

February 28, 2022

VIA ELECTRONIC MAIL

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

**RE: Docket 2509 – Storm Contingency Fund
November 12, 2021 Summary Report**

Dear Ms. Massaro:

Pursuant to 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”), which the PUC approved in Docket No. 2509, I have enclosed one original and eight copies of National Grid’s summary report on the planning and restoration activities associated with the November 12, 2021 Nor’easter event (“November 12, 2021” Storm the “Storm”), which likely will 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 that includes a description of the Storm and a summary of the extent of the damage to the Company’s system, including the number and length of outages.

The Company will file a supplemental report detailing the incremental restoration costs resulting from this Storm once the Company accumulates the total costs and completes a final accounting of storm costs.

Thank you for your attention to this filing. If you have any questions, please contact me at 401-784-7263.

Very truly yours,



Andrew S. Maracaccio

Enclosure

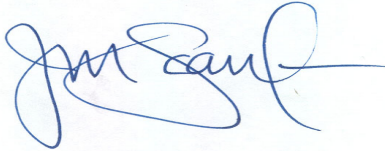
cc: Docket 2509 Service List
Docket D-11-94 Service List
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¹ The Narragansett Electric Company d/b/a National Grid (National Grid or Company).

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.



Joanne M. Scanlon

February 28, 2022
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
November 12, 2021 Storm,
Damage Assessment and
Service Restoration**

February 28, 2022

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 NOVEMBER 12, 2021 STORM DAMAGE ASSESSMENT AND SERVICE
RESTORATION EFFORTS**

I. EXECUTIVE SUMMARY

The Narragansett Electric Company d/b/a National Grid (the “Company”) presents the following report on the planning and restoration activities associated with the November 12, 2021 storm (or the “Storm”), which impacted Rhode Island and other states in the northeast. For pre-planning purposes, the Company classified the Storm as a National Grid Type 5 emergency event for Rhode Island, meaning that the Company estimated that restoration activities generally would be accomplished within a 4-hour period and the event typically would result in up to 2 percent of customers interrupted at peak. The Storm was projected to bring a mixture of strong sustained winds and hazardous gusts, widespread rainfall, and isolated embedded thunderstorms, which potentially could cause damage to the Company’s electric infrastructure. The Storm interrupted power to 15,522 (approximately 11,268 at peak) of the Company’s customers. Overall, 2.25% percent of the Company’s customers in Rhode Island experienced outages at peak, with 24 of the 38 of communities served in Rhode Island impacted.

The Company began monitoring the Storm on the morning of Wednesday, November 10, 2021, as initial weather forecasts identified a newly forming system that was expected to impact the northeast. Throughout the week the Company continued to review the weather forecasts and prepare for the possibility that the Storm would impact the Company’s electric distribution system in Rhode Island. As part of its response to the Storm, the Company opened the Storm Room in Providence at approximately 3:30 p.m. on Friday afternoon, November 12, 2021.

The Company followed its Emergency Response Plan 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 utilized contractors from outside the Company’s service territory to help with restoration. Using its own crews and contractor resources, the Company restored power to 100 percent of its customers impacted in approximately 44.5 hours from the time of the first customer outage. From the time of peak customers impacted, the Company restored 95 percent of the outages in 26.5 hours. Power was restored to the final customer impacted by the Storm on Sunday, November 14, 2021 at approximately 9:23 p.m.

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

II. INCIDENT ANTICIPATION

A. Determination of Incident Classification

As set forth in the Company’s Emergency Response Plan, factors considered in initially establishing or revising the expected incident classification level included the following:

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

The New England Incident Commander is primarily responsible for establishing the projected and actual incident classification level for the Storm. See Table 1 below for Incident Classification Actions.

Table 1. Incident Classification Actions

<u>Action Performed</u>	<u>Date and Time</u>
New England Incident Commander Named	November 10, 2021; approx. 3:00 p.m.
Initial Event Classification Type – 5	November 10, 2021; approx. 3:00 p.m.

B. Activation of Incident Command System

The Company utilizes the Incident Command System (“ICS”), a component of the National Incident Management System, which is a comprehensive national approach to incident management applicable at all levels of the Company’s Emergency Response Organization (“ERO”) and addresses the operation of Company Emergency Operation Centers (“EOCs”). The ERO required to implement the emergency procedures is activated employing a flexible and standardized management structure. Upon declaration of an emergency, the required EOCs are staffed accordingly. Briefings are conducted with the ERO at the System, State, and Branch Level to maintain situational awareness and relay the specifics of the emergency. See Table 2 below for the Storm ICS Actions.

Table 2. ICS Actions

<u>Actions Performed</u>	<u>Date and Time</u>
Branch Storm Room opened in Providence for Capital district	November 12, 2021; approx. 4:00 p.m.

C. Determination of Crew Needs and Pre-STAGING

Given the potential magnitude of the Storm and forecast of hazardous winds, the Company secured crews in advance from its contractors of choice and other outside contractors to support restoration efforts for all New England as part of its regional preparation for the Storm, consistent with its Emergency Response Plan.

See Appendix B for a daily accounting of resource staffing levels from pre-event through complete restoration. Appendix B indicates the number, type, and location of planned resources (in accordance with the Emergency Response Plan designated Event Type), and the number, type, and location of actual resources secured. Appendix B also specifies whether the resources are internal, external contractors, or resources acquired through a mutual assistance agreement.

III. THE STORM AND ITS IMPACT

A. Forecast

On November 10, 2021, the threat of a strong cold front was expected to bring widespread rain, thunderstorms, and potentially hazardous wind gusts. Peak gusts of up to 40 mph were listed for the Rhode Island and eastern Massachusetts. Thunderstorm activity and widespread rainfall was also expected to impact the region.

By November 11, confidence for strong wind gusts had increased, with peak gusts of 45 mph for Rhode Island, along with thunderstorms arriving later in the day on Friday, November 12, 2021 as the storm system strengthens. On the morning of November 12, 2021, the forecast remained consistent with previous reports.

B. Impact

The Storm was a moderate weather event that resulted in significant damage to the Company’s electrical system. The Storm brought rain and strong wind gusts to the Company’s service territory. The Storm also brought three tornadoes that touched down in Rhode Island (first recorded tornadoes in November in Rhode Island since at least 1950, according to NWS Boston, which services Rhode Island) demonstrating the uniqueness and intensity of the front. Peak wind gusts were generally in the 45-50 mph range, with Conimicut Point experiencing a peak gust of 59 mph. The Town of Westerly was affected most heavily with approximately 72 percent of their customers impacted by the event. See Table 3 below for the Storm impact.

Table 3. Storm Impact

Total Customers Impacted	15,522
Peak Customers Impacted	11,268
Date and Time of Peak	November 13, 2021; 5:48 p.m.
Date and Time Final Customer Was Restored	November 14, 2021; 9:23 p.m.
Number of Municipalities That Experienced Interruptions	24
Number of Distribution Feeders That Experienced Interruptions	33

Figure 1 below shows the number of customers interrupted and restored, by hour, for the period of November 13-15, 2021.

Figure 1

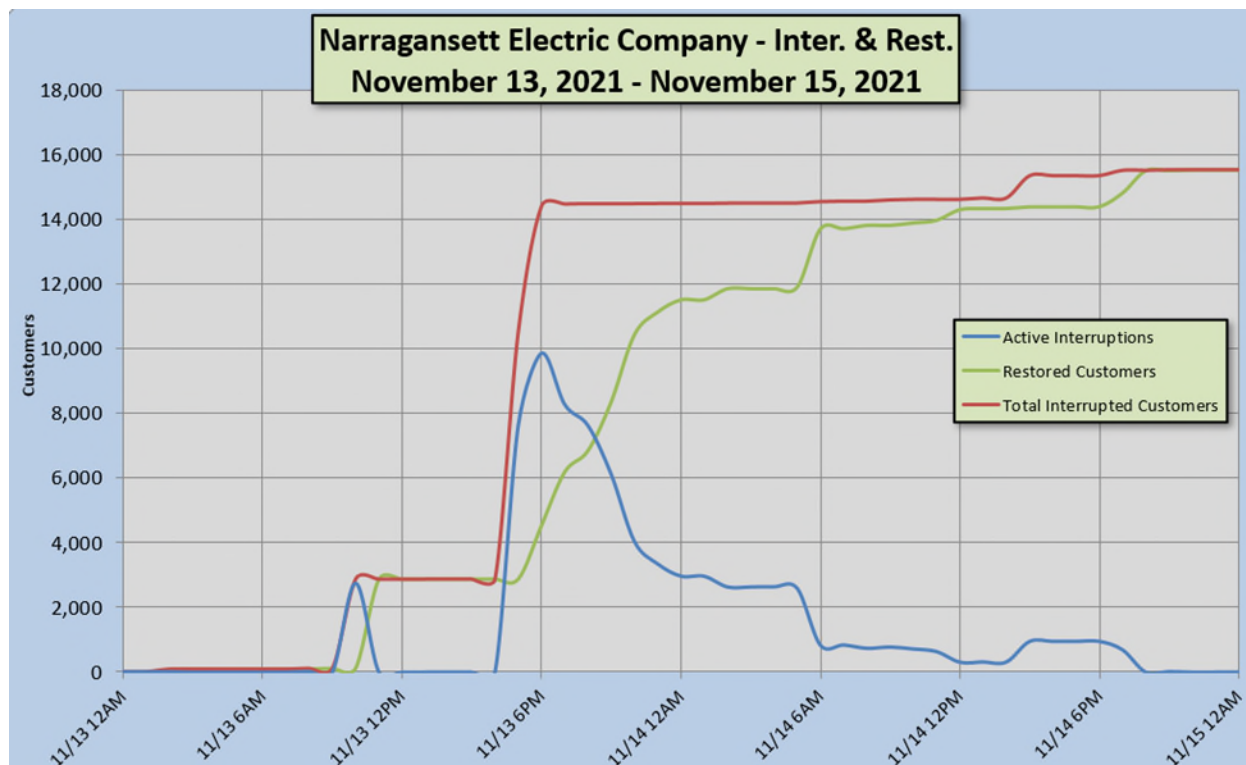


Figure 2 below shows all municipalities that experienced interruptions during the Storm.

Figure 2

Municipality Name	Customers Served	Total Customers Interrupted	Percent of Total
BARRINGTON	6,900	1	0.01%
BRISTOL	10,433	1	0.01%
BURRILLVILLE	2,646	59	2.23%
CHARLESTOWN	5,858	5	0.09%
COVENTRY	14,375	172	1.20%
CRANSTON	31,749	115	0.36%
EAST GREENWICH	6,286	16	0.25%
EXETER	3,075	610	19.84%
FOSTER	2,055	352	17.13%
GLOCESTER	4,723	2	0.04%
HOPKINTON	3,996	60	1.50%
LITTLE COMPTON	2,607	29	1.11%
NARRAGANSETT	10,621	-	0.00%
NORTH KINGSTOWN	13,910	2,688	19.32%
NORTH SMITHFIELD	5,869	1	0.02%
RICHMOND	3,651	3	0.08%
SCITUATE	4,626	48	1.04%
SMITHFIELD	9,079	14	0.15%
SOUTH KINGSTOWN	15,011	25	0.17%
TIVERTON	8,324	38	0.46%
WARWICK	40,438	781	1.93%
WEST GREENWICH	2,830	43	1.52%
WEST WARWICK	14,500	10	0.07%
WESTERLY	14,537	10,344	71.16%

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 its Emergency Response Plan, 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 efforts to restore service to any life support customers the Company was aware of who were impacted by the Storm as quickly as conditions warranted.

See Appendix C for a timeline of the storm progression, including the hour and date that constitutes the start of restoration and the hour and date that constitutes complete restoration. Hourly chronological restoration assessment in this appendix includes number of customers out (in executable format) for the Company's Capital and Coastal regions, the total system, and each feeder affected.

See Appendix D for a summary of number of customer outages at peak and customer outage minutes, by cause, for the Company's Capital and Coastal regions.

See Appendix E for a specific list of all outages, in executable format, that includes detailed information for each outage. Also included in Appendix E is a listing of all outages caused by tree conditions as well as data regarding asset replacements for this event.

B. Restoration Coordination

The Company dispatched crews to respond to outages from the Capital Branch Storm Rooms in Providence as soon as they opened (see Table 2 above) through the end of the Storm. Consistent with the Emergency Response Plan, the Company activated Police and Fire Coordinators for the Storm. These employees reported to the Storm Room Leads and were responsible for communicating the estimated times of arrival on all police and fire calls, with a standby condition noted.

The Company did not deploy Task Force teams for this event.

C. Personnel Resources

The Company secured a total of 287 internal and external field crews¹ to restore power to customers in Rhode Island, consisting of approximately 71 external crews and 216 internal crews. The internal and external field crew numbers included transmission and distribution overhead line, forestry, substation, underground, wires down, and damage assessment personnel.

See Appendix B for a daily accounting of resource staffing levels from pre-storm through complete restoration.

The State Incident Commander for National Grid's Rhode Island and Massachusetts electric distribution operating companies did not request mutual assistance from companies in the North Atlantic Mutual Assistance Group ("NAMAG") to support restoration for this event.

D. Safe Work Practices

Safety is always at the forefront of Company operations, including and especially during activities associated with storm restoration. For each storm event, the System and Regional Incident Command System structures designate a lead position for a Safety, Health, and

¹ Crews typically include two or three people, although there may be some one-person crews in damage assessment, wires down, distribution line (troubleshooters), and substation personnel. Transmission crews typically include 6-10 resources.

Environment Officer. Safety messages are delivered on all calls to heighten awareness during preparation and restoration.

As with any storm, the Company 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 to all Company employees through corporate communications. Safety personnel were deployed to assist in specific geographic areas and delivered on-site safety orientations to Company workers and contractors prior to the start of each day. During the Storm, safety personnel visited work sites to advise Company personnel and contractors of safety issues and best practices. In 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. These safety efforts helped the Company experience no injuries during the Storm. The Company also notes that planning and response were performed taking into account COVID-19 safety protocols.

V. COMMUNICATIONS DURING AND AFTER THE EVENT

A. Communication Regarding Estimated Times of Restoration

The Company posted Estimated Times of Restoration (“ETRs”) on its website during the Storm using Outage Central, which provided real time ETR updates approximately every 15 minutes.

As crews were assigned and reported ETR updates based on their actual findings in the field, the Company uploaded the updated ETRs into Outage Central. The Company continued to update ETRs throughout the restoration process as information became available to the Company.

B. Intra-Company

The Company began preparing for the Storm on Wednesday, November 10, closely monitoring weather forecasts as the storm approached the northeast region.

C. Public Officials

1. Governor’s Office

During the Storm, the Company’s Jurisdictional President communicated with the Governor’s office. Additionally, the Company’s Director of Government Relations communicated with Rhode Island’s legislative leadership leading up to and during the Storm.

2. Rhode Island Public Utilities Commission (“PUC”), Division of Public Utilities and Carriers (“Division”), Office of Energy Resources (“OER”), and Rhode Island Emergency Management Agency (“RIEMA”)

The Company’s Regulatory Liaison contacted the PUC, the Division, the Governor’s office, and OER to provide updates throughout the Storm. See Table 4 below for a listing of updates along with a brief summary of the update provided.

Table 4. Updates to the Division and OER

Date and Time of Update	Summary of Update Content
November 10, 2021; approx. 8:27 a.m.	Initial notification; weather forecast; allocation of needed resources
November 12, 2021; approx. 3:31 p.m.	Weather forecast; update on outages currently experienced, opening of Providence Storm Room, update on incremental crews brought in to support the response
November 13, 2021; approx. 10:37 a.m.	Weather forecast; update on outages currently experienced; communities most impacted; monitoring another weather system; Storm Room status
November 13, 2021; approx. 5:57 p.m.	Weather forecast; update on outages currently experienced; communities most impacted; monitoring another weather system; Storm Room status

During the event, the Company’s Jurisdictional President provided updates to RIEMA regarding the Company’s storm preparations and restoration efforts. The Company also utilized its RIEMA Liaison to post outage number updates virtually on RIEMA’s WebEOC and answer questions throughout the event.

3. Municipalities

Based on the impact from this event, the Company opened a virtual Municipal Room on November 12, at 4:00 p.m. The Company utilized its Area Community Liaison Coordinators to work with each Rhode Island city or town’s emergency, Department of Public Works, and/or public officials as a dedicated liaison. The Company’s Area Community Liaison Coordinators served as full-time resources supporting impacted communities and enabled direct communications back into the Company’s public information coordinators and Branch operations personnel.

D. Customers

The Company communicated with customers during the Storm through its Customer Contact Center, email, website, and social media. The Company’s Customer Contact Center secured additional staffing to respond to incoming life-support calls for those affected by outages, as well as additional staff to support the high call volume.

See Table 5 below for a detailed listing of each method of communication utilized throughout the Storm.

Table 5. Communication Details

<u>Method of Communication</u>	<u>Purpose of Interaction</u>	<u>Level of Interaction</u>
<u>Report Outage/Outage Follow-up</u>		
Number of Customer Calls Received by Customer Service Rep	Customer reports outage or issue	791
Number of Customer Calls Received by Interactive Voice Response (IVR)	Customer reports outage or issue	271
Number of Customer Calls Received by 21 st Century	Customer reports outage or issue	972
Number of Outbound Calls to Life Support Customers, Type 3 Event or greater	Company notification and follow-up with Life Support Customers impacted by an outage	N/A
<u>Automated Outage Updates</u>		
Number of Inbound and Outbound Text Messages	Outage notification, update, or update request from customer	53,714
Number of emails sent	Outage notification, update, or update request from customer	63,505
Number of outbound calls made	Outage notification, update, or update request from customer	234
<u>Web and Social Media</u>		
Number of customer hits on Company website during preparation for, and response to, the event	Customers seeking information	33,923
Number of Facebook posts	Company preparation for the event, safety information, restoration updates	4
Number of tweets/re-tweets posted on Twitter	Company preparation for the event, safety information, restoration updates	10

E. Media

The Company activated its Public Information Officer (“PIO”), along with additional PIO support staff for the Storm. The Company engaged both traditional and social media channels to distribute Storm and safety-related information. The Company’s Strategic Communications Department received two media requests for information related to the Storm in Rhode Island, and no press releases was issued. Feedback and comments from media outlets and social media were received and monitored regularly, and overall sentiment was generally neutral.

VI. TECHNOLOGY ISSUES

There were no technology issues experienced during this event that impacted restoration or communications.

VII. CONCLUSION

The Storm impacted the Company's electrical system, resulting in power outages to 15,522 of the Company's customers. Damage was caused primarily by falling trees and limbs coming into contact with the Company's poles and wires. The Company followed its Emergency Response Plan and was fully prepared to respond to the Storm, having secured all necessary resources and outside contractors to aid in the restoration effort required for the forecast predicted, and maintained communications with stakeholders through a variety of channels throughout the Storm.

The Company utilized its own distribution line resources and transmission line crews, contractor distribution line crews, and contractor tree crews to restore power to its customers. Power was restored to 95 percent of customers impacted in 26.5 hours from the time of peak impact. The Company restored power to 100 percent of its customers impacted in approximately 44.5 hours from the time of the first customer impacted, and in just over 27.5 hours from the time of peak impact. Power was restored to the final customer impacted by the Storm on Sunday, November 14, 2021 at approximately 9:23 p.m.

The Company understands the impact that electrical outages have on its customers. The Company is proud of the restoration work that it accomplished during the Storm and is grateful for the support of customers, employees, state and local officials, and public safety officials, who experienced the effects of the Storm and were an integral part of the Company's restoration efforts.

Appendix B

Please see the Excel version of Appendix B.

Appendix C

Please see the Excel version of Appendix C.

Appendix D

Please see the Excel version of Appendix D.

Appendix E

Please see the Excel version of Appendix E.