

April 1, 2019

VIA HAND DELIVERY & 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 January 1, 2019 Storm Summary Report

Dear Ms. Massaro:

In accordance with Order No. 20814 (November 20, 2012) in Docket D-11-94, I have enclosed four copies of National Grid's¹ summary report on the planning and restoration activities associated with the January 1, 2019 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 January 1, 2019 storm event will likely qualify for inclusion in the Company's Storm Contingency Fund. Accordingly, the Company is filing this 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 781-907-2153.

Very truly yours,



Celia B. O'Brien

Enclosures

cc: Kevin Lynch, Division
John Bell, Division
Greg Booth, Division
John Spirito, Esq.
Christy Hetherington, Esq.
Leo Wold, Esq.

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

National Grid

The Narragansett Electric Company

**Report on
January 1, 2019 Event,
Damage Assessment and
Service Restoration**

April 1, 2019

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 JANUARY 1, 2019 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 January 1, 2019 Wind and Rain Storm (January 1, 2019 Storm or the Storm), which moderately impacted Rhode Island and other states in New England. For pre-planning purposes, the Company classified the January 1, 2019 Storm as a National Grid Type 4 emergency event, 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 three percent of customers interrupted. The Storm was projected to bring heavy rain and hazardous winds, which potentially could cause significant damage to the Company's electric infrastructure. Ultimately, the Storm brought rain and strong winds across Rhode Island, Massachusetts, and much of New England. Rhode Island received over an inch of rainfall across the state. Most of the areas experienced gusts in the 40 to 45 mph range. Although the January 1, 2019 Storm brought heavy rain and high winds to the state, the impact of the Storm was less than anticipated in Rhode Island, interrupting power to 2,310 (approximately 2,149 at peak) of the Company's customers. Overall, 22 of the 38 communities served in Rhode Island were impacted.

The Company began preparing for the Storm on Monday, December 31, at 10:00 a.m. by conducting a Pre-Event Stage Briefing Call, during which the Company reviewed the weather forecast and began planning for the possibility that the Storm would impact the Company's electric distribution system in New England. As part of its preparation for the Storm, on Tuesday, January 1, the Company opened a Branch Storm Room in Providence at approximately 6:00 a.m. Later that same day, the Company conducted its first and only Restoration Stage Briefing Call at 10:00 a.m. 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 less than 14 hours from the time of the first customer impacted and in less than six hours from the time of peak impact. Power was restored to the final customer impacted by the January 1, 2019 Storm on January 1, 2019, at approximately 7:00 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 January 1, 2019 Storm and were an integral part of the Company's restoration efforts.

II. INCIDENT ANTICIPATION

A. Determination of Incident Classification

For its response to the Storm, the Company established a Branch Storm Room in Providence on Tuesday, January 1, 2019, at approximately 6:00 a.m. As explained in more detail below, on Monday, December 31, 2018, the Company named a New England Incident Commander, who primarily was responsible for establishing the projected and actual incident classification level for the Storm. Consistent with a Type 4 event, the Company did not open the Regional Emergency Operation Center in Worcester, Massachusetts.

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.

On Monday, December 31, 2018, at approximately 10:00 a.m., the New England Incident Commander classified the event as a Type 4 event. Through the Operations Storm conference calls, the New England Incident Commander communicated the incident classification to Company leadership and organizations that the Company expected to engage in restoration or support activities.

B. Activation of Incident Command System

The Company utilizes the Incident Command System, 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 and addresses the operation of Company Emergency Operation Centers.

In the days leading up to the Storm, prior to activation of the Incident Command System, the Company's Operations management personnel were monitoring the weather forecast closely. The Company held its first Pre-Event Planning call on Monday, December 31, at 10:00 a.m. to discuss planning efforts for the possibility of a severe wind and rain storm forecasted to bring hazardous conditions to New England. The Company conducted its first and only Restoration Stage Briefing Call on Tuesday, January 1, 2019, at 10:00 a.m., and continued responding to this

event. In accordance with the Company's Emergency Response Plan and anticipated Type 4 event, the Company activated the Branch Level Emergency Response Organization in Rhode Island. At that time, the Company planned to open its Branch Storm Room in Providence on Tuesday, January 1, at 6:00 a.m. to support Rhode Island restoration. The New England Incident Commander activated the Rhode Island Branch Director, who oversaw Rhode Island restoration and located in the Providence Storm Room, and several other Branch Directors in Massachusetts. Thereafter, the Company activated several other positions at the discretion of the Incident Commander and Branch Directors, considering the level of response expected for the January 1, 2019 Storm in their respective areas, including Rhode Island. As mentioned above, the Company did not plan to open the Regional Emergency Operation Center in Worcester, Massachusetts, consistent with the anticipated Type 4 event level for this storm.

C. Determination of Crew Needs and Pre-Staging

Given the potential magnitude of the Storm and forecast of hazardous winds and heavy rain, 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. As of Monday, December 31, at approximately 2:00 p.m., the Company had 40 internal overhead line crews, 22 external overhead line crews, 30 external forestry crews, 8 internal underground crews, 26 internal substation resources, 1 internal transmission crews, and 36 internal wires down resources. The Company established one staging site to support restoration across the state at the Community College of Rhode Island in Warwick.

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 the morning of Monday, December 31, 2018, the weather forecasts began to indicate some potentially hazardous weather for Tuesday, January 1, 2019, consisting of moderate to heavy rainfall and strong wind gusts, mainly along the northern capital region of Rhode Island and central and western Massachusetts. Later in the afternoon, the confidence increased regarding the forecast of rainfall and possibility of wind gusts. Rainfall of approximately 1.0 to 1.25 inches was forecast across Rhode Island. Peak wind gusts of 40 to 60 mph were forecast in northern Rhode Island and central Massachusetts.

On Tuesday, January 1, in the early morning hours, the forecast remained mostly consistent, with the only changes being the strongest wind gusts were forecasted to be more northern in Massachusetts, but the capital region of Rhode Island still was expected to see wind gusts between 45 to 55 mph.

B. Impact

The January 1, 2019 Storm was a moderate weather event that resulted in minor damage to the Company's electrical system. The Storm brought widespread rain and gusty winds to the Company's service territory. Most of Rhode Island experienced wind gusts in the 40 to 45 mph range, with a peak gust of 46 mph in Pawtucket. Rhode Island also experienced rainfall of approximately 1 to 1.25 inches, with slightly more in the northern region.

The Storm impacted a total of approximately 2,310 customers in the Company's Rhode Island service territory. The Storm impacted approximately 2,149 customers at its peak, which occurred on Tuesday, January 1, 2019, at approximately 1:22 p.m. The Company restored power to all customers that same day by approximately 7:00 p.m. The Company experienced interruptions in 22 of the 38 Rhode Island communities it serves, with a total of 22 distribution feeders affected. The Towns of Glocester and Exeter were affected most heavily with approximately 26 and 4 percent of their customers impacted, respectively, by the event.

Figure 1 below shows the number of customers interrupted and restored, by hour, for the period of January 1, 2019.

Figure 1

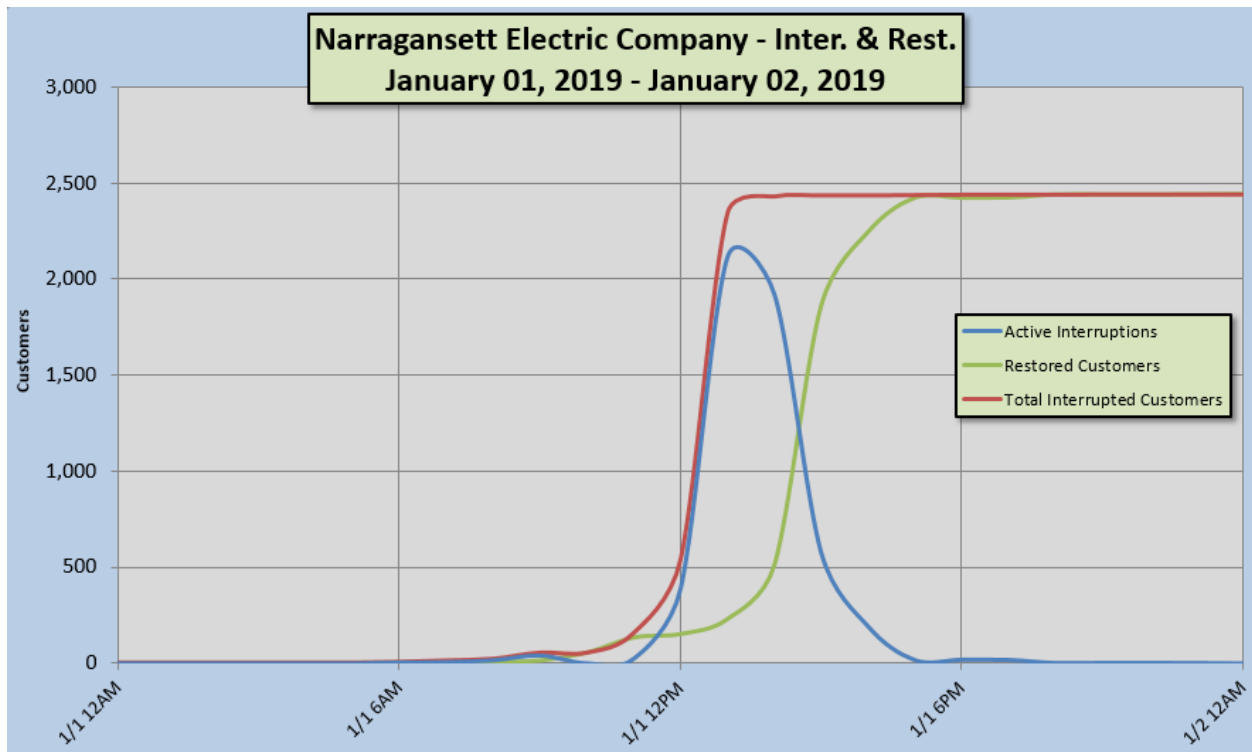


Figure 2 below shows all municipalities that experienced interruptions during the Storm.

Figure 2

Town Name	Customers Served	Total Customers Interrupted	Percent of Total
BURRILLVILLE	2,631	31	1.18%
CHARLESTOWN	5,740	4	0.07%
COVENTRY	13,853	85	0.61%
CUMBERLAND	15,381	137	0.89%
EAST GREENWICH	6,159	9	0.15%
EXETER	3,032	129	4.25%
FOSTER	2,031	20	0.98%
GLOCESTER	4,637	1,212	26.14%
HOPKINTON	3,953	256	6.48%
JOHNSTON	13,745	47	0.34%
LINCOLN	10,220	18	0.18%
NORTH KINGSTOWN	13,521	7	0.05%
NORTH SMITHFIELD	5,773	45	0.78%
PAWTUCKET	33,905	32	0.09%
RICHMOND	3,491	109	3.12%
SCITUATE	4,572	137	3.00%
SMITHFIELD	8,940	5	0.06%
SOUTH KINGSTOWN	14,742	35	0.24%
TIVERTON	8,247	4	0.05%
WARWICK	40,560	9	0.02%
WEST GREENWICH	2,732	2	0.07%
WOONSOCKET	19,032	167	0.88%

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 impacted as quickly as conditions warranted, also as set forth in the Emergency Response Plan.

B. Restoration Coordination

The Company dispatched crews to respond to outages from the Branch Storm Room in Providence beginning on Tuesday, January 1, 2019, at approximately 6:00 a.m. 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 also established one staging site to support restoration across the state at the Community College of Rhode Island in Warwick. The Company did not activate Task Force teams for this event because of the degree of damage expected across the Company's service territory.

C. Personnel Resources

As part of its planning process, the Company prepared for a Type 4 event in Rhode Island based on the forecasts. The Company's plan remained consistent throughout the Pre-Event Stage Briefing Call on Monday, December 31, 2018, as well as a Restoration Stage Briefing Call on Tuesday, January 1.

The Company secured 163 internal and external field crews¹ to restore power to customers in Rhode Island, consisting of approximately 52 external crews and 111 internal crews. The internal and external field crew numbers included transmission and distribution overhead line, forestry, 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. For each storm event, both the System and Regional Incident Command System structure 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, for the January 1, 2019 Storm, 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 to all Company 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 the day. 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 January 1, 2019 Storm.

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 January 1, 2019 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 January 1, 2019 Storm on Monday, December 31, 2018, at 10:00 a.m. by conducting an Pre-Event Stage Planning Call, during which the Company reviewed the weather forecast and began planning for the possibility that the Storm would impact the Company's electric distribution system in New England. The Company held its first and only Restoration Stage Briefing Call on Tuesday, January 1, 2019, at 10:00 a.m. Additionally, the Company issued communications to field crews with both restoration and safety information throughout the Storm.

C. Public Officials

1. Governor's Office

The Company's Jurisdictional President communicated with the Governor's office as needed during the January 1, 2019 Storm.

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

The Company's Manager of Regulatory Affairs first reached out to the Division and the Office of Energy Resources on Monday, December 31, 2018, regarding the Company's preparation for the January 1, 2019 Storm and provided an update on Monday afternoon, December 31. The final update was provided later in the evening on Tuesday, indicating that the Company was continuing to restore the remaining customers without power and would consider transitioning the Providence Storm Room back to normal operations later in the evening after the remaining wind had died down. The Company's Jurisdictional President communicated with RIEMA as needed during the Storm. The Company also utilized its RIEMA Liaisons to post outage number updates virtually on RIEMA's WebEOC throughout the day on Tuesday, January 1.

3. Municipalities

Due to the limited impact from this event, the Company did not open a Municipal Room. The Company did activate 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 January 1, 2019 Storm through its Customer Contact Center, website, and social media. The Company monitored social media channels and posted messages and responded to customer issues. Communications included but was not limited to: information on how customers could stay safe during the Storm; information on what the Company was doing to respond to the Storm; and information on how customers could contact the Company.

On Monday, December 31, 2018, at 2:00 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. 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 an expected high call volume. No life-support customers were affected by an outage from the January 1, 2019 Storm.

E. Media

The Company activated its Public Information Officer (PIO) who participated in the Pre-Event and Restoration Stage Briefing Calls conducted by Company Operations, 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 no media requests for information or interviews related to the January 1, 2019 Storm in Rhode Island. Media sentiment was not a factor as there was little to no media interest as the Storm coincided with the New Year holiday.

VI. CONCLUSION

The January 1, 2019 Storm produced limited impact to the Company's electrical system, resulting in power outages to approximately 2,310 of the Company's customers. The damage to the Company's distribution infrastructure was somewhat less than expected because of actual peak wind gusts being lower than forecast. Damage primarily was limited to falling trees and limbs coming into contact with the Company's poles and wires. The Company 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.

Through use of the Company's own distribution line resources and transmission line crews, contractor distribution line crews, and contractor tree crews, the Company restored power to 100 percent of its customers impacted in less than 14 hours from the time of the first customer impacted and in less than six hours from the time of peak impact. The Company restored power to the final customer impacted by the Storm on January 1, 2019, at approximately 7:00 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 January 1, 2019 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.