Utilities Commission (PUC) Order No. 15360 (August 19, 1997) and paragraph 4(a) of the Joint Proposal and Settlement in Lieu of Comments Submitted by The Narragansett Electric Company¹ and the Division of Public Utilities and Carriers (the Settlement) approved by the PUC in Docket No. 2509, I have enclosed 10 copies of National Grid's summary report on the planning and restoration activities associated with the February 9, 2017 Winter Storm Niko (Winter Storm Niko or the storm), which will likely qualify for inclusion in the Company's Storm Contingency Fund. Paragraph 4(b) of the Settlement requires the Company to file with the PUC 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.

A supplemental report detailing the incremental restoration costs caused by Winter Storm Niko will be submitted to the PUC once the total costs have been accumulated by the Company, and final accounting of storm costs has been completed.

Thank you for your attention to this matter. If you have any questions regarding this filing, please contact me at 401-784-7415.

Very truly yours,



Robert J. Humm

cc: Docket 2509 Service List
Leo Wold, Esq.
Steve Scialabba, Division

¹ The Narragansett Electric Company d/b/a National Grid (referred to herein as National Grid or the Company).

Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

The paper copies of this filing are being hand delivered to the Rhode Island Public Utilities Commission and to the Rhode Island Division of Public Utilities and Carriers.



Robert J. Humm

May 10, 2017
Date

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Docket D-11-94 Review of National Grid's Storm Reports

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National Grid

The Narragansett Electric Company

**Report on
February 9, 2017 Event,
Damage Assessment, and Service
Restoration**

May 10, 2017

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 FEBRUARY 9, 2017 STORM 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 9, 2017 Winter Storm Niko (Winter Storm Niko or the Storm), which began in the Midwest United States and traveled across the country to impact the New England region. For pre-planning purposes, the Company classified the Storm as a Level 4 emergency event (i.e., up to three percent of customers impacted, 750 lines of outage and a one-day restoration effort). The Storm was projected to bring, and did bring, hazard winds, heavy snow, and blizzard conditions that caused damage to the Company's electric infrastructure. The impact and power outages caused by the Storm were slightly more than anticipated in Rhode Island, impacting approximately 32,129 (approximately 20,183 at peak) of the Company's customers. Overall, 6.5 percent of the Company's customers in Rhode Island experienced outages.

The Company began preparing for the Storm on February 8 with its first pre-event Operations storm call. To prepare for the Storm, the Company opened a storm room in Providence the morning of February 9. 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. As part of its preparation efforts, the Company also contracted contractors from outside the Company's service territory to secure resources to help with restoration and contracted with other utilities to request additional resources. Outages started on Thursday, February 9 at approximately 11:00 a.m. Using approximately 86 line crews, 49 tree crews, and 94 wires-down crews, comprised of the Company's own crews and external resources, the Company restored power to over 70 percent of its Rhode Island customers by approximately 5:00 p.m. on February 9. By 7:15 p.m. that night, over 90 percent of the total impacted customers were restored, with the final customer restored shortly after 12:00 a.m. on Friday, February 10.

The Company is grateful for the support of customers, employees, state and local officials, and public safety officials, who experienced the effects of Winter Storm Niko and were an integral part of the Company's restoration efforts.

II. INCIDENT ANTICIPATION

A. Determination of Incident Classification

On Thursday, February 9, 2017 at 7:00 a.m., the Company established an Emergency Operations Center (EOC) in Providence, Rhode Island. As noted below, the Company named a New England Regional Incident Commander, who was primarily responsible for establishing the projected and actual Incident Classification level for the Storm.

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

- 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 the pace of restoration work crews.

Through the system and operations storm conference calls, the New England Regional Incident Commander communicated the incident classification to Company leadership and organizations that the Company expected to engage in restoration or support activities. A Branch Director in charge of Rhode Island restoration was located in the Providence EOC.

B. Activation of Incident Command System (ICS)

On February 8, 2017, prior to activation of the ICS, several operational calls were held among operations management personnel to discuss the planning efforts for the possibility of a severe winter storm forecasted to bring hazardous conditions to New England. As a result of these calls, the Company decided to open a storm room in Providence at approximately 7:00 a.m. on Thursday, February 9 to support Rhode Island restoration.

In accordance with the ERP and ICS, National Grid activated the New England Regional Incident Commander the afternoon of February 8. The New England Regional Incident Commander then activated the Rhode Island Branch Director and several other Branch Directors in Massachusetts. Thereafter, all the Incident Commanders activated a number of positions at their discretion, considering the level of response likely required for the event in their respective areas. Throughout the restoration effort, the Company activated additional ICS positions as operating conditions warranted.

C. Determination of Crew Needs and Pre-Staging

Given the potential magnitude of Winter Storm Niko and severity of hazard winds, the Company secured crews in advance from its alliance vendors and other outside contractors to support restoration efforts for all of New England as part of its regional preparation for the Storm, consistent with its ERP. The Company had a contingent of internal Rhode Island distribution line crews working overnight on Thursday, February 9, 2017 and into the morning of Friday, February 10. Approximately 42 internal distribution line crews and 16 troubleshooters were available for restoration on February 9, and the Company secured a total of 44 external

distribution line crews, 20 of which were pre-deployed to Rhode Island before the Storm commenced. Later in the event, all 44 external distribution line crews deployed to Rhode Island. The Company also pre-deployed 36 external tree crews to Rhode Island before the Storm commenced. At the peak of the restoration effort, the number of tree crews in Rhode Island increased to 49. Additionally, the Company activated 94 wires-down personnel working in Rhode Island to support priority 911 and customer wire-down calls throughout the event. Finally, the Company secured two internal and one external transmission line crews to support the Rhode Island area.

III. THE STORM AND ITS IMPACT

A. Forecast

On Wednesday, February 8, 2017, the weather forecast called for a strong winter system to move across New England on Thursday continuing into Friday. This system was expected to bring hazard level snow and gusty winds to the region, especially across Rhode Island. Throughout the day on February 8 and into the morning of February 9, the forecasted snow impact for Rhode Island increased from 5-8 inches to 10-16 inches. The forecasted winds for coastal Rhode Island areas also increased to sustained winds of 32 mph, with peak gusts up to 50 mph the afternoon of February 9. Temperatures were forecasted in the single digits the night of February 9 and into the morning of February 10. Another system was forecasted to move into the region on Sunday, February 11 and continue through the day on Monday, February 12, bringing a mix of snow, sleet, rain, and possible freezing rain.

B. Impact

Winter Storm Niko's rapidly-intensifying low pressure system raced from the Delmarva Peninsula northeast into the Atlantic Ocean, well off the coast of Long Island and Cape Cod, but close enough to significantly affect the Northeast. The Storm brought heavy snow, blizzard conditions, and high winds to the area. Rhode Island was particularly affected, with approximately 12 inches of snow in the Providence area and upwards of 14 inches in northern parts of the state. A number of weather stations reported thundersnow, as well as wind gusts of greater than 50 mph.

The Storm impacted a total of approximately 32,129 customers in the Company's service territory in Rhode Island, with approximately 20,183 customers at its peak, which occurred on Thursday, February 9, 2017 at approximately 2:00 p.m. The Company restored power to all customers by shortly after 12:00 a.m. on Friday, February 10, 2017.

The Company experienced interruptions in 31 of the 38 communities it serves in Rhode Island, with interruptions to a total of 27 distribution feeders. At approximately 1:50 p.m. on Thursday, February 9, the L14 transmission line that supplies the Dexter Street substation locked out, impacting 5,588 customers, all in the town of Portsmouth. The Company restored the L14 transmission line at 3:45 p.m. Figure 1 below shows the number of customers interrupted and restored during the duration of the Storm.

Figure 1

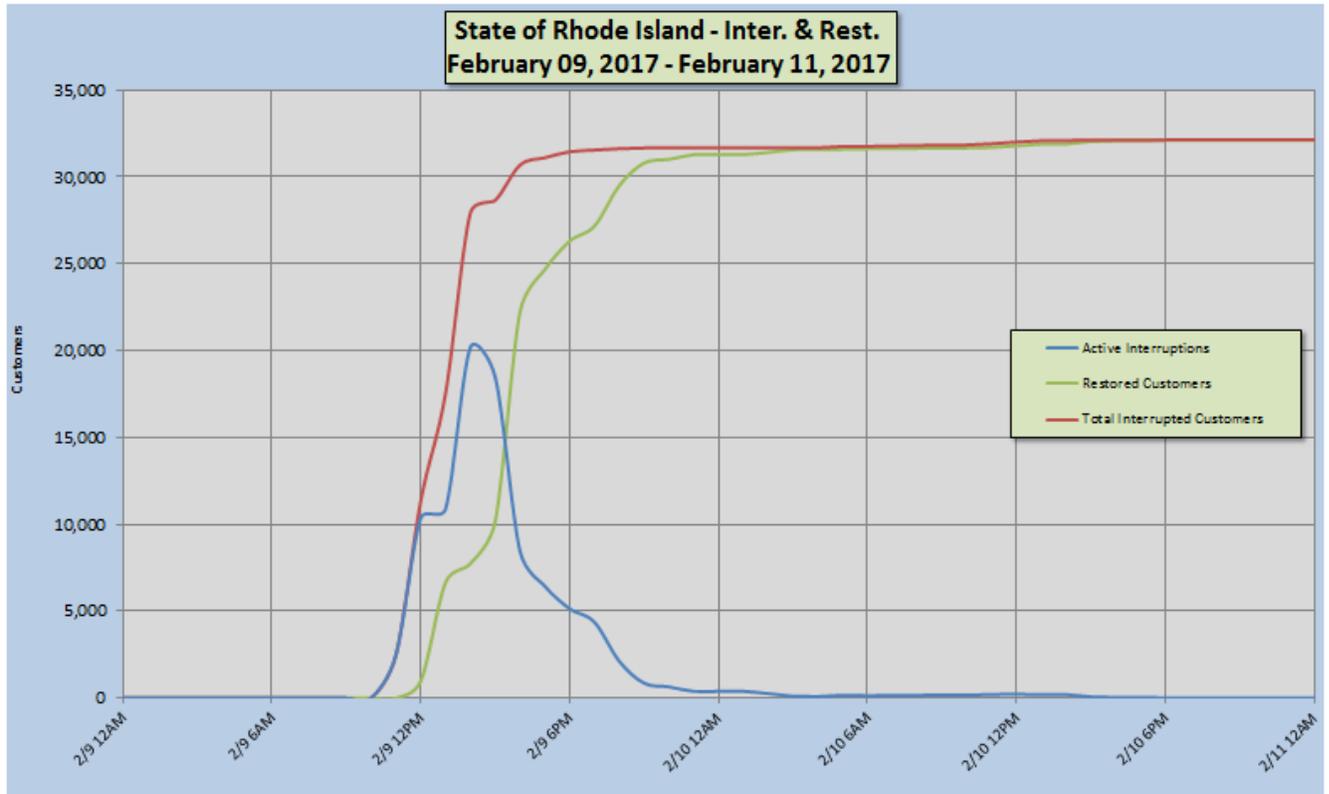


Figure 2 below shows all municipalities that experienced interruptions during the Storm.

Figure 2

Town Name	Customers Interrupted ¹	Customers Served	Percent of Total
PORTSMOUTH	7,803	9,195	84.86%
NORTH KINGSTOWN	2,467	13,363	18.46%
PAWTUCKET	2,223	33,433	6.65%
SOUTH KINGSTOWN	2,176	14,677	14.83%
CRANSTON	2,065	31,312	6.59%
EXETER	1,951	3,005	64.93%
WEST GREENWICH	1,918	2,585	74.20%
PROVIDENCE	1,477	71,832	2.06%
WARWICK	1,393	40,321	3.45%

¹ This value can include multiple outages experienced by the same customer.

Town Name	Customers Interrupted	Customers Served	Percent of Total
COVENTRY	1,308	13,722	9.53%
EAST GREENWICH	1,204	6,096	19.75%
NORTH PROVIDENCE	1,016	16,095	6.31%
CHARLESTOWN	989	5,697	17.36%
RICHMOND	870	3,400	25.59%
SCITUATE	868	4,520	19.20%
LINCOLN	836	10,142	8.24%
NARRAGANSETT	467	10,523	4.44%
WEST WARWICK	335	13,532	2.48%
JOHNSTON	325	13,658	2.38%
MIDDLETOWN	246	8,276	2.97%
EAST PROVIDENCE	241	22,031	1.09%
HOPKINTON	154	3,925	3.92%
WESTERLY	51	14,408	0.35%
LITTLE COMPTON	32	2,564	1.25%
NEWPORT	32	14,973	0.21%
BARRINGTON	22	6,861	0.32%
FOSTER	22	2,027	1.09%
SMITHFIELD	2	8,755	0.02%
CUMBERLAND	1	15,210	0.01%
JAMESTOWN	1	3,308	0.03%
TIVERTON	1	8,242	0.01%

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

IV. 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 customer restoration that maximized restoration when lines were energized. The Company gave priority and consideration to critical facilities and concentrated its efforts to restore service to its life support customers as quickly as conditions warranted, also as set forth in the ERP.

B. Restoration Coordination

Outages were dispatched out of the Providence storm room beginning on Thursday, February 9, 2017 at approximately 11:00 a.m. through the end of the Storm. The Company activated police and fire coordinators for the event. These employees reported to the storm room leads and were responsible for communicating the estimated times for restoration on all police and fire calls, with a standby condition noted.

In preparation for the Storm, the Company mobilized the Providence wires-down room on February 9 at 7:00 a.m., with approximately 94 field-personnel available (including wires-down appraisers and cut and clear restoration crews) and 15 office-based employees. The Company monitored activity throughout the day and, based on the high activity, mobilized additional wires-down support resources from Massachusetts into Rhode Island, which allowed the Company to stay ahead of incoming priority 911 and customer-reported wire-down calls.

C. Personnel Resources

Given the potential magnitude of Winter Storm Niko, the Company secured supplemental contractor crews and strategically placed them throughout New England. This deployment plan allowed for the greatest degree of flexibility to move the resources to where they were needed, especially if the storm track or intensity changed. Pre-staging crews and equipment in key locations throughout the region enabled the Company to restore service to customers as quickly and safely as possible.

At peak, the Company used approximately 296 field crews² to restore power to customers, including approximately 94 external crews and 202 internal crews. This peak number of external and internal crews includes transmission and distribution line, vegetation management, wires-down, substation, and underground personnel.

D. Safe Work Practices

Safety is always at the forefront of Company operations, including and especially during activities associated with storm restoration. Both the System and Regional ICS structure designate a lead position for a Safety, Health, and Environment Officer. Safety messages are delivered on all calls to heighten awareness during preparation and restoration.

As with any storm, for Winter Storm Niko National Grid assembled a safety team with area responsibilities, established the reporting hierarchy, and prepared and communicated organization charts. The safety team prepared safety notices and delivered them Company-wide to all employees through corporate communications. Safety personnel were deployed to assist in specific geographic areas and delivered on-site safety orientations to National Grid workers and contractors prior to the start of each day. During Winter Storm Niko, safety personnel visited work sites to advise Company personnel and contractors of safety issues and practices. In

² Crews typically include two or three people, although there are some one-person crews in damage assessment, wires-down (appraisers), distribution line (troubleshooters), and substation personnel. The transmission crews typically include 6-10 people.

addition, prior to the start of each new job, the work was reviewed by assigned crews, with a focus on safe working conditions for the specific job. As a result, the Company experienced no injuries during the Storm.

V. COMMUNICATIONS DURING AND AFTER THE EVENT

A. Communication Regarding Estimated Times for Restoration (ETRs)

The Company posted ETRs on its website during Winter Storm Niko using Outage Central, which provided real time ETR updates approximately every 15 minutes.

As ETRs changed, the updated restoration information was entered into the system and reflected on Outage Central. Throughout the event, the ETRs for each outage were revised to show the most accurate restoration information.

B. Intra-Company

New England Operations pre-event calls were held at least once daily beginning on Wednesday, February 8, 2017 at approximately 2:00 p.m. until the Storm occurred. New England Operations Restoration calls were held throughout the Storm beginning on Thursday, February 9 at approximately 9:00 a.m. The final New England Operations Restoration call was held on Friday, February 10 at approximately 9:00 a.m.

Communications were issued to field crews with both restoration and safety information.

C. Public Officials

1. Governor's Office

The Company's Jurisdictional President communicated with the Governor's office throughout Winter Storm Niko. In addition, the Governor visited the Providence EOC during the Storm to see the Company's response operations in action.

2. Rhode Island Regulators and Rhode Island Emergency Management Agency (RIEMA)

The Company's Director of Regulatory Affairs reached out to the Division of Public Utilities and Carriers regarding the Company's storm preparation. Additionally, the Company activated its RIEMA liaisons, who were staffed at RIEMA's Emergency Operation Center beginning on Thursday, February 9, 2017 at 6:00 a.m. The Company also participated in communications with Emergency Support personnel via the EOC website at RIEMA.

3. Municipalities

The Company opened a municipal room in Providence on Thursday, February 9, 2017 at 7:00 a.m. The municipal room was opened to effectively manage and communicate with any

potentially impacted communities in Rhode Island. The municipal room 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 municipal room was deactivated on Friday, February 10 at 7:00 a.m.

The Company's community liaisons were put on standby for this Storm, but the event did not result in the need to activate them. The Rhode Island Customer & Community team was able to manage the municipal liaison work and community responsibilities for this Storm event.

D. Customers

On Wednesday, February 8, 2017 at approximately 5:00 p.m., an outbound call was made to all life-support customers advising them of the upcoming weather and notifying them regarding possible outages. The Company's Call Center secured additional staffing to respond to incoming life-support calls for those affected by outages. The Company continued to make proactive calls to its life-support customers until all power was restored. Ultimately, no life-support customers were impacted by outages caused by the Storm.

E. Media

The Public Information Officer and its support staff were activated for the event and participated in all the planning and restoration briefing calls held by Operations. The Company distributed a Storm-related news release on Thursday, February 9, 2017 to all Rhode Island news media. The Company used both traditional and social media channels to distribute the news release, as well as additional Storm, restoration, and safety-related information. The Rhode Island home page on the National Grid website was updated to prominently feature the Outage Central function and provide weather alert information. The Company also responded to multiple media requests, including interviews during the day on February 9. Additionally, feedback and comments from media outlets and social media were received and regularly monitored.

VI. CONCLUSION

The Company understands the impact that electrical outages have on its customers, and was fully prepared to respond, having secured the necessary crews and other outside contractors to aid in the restoration effort of Winter Storm Niko. Through use of the Company's own distribution line resources, contractor distribution and transmission line crews, and contractor tree crews, the Company restored service to its customers in the wake of the Storm in a safe and expeditious manner.

The Company is proud of all the work that was accomplished during Winter Storm Niko, and is grateful for the support of customers, employees, state and local officials, and public safety officials, who experienced the effects of this Storm and were an integral part of the Company's restoration efforts.