

June 8, 2021

VIA ELECTRONIC MAIL

Luly E. Massaro, Division Clerk
Rhode Island Division of Public Utilities and Carriers
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket D-11-94 - Review of Preparedness and Restoration Efforts by the State's Electric Utility Companies Related to Tropical Storm Irene February 7, 2021 Storm Summary Report

Dear Ms. Massaro:

In accordance with Order No. 20814 (November 20, 2012) in Docket D-11-94, I have enclosed an electronic version¹ of National Grid's² summary report on the planning and restoration activities associated with the February 7, 2021 storm event. Order No. 20814 directs National Grid to file a final written report with the Division within 90 days following major storm events. The Company is providing Appendices B through E to the storm summary report in Excel format.

The February 7, 2021 storm event likely will qualify for inclusion in the Company's Storm Contingency Fund. Accordingly, the Company is filing this storm summary report simultaneously with the Rhode Island Public Utilities Commission in Docket No. 2509.

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

Very truly yours,



Andrew S. Marcaccio

Enclosures

cc: Linda George, Division
John Bell, Division
Greg Booth, Division
John Spirito, Esq.
Christy Hetherington, Esq.
Tiffany Parenteau, Esq.
Leo Wold, Esq.

¹ Per practice during the COVID-19 emergency period, the Company is providing a PDF version of the storm report referenced above. The Company will provide the Division with one hard copy and, if needed, additional hard copies of this report at a later date.

² The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

National Grid

The Narragansett Electric Company

**Report on
February 7, 2021 Event,
Damage Assessment and
Service Restoration**

June 8, 2021

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 7, 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 February 7, 2021 Storm (“February 7, 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 4 emergency event for Rhode Island, meaning that the Company estimated that restoration activities generally would be accomplished within a 24-hour period, and the event typically would result in up to seven percent of customers interrupted. The Storm was projected to be a coastal low-pressure system moving through the area, bringing breezy winds and heavy, wet snow which potentially could cause damage to the Company’s electric infrastructure. Ultimately, the Storm brought some breezy winds along with significant snowfall across Rhode Island and eastern Massachusetts. Maximum wind gusts were in the 20 mph range in the Providence area. Maximum snowfall was in the six to twelve inch range across central and northern portions of the state. The Storm interrupted power to 959 (approximately 754 at peak) of the Company’s customers. Overall, 0.19 percent of the Company’s customers in Rhode Island experienced outages, with 10 of the 38 communities served in Rhode Island impacted.

The Company began preparing for the Storm on Saturday, February 6, closely monitoring the severity of the weather forecast as the intensity increased, predicting a threat for breezy winds and heavy, wet snow associated with a coastal low-pressure system that would be moving through the area on Sunday. As the day progressed and into the next day, 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 New England. As part of its response to the Storm, the Company opened Branch Storm Rooms for its Capital and Coastal districts at approximately 10:00 a.m. on Sunday, February 7, and also opened its wires down rooms later that day. As this was a brief duration event which ultimately resulted in little damage to the Company’s electric distribution system, the State Incident Commander communicated directly with key staff to coordinate response and restoration efforts, and no Restoration Stage Briefing Calls were conducted. 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 16 1/2 hours from the time of the first customer impacted, and in approximately 6 hours from the time of peak impact. Power was restored to the final customer impacted by the Storm on February 7, at approximately 11:28 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 February 7, 2021 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 the February 7, 2021 Incident Classification Actions.

Table 1. Incident Classification Actions

<u>Action Performed</u>	<u>Date and Time</u>
New England Incident Commander Named	February 6, 2021; approx. 8:30 a.m.
Initial Event Classification Type – 4	February 6, 2021; approx. 8:30 a.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. As mentioned earlier, this was a brief duration event which ultimately resulted in little damage to the Company’s electric distribution system. The State Incident Commander communicated directly with key staff to coordinate response and restoration efforts,

and no Restoration Stage Briefing Calls were conducted. See Table 2 below for the February 7, 2021 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	February 7, 2021; approx. 10:00 a.m.
Branch Storm Room opened in Providence for Coastal district	February 7, 2021; approx. 10:00 a.m.
Branch Wires Down Rooms opened in Providence	February 7, 2021; approx. 12:00 noon

Because there were no briefing calls conducted, Appendix A, which typically contains copies of briefing minutes, will not be provided with this report.

C. Determination of Crew Needs and Pre-Staging

Given the potential magnitude of the Storm and forecast of heavy, wet snow, 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

The Company monitors the weather forecast obtained from its weather provider, DTN, through detailed emails received three times daily. Throughout the day, the Company also monitors the forecast from various weather websites.

On Thursday, February 4, the weather forecasts began to predict that a storm system would come up the coast on Sunday, bringing chances for some breezy winds and accumulating snowfall, possibly reaching hazard levels in southeastern New England. Confidence in the weather forecast remained at a medium level throughout the weekend, even as the forecast severity increased. By late in the day on Saturday, peak wind gusts were expected to be in the 40 mph range with five to nine inches of heavy, wet snow forecast for Rhode Island. This forecast remained essentially the same into Sunday, February 7, as the event began to impact the Company’s service territory.

B. Impact

The February 7, 2021 Storm was a strong weather event that ultimately resulted in little damage to the Company's electrical system. The Storm brought a coastal low-pressure system with breezy winds and significant snowfall to portions of the Company's service territory. Peak snowfall totals were in the eight to eleven inch range across the northern half of the state, with both Burrillville and North Providence receiving eleven inches of snow. The Town of Charlestown was affected most heavily with approximately three percent of its customers impacted by the event. See Table 3 below for the February 7, 2021 Storm impact.

Table 3. Storm Impact

Total Customers Impacted	959
Peak Customers Impacted	754
Date and Time of Peak	February 7, 2021; 5:28 p.m.
Date and Time Final Customer Was Restored	February 7, 2021; approx. 11:28 p.m.
Number of Municipalities That Experienced Interruptions	10
Number of Distribution Feeders That Experienced Interruptions	11

Figure 1 below shows the number of customers interrupted and restored, by hour, for the period of February 7-8, 2021.

Figure 1

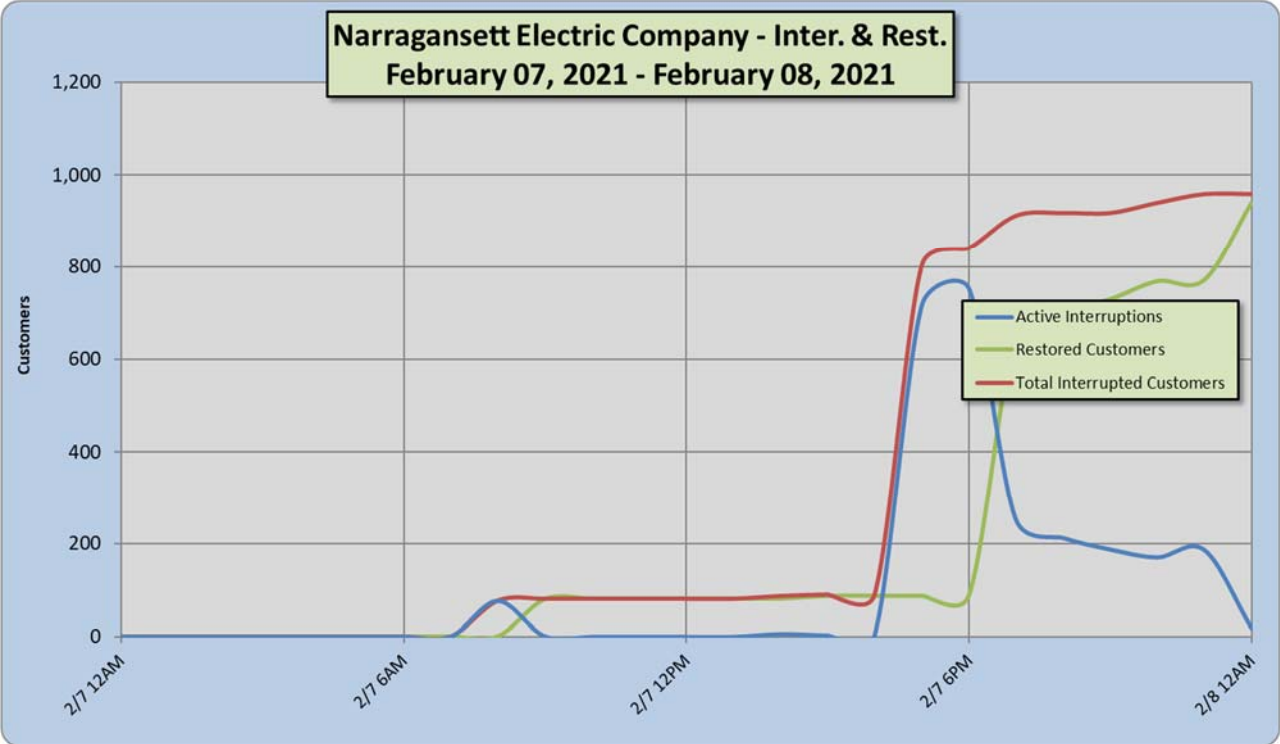


Figure 2 below shows all municipalities that experienced interruptions during the Storm.

Figure 2

Municipality Name	Customers Served	Total Customers Interrupted	Percent of Total
CHARLESTOWN	5,825	173	2.97%
COVENTRY	14,393	27	0.19%
HOPKINTON	3,973	1	0.03%
JAMESTOWN	3,333	36	1.08%
LITTLE COMPTON	2,581	45	1.74%
NORTH KINGSTOWN	13,782	30	0.22%
PROVIDENCE	74,406	76	0.10%
RICHMOND	3,578	45	1.26%
SOUTH KINGSTOWN	14,839	37	0.25%
WEST GREENWICH	2,748	1	0.04%

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 and Coastal 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 establish staging sites for this event. The Company also did not deploy Task Force teams for this event.

C. Personnel Resources

The Company secured a total of 273 internal and external field crews¹ to restore power to customers in Rhode Island, consisting of approximately 116 external crews and 157 internal crews. The internal and external field crew numbers included transmission and distribution overhead line, forestry, substation, and underground 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 was able to obtain sufficient external contractor crews to supplement restoration efforts in New England. No additional assistance was required from companies in the North Atlantic Mutual Assistance Group ("NAMAG") to support restoration for this event. Resources requested through mutual assistance are based on anticipated needs across National Grid's service territory in Rhode Island and Massachusetts; total resources received then are allocated across the service territory and may be reallocated as restoration progresses depending on resource needs. In addition, mutual assistance resources allocated to one area may free up local or external contractor crews to be allocated to other areas. For the February 7, 2021 Storm, no mutual assistance was requested.

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.

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

As with any storm, for the February 7, 2021 Storm, the Company assembled a safety team with area responsibilities, established the reporting hierarchy, and prepared and communicated organization charts. 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 February 7, 2021 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 February 7, 2021 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 February 7, 2021 Storm on Saturday, February 6, closely monitoring weather forecasts.

As mentioned earlier, this was a brief duration event which ultimately resulted in little damage to the Company’s electric distribution system. The State Incident Commander communicated directly with key staff to coordinate response and restoration efforts, and no Restoration Stage Briefing Calls were conducted. Additionally, the Company issued communications to field crews with both restoration and safety information throughout the Storm.

C. Public Officials

1. Governor’s Office

During the Storm, the Company’s Jurisdictional President communicated regularly 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 Manager of Regulatory affairs contacted the PUC, the Division, the Governor’s office, and OER to provide updates throughout the February 7, 2021 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
February 6, 2021; approx. 9:45 a.m.	Initial notification of possible event; weather forecast; planned Storm Room openings; securing external resources; Life Support and Critical Facility calls plans
February 7, 2021; approx. 9:30 a.m.	Weather forecast update; review of Company’s plans and preparation; internal and external OH Line and Forestry crew counts; Life Support and Critical Facility calls placed
February 7, 2021; approx. 8:00 p.m.	Recap of actual weather and forecast update; customer outage update; demobilization plans; final update

During the event, the Company’s Jurisdictional President provided updates to RIEMA regarding the Company’s storm preparations and restoration efforts. RIEMA activated their State Emergency Operations Center on Sunday, February 7, from 8:00 a.m. until 8:30 p.m. The Company supported this activation remotely and 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 expected impact from this event, the Company opened its Municipal Room on Sunday, February 7, at 10:00 a.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 February 7, 2021 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.

On Saturday, February 6, 2021, at approximately 4:00 p.m., the Company made an outbound call to all life-support customers to notify them of the upcoming weather and to recommend taking necessary precautions and preparations to ensure their well-being in the event of an outage. The outbound call also informed life-support customers to contact 911 or their local public safety officials in the event of an emergency.

See Table 5 below for a detailed listing of each method of communication utilized throughout the February 7, 2021 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	91
Number of Customer Calls Received by Interactive Voice Response (IVR)	Customer reports outage or issue	28
Number of Customer Calls Received by 21 st Century	Customer reports outage or issue	28
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	411
Number of emails sent	Outage notification, update, or update request from customer	1,253
Number of outbound calls made	Outage notification, update, or update request from customer	0

Web and Social Media		
Number of customer hits on Company website during preparation for, and response to, the event	Customers seeking information	10,103
Number of Facebook posts	Company preparation for the event, safety information, restoration updates	1
Number of tweets/re-tweets posted on Twitter	Company preparation for the event, safety information, restoration updates	8

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 one media request for information related to the February 7, 2021 Storm in Rhode Island. 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 February 7, 2021 Storm impacted the Company’s electrical system, resulting in power outages to 959 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 approximately 5 1/2 hours from the time of peak impact. The Company restored power to 100 percent of its customers impacted in approximately 16 1/2 hours from the time of the first customer impacted, and in approximately 6 hours from the time of peak impact. Power was restored to the final customer impacted by the Storm on February 7, at approximately 11:28 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 February 7, 2021 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.