

I. EXECUTIVE SUMMARY	1
II. THE STORM AND ITS IMPACT	4
III. INCIDENT ANTICIPATION	11
A. Determination of Incident Classification	11
B. Activation of Incident Command System (“ICS”)	12
C. Determination of Crew Needs and Pre-Staging	13
1. Distribution and Transmission Line Crews	13
a) Company and Contractor Crews	13
b) Mutual Assistance Crews	14
2. Vegetation Management and Tree Crews	15
D. Logistics	16
1. Staging Sites	17
2. Meals and Lodging	18
3. Inventory Management	19
4. Fleet Management	21
E. Communications	22
1. Introduction	22
2. Intra-Company	22
3. Public Officials: Governor’s Office, Massachusetts Emergency Management Agency, State Agencies, Elected Officials, Municipalities	23
a) Governor’s Office	23
b) Department and MEMA	23
c) Municipalities	24
d) State Elected Officials	24
e) Federal Officials	25
4. Contact with Non-Life Support Customers	25
5. Contact with Life Support Customers	26
6. Media	26
IV. DAMAGE APPRAISAL	27
A. Transmission	28
1. Transmission Damage Appraisal Process	28
2. Transmission Damage	28
B. Distribution	30
1. Damage Appraisal Process	30
2. Distribution Damage	31
V. RESTORATION	32

A.	Timing and Priority of Service Restoration	32
B.	Personnel Resources	34
C.	Safe Work Practices	34
VI.	COMMUNICATIONS DURING AND AFTER THE EVENT	35
A.	Communications Regarding Emergency Times for Restoration (ETRs)	35
B.	Intra-Company	36
C.	Public Officials: Governor’s Office, MEMA, State Agencies, Elected Officials, Municipalities	37
1.	Governor’s Office	37
2.	Department and MEMA	37
3.	Municipalities	37
4.	State and Federal Elected Officials	38
D.	Customers	39
1.	Communications During and After the Storm Event	39
2.	Life Support Customers	40
E.	Media	41
VII.	LESSONS LEARNED	42
VIII.	CONCLUSION	45

**REPORT ON BEHALF OF MASSACHUSETTS ELECTRIC COMPANY and
NANTUCKET ELECTRIC COMPANY d/b/a NATIONAL GRID ON TROPICAL
STORM IRENE SERVICE RESTORATION EFFORTS**

I. EXECUTIVE SUMMARY

Massachusetts Electric Company and Nantucket Electric Company d/b/a National Grid (the “Company”) present the following report on the planning and restoration activities associated with Hurricane or Tropical Storm Irene (“Irene” or the “storm”), which battered the Commonwealth of Massachusetts on August 28, 2011. The storm caused significant and extensive damage to the Company’s electric infrastructure and caused power interruptions to approximately 518,000 of the Company’s customers in 170 of the Company’s 172 communities. The Company made steady progress in addressing the severe damage and restoring customers’ power during the course of the week that followed, with ninety percent of customers restored by 6:30 PM on Wednesday, August 31 and all customers restored by Saturday, September 3. This report details the Company’s efforts, including advanced planning, post-event damage appraisal, restoration activity, and communications. This report also discusses the robust process underway to identify “lessons learned” from the Irene restoration process which will be incorporated for the future. Attachment A contains the reporting required under the Department’s guidelines set forth in D.P.U. 10-02-A. The Final Event Report required by the Department’s Emergency Response Plan Guidelines is provided as Attachment B.

Irene was an extraordinary meteorological event, causing extensive and widespread destruction along the east coast from the Carolinas to New England. Irene’s hurricane-force winds as it progressed towards New England extended outward as much as 90 miles from the center and tropical storm-force winds at the periphery of the storm extended outward as much as 290 miles. Irene shattered several flooding records in the northeast and in its wake interrupted electricity service to approximately 6,000,000 customers in 11 states along the east coast.

In the normal course of managing system operations, the Company continually monitors the weather. On August 23, when it became apparent that there was a risk of a Tropical Storm or Hurricane coming to New England, the Company commenced planning for Irene’s impact. The Company commenced formal reviews of hurricane preparation checklists. This phase of emergency preparedness is referred to as the Anticipation Phase. These tasks are designed to ensure that the Company was positioned to protect public safety, assess the damage, and restore power as quickly as possible. During the Anticipation Phase, weather forecasts for New England predicted a strong tropical storm or low Category 1 hurricane would take a very wide path through Massachusetts with the center going over the Berkshire Mountains.

As a result of the weather forecast, the Company worked aggressively during the Anticipation Phase to identify and retain additional line and tree crews to supplement its internal employee workforce. Utilities historically rely upon one another for mutual aid to address storm events by sharing crews. In the case of Irene, however, the storm’s expansive path and destructive impact constrained the availability of mutual assistance restoration forces to immediately aid the Company’s restoration efforts. Faced with the emerging and threatened destruction of their electricity infrastructure occasioned by Irene, utilities along the east coast – from Florida to Maine – retained both their own internal crews and available contractors, putting

resources that typically can be relied on in an emergency event in Massachusetts to aid in the Company's restoration effort out of reach. In addition, utilities directly affected by the storm were all simultaneously seeking mutual aid assistance from utilities in other regions not directly affected by Irene. As of August 29, the total number of requested resources along the east coast topped out at approximately 7,000 linemen, and National Grid received from mutual aid twenty-four out of a requested 400. Despite the mutual aid resource constraints, the Company was able to strategically stage both its own crews and its outside resources, along with necessary supplies, equipment, and vehicles, in advance of the storm at various locations prior to the storm reaching Massachusetts. This staging occurred in Marlboro, Raynham (for Massachusetts and Rhode Island), and Salem, NH (Rockingham Park)(for Massachusetts and New Hampshire). These three locations served as the staging sites not only for the Company, but for its New England affiliates as well, with the expectation that these sites would be convenient for access to the expected path of the storm and its aftermath throughout New England.

The Company also commenced extensive external communications by contacting affected stakeholders prior to the arrival of Irene. The Company contacted the Governor's office, the Department, the Massachusetts Emergency Management Agency ("MEMA"), federal, state and local elected officials, and general media sources. Contacts were made to customers including the Company's life support customers, hospitals, water treatment plants and sewage plants. The Company maintained communications with all these stakeholders throughout the storm and during the restoration period. In total, the Company used over ten different communications channels to reach stakeholders, including the customer contact center, the Company's website, Twitter, Facebook, YouTube, e-mail, text messaging and broadcast radio.

Irene hit Massachusetts on August 28. The photographs below from (clockwise) Colrain, Stoughton, Shirley, and Randolph illustrate the severity of the damage caused by the storm that was typical to the Company's transmission and distribution infrastructure.





As these photos indicate, once Irene passed through the service territory, the Company was left with a tremendous amount of damage. Damage appraisal itself was an extensive effort, performed by the Company's complement of damage appraisers, working on foot, in vehicles, and in helicopters. The Company implemented its system of prioritization for restoration, because it was clear that the attention needed for public safety hazards caused by downed wires and restoration work needed across the Commonwealth was significant. As further described below, the Company's Electric Emergency Plan ("EEP"), on file with the Department, provides a restoration priority focused first on securing public safety from the danger from inadvertent contact with live wires and extreme hazards. Then, under the Company's priority system crews address problems with transmission lines and substations that serve large numbers of customers. Critical Facilities are given priority and consideration next, and the Company makes efforts to restore service to Life Support Customers as quickly as conditions warrant. Distribution lines that serve local neighborhoods are the next priority, starting with areas that involve the largest number of customers. Finally, distribution lines and transformers within neighborhoods and the wires that connect them to homes and businesses come next.

While most customers lost power on Sunday, selective restoration efforts began on Sunday night and continued. These early activities included eight transmission lines and some critical care facilities. More extensive mobilization began at 6:00 AM Monday, August 29 after the storm and the winds had passed. Much of the work on Monday included identifying wires that were downed and doing damage assessments. The Company followed its prioritization process with the resources that were available. The Company made steady progress in restoring power during the course of the week. As noted above, ninety percent of interrupted customers

had power restored by 6:30 PM on Wednesday, August 31 and the Company succeeded in restoring service throughout its system to all interrupted customers by Saturday, September 3. Some customers, of course, may not have understood why they did not see crews repairing downed wires immediately after the storm winds subsided and the weather became clear and consequently could have felt ignored. In reality, the Company was following its prioritization process with the resources that were available. Unfortunately, this meant that some locations and customers would not have power restored until much later in the week.

The Company experienced record call volume during the storm in the customer contact center, with approximately 168,000 calls received on August 28. The Company also had a significant amount of communication with other stakeholders, including daily scheduled calls with municipalities in addition to one-on-one communications, communications with MEMA, elected officials, and regulators, and regular media contact. The Company called all affected life support customers each day. The Company was not able to reach them all by phone, and Company personnel visited these customers in an effort to ensure that they were safe and aware of the Company's restoration efforts. In addition, the Company continued its use of other contact channels, including the Company's website, Twitter, Facebook, YouTube, e-mail, text messaging and broadcast radio.

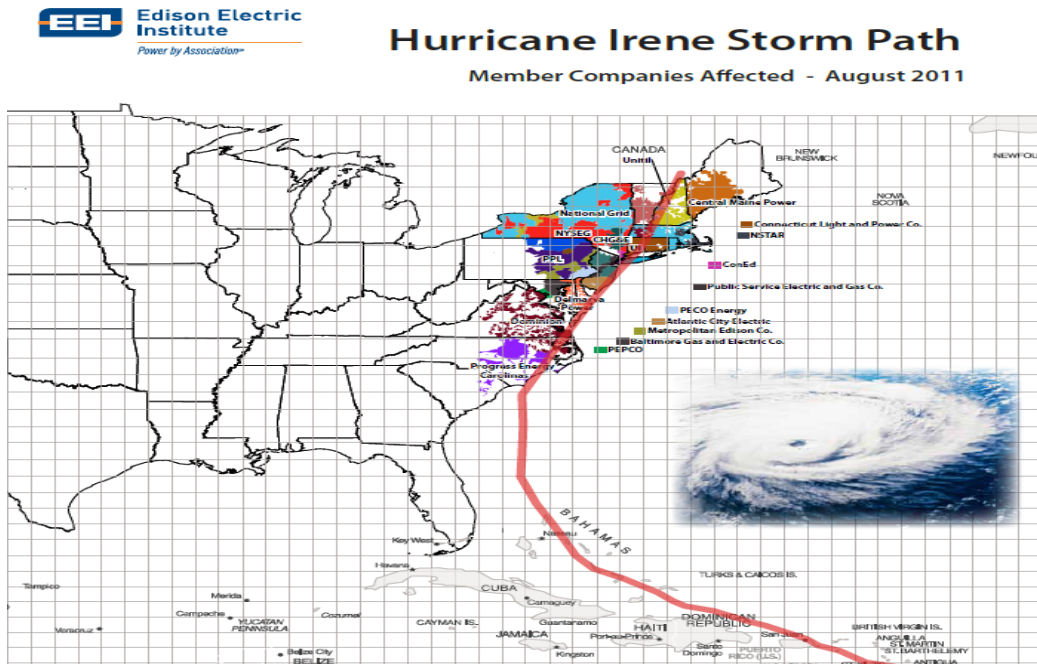
The Company made every effort to accurately and effectively communicate estimated times for restoration (ETRs) to customers and other interested stakeholders. The Company typically communicates ETRs to customers through its Outage Central web page or through its Customer Contact Center. When damage is less severe and outages are more limited in scope than was the case for Irene, the Company is able to assess its ETRs fairly readily based on localized damage assessments that can be tied more easily to a particular customer's outage. However, the Company's ability in the wake of Irene to provide ETRs at the individual customer level was hampered by the scope and scale of the damage to the Company's transmission and distribution systems. With damage assessment still on-going in most areas on August 30, the Company did make ETRs available to municipal contacts that afternoon and posted them on the website. The Company was able to develop localized ETRs on August 31, and then refined them in the succeeding days. Towards the end of the restoration effort, the Company provided street level details for the remaining outages when requested by certain towns.

The Company is proud of the unwavering dedication of its employees and their response to Irene and especially grateful for the support offered by many customers, state and local government officials and public safety authorities before, during, and after the storm. In light of the widespread devastation caused by the storm, an effective emergency plan and a team effort by multiple parties were, undoubtedly, the most effective means to restore power.

II. THE STORM AND ITS IMPACT

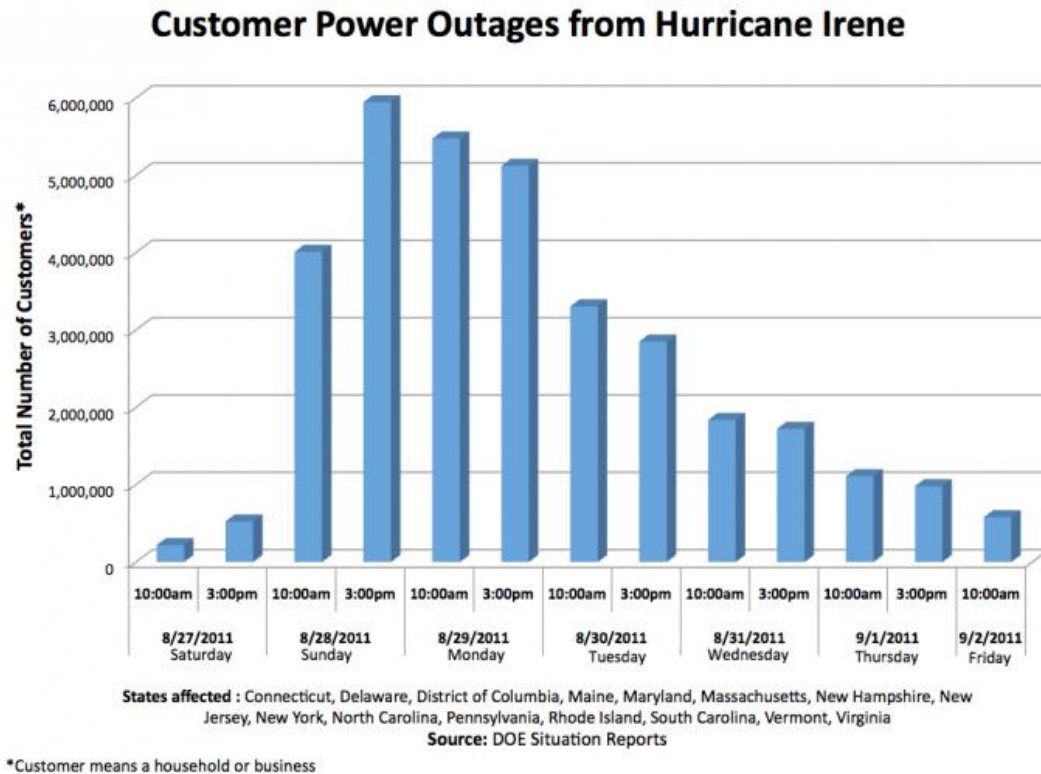
Late on August 20, 2011, the National Hurricane Center warned of a hurricane forming in the Caribbean, and on August 22, Irene first made landfall in Puerto Rico as a Category 1 hurricane. After passing Puerto Rico, Irene strengthened over the warm waters of the Atlantic to a Category 3 hurricane. Irene reached landfall in the continental United States in North Carolina on August 27. From there, Irene continued up the east coast, causing death, flooding, an estimated \$10-15 billion dollars of damage, with millions of power outages as it went. As reported by the Department of Energy, states of emergency were declared in South Carolina,

North Carolina, Virginia, the District of Columbia, Maryland, Delaware, New Jersey, Pennsylvania, New York, Connecticut, Massachusetts, Rhode Island, Vermont, New Hampshire and Maine. In addition, the remnants of Irene continued into Canada.



By the time the storm arrived in Massachusetts early on August 28, Hurricane Irene had been downgraded to a tropical storm, yet maintained the strength to cause significant physical damage and destruction to infrastructure. The U.S. Department of Energy gathered situational reports from utilities in the United States affected by the storm. According to the DOE, at its peak on Sunday August 28, Irene had caused nearly 6,000,000 customers on the east coast to lose electrical power, as Irene concluded its devastating trek up the Eastern Seaboard. The DOE reported the track of outages and service restoration from Irene on its website. Figure 1 below depicts the aggregate peak number of power outages from all affected utilities in the path of Irene to full restoration of service, from August 27 through to September 2.

Figure 1



The storm impacted a total of 518,235 customers in Massachusetts Electric's service territory¹; 326,586 customers at its peak. Figure 2 below shows a map of customers interrupted by town at the peak, which occurred on Sunday August 28 at 1:20 PM. Figure 3 below shows the percent of customers interrupted by town at the peak. While the impacts were wide ranging and outages were experienced as far west as the New York State border and north to the New Hampshire border, the heavier impacts in the Company's service territory were on the south shore, south along the Rhode Island border and south central Massachusetts.

¹ Ninety four customers (less than 1%) were impacted in Nantucket Electric Company's service territory. Service to the 94 impacted customers was restored by August 30.

Figure 2

**Customers Interrupted by Town
at MA Peak**

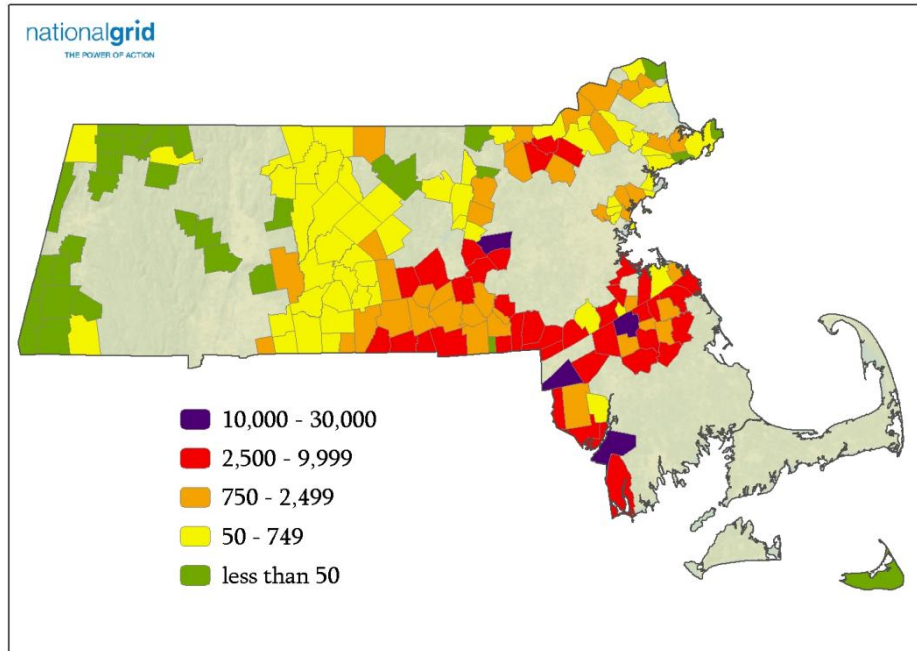
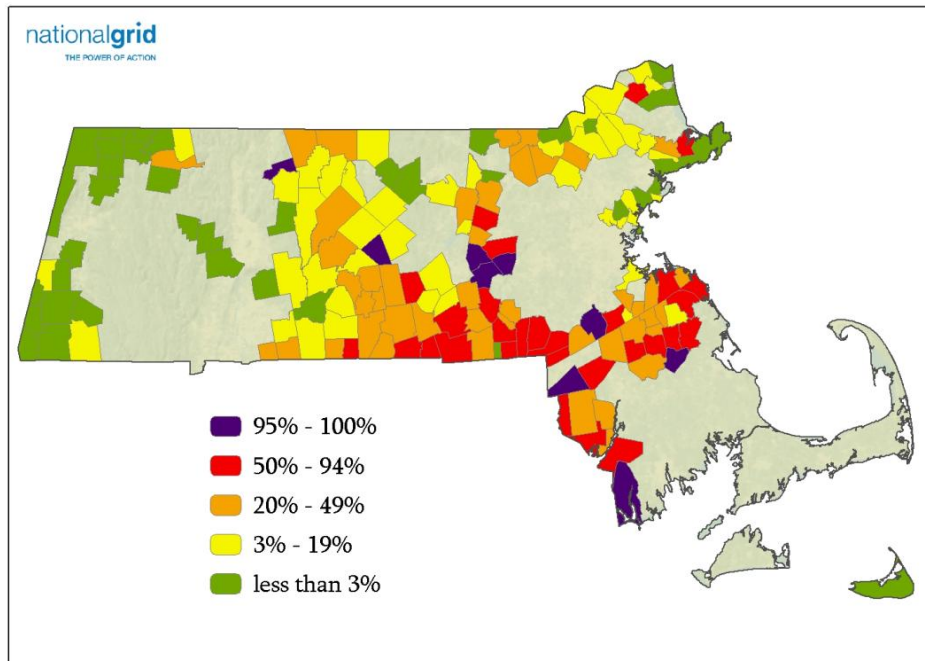


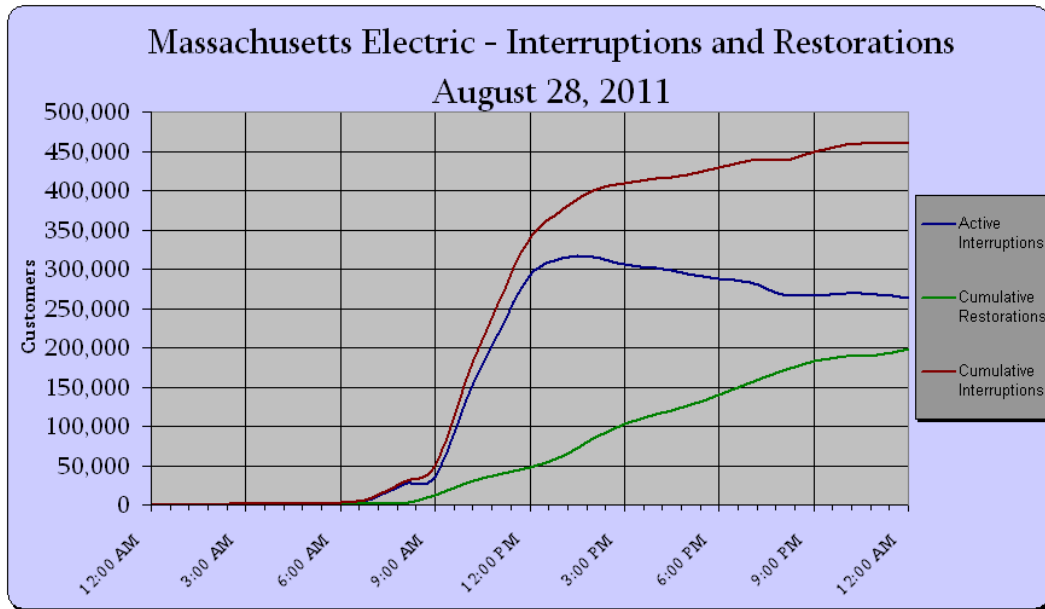
Figure 3

**Customers Interrupted by Town
at MA Peak**



The storm started in the early morning hours of Sunday, August 28, with 9,000 customers interrupted in Massachusetts by 7:00 AM. This number of reported outages increased to 160,000 customers by 10:00 AM and peaked at approximately 327,000 customers at 1:20PM. The storm remained over New England throughout the day, with sustained winds of 44 mph and gusts up to 67 mph. Figure 4 below shows the customers interrupted and restored, by hour, from midnight on Saturday August 27, to midnight on Sunday August 28.

Figure 4



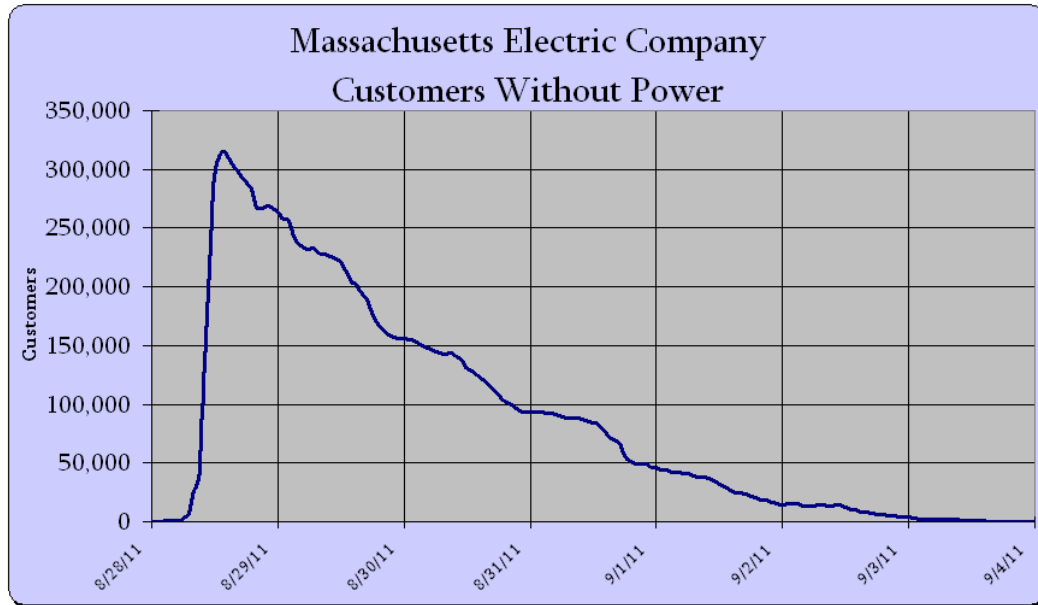
The storm affected approximately 3,920 square miles of the Company's service territory, essentially the entire service territory. This included damage to 23 transmission circuits, 983 distribution feeders, 238 distribution poles and 135 distribution transformers. The Company experienced interruptions in 170 of the 172 communities it serves in Massachusetts. The towns that experienced the greatest impact (greater than 5,000 customers interrupted) are shown in Figure 5.

Figure 5

Town	Town Code	Customers Interrupted	Customers Served	% Customers Interrupted	District
Fall River	0262	36,661	42,987	85	Southeast
Marlborough	0181	20,242	18,205	111	Southeast
Brockton	0281	19,201	37,751	51	South Shore
Attleboro	0271	19,174	19,327	99	Southeast
Stoughton	0136	11,043	12,062	92	South Shore
Worcester	0191	10,307	76,740	13	Central
Tewksbury	0024	10,082	12,512	81	Merr. Valley
Webster	0381	9,195	8,877	104	Central
Lowell	0021	9,067	42,438	21	Merr. Valley
Randolph	0123	8,935	12,659	71	South Shore
Grafton	0148	8,251	8,019	103	Central
Easton	0284	7,958	9,341	85	South Shore
Franklin	0131	7,776	12,746	61	Southeast
Westborough	0186	7,686	7,949	97	Southeast
Billerica	0025	7,554	16,170	47	Merr. Valley
Bridgewater	0289	7,150	9,199	78	South Shore
Quincy	0129	7,089	43,584	16	South Shore
Pembroke	0256	7,062	7,529	94	South Shore
Northborough	0184	6,702	6,515	103	Southeast
Chelmsford	0023	6,423	15,438	42	Merr. Valley
Auburn	0149	6,107	7,618	80	Central
Halifax	0254	5,928	3,307	179	South Shore
Scituate	0259	5,754	8,043	72	South Shore
Swansea	0269	5,620	7,140	79	Southeast
Somerset	0268	5,453	7,802	70	Southeast
Weymouth	0121	5,074	24,308	21	South Shore
Everett	0014	5,060	17,888	28	North Shore
Milford	0152	5,054	12,504	40	Southeast

Figure 6 below shows a timeline of the number of customers without power from Sunday, August 28 through Saturday Sept 3.

Figure 6



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

III. INCIDENT ANTICIPATION

A. Determination of Incident Classification

In accordance with the EEP and System Incident Command System, National Grid activated the System Incident Commander, with responsibility for the entire National Grid service area in Massachusetts, Rhode Island, New Hampshire, and New York, on Wednesday, August 24 at 3:00 PM. On Thursday, August 25 at approximately 9:00 AM, National Grid activated the Regional Incident Commander for New England. The System Emergency Operations Center and Regional Emergency Operations Center were located in Northborough, MA. The System Incident Commander was primarily responsible for establishing the projected and actual Incident Classification level for Irene. Whenever a significant incident capable of causing interruptions to electric service does, or is anticipated to, occur, the System Incident Commander, with support from the Company's emergency planning organization, determines the necessary level of the Company's response.

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 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 C for copies of weather forecasts for New England prepared for National Grid by Telvent. In the pre-event stage reports on Thursday, August 25, and Friday, August 26, the Company classified Irene to be Level 5. A Level 5 event is classified in the Company's EEP as an event that is expected to cause over 9 percent of the Company's customers to be without service for a period of over 72 hours.

The Company anticipated a Level 5 event for the New England Region, which includes the Company's New England North (NE-North) and New England South (NE-South) Divisions encompassing Massachusetts, Rhode Island, and New Hampshire. The System Incident Commander communicated the incident classification to Company leadership and organizations anticipated to be engaged in restoration or support activities via the system and operations storm conference calls. On the afternoon of Friday, August 26, the Company revised the anticipated classification to Level 4 based on information from its weather service provider, Telvent, as the storm had weakened slightly, with a track more toward the Northeast. However, on Sunday, August 28, the Company revised Irene to Level 5, with over 340,000 customers, or approximately 25% of its customer base interrupted by Sunday afternoon and the expectation that restoration would require more than 72 hours.

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

In accordance with the Company's EEP, a number of positions were activated by the System Incident Commander, at her discretion, and in consideration of the level of response likely required for the event. Throughout the day on Thursday, August 25 and Friday, August 26, the Company reviewed the ICS organization and made personnel assignments to fill the necessary positions in the ICS structure.

The Regional Incident Commander appointed the following ICS assignments pursuant to the EEP on Thursday, August 25 and communicated at 7:30 PM that day:

- Regional Liaison Officer
- Regional Planning Section Chief
- Regional Public Information Officer
- Regional Logistics Section Chief
- Regional Safety & Health Officer; and
- Regional Finance Section Chief.

In addition, the Regional Incident Commander established Branch Directors for NE-North and NE-South to facilitate National Grid's "decentralized" approach to the restoration effort.

The following day, Friday, August 26, the Regional Incident Commander appointed individuals to fill the following additional ICS assignments:

- Regional Environmental Officer
- Regional Human Resources Section Chief; and
- Additional Branch Directors for NE-North.

The Company announced additional assignments below the Branch Directors that day.

The Company continuously reviewed existing assignments and made further assignments and/or adjustments to assignments throughout the restoration period in order to better match the Company's resources to the areas affected by the restoration. For example, on Tuesday, August 30 the Southern MA restoration area was split into two; with a Branch Director responsible for the South Shore District (Brockton) and a Branch Director responsible for the Southeast District (Hopedale). Copies of ICS organization charts in effect throughout the storm are included as Attachment D.

C. Determination of Crew Needs and Pre-Staging

1. Distribution and Transmission Line Crews

a) Company and Contractor Crews

From Wednesday, August 24, until Friday, September 3, National Grid requested crews in support of its effort to restore service to its customers. Due to the magnitude and severity of anticipated damage to electric utility infrastructure along the eastern United States, dozens of utilities in numerous states mobilized activities to secure external crews for service restoration. With a much greater number of utilities competing for the same resources, the Company encountered more challenges in securing crew resources for Irene than is typical for less intense storm events. National Grid made hundreds of calls to vendors as far west as Colorado and as far south as Florida over this time period.

Utilities in southern states quickly absorbed resources and equipment as Irene approached the east coast. A significant number of the southern utilities were also in discussions with contractors in the New England area to secure crew compliments. These utilities looking to move labor and equipment south to aid in their restoration efforts solicited many of the Company's regular New York and New England vendors along with other vendors north and west of the Carolinas. Many of these normally available resources had been committed to participating in restoration activities in the southeast, based on the timing and projected landfall of the hurricane.

The Company also contacted contractors and utilities in Canada for availability, but their resources were either already committed to other utilities or were being held until the projected path of Irene had passed their service areas without incident. Additionally, Canadian utility crews were not available due to damage incurred by an EF-3 tornado in Ontario earlier in the week.

However, the Company successfully procured crews before Irene impacted Massachusetts and ultimately secured all available crews to support restoration to its customers.

The Regional Planning Section Chief, in coordination with the Regional Incident Commander, led discussions well in advance of the onset of Irene in New England regarding the acquisition of resources. National Grid began discussions with its Alliance vendors² and other local contractors on Tuesday evening, August 23, prior to the first planned System Storm Call, to tentatively secure resources that were readily available in the Company's service territory. Approximately 25 Alliance two-person crews were made available Tuesday evening. On Wednesday, August 24 at 6:00 AM, the Company started to verify with the Alliance vendors that these crews would be used for service restoration rather than normal work upon the arrival of Irene, with the intent to lock up local resources as soon as possible, once the decision was made by the Regional Incident Commander that such resources were needed. Alliance crews were staged in areas local to where they were working that Friday. The Company also had many of the other local vendors remain at their places of business, where their vehicles and men could assemble and wait to be deployed. Many of the vendors who reported to National Grid on Saturday were staged where lodging became available. Most of the local vendors were headquartered in the communities of Woburn, Billerica, Abington, Canton, Holbrook, and Bedford. Once the impact of Irene became known, National Grid deployed these external resources to areas in Massachusetts, Rhode Island, and New Hampshire.

On August 24 at 8:00 AM, the Regional Incident Commander directed the Planning Section Chief to secure 200 additional contract distribution line crews for New England. By late Wednesday evening, the Company had secured the 160 of the 200 distribution line crews requested. By the morning of Thursday, August 26, the Company secured over 200 distribution line crews.

In addition, approximately 235 transmission line workers were pre-staged on Saturday, August 27 at 6:00 PM. Approximately 70 of those were internal transmission line workers and 165 were contractor transmission line workers.

b) Mutual Assistance Crews

In addition to marshalling its own resources and securing resources from contractors, the Company vigorously 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 Irene, the EEI Mutual Assistance process was initiated on Thursday, August 25 at 8:00 AM when the Northeast Mutual Assistance Group ("NEMAG") convened a conference call to discuss the forecast for Irene. This call included representatives from fourteen northeast utilities and focused on the potential impact of Irene and pre-landfall activities. At the time, all utilities were holding their crews and monitoring the development of the storm. As part of this call, members of NEMAG also acknowledged that Irene had not yet reached landfall

² 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 emergencies work.

along the eastern seaboard and therefore NEMAG could not evaluate the full impact of the storm and the resulting need and duration for resources by the southern utilities.

Due to the potential magnitude of the damage from Irene, NEMAG leadership initiated a subsequent conference call on Thursday August 25, at 6:30 PM that included multiple Regional Mutual Assistance Groups (RMAGs) from across the United States. This call included the leadership from NEMAG, the New York Mutual Assistance Group (NYMAG), Southeast Electricity Exchange (SEE), and the Midwest Mutual Assistance Group. While the call did not yield the Company additional crews, it did establish key contacts and a process that would be continued throughout the event.

The Company's emergency planning group was working closely with Regional Planning Section Chief staff on August 26 and 27 in an attempt to secure an additional 400 crew resources. Following the 8:00 AM NEMAG call on Saturday, August 27, the NEMAG members determined that, due to the damage along the east coast, the Great Lakes Mutual Assistance Group and the Mid-Atlantic Mutual Assistance Group were also asked to participate on conference calls.

On Sunday, August 28, the total number of resources requested through NEMAG from electric distribution companies was in excess of 1,500 line personnel, inclusive of National Grid's request of 400. Additionally, other utilities along the east coast were requesting additional restoration resources in excess of 1,800 line personnel. However, as of August 28, participating utilities did not make additional resources available.

After the height of the storm had passed on August 28, National Grid continued to request additional resources through the mutual assistance process. As of 4:00 PM on August 29, approximately 7,000 line personnel had been requested by electric distribution companies along the east coast. National Grid ultimately secured twenty-four released line workers for New England restoration.

National Grid continued to participate in the NEMAG, NYMAG and RMAG Coordination Calls throughout the duration of the event. The last call was conducted on Sunday, September 4. As a result of its continuous effort to secure all available resources, National Grid obtained additional resources from Ohio, Florida, Canada, and New Hampshire, providing approximately 118 personnel, inclusive of the 24 line workers identified above.

2. Vegetation Management and Tree Crews

National Grid's forestry group, in support of the Regional Planning Section Chief, participated in all System Level Storm calls beginning on August 24 and used the weather projections to anticipate the number of forestry crews required to respond to this event.

The Company had completed a comprehensive assessment of its local forestry resources on Wednesday, August 24 well prior to the onset of Irene. Local resources are defined as contract tree crews currently performing scheduled work for the Company as part of their annual contracts. Through evaluation of local resources, which is the baseline support for the Company's normal forestry operations, the Company was able to identify incremental tree crews to support restoration efforts. This review considered both the location of the local forestry resources as well as the anticipated need for these resources during Irene.

The Company determined that incremental resources beyond local forestry resources were required to respond to Irene. Consequently, the Company initially contacted existing forestry contractors to understand resource availability outside of the Company's service area. The Company's ability to hire contractors for tree work is enhanced by the Company regularly engaging large national, as well as local, contractors. These vendors prioritize their response to National Grid based on the annual volume and overall stability of the vegetation management program, and have the ability to quickly move resources from one part of the country to another to assist with significant storm events such as Irene.

As Irene progressed and the potential impact to the Company's system became more certain, National Grid formally requested and obtained commitments for incremental resources from these contractors. Once committed, the Company commenced the mobilization process. These commitments provided specific assurance that all resources would be on site prior to Irene's anticipated impact on August 28.

By end of day Saturday, August 27, all forestry contractors were on site and staged at various locations across the New England region. By the time Irene impacted the Company's service area on August 28, the Forestry group had successfully procured and staged over 400 tree crews across New England, of which 274 tree crews were in Massachusetts, ready to respond to potentially impacted areas.

D. Logistics

Irene's timing significantly affected the Company's logistics activities prior to and during the event. The activities surrounding logistics for meals, lodging, vehicles and other services is dependent not only on the demand pertaining to the estimated number of crews required to support restoration work and the anticipated locations of service restoration, but also on the competing demands for similar services in the affected areas by other, non-utility consumers, such as the college move-in weekend, the Deutsche Bank Championship and other regional festivals, each of which occurred at some point during the Company's restoration efforts.

The Vice President of Operations Support contacted members of the logistics team by email on the morning of Wednesday, August 24, to activate the three-day pre-storm checklists in anticipation of Hurricane Irene. Members of the logistics team are sourced from a variety of National Grid departments and are pre-identified, providing logistics support for all events throughout New England. The following National Grid functions were represented on the logistics team pre-ICS designation:

- Regional Logistics Section Chief (Director of Investment Strategy)
- Regional Staging Site Lead (Director of Facilities Management)
- Regional Meals and lodging Lead (Manager of Operations Performance)
- Regional Fleet Management Lead (Director of Fleet)
- Regional Inventory Management Lead (Director of Inventory Management)

The logistics team members participated on System Storm Call #1 at 2:00 PM on Wednesday, August 24, during which the size and complexity of the event, based on the Telvent weather predictions at that time, were discussed.

During the following days, further pre-event daily system storm calls culminating with System Storm Call #5 on Sunday, August 28, added further granularity to the forecast and predictions, enabling the logistics team to refine response plans during the incident anticipation stage.

The team assumed their ICS roles following System Storm Call #2 on Thursday, August 25, at which time a determination on the storm's level was made and the Senior Vice President of Network Strategy was appointed Incident Commander for New England.

The logistics team mobilized after System Storm Call #1 and initiated its pre-event activities.

1. Staging Sites



Following System Storm Call #1, the staging site core team members were contacted on Wednesday, August 24 and activated on Thursday August 25. Contact lists were confirmed and updated where necessary on Thursday August 25. The core team notified all remaining team members on Wednesday, August 24 concerning the likelihood of activating multiple staging sites, and the Company contacted Base Logistics, a third party logistics vendor, on Wednesday, August 24 to put it on notice that the Company may be requiring its support.

The core team participated on subsequent system storm calls and held preliminary discussions with Branch Emergency Operations Centers (“Branch EOC”) 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 location. On Thursday, August 25, the core team reviewed the list of pre-negotiated locations across the targeted area previously identified as staging sites and instructed National Grid’s customer and community group, with contacts at these locations, to confirm their availability as stated in the pre-negotiated agreements. The team also verified the list of available sites on Thursday.

The Company decided to establish staging sites along the perimeter of where the greatest anticipated damage would likely be sustained, based on the latest forecast information. This strategy helps keep crews, equipment and supplies directly out of harms way, until the storm passes, yet keeps the resources “close by” to where the greatest damage is expected. The core team reviewed the staging site plans for Rockingham Park (in Salem, NH) and Raynham to verify capacity and determine equipment requirements. Based upon this review, the core team

selected Rockingham Park (for service restoration in northern Massachusetts and New Hampshire) and Raynham, MA (to support restoration in southern Massachusetts and Rhode Island). Combining staging sites within National Grid's operations in Massachusetts, New Hampshire and Rhode Island is consistent with the Company's EEP and its regional approach to protecting its system and also affords additional flexibility once the extent of the actual damage can be ascertained.

Based on expected line crew resources and limitations in site availability in central Massachusetts, the core team reviewed other potential locations and the Regional Staging Site Lead visited a site in Marlborough at the Best Western Hotel and Conference Center. The meals and lodging team indicated that numerous rooms were available. The site visit revealed adequate on site parking and an adjacent conference center with a large yard. The Regional Staging Site Lead contacted the hotel manager and arranged for the use of the conference center yard for staging of stock/materials, parking vehicles and potential bussing to other hotels in the area. The meals and lodging team arranged for breakfast and dinner to be served at this location.

The staging site team also held discussions daily beginning Thursday, August 25 with the meals and lodging team to identify hotels in close proximity to proposed staging sites in Raynham and at Rockingham Park. 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 to provide overnight fueling services.

On Saturday, August 27, the Regional Staging Site Lead mobilized Staging Site Managers and personnel, enlisting the help of National Grid personnel who did not have previously assigned storm responsibility to assist with set up and operation of the sites. The staging site team activated the staging sites in Marlborough, Raynham, and Rockingham Park for the purpose of pre-stage line crews on Saturday, August 27. As part of this process, the staging site team, in coordination with the meals and lodging team, arranged for the transportation of line crews from Rockingham Park and Raynham as necessary, and breakfast and dinner for the line crews in Raynham by the owners of that site.

On Sunday, August 28, the staging site team arranged for the delivery of boxed lunches to begin on Monday, August 29 to the staging sites and crew locations for crews to take with them at the start of the working day.

2. Meals and Lodging

After System Storm Call #1, the Regional Meals and Lodging Lead communicated on August 24 to the meals and lodging team to prepare for activation. The Regional Meals and Lodging Lead developed a schedule for the next three days. Upon receipt of pre-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 upon this information. The team also booked hotels and ferries for the line crews to be sent to Nantucket. National Grid's procurement group informed the meals and lodging team of communication channels for expedited processing of hotel-related purchase orders. The meals and lodging team also ensured that an event would be opened in Resource on Demand ("RoD") (which is a software tool used during storm emergencies to track personnel working during an event) on August 25 and communicated with the RoD Intake Team to ensure that their mailbox was being monitored for incoming crew sheets.

On Thursday, August 25, meals and lodging set up operations. The team began to secure hotel inventory near the Marlborough and Raynham staging sites and the areas of northern Massachusetts and southern New Hampshire, as information from Operations was fed to the team. Various field resources populated crew sheets and the RoD Intake Team uploaded the sheets in RoD and rooms were assigned as the need demanded. The meals and lodging team participated in all storm calls on Thursday, August 25, and met with representatives from various groups requiring weekend lodging. Meals and lodging and procurement maintained constant communication to expedite purchase orders as the Company acquired hotel inventory. Updates regarding inventory acquired were sent throughout the day as requested by the Regional Meals and Lodging Lead to emergency planning when the Company determined this would be a multi-day event requiring significant resources. The Regional Meals and Lodging Lead communicated with the team updating them of this change in status and prepared a schedule for the next four days and communicated it to the team, along with the expectations that the team report to the Northborough Customer Contact Center (“Contact Center”) starting Saturday morning, August 27.

On Friday, August 26, the meals and lodging team was fully operational at the Contact Center. The team was instructed to come prepared to stay at least through the following Wednesday, August 31. The previous schedule was adjusted to have 24-hour coverage of the meals and lodging room beginning Saturday morning and was circulated to the team. The team compiled a list of all open restaurants at 12:30 PM, which was continuously updated as more information from the field came into the meals and lodging team. Concurrent with this activity was constant 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, at the end of Friday night, Meals and lodging sent out a report of hotel inventory for Saturday and Sunday to logistics leads along with contact information for emergency calls.

3. Inventory Management



The Company’s inventory management group ensures adequate materials and resources are engaged to provide effective material supply during the storm. Inventory Management contacted materials suppliers beginning Wednesday, August 24, to begin preparations for material needs, including the delivery of materials throughout the upcoming weekend and during Labor Day holiday weekend. Inventory management ordered 1,000 additional poles for delivery to the New England Distribution Center (NEDC) from the Company’s supplier as a proactive measure to ensure an adequate supply. Procurement also provided a dedicated buyer to proactively begin discussions with both primary and secondary suppliers of transformers, poles,

and storm kit materials in advance of actual need to ensure that sources for needed materials/supplies could be obtained, if and when required. Throughout the storm, inventory management employed a team of strategic buyers that worked under the direction of its material planning group to anticipate material needs. This proved to be very effective and allowed the material planning analysts to concentrate on replenishment of stock items, while the procurement team worked with suppliers to orchestrate delivery requirements, providing inventory a few days ahead of its need. During the duration of the storm, inventory management and procurement had four daily storm calls to coordinate needs and proactively identify any issues related to surety of supply.

Materials on hand were adequate to address all needs during the restoration. There were no instances of material shortages during the entire storm. Materials came directly from the crew locations, staging sites, and from the NEDC. Additional pole needs were delivered directly from the supplier's stocking yards to the staging sites, crew locations, and operations yards. Staging sites were utilized to locate materials in close proximity to the damaged areas and the location of line crews brought in to perform restoration activities. Three procurement buyers under the direction of inventory management were sent to the designated staging sites as material coordinators to monitor stocking levels and assist with deployment of materials to contractor crews. As the storm progressed and 24/7 coverage was necessary, additional staff from finance and facilities were engaged to assist as material coordinators, and to provide necessary rest to the individuals working 12-16 hour day shifts. Contract material handlers were procured to provide labor to operate forklifts and load trucks as a supplement to existing National Grid staff.

Stock rooms were reviewed for adequate material levels as a matter of course before the storm and additional required materials were delivered well in advance of the storm. All "routine" deliveries for normal business requirements on Monday, August 29 were moved up and delivered on Friday, August 26 or Saturday, August 27, so that all delivery trucks were empty and available at the NEDC, beginning on the morning of Sunday, August 28, when the storm was predicted to begin. Warehouse and material planning staff was scheduled for around-the-clock coverage and all vacations were cancelled to ensure adequate resources available 24/7. In addition, inventory management also enlisted the help of National Grid personnel who did not have previously assigned storm duties. Three procurement buyers and one category manager were brought into the NEDC to answer phones, process material stock requests, and provide daily order and delivery reports. Two additional material planning analysts were also deployed to the NEDC to assist with material stock requests as well as making sure that stock issues were processed correctly through the material management system. Inventory management personnel were present on every system storm call to respond to any material-related issues or inquiries. Due to the predicted magnitude of the storm, inventory management also engaged three mobile maintenance, repair and operations storerooms from one of the Company's suppliers to ensure on-site availability of high demand consumable items and eliminate delays due to lead time constraints.

The staging sites were the means to effectively provide materials to line crews from a central location. Requested deliveries were made to crew locations and staging sites during the storm for specific materials and replenishment of common stock.

4. Fleet Management



Based upon the predicted size and impact, discussed on system storm calls, fleet management conducted a staffing review and resource level evaluation for the remainder of the week and throughout the weekend of August 27-28. The Company decided to commence round-the-clock staffing for fleet operations beginning Saturday, August 27, and consecutive 12-hour shifts were then established at all Massachusetts fleet garage locations

Fleet management conducted a comprehensive availability review of all vehicles and equipment which were under repair. Those that could be utilized for restoration purposes were reprioritized, focusing to have these available for service by Friday, August 26.

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 if there were any changes in staging site fueling requirements. In addition, fleet management contacted vehicle material suppliers reaffirming 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. Specialty vehicles (e.g., digger derrick, aerial trucks, and amphibious equipment) were flagged and made ready awaiting reservation. Rental vehicles for damage assessment and wires down were also identified. Rental sedans/Sport Utility Vehicles were ordered and delivered to strategic locations based on the forecasted storm track by Saturday, August 27, and were available for dispatch.

The fleet group participated in all system 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.

The following vehicle count and type of Company-owned vehicles were available for Irene restoration work in Massachusetts:

Category	Total
Aerial	239
All-Terrain-Vehicle	5
Backhoe/Loader	134
Crane	25
Digger Derrick	42
Pickup	455
Passenger Car	221
Tanker Truck	2
Trailer	393
Truck Tractor	13
Truck/Body	342
Van	715
Grand Total	2,586

Repairs for Company vehicles and equipment during the storm restoration effort were performed at local Company fleet garage locations, or local external vendors. Local external vendors performed road calls, towing/recovery tasks. Repairs for foreign vehicles were handled by their supplier.

E. Communications

1. Introduction

In advance of the storm, the Company communicated with a variety of stakeholders about the impending storm and the Company's preparations. The Company made information available to all of its customers on safely preparing for Irene's arrival, including storm safety tips, emergency kit recommendations, ways to secure home and property, emergency contact numbers, elderly care, and special needs and life support information. The Company made contact with life support customers, hospitals, water treatment plants, and sewage plants. In total, the Company used over ten different channels to reach customers, including the customer contact center, the Company's website, Twitter, Facebook, YouTube, e-mail, text, and paid radio broadcast messages sending numerous messages about Irene to customers over the course of the storm event. The Company also communicated with MEMA, the Department, state and federal officials, and the media about its preparations. Communications with various stakeholders is described in more detail below.

2. Intra-Company

The Company's initial system storm call was held Wednesday, August 24 at 2:00 PM. Subsequent system storm calls prior to August 28 were conducted by the System Incident Commander as follows:

System Storm Call #2, 3:00 PM on Thursday Aug 25th
System Storm Call #3, 2:00 PM on Friday Aug 26th
System Storm Call #4, 4:00 PM on Saturday Aug 27th

The Regional Public Information Officer and three Public Information Coordinators led Intra-Company communications before, during and after the storm event. The Public Information Coordinators were located in the most affected areas. Communication flowed smoothly and was detailed, accurate and timely. The communications team was mobilized on August 24 immediately following the first system storm call.

Prior to August 28, the Company held regional storm calls on August 26 at 8:30 AM and on August 27 at 11:00 AM. Regional calls were held twice daily by the Regional Incident Commander. The Company's regional storm call notes are provided as Attachment E. Divisional calls began on August 26 and Public Information Coordinators participated in those calls. System Storm Calls were attended by the Public Information Officer, who conducted daily briefings with the Public Information Coordinators after each call.

3. Public Officials: Governor's Office, Massachusetts Emergency Management Agency, State Agencies, Elected Officials, Municipalities

a) Governor's Office

The Company's Vice President of Government Affairs for Massachusetts initially contacted the Governor's Deputy Chief of Staff on Thursday, August 25 to assure the Governor that the Company had all necessary contact information to provide information to the Governor's Office and to inform the Deputy Chief of Staff that the Company was in the process of making preparations for the storm due to hit the Commonwealth on Sunday, August 28. The call was also made to ensure that the Governor's office had the necessary contact information for the Company.

b) Department and MEMA

Beginning on Thursday, August 25 at 4:30 PM, the Company issued pre-event reports to the Department and MEMA every eight hours, until the storm arrived. Please see Attachment F for copies of the Company's pre-event reports. These reports outlined the Company's planning activities, assessment of forecasts and identified communications maintained with public, municipal, and elected officials, as well as regulators, MEMA and Life Support Customers. The final pre-event report was filed Saturday evening, August 27.

The Company maintained daily communications from Wednesday, August 24 forward with the Department's commissioners and staff. These included communications with commissioners and staff to update them on the Company's storm preparation and to notify them that the prepositioning of crews and equipment was underway, the Company's operating locations were being readied for the weekend, and that the Company would keep the Department informed through scheduled pre-event updates. In addition, the Company responded to Department inquiries and requests where information was available. The Company's system restoration reports are provided as Attachment G.³

The Company's Liaison Officer was stationed at MEMA's offices in Framingham on Friday, August 26, from 9:00 AM to 5:00 PM to review the Company's EEP with regulators and

³ The Company has provided updated "Stage B" Service Restoration Reports, along with the original "Stage A" reports submitted to the Department. The "Stage B" reports attached hereto include updated information regarding the Company's resources.

emergency management personnel. The Company's Liaison Officer or a designated alternate was present at MEMA in Framingham throughout the event.

c) Municipalities

The Company's Community and Customer Management organization maintained ongoing pre-event communications with municipal officials beginning Friday, August 26. A listing of assignments of the Company's municipal contact personnel is provided as Attachment H. On Friday afternoon, August 26, the Company completed outreach to all local officials and safety officials for the cities and towns in its service area, providing contact information and storm plans. Additionally, the Company sent a secondary notice containing municipal room telephone numbers, with the time of opening and the regular customer service telephone number for residents and businesses.

The Company also contacted hospitals, water treatment plants and sewage plants. As of Saturday, August 27, communications were completed to all municipalities informing them that the Company's municipal rooms would be open at 7:00 AM Sunday morning. The notification reviewed the Priority 1, 2 and 3 numbers and procedures for emergency calls. Municipal rooms opened as scheduled in Worcester, Brockton, Hopedale and North Andover at 7:00 AM on Sunday, August 28. There were also personnel located in the Malden office around the clock to assist with local Branch EOC activities. The Company made initial contact with well over 500 public safety officials (i.e., police chiefs, fire chiefs, emergency management directors, etc.) at each and all of the 171 cities and towns the Company serves in Massachusetts. Once the storm passed and the restoration phase began, the Company maintained communication with all of these communities until the Company ascertained the damage and impacts on a community-by-community basis. The Company's municipal call notes are provided as Attachment I.

In addition to the Company's standard outreach protocol, the Company made specific outreach calls to Gloucester and to the communities most affected by the June 1, 2011 tornado in Central Massachusetts: Monson, East Longmeadow, Hampden, Wilbraham, Sturbridge and Belchertown. The purpose of the calls was to reassure them that the Company's municipal rooms would be open on Sunday. On Saturday, August 27 at 2:00 PM, the Company held a conference call with Plymouth County public safety officials to re-confirm communication of key contact numbers. On Saturday, August 27, the Company also communicated with the City of Boston to discuss the Company's preparation activities and availability.

d) State Elected Officials

On Friday afternoon, August 26, the Company's Vice President of Government Affairs for Massachusetts communicated with all state representatives and senators in its Massachusetts service area informing them that the Company had activated its EEP. The Company outlined its activities in preparation for the hurricane, referred elected officials to its corporate website, provided key contact numbers, and provided them a copy of the afternoon press release. On Friday afternoon, August 26, the Company communicated with the Massachusetts Secretary, Energy and Environment Affairs to inform him of the Company's preparation activities, share some key information, and provide contact numbers.

e) Federal Officials

On Friday evening, August 26, National Grid's Federal Government Relations Vice President communicated with the Massachusetts Congressional delegation informing all recipients that the Company had activated its EEP. He outlined the Company's activities in preparation for Irene, referred them to the Company's corporate website, provided key contact numbers, and provided them a copy of the afternoon press release. On Saturday evening, the Company once again communicated with the delegation regarding the Company's activities and provided the press releases issued that evening. At the Federal level, National Grid communicated continually with the state delegation through daily updates during the week of August 28. The Company also communicated individually with many offices across the state.

4. Contact with Non-Life Support Customers

An internal pre-event call was held on Wednesday, August 24 with all regional departments in which information related to storm preparedness was shared and expectations were set. In addition, the Contact Center participated in division and system storm calls. These calls, as well as local contacts, provided the appropriate information for the Contact Center to develop storm restoration messages for customers.

On Thursday, August 25, the Customer Contact Center took the following steps to facilitate communications with the Company's customers:

- added additional staffing for Sunday, August 28, for mandatory 16-hour shifts
- established and created 12-hour shifts for representatives through Friday, September 2
- scheduled management personnel for 12-hour rotating shifts; and
- contacted the Company's third party vendor to put on alert/standby in the event the Company needed additional assistance.

In addition, the Contact Center established and maintained communication with the municipal rooms and wires down rooms in each region, which enabled the Contact Center to have a direct contact in the event of a dangerous situation, medical or safety concern from customers.

Also on August 25, the Company initiated customer communications regarding the imminent arrival of Irene. The Company communicated to customers across various channels, including calls made to customers by the Company's sales representative, and media outreach, which was intended to help ensure the messages were received by customers. In total, the Company utilized over ten different channels to reach customers such as the Contact Center, the Company's website, the Company's integrated voice recognition system, social media (Twitter/Facebook), and included the Company's first time use of e-mail, text, paid radio, print media, and YouTube.

The Company's pre-storm communications included alerts to customers of the impending weather and information for both residential and business customers to safely prepare for its arrival. The messages included topics on storm safety tips, emergency kit recommendations, ways to secure home and property, emergency numbers, elderly care, and special needs/life support customer information.

As the storm became imminent, the message communicated a sense of urgency for customers to prepare, given the potential storm severity that was being projected. Additionally, the Company informed customers of its preparedness efforts which included, but was not limited to, calling in extra crews, preparing to move crews and materials to impacted areas, and ensuring that key areas such as operations and customer call centers were appropriately staffed. Communications sent during the storm and the subsequent restoration period are included as Attachment J.

5. Contact with Life Support Customers

The Contact Center initiated calls to life support customers at noon on August 26 with a second call in the afternoon of August 27. Three automated outbound calls were made prior to the event, as detailed below.

8/26 Outbound call made at 12:00 pm

August 26 message to life-support customers

Hello this is Rita calling from National Grid on (Friday August 26) with an important message. Hurricane Irene is expected to affect our area with damaging wind and rain on Sunday August 28 which may cause widespread power outages.

I am reaching out to you because our records show that an individual who requires medical care or life support equipment is at this phone number. I am contacting you to make sure you and your households are able to take necessary precautions and preparations to insure your well being in the event of a power outage. For the health and safety of you and your family we urge you to consult your local media for more detailed weather information.

8/27 Outbound call made at 3:00 pm

Hello this is Rita calling from National Grid on (Saturday August 27) with an important message. Hurricane Irene is expected to affect our area with damaging wind and rain on Sunday August 28 which may cause widespread power outages.

I am reaching out to you because our records show that an individual who requires medical care or life support equipment is at this phone number. I am contacting you to make sure you and your households are able to take necessary precautions and preparations to insure your well being in the event of a power outage. For the health and safety of you and your family we urge you to consult your local media for more detailed weather information. **Please contact your 911 if you require emergency assistance or your local public safety officials.** If you have any questions about this phone calls please contact National Grid at 1-800-322-3223. Thank you

6. Media

In advance of the storm's arrival, the Company's Media Relations group used this time to develop communication to inform its customers, municipalities, and other affected stakeholders about storm safety and preparedness, as well as the efforts the Company had underway to prepare for the storm.

Media relations efforts in this regard commenced on Wednesday, August 24, by participating in an internal system storm call hosted by National Grid's System Incident Commander. Media relations participated in a subsequent system storm call on August 25, and based on the evolving weather forecast and the discussions on these calls, decided to issue a news release on Friday, August 26, two days in advance of the storm's forecasted arrival in Massachusetts, advising customers about what the Company was already doing to prepare for Irene, and urging customers to take appropriate precautions. A second "preparatory" or advisory news release was issued by media relations on August 27. This second message included information on the Company's preparations and safety and preparation messages for customers, as well as a list of ways customers could contact or stay in touch with the Company during and after Irene. In addition to these proactive announcements, Media Relations fielded approximately 20 media calls on Friday from reporters wanting to know how the Company was preparing for Irene. These requests were used as opportunities to deliver the customer preparedness and safety messages as well.

Media Relations also sought out additional opportunities to communicate the complexity and scale of how the Company was preparing for the storm, by proactively offering various media outlets interviews with the Company's manager of the NEDC. NEDC responses to questions were useful to inform media outlets that materials such as poles, transformers, wire, fuses, and other materials needed for the restoration effort were available and distributed in advance of the storm to pre-staged areas expected to be hardest hit, so as to expedite the restoration effort.

To ensure consistency and coordination of messaging throughout the pre-event stage, Media Relations coordinated closely with the Company's Regional and System Public Information Officers as established under the Company's EEP, as well as with other Company departments that have customer-facing responsibilities, and with government, community, and regulatory relations.

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 through the Company's outage management systems (Power On), through customer-reported troubles and information from all 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. Transmission Damage Appraisal Process

The Company's transmission damage appraisal 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 appraisal, 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 criticality of the affected circuit, the circuit is prioritized for patrol and damage assessment.

On Sunday, August 28, the first day of the storm, no aerial patrols of the transmission system were possible due to excessive wind speeds. The first patrols during Sunday were performed by foot patrols and by vehicle patrols. There were approximately 230 transmission line workers that also were pre-staged overnight into hotels the evening of August 27 in order to respond to damage assessed by foot patrols and vehicles on August 28. However, these patrols could not be undertaken safely until the peak storm winds began to subside in the late afternoon hours of Sunday. The extent of these initial patrols was limited due to safety reasons and reducing the risk of injury to employees on right of ways where tree limbs and trees could still be susceptible to falling. When it was safe, these resources were assigned foot patrols through the Branch EOC based on the priority set by the control center.

The second day of the storm, Monday, August 29, as the winds diminished helicopters were deployed to the New England region. Each helicopter vendor was assigned a spotter from National Grid to ride with the pilot. Their patrols were divided into regional areas for safety reasons and their flight paths along transmission corridors in Massachusetts and adjoining states affected by the storm were coordinated with the transmission control center.

2. Transmission Damage

On August 28, at approximately 7:40 AM, the storm began impacting National Grid's Massachusetts and Rhode Island transmission systems. The storm impacted the following transmission assets:

- 2 – 230kV lines tripped and remained open
- 8 – 115kV lines tripped and remained open
- 14 - 69kV lines tripped and remained open
- 2– 115kV lines tripped and reclosed automatically
- 5- 69kV lines tripped and reclosed automatically
- 2 – 115kV lines were taken out of service for emergency repairs
- 2- 69kV lines were taken out of service for emergency repairs

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. Examples include:

- The E-5E and F-6E lines (69kV - Millbury to Pondville to Leicester to Meadow Street - Central and Western Massachusetts) tripped and remained open. The faulted section was isolated and supply to the stations listed above was restored. These stations serve approximately 8,600 customers.
- The O-15S line (69kV - Palmer to Hampden to Kibbe Road to East Longmeadow – Western Massachusetts) tripped and remained open. The faulted section was isolated and supply to the Hampden station was restored. This station serves approximately 4,000 customers.
- S-19 line (69kV - Millbury to East Webster - Central Massachusetts) tripped and remained open. In this case, the station supply is transferred automatically to the T-20 line (69kV - Meadow St. – East Webster) and customers experience only a momentary outage. The S-19 line was isolated to repair. Later in the day, the T-20 line tripped and remained open resulting in loss of transmission supply to the station. The T-20 line was isolated to repair. When repairs were completed on the S-19 line, the line was returned to service and supply to East Webster was restored. This station serves approximately 14,000 customers.
- W-23 line (69-kV - Fitch Road to Woodside - Central Massachusetts) tripped and remained open. In this case, the station supply is transferred automatically to the W-23W line (69kV – Northborough Road to Woodside) and customers experience only a momentary outage. The W-23 line was isolated for repairs. Later in the day, the W-23W line tripped and remained open resulting in loss of transmission supply to the station. The W-23W was isolated for repair. When repairs were completed on the W-23W line, the line was returned to service and supply to Woodside was restored. This station serves approximately 6,200 customers.
- G7 line (69-kV – Northborough Road to Marlborough to S. Marlborough - Central Massachusetts) tripped and remained open. In this case, the station supply is transferred automatically to the W-23W line (69kV – Northborough Road to Woodside) and customers experience only a momentary outage. The G-7 line was isolated for repairs. Later in the day, the W-23W line tripped and remained open resulting in loss of transmission supply to the Marlborough and S. Marlborough stations. The W-23W was isolated for repair. When repairs were completed on the G-7 line, the line was returned to service and supply to Marlborough and S. Marlborough stations was restored. These stations serve approximately 18,600 customers.
- X-24E line (69-kV – Northborough to Westborough - Central Massachusetts) tripped and remained open. Several minutes later, the X-24W line (69-kV – Millbury to Westborough - Central Massachusetts) tripped and remained open. This resulted in the loss of transmission supply to Westborough. Both lines were isolated for repairs. When repairs were completed on the X-24W line, the line

was returned to service and supply to the Westborough station was restored. This station serves approximately 5,900 customers.

The damage to the transmission lines was largely caused by fallen trees that resulted in damaged conductors, cross-arms, and structures. In addition, several lines in western Massachusetts experienced damage to structures due to erosion resulting from flooding conditions.

Transmission line restoration occurred as follows:

- 4 lines restored on 8/28
- 16 lines restored on 8/29
- 1 lines restored on 8/30
- 1 lines restored on 9/1
- 4 lines restored on 9/2
- 2 lines restored on 9/3

B. Distribution

1. Damage Appraisal Process

Distribution damage appraisal operations were set up in five locations: North Andover, Malden, Worcester, Hopedale, and Brockton. The Damage Appraisal Manager coordinated these five regional operations from a central location. The five regional damage assessment groups each were staffed for 24-hour operations.

Preparations for damage appraisal began on Thursday, August 25, including staff assignment, requests for vehicles, and securing materials including appraisal forms, and feeder prints. On Friday, August 26, the Company dispatched key personnel to their assigned regional offices to set up the damage assessment offices and test computers, phones and other equipment. On Sunday, August 28, before the arrival of the storm, damage appraisal field coordinators and their support team activated each regional damage appraisal office at 5:00 AM. Throughout the day as the storm progressed these teams prepared the necessary patrol packages and made arrangements for the efficient assignment of damage appraisal patrollers on the first morning following the storm.

Damage appraisal patrols are performed in multiple phases. In Phase 1, the patrollers collect restoration requirements for 3-Phase Circuit Mainlines. Damage appraisal began on a limited basis the evening of Sunday, August 28 with the majority of Monday, August 29 dedicated to Phase 1 patrols. In Phase 2, which is activated immediately after completion of the Phase 1 Damage Appraisal Patrol, the patrollers collect restoration requirements for fused taps, single phase primary distribution, secondary, and services. Throughout the day, calls are made to the patrollers to capture information and enter it into the Company's storm damage appraisal database. Following the completion of Phase 2 surveys, the patrollers were used to inspect single no power calls and other in-service trouble orders called in by customers.

Each evening beginning on August 28 through September 2, the patrollers returned their

field notes and marked up feeder prints for the Work Packet⁴ Support teams. These teams would review the field notes and update the storm damage appraisal database. Then, for each feeder patrolled, 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 AM and provided for assignment to the appropriate crews.

The Worcester, Malden and North Andover offices commenced damage appraisal patrols on a limited number of circuits, based on the number of customers interrupted. Many of these patrols were concentrated in areas with confirmed outages downstream of reclosers and fuses. In the South Shore and Southeast areas, damage appraisers patrolled approximately 272 feeders in the Hopedale (Southeast) and Brockton (South Shore) areas, where damage was worst. These feeder routes comprise approximately 5,000 circuit miles of overhead conductor. Feeder patrols were prioritized based on a feeder's ranking (*i.e.*, the number and importance of customers served), as well as information on number of customers interrupted. The majority of the Phase 1 patrols were completed on Monday, August 29. Some Phase 1 patrols were combined and completed along with Phase 2 patrols. Appraisal of the damage was hampered by downed trees and closed roads in many locations.

As the storm restoration effort progressed, damage assessment resources were re-located to the hardest hit areas. The damage appraisal offices were demobilized at 6:00 PM on the following dates: Malden on August 29; North Andover on September 1; Worcester on September 2 and; Brockton and Hopedale on September 3.

2. Distribution Damage

The Company determined from its damage surveys that approximately 79 percent of all broken poles, 84 percent of all time worked by tree crews, 85 percent of all time worked by crews, and 82 percent of all three-phase primary sections down were in the Southeast and South Shore service areas. Many repairs were already underway on many of the circuits before the survey teams arrived and thus did not need to be noted in the Damage Appraisal (because the Company was already aware of their existence and restoration efforts were already underway). The towns and cities of Massachusetts with the most damage were Stoughton, Randolph, Brockton, East Bridgewater, Hanover, Hanson, Pembroke, Norton, Rehoboth, Seekonk, Attleboro, Douglas, Foxboro, Millville, Blackstone, Wrentham, Uxbridge and Upton.

As examples of the extent of storm damage, the Company's damage assessment identified:

- The feeders from the Norton substation had 17 broken poles, 12 sections of three-phase primary lines down, and 22 sections of single-phase primary lines down;
- The Whitins Pond 320W2 feeder that supplies a large portion of Douglas had 4 broken poles, 7 sections of three-phase primary down, and 14 sections of single-phase primary down;

⁴A Work Packet is also referred to as a Damage Patrol Envelope. It documents the nature of the damage sustained by the system, containing relevant information pertaining to the type and extent of damage in terms of the type damage, crews required to address the damage, estimated time to repair, equipment to be repaired, whether tree work is required, a LSC is involved, environmental clean up necessary, and the need for dig safe.

- The Uxbridge 321W2 that supplies a large portion of Uxbridge had no broken poles, but 9 sections of three-phase and 20 sections of single-phase primary lines down;
- The Water Street 910W52, which supplies a portion of Hanover, had 1 broken pole, 7 sections of three-phase and 10 sections of single-phase primary down;
- The Mink Street Station feeders, which supply large portions of Seekonk and Rehoboth, had 6 broken poles, 7 sections of three-phase primary lines and 39 sections of single phase primary lines down;
- South Randolph station feeders had 9 broken poles, 5 sections of three-phase primary lines and 8 sections of single-phase primary down;
- Stoughton station feeders had 9 broken poles, 13 sections of three-phase and 9 sections of single phase primary lines down;
- East Bridgewater station feeders had 8 broken poles, 2 sections of three-phase primary lines and 18 sections of single-phase primary lines down.

Uxbridge, Wrentham, Norwell, Foxboro, Rehoboth, Attleboro, and Bridgewater had the greatest number of trees down. In the South Shore and Southeast districts, days three and four of damage appraisal focused on confirming remaining trouble calls and closing work orders for which power had been restored.

V. RESTORATION

A. Timing and Priority of Service Restoration

The Company implemented the system of prioritization for restoration found in the EEP, focusing first on public safety and then with 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 backup 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 fed as few as 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 form in the EEP. Even with the challenge of accessing mutual aid crews while other utilities experienced similar damage from Irene, the Company had at one point more than 1,200 line crews, tree crews, personnel attending to downed wires, damage appraisers, and substation personnel working to restore service in the wake of Irene.

During a normal “Blue Sky” day, the Company’s Northborough control center is responsible for all service restoration activities, including response to public safety situations where there may be wires down or police and fire apparatus standing by. However, due to the

magnitude of Irene, the Company decentralized its service restoration efforts. In doing so, the company opened Branch EOCs and wires down rooms across much of its service area, allowing for the analysis, assignment, dispatch, repair and closeout functions to be performed closer to locations where outages were anticipated, thereby providing more accurate and timely deployment of resources to perform these activities. Northborough maintained control of service restoration and wires-down activities for communities in Western Massachusetts.

Each wires down room was staffed to operate in the same manner as the field workforce (i.e., 12 hour shifts/ 24 hour coverage). Each shift had at minimum one wires down coordinator responsible while assigned to the room for the overall operation of the wires down function for the area. Wires down dispatchers, clerical support and police and fire call back support reported to the wires down coordinator for that area. The wires down coordinator worked directly with the Branch EOC lead manager to ensure effective and efficient use of the available resources and appropriate coverage of police and fire calls indicating a “stand by” condition exists.

The decentralized wires down rooms were responsible for handling the police and fire estimated time of arrival (ETA) call back process for Priority 2 and 3 calls received by the room where police and/or fire apparatus are “standing by” until relieved by Company forces. Prior to the onset of Irene, the Company communicated with all wires down rooms regarding the police and fire call back process, to remind personnel of the proper way to prioritize, as well as the proper procedures on how ETA call backs would be handled. The wires down rooms prioritized resources such that police and fire at locations where public safety apparatus were reported to be standing by were relieved first.

The Company decentralized service restoration at 6:00 AM on Sunday, August 28. The Company selected its offices in Malden, North Andover, Worcester, Hopedale, and Brockton to be used as Branch EOCs. In addition, the following wires down operations were opened on that date in the same communities as part of the decentralized storm response in Massachusetts:

- 1) Malden – supporting North Shore
- 2) North Andover – supporting Merrimack Valley
- 3) Worcester – supporting Central
- 4) Hopedale – supporting Southeast
- 5) Brockton – supporting South Shore

On the South Shore, the Company implemented Phase 3 of the 2006 Joint Recommendations for an Emergency Response Communications Pilot Program with the Plymouth County Fire Chiefs Association (the “Pilot Program”). The Pilot Program includes agreed-upon protocols between the Company and public safety personnel in Plymouth County to respond to wires down calls. Phase 3 of the Pilot Program requires a minimum of 22 appraisers assigned each shift to support specific municipal locations in Plymouth County. The individuals assigned to this role checked in at the local fire stations per the Pilot Program.

The Branch EOCs and Northborough Control Room primarily focused on 911 Priority 1 Calls, as well as public safety and wires down support. This focus on public safety continued throughout every day of restoration. By early Sunday afternoon, most line crews were engaged in supporting wires down operations. Each wires down operation mobilized the necessary office support staff (i.e., dispatching) as well as field support (e.g., standby, appraisers, cut and clear). Resources typically assigned to be wires down personnel are drawn by the Company from customer meter service workers, available electric operations workers, gas customer meter

service workers. In the case of Irene, the Company also trained workers from National Grid gas field operations in Massachusetts, as well as available outside contractor resources.

As service restoration activities neared completion in a geographic area of responsibility, the Company executed a transition plan for returning to normal operations, allowing the Northborough EOC to retake service restoration activities. The Incident Commander reassigned line crews to other geographic areas. The Malden Branch EOC returned to normal operations August 31, at approximately 7:00 AM and the North Andover Branch EOC by the morning of September 1. The Worcester Branch EOC returned to normal at approximately 9:00 AM on September 2. By Saturday evening September 3, normal operations were returned by approximately 10:00 PM to Brockton and Hopedale.

B. Personnel Resources

The Company's resources during and after the storm event are provided in Attachment B (see Table B, pages 41-42). As noted previously, the Company planned for resources for Irene well in advance of the onset of the storm in Massachusetts and was ultimately able to secure over 1,200 crews at one point to restore service to customers. Although the Company's ability to secure additional crews was hampered by the demand for utility crews throughout New England and the east coast of the United States, ultimately, the Company was able to restore service to over 90 percent of its customers by 7:00 AM on September 1, even in the context of resource constraints.

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 Irene. This is common practice and was used in recent years by National Grid during storms in December 2009 and September 2010.

C. 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 pre-storm preparation.

As with any storm, prior to Irene's arrival, National Grid assembled a safety team with area responsibilities, established the reporting hierarchy, and prepared and communicated organ organization chart. The safety team prepared safety notices and delivered them Company-wide to all employees through corporate communications. The Company's communications from the Safety team to personnel involved in service restoration are provided in Attachment L. Safety personnel were deployed to assist in specific geographic areas, and delivered on-site safety orientations to National Grid workers, contractors, and mutual aid personnel prior to the start of each day. During Irene, safety personnel were regularly assigned to work sites to advise Company personnel, contractors and mutual aid personnel of safety issues and practices. In addition, prior to the start of each new job, the assigned crews reviewed the work ahead, with a focus on safe working conditions for the specific job.

VI. COMMUNICATIONS DURING AND AFTER THE EVENT

A. Communications Regarding Emergency Times for Restoration (ETRs)

The Company is aware of the importance on accurate and timely information about estimated times for restoration (“ETR”) after storm events. The Company made every effort to accurately and effectively communicate ETRs to customers and other interested stakeholders, in the context of widespread outages and damage to the Company’s infrastructure. In general, the Company’s primary communication vehicle for offering ETRs is through its Outage Central web page or through its Customer Contact Center. Outage Central is an interactive online tool directly accessible to customers, municipal officials, and state officials, which provides outage information, including ETRs. The information available on the Outage Central website is typically updated approximately every 15 minutes. During Irene, the Company used an integrated communications approach to reach customers with ETR information. The Company used its website, Twitter, Facebook, radio, email and text messages to encourage customers to visit Outage Central or call 1-800-465-1212 (Call Center) for ETRs. All residential and commercial customers who have email addresses on file with the Company and did not opt out of the email program received email updates. Only those customers who signed up to receive text message updates specifically for this storm received updates via text. The Company also used Twitter and Facebook to provide ETR information directly to customers who requested it rather than directing them to Outage Central or the customer contact center. ETR information provided by the Company through Twitter and Facebook was taken directly from the Company's Outage Central website, to ensure the most up-to-date information was provided to the customer.

On Sunday, August 28, because of the extensive and pervasive nature of the interruptions from the storm, the Company began experiencing performance issues with the Outage Central website, including slow response to users, outage and recovery time data not being updated properly and/or on a timely basis, and Outage Central intermittently not working entirely as a resource for its customers. The Company addressed these issues at the time of their occurrence as quickly as possible and attempted to resolve the issues by restarting servers and selectively turning off non-critical functionality on its website that competed for information technology resources. In addition, the Company’s service suppliers worked at the time of the occurrence to address telecom and network issues. The Company subsequently also undertook server upgrades after the restoration period subsided, as is reviewing long-term actions to remediate the issues that arose.

One of the initial challenges with providing ETRs was that the Company did not yet have the information. The Company must have sufficient information of the extent of the damage to the electrical system before it can formulate and provide ETRs. When damage is less severe and outages are more limited in scope than was the case for Irene, the Company is able to assess ETRs fairly readily and reliably, based on localized damage assessments where the “cause” and “effect” can be tied more plainly to a particular customer’s outage. As noted earlier, for this storm the distribution damage assessment in the field began on the evening of Sunday, August 28, as soon as weather conditions allowed damage assessment activities to begin safely. Since damage was still being assessed in most areas on August 30, these ETRs were set at the time by area or region. During the remainder of the event, the Company continued to refine available ETR information by developing more specific ETRs for the various geographic areas affected by the storm, based on existing damage, resource allocations, and the expected complexity of repairs. As of the afternoon of August 30, ETRs were made available to the municipal rooms. This information was passed along to municipal contacts through the daily municipal calls and

through individual calls and e-mails. This same information was posted on the Company's external website, which we communicated to the municipal contacts, in the event their citizens were seeking this information. On Wednesday August 31, as more damage assessment information became available, the Company provided ETRs by type of outage (feeder breaker, main-line device, fused branch, or individual customer) by crew platform location. On Thursday September 1, the Company focused on providing additional batched updates with ETRs by type of outage by town. Adjustments to ETRs were made continuously each day based on information from the field and resource allocations. As crews were assigned to individual outages the ETRs were again updated. On Friday and Saturday the Company focused on updating ETRs by type of outage by town for each individual outage. The Company continued to provide and make this information available to the municipalities. Towards the end of the restoration effort, primarily Friday, National Grid provided street level details for the remaining outages when requested by certain towns.

The Company is aware that some customers and government representatives perceived that the Company's efforts to communicate ETRs and the level of detail available to customers during the event regarding their specific outage needed improvement. The Company acknowledges that, in addition to the time necessary to perform a thorough damage appraisal of the Company's system, which prolonged the time otherwise necessary to determine ETRs, its Outage Central website was not easily accessible by customers early in the week of August 28, which hampered some customers from receiving ETR information that the Company had available. The Company is currently analyzing the performance of its Outage Central website during Irene and will determine how the system can be improved for future storm events.

On August 30, the Company received a request from the Department asking that the Company post a non-interactive PDF document on its website containing ETRs. The Company complied with this request on August 30 and throughout the duration of the restoration effort. See Attachment M. The PDF provided the number of customers without power and ETRs by town. The ETRs on the PDFs were updated twice daily on August 30 and 31, September 1 and 2.

Additional information on the Company's general communications effort during and after the storm is presented below.

B. Intra-Company

As part of the storm restoration effort, an internal communications protocol was implemented on August 28, under the direction of the System Public Information Officer. Periodic updates were issued each hour with detailed internal communications being issued from the EOC room after each storm call. These communications were shared so that all communications could be made in a timely manner. Internal communications were issued to all employees via email and the internal intranet daily throughout the duration of the event.

Regional storm calls were held twice daily – at 9:00 AM and 3:00 PM – from August 28 through September 4. System storm calls during and after the onset of Irene were coordinated with the regional calls and transpired once a day, between Sunday, August 28 and Sunday, September 4.

C. Public Officials: Governor’s Office, MEMA, State Agencies, Elected Officials, Municipalities

1. Governor’s Office

After the onset of the storm in Massachusetts additional communications to the Governor’s Deputy Chief of Staff were initiated by the Company’s Vice President of Government Affairs - Massachusetts during Sunday, Monday and Tuesday, August 28, 29 and 30. The Company informed the Governor’s office of the timing of restoration, the timing of any Company press conferences relating to restoration updates, and to indicate that the Company was available to provide any information requested.

2. Department and MEMA

A National Grid representative was present in the MEMA operations center from Friday, August 26 until the end of the storm and the closing of the MEMA operations.

3. Municipalities

The Company opened four divisional municipal rooms on August 28 at 7AM. The sites were pre-selected, given the breadth of the storm’s predicted impact on the state, to effectively manage and communicate with the number of communities in Massachusetts. These municipal rooms were established in North Andover, Worcester, Hopedale and Brockton, and were 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 held daily municipal calls, in each of the four locations, with all the communities throughout the restoration stage. A copy of municipal officials invited by the Company to participate in its storm calls is provided as Attachment K. The Company activated Phase 3 of the Pilot Program at 7:00 AM Sunday morning, August 28 (notification was made on Friday, August 26 that it would be happening) and it closed down the wires down emergency storm plan operation at 1:30 PM on Saturday, September 3.

Municipal calls were held beginning Sunday, August 28 until completion of the restoration activities in each region, as indicated in the table below.

Locations	Aug 28	Aug 29	Aug 30	Aug 31	Sept 1	Sept 2	Sept 3	Sept 4
North Shore/Merrimack Valley	2PM	2PM	11AM	Closed				
Worcester	2PM	2PM	2PM	2PM	2PM	Closed		
South Shore		10AM and 4PM	10:30AM	11AM	11AM and 7PM	11AM and 2PM	11AM	Closed
Southeast		4:30PM	6PM	11AM and 6PM	11AM and 6PM	11AM and 6PM	Closed	

As each division restoration was completing, a final municipal call was held with instructions on communications with the company should any new issues arise.

In addition to these daily calls, the Company maintained close contact daily with individual communities to provide an update on its activities and work closely with town and city officials to properly prioritize public safety concerns, critical facilities and important town functions (e.g., shelters, hospitals, schools, water/ sewer pumping stations, etc.). In some of its harder hit communities, the Company deployed National Grid community liaisons to work with the city's or town's emergency, safety and public officials as a dedicated liaison. These community liaisons were assigned full time to a specific community and supported direct communications back into the Company's branch municipal rooms, public information coordinators and branch restoration personnel. The Company's liaisons accompanied the safety officials around their towns to review prioritized locations and provide any further details about any concerns being 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.

Throughout the event, the municipal rooms worked with the local safety, emergency and elected officials to manage the towns priorities, along side the Company's restoration process and priorities. In cooperation with the Company's operations personnel, the Company worked collaboratively with municipalities to confirm and clear all wires down and public safety issues. 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 then worked with the municipalities to prioritize restoration of critical facilities (e.g., hospitals, shelters), critical infrastructure (e.g., communications, water and sewer stations) and critical customers (e.g., major elderly complexes, nursing homes). The local municipal room leads and the branch public information coordinator were active participants in the prioritization activities within in each division.

The Company also provided information on estimated restoration times for each town, which was posted on the Company's website, beginning Tuesday, August 30 and refreshed every 12 hours. As the Company completed restoration of supply and substations, it continuously provided more finite ETRs as the restoration activities progressed.

4. State and Federal Elected Officials

During the restoration period, the Company received many calls from state legislators, and some of the Congressional Offices, either asking for estimated restoration times, or informing the Company of calls received from their constituency regarding outages to hospitals, municipal offices, businesses and in some cases, elderly customers or customers with medical conditions. These calls were researched through the municipal rooms and information regarding the status of the restoration activity for the affected customer was provided back to the requestor through the Company's Vice President of Government Affairs. Information regarding the area impacted along with estimated times of restoration were provided, along with follow-up, once the impacted party was restored. The Company also provided updates to the Attorney General's Office and responded to requests for information.

D. Customers

1. Communications During and After the Storm Event

During the storm event, National Grid continued to provide customers with safety tips that were relevant during this phase of the storm, such as staying away from downed wires, and contact information to report power outages or downed wires, and to inform them that National Grid was assessing the damage to determine initial restoration times.

The messages during this phase of the storm were communicated with expanded coverage to increase communication frequency utilizing various communication channels including: web, email, radio, text, call center representative and Interactive Voice Response technology, along with postings on Twitter and Facebook. In addition, the Company utilized direct sales representative commercial customer calls and media outreach.

The Company conducted numerous outbound calls to customers regarding downed wires, crews, where to get ETRs, and also made calls to verify that power had been restored as feeders were restored, to help identify single customers that remained out of service. Scripts for these outbound calls were as follows:

Hurricane Irene Outage Restoration Call Script

This is <Heather> calling from National Grid with an important message regarding restoration of your power. Our crews have restored power to most customers in your area. This call is to confirm that your power has been restored, and to remind you to stay away from downed wires **which may be live and dangerous**. If you are still without power, please call us at 1-800-465-1212; **or press 9 now to connect to our outage reporting system**. If you are able to access the internet, you may also report your outage online at nationalgridus.com and click on outage central. Any information you provide will help us to find local problems more quickly. Again that number is 1800-465-1212. Our crews will continue to work until all customers have power restored.

We appreciate your patience - thank you

Sunday August 28 all customers Alternative Message – This message was sent starting at 8:30 PM

Hello this is Rita calling from National Grid on Sunday August 28 with an update on Hurricane Irene which has caused widespread damage to National Grid's electric system across New England. Our crews' immediate efforts are focused on securing public safety. Over 3500 National Grid employees will be working around the clock to restore your service as quickly as possible. Because the damage to our system is significant, it could be several days before all customers are restored. Please contact 911 if you require emergency assistance or your local public safety officials. Please remember that all down wires should be considered live and dangerous. Thank you

Day 2 August 29 Message to all customers – This message was sent starting at 4:00 PM

New England

Hello, This is Rita calling from National Grid on Monday August 29 with an update on Hurricane Irene which has caused widespread damage to National Grid's electric system across New England/. We want to thank you for your patience as over (3500) National Grid employees and contractors work around the clock to restore your service as quickly and safely as possible. Our crews' immediate efforts today are focused on clearing downed wires and restoring power to as many customers as possible. Because the damage to our system is so significant and widespread, restoration is expected to last well into the weekend in some of the hardest hit areas. We are committed to providing you routine updates as additional information becomes available. Please contact 911 if you require emergency assistance or your local public safety officials. Please remember to treat all down wires as live and dangerous. Thank you.

All NE Customers August 30 starting at 6:00 PM

This is <NAME> calling from National Grid with two important messages. The first is a reminder to stay away from all downed wires which are potentially live and dangerous. Please report all downed wires by calling 1-800-465-1212. The second message is to let you know that we have starting posting estimated times of restoration or ETRs on our website . To see the ETR for your location , please visit nationalgridus.com and click on outage central. We appreciate your patience and commitment to safety - thank you.

Due to the extensive and widespread damage to the region by Irene, immediately after the event, initial post-storm communications continued to focus on assessing restoration efforts and indication of multi-day restoration efforts along with safety information on downed wires and reporting power outages.

The Company provided customers with an update of restoration efforts, which consisted of crew updates and restoration estimates, as appropriate. In addition, other information that provided context to the magnitude of the hurricane, such as number of crews deployed, number of customers without power, numbers customers restored, extent of damage (with photos in applicable channels), and number of poles replaced, was provided. We also continued to emphasize safety and provided post-storm tips around downed wires, generators and home outdoor debris clean up.

Given the need for the timeliness of the above information, the channels most utilized during this phase were Call Center, Website, Twitter and Facebook. The other channels such as email, text, radio, representative calls, and media relations were also utilized. To help customers better understand the magnitude of the hurricane, we also deployed YouTube to provide videos of the damage.

Upon completion of restoration efforts, National Grid communicated 'thank you' messages to customers via web, email, social media, radio (in Boson/Worcester/Cape Cod markets) and newspaper print ads to let the customers know we appreciated their patience as everyone worked to safely restore power.

2. Life Support Customers

The Company remained in contact with Life Support Customers during and after the storm. A sample call message was as follows:

8/28 Outbound call made at 5:30 pm

Hello, this is Rita calling from National Grid with an important update about hurricane Irene which has caused widespread damage and power outages throughout the region.

3,500 National Grid employees will be working around the clock to restore your service as quickly as possible. Because the damage to our system is significant, it could be several days before all customers are restored. Your city or town may have information on locations where you can take shelter. Please contact 911 if you require emergency assistance. Please treat all downed wires as live and dangerous.

Thank you for your patience as we work to restore service as quickly and safely as possible.

National Grid was unsuccessful in reaching approximately 200 life support customers, either because their line was busy or because there was no answer. In a further effort to contact these customers, National Grid employees went in two person teams to their homes to personally speak with them. In advance of dispatching these teams into the field, National Grid informed local police departments that it would be making these visits to check on the well-being of citizens in their town. At each customer location, the teams documented completion of the visit including date and time, whether contact was made with the customer, as well as whether power had been restored to the customer's location.

Upon completion of all field visits, follow-up calls were made to those customers with whom contact had not been made during those visits. The date and time of each follow-up call was documented along with whether the customer was reached and whether power had been restored to their location. If, upon completion of all follow-up calls, contact was still not made with the customer, the local police department was contacted and asked to make a wellness visit to check on the status of that customer.

The Company also placed follow-up calls to customers for whom the Company could not contact with during field visits. The date and time of each follow-up call was documented as was the result of the call and the status of whether power had been restored at the location. Some life support customers expressed a concern over too many follow-up calls during the multi-day event, and asked the Company to discontinue follow-up calls to their location.

E. Media

Media relations activities in support of National Grid's restoration efforts began on Sunday, as the storm began bearing down on Massachusetts, and continued until the final customers were restored. There was no downtime between pre- and post-event media relations activities, as media interest understandably continued unabated as the storm came through the area.

On Sunday, August 28, Media Relations issued two news releases. The first urged customers in Massachusetts and Rhode Island to stay safe during and after the storm, and apprised customers that a total of 3,500 field staff were ready to respond to outages in the two states as soon as it was safe to do so. The second release alerted Massachusetts media outlets to a news briefing to be held at National Grid's Northborough EOC and led by the Company's Chief Operations Officer and System Incident Commander for National Grid's storm response, who would address the status of damage to the Company's electricity system in Massachusetts, as well describe the restoration process.

On Monday, the System Incident Commander conducted the news conference, which was attended by the Boston TV stations, WBZ radio, the Worcester and MetroWest daily newspapers and others. During the news conference and in all subsequent interactions the media relations team had with reporters throughout the restoration process, the Company made very clear that given what National Grid knew about the level of damage to its system, the service restoration process would likely continue into Labor Day weekend.

During the subsequent days, the media relations team fielded hundreds of incoming calls from reporters across the state, conducted a myriad of interviews with print and broadcast media, arranged numerous media interviews with Company executives and Operations staff, and coordinated crew visits for media. The media relations team also continued to issue news releases about the status of the restoration that also included safety information for customers -- particularly that they should avoid downed lines and use generators safely. Media relations also continuously directed reporters to the Company's online "Outage Central" information site to provide estimated restoration times once they had become available.

In order to accommodate some of the more localized media outlets, media relations also held a series of teleconferences for the media with the president of National Grid's Massachusetts business and the System Incident Commander. These calls were well attended by reporters from several suburban daily newspapers in the hardest-hit areas, as well as a number of the hyper-local "patch.coms," web sites that provide news about a single community.

In all, 14 news releases were issued by media relations from pre-event through completion of the restoration. Media relations fielded or initiated numerous interactions with reporters (including those that attended the news conference on August 29 or participated in the teleconference briefings), held a total of four media briefings/news conferences, and conducted countless interviews.

Consistent with the Company's EEP, the media relations team coordinated all media messaging and communications with the Company's Regional and System Public Information Officers and with other Company departments with customer-facing responsibilities, as well as government, community and regulatory relations personnel to ensure consistency and coordination of messaging.

VII. LESSONS LEARNED

In accordance with the Company's EEP, a detailed After Action Review (AAR) has been undertaken to identify what went well during Irene, as well as opportunities for improvement. Seven cross-functional workshops were held, each of which focused on improving the

effectiveness of the Company's storm response in terms of safety, restoration time, public information flow, process efficiency, workforce utilization, and customer satisfaction.

These workshops consisted of high level process flow evaluation of its activities during four phases of storm planning/restoration:

- 1) annual/pre-event:
- 2) incident anticipation,
- 3) restoration, and
- 4) post event.

This review is on-going and will result in recommendations for immediate improvement as well as longer term strategic improvements, perhaps resulting in modifications to the EEP. This AAR may also trigger additional in depth process reviews. The Company will provide the Department with the results of the AAR once it is completed.

The Company is considering some of the following action items based on preliminary lessons learned in the wake of Irene:

- 1) Communications with Customers Regarding ETRs

Although a full analysis is still ongoing, it was clear during the Company's restoration efforts that some of its customers and government stakeholders were not satisfied with the Company's performance communicating ETRs. The Company acknowledges that its Outage Central web-page did not provide customers with outage information with the speed or accuracy that they expected, and that the web-page was overwhelmed by customer demand during the early part of the week of August 28.

Action Item: The Company is reviewing ways to improve Outage Central.

- 2) Communications with Municipalities Regarding Restoration Procedures

The Company has initially concluded that improvements could be made to its procedures for communicating with municipal stakeholders.

Action Item: First, the Company intends to explore training employees to act as municipal liaisons during emergency events with the same municipalities over time. In addition, the Company believes that more frequent meetings between the Company and municipal stakeholders regarding the Company's EEP may be beneficial in order to discuss the Company's restoration priorities and procedures in the context of an emergency event. During these meetings, the Company hopes, for example, to improve communications of the Company's procedures for responding to Wires Down calls in order to improve the proper priority classification of downed wires and minimize the time necessary for public safety officials to monitor downed wires during emergency events. Thus, the Company will coordinate with NSTAR Electric Company and other Massachusetts electric companies evaluate whether improvements to the Wires Down process could be implemented in the future.

- 3) Communications With Life Support Customers

As required by the EEP, the Company contacted life support customers, before the storm and then again daily afterwards. Some life support customers expressed a concern over too many follow-up calls during the multi-day event, and asked the Company to discontinue follow-up calls to their location.

Action Item: While the Company is not implementing any change to its current practice, and in fact is extending it to calls during Level 2 events as required by its settlement in D.P.U. 11-03, the Company notes that its experience during Irene may indicate that this practice should be revised, and will review customer reaction to these calls during subsequent storms.

4) Outage Reporting Statistics

The current Outage Reporting Procedures (“ORP”) between the Company and the Department requires the Company to report every sustained distribution and transmission interruption that occurs within or impacts its service territory. Reporting is required within a one-hour period, from the beginning of the interruption, every interruption that results in 500 or more customer-interruption hours or that results in service interruption to a High-Profile Customer (for example, a customer to whom an interruption of service could pose a threat to public safety). All other interruptions are required to be reported to the Department within a 24-hour period from the beginning of the interruption. Reports are allowed to be revised to reflect updated/analyzed interruption information submitted within seven (7) days of the initial interruption reporting.

In the context of significant emergency events, such as Irene, the Company believes that the interruption reporting requirements do not provide sufficient time or latitude to the Company to analyze its initial interruption data and update it accurately to reflect the actual interruption experience of its customers. The Company’s interruption system, PowerOn, is designed to provide interruption information to the Company in the moments immediately after an interruption in a manner that allows the Company to initially predict the extent of interruptions on a street, in a neighborhood or throughout a region.

The system worked as intended during Irene to provide the Company with information necessary to pinpoint interruptions and develop restoration plans. However, the Company must analyze such data after an interruption event in order to more accurately determine the full extent of an interruption once the Company has been able to investigate the source of an outage. With respect to Irene, the Company needs more time than the ORP currently allows to review, analyze and update its interruption data in order to present the Department and interested stakeholders with more precise interruption information than is otherwise available in the early days after a storm event. As modernization of the electric grid evolves over time, interruption reporting systems may better allow the Company to report more precise interruption information more quickly. However, the Company believes that the current ORP requirements complicate its ability to present the Department with more accurate interruption data than is optimal, particularly in the context of storm events causing significant interruptions, such as Irene.

Action Item: The Company would like to work with the Department and interested parties to develop an interruption reporting system that better aligns the needs of customers and government stakeholders for quick and accurate interruption information with the capabilities of the Company’s systems.

VIII. CONCLUSION

Although Hurricane Irene had been downgraded to a Tropical Storm by the time it affected Massachusetts, it nonetheless damaged a significant amount of the Company's transmission and distribution infrastructure, and caused interruptions to approximately 40 percent of the Company's customers. Moreover, although resources were in high demand from North Carolina to Canada during the days before and after Irene hit Massachusetts, National Grid secured as many resources as possible to restore service, with approximately 1,200 resources working at one point, and returned service to customers as quickly as possible during the week of August 28. The Company is proud of its restoration efforts, and grateful for the unwavering dedication of its employees and the support offered by many customers, state and local government officials, and public safety authorities before, during, and after the storm. As the Company continues its lessons learned AAR process to flesh out improvements it can implement during future storms, the Company looks forward to working with the Department and interested stakeholders over the coming weeks to further discuss the Company's restoration efforts relating to this event.

Hurricane Irene - Rhode Island Resources

	Date Time			
	2011 08 29			
Data	600	1200	1800	2400
Number of Company Line Crews		61	57	56
Number of Company Tree Crews		-	-	-
Number of Company Wire Down Personnel		83	116	59
Number of Company Damage Appraiser Personnel		65	65	15
Number of Company Substation/Transmission Personnel		51	51	-
Total Company	-	260	289	130
Number of Contractor Line Crews		80	48	-
Number of Contractor Tree Crews		143	143	-
Number of Contractor Wire Down Personnel		-	15	15
Number of Contractor Damage Appraiser Personnel		-	-	-
Number of Contractor Substation/Transmission Personnel		141	141	-
Total Contractor	-	364	347	15
Number of In-State Mutual Aid Line Crews		-	-	-
Number of In-State Mutual Aid Tree Crews		-	-	-
Number of In-State Mutual Aid Wire Down Personnel		-	-	-
Number of In-State Mutual Aid Damage Appraiser Personnel		-	-	-
In-State Mutual Aid Substation/Transmission Personnel		-	-	-
Total In-State Mutual Aid	-	-	-	-
Number of Out-of-State Mutual Aid Line Crews		-	-	-
Number of Out-of-State Mutual Aid Tree Crews		-	-	-
Number of Out-of-State Mutual Aid Wire Down Personnel		-	-	-
Number of Out-of-State Mutual Aid Damage Appraiser Personnel		-	-	-
Out-of- State Mutual Aid Substation/Transmission Personnel		-	-	-
Total Out-of-State Mutual Aid	-	-	-	-
Total # of Crews and Personnel Working		624	636	145
Sum of Number of Company Support Personnel Used		95	118	54

Hurricane Irene - Rhode Island Resources

	2011 08 30			
Data	600	1200	1800	2400
Number of Company Line Crews	65	71	64	19
Number of Company Tree Crews	-	-	-	-
Number of Company Wire Down Personnel	113	157	162	78
Number of Company Damage Appraiser Personnel	114	97	48	25
Number of Company Substation/Transmission Personnel	51	99	99	-
Total Company	343	424	373	122
Number of Contractor Line Crews	83	81	81	-
Number of Contractor Tree Crews	143	160	177	7
Number of Contractor Wire Down Personnel	15	13	26	10
Number of Contractor Damage Appraiser Personnel	-	-	49	-
Number of Contractor Substation/Transmission Personnel	141	219	219	-
Total Contractor	382	473	552	17
Number of In-State Mutual Aid Line Crews	-	-	-	-
Number of In-State Mutual Aid Tree Crews	-	-	-	-
Number of In-State Mutual Aid Wire Down Personnel	-	-	-	-
Number of In-State Mutual Aid Damage Appraiser Personnel	-	-	-	-
In-State Mutual Aid Substation/Transmission Personnel	-	-	-	-
Total In-State Mutual Aid	-	-	-	-
Number of Out-of-State Mutual Aid Line Crews	-	-	-	-
Number of Out-of-State Mutual Aid Tree Crews	-	-	-	-
Number of Out-of-State Mutual Aid Wire Down Personnel	-	-	-	-
Number of Out-of-State Mutual Aid Damage Appraiser Personnel	-	-	-	-
Out-of- State Mutual Aid Substation/Transmission Personnel	-	-	-	-
Total Out-of-State Mutual Aid	-	-	-	-
Total # of Crews and Personnel Working	725	897	925	139
Sum of Number of Company Support Personnel Used	118	124	126	60

Hurricane Irene - Rhode Island Resources

	2011 08 31				
Data	600	900	1200	1800	2400
Number of Company Line Crews	61	61	62	73	21
Number of Company Tree Crews	-	-	-	-	-
Number of Company Wire Down Personnel	142	145	160	298	160
Number of Company Damage Appraiser Personnel	48	46	47	52	25
Number of Company Substation/Transmission Personnel	99	95	95	95	-
Total Company	350	347	364	518	206
Number of Contractor Line Crews	81	76	149	149	-
Number of Contractor Tree Crews	177	176	176	175	-
Number of Contractor Wire Down Personnel	26	26	34	34	36
Number of Contractor Damage Appraiser Personnel	49	75	75	45	-
Number of Contractor Substation/Transmission Personnel	219	204	204	213	-
Total Contractor	552	557	638	616	36
Number of In-State Mutual Aid Line Crews	-	-	-	-	-
Number of In-State Mutual Aid Tree Crews	-	-	-	-	-
Number of In-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of In-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
In-State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total In-State Mutual Aid	-	-	-	-	-
Number of Out-of-State Mutual Aid Line Crews	-	7	7	7	-
Number of Out-of-State Mutual Aid Tree Crews	-	-	-	-	-
Number of Out-of-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of Out-of-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
Out-of- State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total Out-of-State Mutual Aid	-	7	7	7	-
Total # of Crews and Personnel Working	902	911	1,009	1,141	242
Sum of Number of Company Support Personnel Used	126	129	127	132	60

Hurricane Irene - Rhode Island Resources

	2011 09 01				
Data	600	900	1200	1800	2400
Number of Company Line Crews	75	77	75	83	21
Number of Company Tree Crews	-	-	-	-	-
Number of Company Wire Down Personnel	217	217	352	352	171
Number of Company Damage Appraiser Personnel	51	52	54	66	25
Number of Company Substation/Transmission Personnel	55	55	55	68	-
Total Company	398	401	536	569	217
Number of Contractor Line Crews	182	200	182	174	-
Number of Contractor Tree Crews	175	182	182	173	-
Number of Contractor Wire Down Personnel	62	62	86	86	36
Number of Contractor Damage Appraiser Personnel	34	34	20	8	-
Number of Contractor Substation/Transmission Personnel	228	38	38	40	-
Total Contractor	681	516	508	481	36
Number of In-State Mutual Aid Line Crews	-	-	-	-	-
Number of In-State Mutual Aid Tree Crews	-	-	-	-	-
Number of In-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of In-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
In-State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total In-State Mutual Aid	-	-	-	-	-
Number of Out-of-State Mutual Aid Line Crews	18	18	18	18	-
Number of Out-of-State Mutual Aid Tree Crews	-	-	-	-	-
Number of Out-of-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of Out-of-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
Out-of- State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total Out-of-State Mutual Aid	18	18	18	18	-
Total # of Crews and Personnel Working	1,097	935	1,062	1,068	253
Sum of Number of Company Support Personnel Used	132	132	145	146	60

Hurricane Irene - Rhode Island Resources

	2011 09 02				
Data	600	900	1200	1800	2400
Number of Company Line Crews	88	88	89	79	21
Number of Company Tree Crews	-	-	-	-	-
Number of Company Wire Down Personnel	294	299	299	312	98
Number of Company Damage Appraiser Personnel	66	66	65	65	7
Number of Company Substation/Transmission Personnel	68	68	68	68	-
Total Company	516	521	521	524	126
Number of Contractor Line Crews	174	174	175	175	-
Number of Contractor Tree Crews	173	173	173	173	-
Number of Contractor Wire Down Personnel	86	86	86	86	-
Number of Contractor Damage Appraiser Personnel	8	8	8	8	-
Number of Contractor Substation/Transmission Personnel	40	40	40	40	-
Total Contractor	481	481	482	482	-
Number of In-State Mutual Aid Line Crews	-	-	-	-	-
Number of In-State Mutual Aid Tree Crews	-	-	-	-	-
Number of In-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of In-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
In-State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total In-State Mutual Aid	-	-	-	-	-
Number of Out-of-State Mutual Aid Line Crews	18	18	18	18	-
Number of Out-of-State Mutual Aid Tree Crews	-	-	-	-	-
Number of Out-of-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of Out-of-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
Out-of- State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total Out-of-State Mutual Aid	18	18	18	18	-
Total # of Crews and Personnel Working	1,015	1,020	1,021	1,024	126
Sum of Number of Company Support Personnel Used	146	150	150	150	60

Hurricane Irene - Rhode Island Resources

	2011 09 03				
Data	600	900	1200	1800	2400
Number of Company Line Crews	81	81	92	92	21
Number of Company Tree Crews	-	-	-	-	-
Number of Company Wire Down Personnel	155	111	111	111	-
Number of Company Damage Appraiser Personnel	50	50	53	53	7
Number of Company Substation/Transmission Personnel	68	68	68	68	-
Total Company	354	310	324	324	28
Number of Contractor Line Crews	230	186	201	152	-
Number of Contractor Tree Crews	173	81	81	69	-
Number of Contractor Wire Down Personnel	24	24	24	24	-
Number of Contractor Damage Appraiser Personnel	-	-	-	-	-
Number of Contractor Substation/Transmission Personnel	40	-	-	-	-
Total Contractor	467	291	306	245	-
Number of In-State Mutual Aid Line Crews	-	-	-	-	-
Number of In-State Mutual Aid Tree Crews	-	-	-	-	-
Number of In-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of In-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
In-State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total In-State Mutual Aid	-	-	-	-	-
Number of Out-of-State Mutual Aid Line Crews	18	62	95	95	-
Number of Out-of-State Mutual Aid Tree Crews	-	-	-	-	-
Number of Out-of-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of Out-of-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
Out-of- State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total Out-of-State Mutual Aid	18	62	95	95	-
Total # of Crews and Personnel Working	839	663	725	664	28
Sum of Number of Company Support Personnel Used	138	137	122	121	41

Hurricane Irene - Rhode Island Resources

	2011 09 04				
Data	600	900	1200	1800	2400
Number of Company Line Crews	92	90	98	18	18
Number of Company Tree Crews	-	-	-	-	-
Number of Company Wire Down Personnel	50	-	-	-	-
Number of Company Damage Appraiser Personnel	53	-	-	-	-
Number of Company Substation/Transmission Personnel	-	-	-	-	-
Total Company	195	90	98	18	18
Number of Contractor Line Crews	152	242	242	20	-
Number of Contractor Tree Crews	69	37	37	-	-
Number of Contractor Wire Down Personnel	-	-	-	-	-
Number of Contractor Damage Appraiser Personnel	-	-	-	-	-
Number of Contractor Substation/Transmission Personnel	-	-	-	-	-
Total Contractor	221	279	279	20	-
Number of In-State Mutual Aid Line Crews	-	-	-	-	-
Number of In-State Mutual Aid Tree Crews	-	-	-	-	-
Number of In-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of In-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
In-State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total In-State Mutual Aid	-	-	-	-	-
Number of Out-of-State Mutual Aid Line Crews	95	95	95	-	-
Number of Out-of-State Mutual Aid Tree Crews	-	-	-	-	-
Number of Out-of-State Mutual Aid Wire Down Personnel	-	-	-	-	-
Number of Out-of-State Mutual Aid Damage Appraiser Personnel	-	-	-	-	-
Out-of- State Mutual Aid Substation/Transmission Personnel	-	-	-	-	-
Total Out-of-State Mutual Aid	95	95	95	-	-
Total # of Crews and Personnel Working	511	464	472	38	18
Sum of Number of Company Support Personnel Used	69	61	53	10	4

08/30/2011 15:51

Geo Area Id	Geo Area Name	Number Of Customers Served	Number Of Customers Out Of Service	Percent Of Customers Out Of Service	Customer Calls	Active Outages	Estimated Restoration Date/Time
605	WARWICK	40,556	12,932	31.89%	2,923	521	
647	PAWTUCKET	32,111	12,282	38.25%	2,115	86	
612	COVENTRY	15,187	7,050	46.42%	1,172	137	
604	CRANSTON	35,286	6,816	19.32%	1,394	177	
601	PROVIDENCE	68,527	6,537	9.54%	1,539	282	
637	SOUTH KINGSTOWN	14,316	6,338	44.27%	1,637	138	
643	CUMBERLAND	14,876	6,111	41.08%	1,229	65	
623	BRISTOL	10,266	5,767	56.18%	670	15	
646	CENTRAL FALLS	6,976	5,467	78.37%	737	17	
608	WEST WARWICK	14,816	4,651	31.39%	778	89	
613	NORTH KINGSTOWN	12,968	4,608	35.53%	800	83	
602	NORTH PROVIDENCE	15,908	4,487	28.21%	969	170	
633	CHARLESTOWN	5,714	4,444	77.77%	764	20	
606	JOHNSTON	13,346	3,948	29.58%	1,215	127	
614	GLOCESTER	4,488	3,710	82.66%	709	35	
642	NORTH SMITHFIELD	5,655	3,147	55.65%	425	26	
622	BARRINGTON	6,783	2,886	42.55%	176	54	
610	SCITUATE	4,596	2,589	56.33%	518	78	
641	BURRILLVILLE	2,573	2,570	99.88%	292	4	
635	HOPKINTON	3,828	2,538	66.30%	503	42	
631	WESTERLY	14,137	2,529	17.89%	493	93	
634	EXETER	2,899	2,411	83.17%	645	29	
609	EAST GREENWICH	5,993	2,317	38.66%	526	62	
645	LINCOLN	9,756	2,244	23.00%	321	31	
603	EAST PROVIDENCE	21,923	1,942	8.86%	529	123	
607	SMITHFIELD	8,616	1,833	21.27%	553	86	
626	PORTSMOUTH	9,034	1,718	19.02%	100	57	
632	RICHMOND	3,279	1,578	48.12%	590	46	
611	FOSTER	2,015	1,514	75.14%	162	18	

08/30/2011 15:51

Geo Area Id	Geo Area Name	Number Of Customers Served	Number Of Customers Out Of Service	Percent Of Customers Out Of Service	Customer Calls	Active Outages	Estimated Restoration Date/Time
644	WOONSOCKET	18,238	1,457	7.99%	366	70	
621	WARREN	5,704	1,446	25.35%	37	10	
639	WEST GREENWICH	2,681	1,433	53.45%	472	60	
636	NARRAGANSETT	10,493	890	8.48%	193	56	
624	TIVERTON	8,108	306	3.77%	96	55	
625	LITTLE COMPTON	2,544	220	8.65%	44	21	
627	NEWPORT	14,936	219	1.47%	71	52	
629	JAMESTOWN	3,272	63	1.93%	23	14	
628	MIDDLETOWN	7,877	49	0.62%	42	38	
304	WARWICK	441	1	0.23%	1	1	
		480,722					

NH PUC TRANSMISSION CREW REPORT TEMPLATE

EVENT	Hurrican Irene	
DATE:		TIME - DATA EXTRACT:
Submitted by:		
Company:	National Grid	

Quantity of Field Personnel

Quantity of Field Personnel				Prior to Event	During Event	Incremental
FRONT LINE						
1	Transmission ^A 69KV and Greater includes off road and on road crews	Line	Company Line Crews restoring Transmission Circuits	0	0	0
			Affiliate Co Line Crews restoring Transmission Circuits	0	0	0
			Contractor Line Crews restoring Transmission Circuits	0	0	0
			Foreign Utility Line Crews restoring Transmission Circuits	0	0	0
		Tree	Contractor Tree Clearing - Working on Transmission Lines:	0	0	0
			Foreign Utility Tree Clearing - Working on Transmission Lines:	0	0	0
			SUBTOTAL	0	0	0
FIELD ASSESSMENT						
2	Transmission see above	Line ^C	Company Damage Assessment Personnel	0	0	0
			SUBTOTAL	0	0	0
PUBLIC SAFETY						
3	Wires Down Appraiser Field Guides Other Support	Line	Company Personnel	0	0	0
			Bird Dogs, Location Guides	0	0	0
			includes contractors	0	0	0
			SUBTOTAL	0	0	0
A includes crews physically present, signed into work , includes off road and on road						
B does not include line crews who are doing both, includes those who are exclusively doing pole setting, includes contractor, in-house crews, mutual aid crews, does not include Telecom Crews						
GRAND TOTAL				0	0	0

A includes crews physically present, signed into work , includes off road and on road

B does not include line crews who are doing both, includes those who are exclusively doing pole setting, includes contractor, in-house crews, mutual aid crews, does not include Telecom Crews

C does not include line crews who are also doing assessment

NH PUC DISTRIBUTION CREW REPORT

EVENT	Hurrican Irene	
DATE:	August 29, 2011	TIME - DATA EXTRACT: 8/29/11 3pm
Submitted by:	Will Kern	
Company:	National Grid	

Quantity of Field Personnel

Quantity of Field Personnel				Prior to Event	During Event	Incremental
FRONT LINE						
1	Distribution ^A 69 KV and Less includes Subtransmission 46kv, 34.5kv,22kv, 13kv, 7.5 kv, 4kv, 2kv and below	Line	Company Line Crews restoring Distribution Circuits	9	8	-1
			Affiliate Co Line Crews restoring Distribution Circuits	0	0	0
			Contractor Line Crews restoring Distribution Circuits	0	24	24
			Foreign Utility Line Crews restoring Distribution Circuits	0	0	0
		Service	Company Line Crews restoring Service	0	0	0
			Contractors restoring Service <i>includes Electricians</i>	0	0	0
		Pole ^B	Pole Setting/Digging Operations <i>includes Co, Foreign Utility, Contractor</i>	0	0	0
			Tree	Contractor Tree Clearing - Working on Distribution Circuits	7	18.5
		Foreign Utility Tree Clearing - Working on Distribution Circuits		0	0	0
SUBTOTAL				16	50.5	34.5
FIELD ASSESSMENT						
2	Distribution see above	Line ^C	Company Damage Assessment Personnel	0	0	0
SUBTOTAL				0	0	0
PUBLIC SAFETY						
3	Wires Down Appraiser Field Guides Other Support	Line	Company Personnel	2	3	0
			Bird Dogs, Location Guides	1	0	-1
			<i>includes contractors</i>	14	11	-3
		SUBTOTAL				17
<div><div><div><div>^A includes crews physically present, signed into work , includes off road and on road</div><div>^B does not include line crews who are doing both, includes those who are exclusively doing pole setting, includes contractor, in-house crews, mutual aid crews, does not include Telecom Crews</div><div>^C does not include line crews who are also doing assessment</div></div></div></div>						
GRAND TOTAL				33	64.5	30.5

A includes crews physically present, signed into work , includes off road and on road

B does not include line crews who are doing both, includes those who are exclusively doing pole setting, includes contractor, in-house crews, mutual aid crews, does not include Telecom Crews

C does not include line crews who are also doing assessment

EVENT

DATE:

Submitted by:

2011 Hurricane Irene

08/29/11

Manzo

TIME - DATA EXTRACT:

3:00 PM

Town Name	N Grid Total Customers	NGrid Customers without Power	NGRID % Out of Power
Acworth	188	5	3%
Alstead	1,049	0	0%
Bath	9	0	0%
Canaan	1,452	5	0%
Charlestown	1,691	0	0%
Cornish	112	0	0%
Derry	113	23	20%
Enfield	2,547	0	0%
Grafton	18	0	0%
Hanover	3,499	5	0%
Langdon	262	0	0%
Lebanon	7,870	5	0%
Marlow	5	0	0%
Monroe	231	0	0%
Orange	30	0	0%
Pelham	5,127	1,268	25%
Plainfield	564	0	0%
Salem	13,746	840	6%
Surry	34	0	0%
Walpole	1,983	0	0%
Windham	1,062	144	14%
	41,592	2,295	

Open link below, open outage map, open outage central. Open summary/outage areas/county designations. Copy ,paste special(unicode text) into blocked area (col Q-V) . Note: need county names for this to www.nationalgridus.cc

CTV - City Town Village	Customer s Affected	Customer s Served	Estimated Restoration
(NH)	0	3,333	
Alstead	0	1,049	
Langdon	0	262	
Marlow	0	5	
Surry	0	34	
Walpole	0	1,983	
GRAFTON (NH)	5	15,656	Assessing Condition
Bath	0	9	
Canaan	5	1,452	Assessing Condition
Enfield	0	2,547	
Grafton	0	18	
Hanover	5	3,499	Assessing Condition
Lebanon	5	7,870	Assessing Condition
Monroe	0	231	
Orange	0	30	
HILLSBOROUGH (NH)	1,268	5,127	Assessing Condition
Pelham	1,268	5,127	Assessing Condition
ROCKINGHAM (NH)	1,007	14,921	Assessing Condition
Derry	23	113	Assessing Condition
Salem	840	13,746	Assessing Condition
Windham	144	1,062	Assessing Condition
SULLIVAN (NH)	<5	2,555	Assessing Condition
Acworth	5	188	Assessing Condition
Charlestown	0	1,691	
Cornish	0	112	
Plainfield	0	564	
TOTAL	2,281	41,592	-

Branch/Platform/Town	Number of Company Line Crews	Number of Contractor Line Crews	Number of In- State Mutual Aid Line Crews	Number of Out-of-State Mutual Aid Line Crews	Number of Company Tree Crews	Number of Contractor Tree Crews	Number of In- State Mutual Aid Tree Crews
NE North Shore/Merrimack Valley Branch (Total)	<u>36.5</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>18</u>	<u>0</u>
Malden						6	
Everett							
Lynn							
Malden							
Medford	8						
Melrose							
Nahant							
Revere							
Saugus							
Swampscott							
Winthrop							
Beverly						0	
Beverly	1						
Essex							
Gloucester							
Hamilton							
Manchester-By-the-Sea							
Rockport							
Salem							
Topsfield							
Wenham							
N. Andover/Haverhill		0				0	
Andover	2						
Boxford	1						
Haverhill	1						
Lawrence	0						
Methuen	3						
N.Andover	5						
Tewksbury		0				7	
Billerica	2						

Branch/Platform/Town	Number of Company Line Crews	Number of Contractor Line Crews	Number of In- State Mutual Aid Line Crews	Number of Out-of-State Mutual Aid Line Crews	Number of Company Tree Crews	Number of Contractor Tree Crews	Number of In- State Mutual Aid Tree Crews
<i>Chelmsford</i>	2						
<i>Dracut</i>	0						
<i>Lowell</i>	0						
<i>Tewksbury</i>	5						
<i>Tyngsboro</i>	1						
<i>Westford</i>	2						
Newburyport		0				5	
<i>Amesbury</i>	0						
<i>Newbury</i>	0						
<i>Newburyport</i>	3.5						
<i>Salisbury</i>	0						
<i>W. Newbury</i>	0						
NE South Branch (Total)	<u>60</u>	<u>141</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>153</u>	<u>0</u>
Marlboro						0	
<i>Marlboro</i>							
<i>Northboro</i>							
<i>Southboro</i>							
<i>Westboro</i>							
Somerset						6	
<i>Dighton</i>							
<i>Fall River</i>	2						
<i>N. Dighton</i>	3						
<i>Somerset</i>	1						
<i>Swansea</i>							
<i>Westport</i>	1						
Hopedale						61	
<i>Bellingham</i>	1						
<i>Blackston</i>	1						
<i>Foxboro</i>	2	5					
<i>Franklin</i>	1						
<i>Hopedale</i>							

Branch/Platform/Town	Number of Company Line Crews	Number of Contractor Line Crews	Number of In- State Mutual Aid Line Crews	Number of Out-of-State Mutual Aid Line Crews	Number of Company Tree Crews	Number of Contractor Tree Crews	Number of In- State Mutual Aid Tree Crews
Mansfield							
Mendon							
Milford	5						
Plainville	2						
Upton	1						
Wrentham	1	2					
Douglas	1						
E. Douglas							
Linwood							
Millville	2						
N. Uxbridge							
Northbridge	2						
Uxbridge	4	13					
Whitinsville		3					
Attleboro						31	
Attelboro	3	17					
Norton							
Rehoboth	1	22					
South Attelboro							
Seekonk		11					
Brockton			0	0		45	
Abington		5					
Avon		2					
Bridgewater	1	7					
Brockton	6	7					
E Bridgewater							
Easton	1	6					
Hanson	1						
N. Easton							
Norwell							

Branch/Platform/Town	Number of Company Line Crews	Number of Contractor Line Crews	Number of In- State Mutual Aid Line Crews	Number of Out-of-State Mutual Aid Line Crews	Number of Company Tree Crews	Number of Contractor Tree Crews	Number of In- State Mutual Aid Tree Crews
<i>Sharon</i>							
<i>S. Easton</i>							
<i>Stoughton</i>		21					
<i>W. Bridgewater</i>	1	1					
<i>Whitman</i>							
Hanover						10	
<i>Cohasset</i>	1						
<i>Halifax</i>							
<i>Hanover</i>	1						
<i>Hanson</i>							
<i>Norwell</i>	2						
<i>Pembroke</i>	5	5					
<i>Rockland</i>							
<i>Scituate</i>	2	6					
Quincy						0	
<i>Hingham</i>							
<i>Holbrook</i>		1					
<i>N. Quincy</i>							
<i>N. Weymouth</i>							
<i>Quincy</i>	2	5					
<i>Randolph</i>	2	2					
<i>S. Weymouth</i>							
<i>Weymouth</i>	1						
<i>Walliston</i>							
Nantucket						0	
<i>Nantucket</i>							
<i>Siasconet</i>							
Bay State West Branch (Total)	50	0	0	0	0	48	0
Spencer						13	
<i>Brookfield</i>							
<i>Charlton</i>							

Branch/Platform/Town	Number of Company Line Crews	Number of Contractor Line Crews	Number of In- State Mutual Aid Line Crews	Number of Out-of-State Mutual Aid Line Crews	Number of Company Tree Crews	Number of Contractor Tree Crews	Number of In- State Mutual Aid Tree Crews
<i>E. Brookfield</i>	2						
<i>New Braintree</i>	2						
<i>N. Brookfield</i>							
<i>Oakham</i>							
<i>Rutland</i>							
<i>Southbridge</i>	4						
<i>Spencer</i>	2						
<i>Sturbridge</i>	3						
<i>W. Brookfield</i>	1						
Worcester						1	
<i>Auburn</i>							
<i>Leicester</i>							
<i>Worcester</i>	14						
<i>Millbury</i>							
<i>Dudley</i>	2						
<i>Grafton</i>							
<i>Oxford</i>	2						
<i>Sutton</i>							
<i>Webster</i>	2						
Leominster/Gardner						5	
<i>Ayer</i>							
<i>Berlin</i>							
<i>Bolton</i>							
<i>Clinton</i>							
<i>Dunstable</i>							
<i>Gardner</i>							
<i>Harvard</i>							
<i>Hubbardston</i>							
<i>Lancaster</i>							
<i>Leominster</i>							
<i>Pepperell</i>							

Branch/Platform/Town	Number of Company Line Crews	Number of Contractor Line Crews	Number of In- State Mutual Aid Line Crews	Number of Out-of-State Mutual Aid Line Crews	Number of Company Tree Crews	Number of Contractor Tree Crews	Number of In- State Mutual Aid Tree Crews
<i>Shirley</i>							
<i>Westminster</i>							
<i>Winchendon</i>							
Athol						0	
<i>Athol</i>							
<i>Barre</i>							
<i>Erving</i>	1						
<i>New Salem</i>							
<i>Orange</i>							
<i>Petersham</i>							
<i>Phillipston</i>							
<i>Royalston</i>							
<i>Shutesbury</i>							
<i>Warwick</i>							
<i>Wendell</i>							
Monson						14	
<i>Belchertown</i>	2						
<i>Brimfield</i>	1						
<i>E. Longmeadow</i>							
<i>Hampden</i>	1						
<i>Hardwick</i>							
<i>Holland</i>							
<i>Monson</i>							
<i>Palmer</i>							
<i>Wales</i>							
<i>Ware</i>	2						
<i>Warren</i>	1						
<i>Wilbraham</i>							
Northhampton						0	
<i>Goshen</i>							
<i>Granby</i>							

Branch/Platform/Town	Number of Company Line Crews	Number of Contractor Line Crews	Number of In- State Mutual Aid Line Crews	Number of Out-of-State Mutual Aid Line Crews	Number of Company Tree Crews	Number of Contractor Tree Crews	Number of In- State Mutual Aid Tree Crews
Northampton	2						
Williamsburg							
Great Barrington						15	
Alford							
Great Barrington							
Lenox							
Monterey	2						
Nt. Washington							
New Marlboro							
Egremont							
Sheffield							
Stockbridge							
W. Stockbridge	2						
North Adams						0	
Adams							
Charlemont							
Cheshire							
Clarksburg	2						
Florida							
Hancock							
Hawley							
Heath							
Monroe							
North Adams							
Rowe							
Williamstown							

Branch/Platform/Town	Number of Out-of-State Mutual Aid Tree Crews	Number of Company Wire Down Crews	Number of Contractor Wire Down Crews	Number of In- State Mutual Aid Wire Down Crews	Number of Out-of-State Mutual Aid Wire Down Crews	Number of Company Damage Appraiser Crews	Number of Contractor Damage Appraiser Crews
NE North Shore/Merrimack Valley Branch (Total)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Malden							
Everett							
Lynn							
Malden							
Medford							
Melrose							
Nahant							
Revere							
Saugus							
Swampscott							
Winthrop							
Beverly							
Beverly							
Essex							
Gloucester							
Hamilton							
Manchester-By-the-Sea							
Rockport							
Salem							
Topsfield							
Wenham							
N. Andover/Haverhill		0	0			0	0
Andover							
Boxford							
Haverhill							
Lawrence							
Methuen							
N.Andover						0	0
Tewksbury		0	0				
Billerica							

Branch/Platform/Town	Number of Out-of-State Mutual Aid Tree Crews	Number of Company Wire Down Crews	Number of Contractor Wire Down Crews	Number of In- State Mutual Aid Wire Down Crews	Number of Out-of-State Mutual Aid Wire Down Crews	Number of Company Damage Appraiser Crews	Number of Contractor Damage Appraiser Crews
<i>Chelmsford</i>							
<i>Dracut</i>							
<i>Lowell</i>							
<i>Tewksbury</i>							
<i>Tyngsboro</i>							
<i>Westford</i>							
Newburyport		0	0			0	0
<i>Amesbury</i>							
<i>Newbury</i>							
<i>Newburyport</i>							
<i>Salisbury</i>							
<i>W. Newbury</i>							
NE South Branch (Total)	<u>0</u>	<u>138</u>	<u>46</u>	<u>0</u>	<u>0</u>	<u>44</u>	<u>26</u>
Marlboro							
<i>Marlboro</i>		1	1			1	
<i>Northboro</i>		1	1				
<i>Southboro</i>		1	1				
<i>Westboro</i>		1	1			1	
Somerset							
<i>Dighton</i>		2	2				1
<i>Fall River</i>		3	3			1	1
<i>N. Dighton</i>							
<i>Somerset</i>		1	2				1
<i>Swansea</i>			3				1
<i>Westport</i>		1	2				
Hopedale							
<i>Bellingham</i>		4	1				1
<i>Blackston</i>		4	1				
<i>Foxboro</i>		5	2				1
<i>Franklin</i>		4	1			1	1
<i>Hopedale</i>		2	2				

Branch/Platform/Town	Number of Out-of-State Mutual Aid Tree Crews	Number of Company Wire Down Crews	Number of Contractor Wire Down Crews	Number of In- State Mutual Aid Wire Down Crews	Number of Out-of-State Mutual Aid Wire Down Crews	Number of Company Damage Appraiser Crews	Number of Contractor Damage Appraiser Crews
<i>Mansfield</i>							
<i>Mendon</i>		3	2			1	1
<i>Milford</i>		6	2				2
<i>Plainville</i>		1	1			1	
<i>Upton</i>		3	1				
<i>Wrentham</i>		6	1			1	
<i>Douglas</i>		5	1				
<i>E. Douglas</i>							
<i>Linwood</i>		1	2				
<i>Millville</i>		2	1				
<i>N. Uxbridge</i>			2				
<i>Northbridge</i>		3	1				
<i>Uxbridge</i>		3	2				
<i>Whitinsville</i>		4	1				
Attleboro							
<i>Attelboro</i>		8	1			1	
<i>Norton</i>		4	2			1	
<i>Rehoboth</i>		3	1			1	
<i>South Attelboro</i>							
<i>Seekonk</i>		7	2			2	
Brockton			0	0	0	32	16
<i>Abington</i>		0					
<i>Avon</i>		0					
<i>Bridgewater</i>		4					
<i>Brockton</i>		9					
<i>E Bridgewater</i>		0					
<i>Easton</i>		5					
<i>Hanson</i>		0					
<i>N. Easton</i>							
<i>Norwell</i>							

Branch/Platform/Town	Number of Out-of-State Mutual Aid Tree Crews	Number of Company Wire Down Crews	Number of Contractor Wire Down Crews	Number of In- State Mutual Aid Wire Down Crews	Number of Out-of-State Mutual Aid Wire Down Crews	Number of Company Damage Appraiser Crews	Number of Contractor Damage Appraiser Crews
<i>Sharon</i>		0					
<i>S. Easton</i>							
<i>Stoughton</i>		9					
<i>W. Bridgewater</i>		1					
<i>Whitman</i>		1					
Hanover							
<i>Cohasset</i>		1					
<i>Halifax</i>		0					
<i>Hanover</i>		1					
<i>Hanson</i>							
<i>Norwell</i>		4					
<i>Pembroke</i>		2					
<i>Rockland</i>		0					
<i>Scituate</i>		2					
Quincy							
<i>Hingham</i>		0					
<i>Holbrook</i>		1					
<i>N. Quincy</i>							
<i>N. Weymouth</i>							
<i>Quincy</i>		6					
<i>Randolph</i>		1					
<i>S. Weymouth</i>							
<i>Weymouth</i>		2					
<i>Walliston</i>							
Nantucket							
<i>Nantucket</i>							
<i>Siasconet</i>							
Bay State West Branch (Total)	0	4	0	0	0	14	10
Spencer							
<i>Brookfield</i>							1
<i>Charlton</i>							2

Branch/Platform/Town	Number of Out-of-State Mutual Aid Tree Crews	Number of Company Wire Down Crews	Number of Contractor Wire Down Crews	Number of In- State Mutual Aid Wire Down Crews	Number of Out-of-State Mutual Aid Wire Down Crews	Number of Company Damage Appraiser Crews	Number of Contractor Damage Appraiser Crews
<i>E. Brookfield</i>							
<i>New Braintree</i>							
<i>N. Brookfield</i>							1
<i>Oakham</i>						1	
<i>Rutland</i>							
<i>Southbridge</i>						1	
<i>Spencer</i>							1
<i>Sturbridge</i>							1
<i>W. Brookfield</i>							
Worcester							
<i>Auburn</i>						1	
<i>Leicester</i>							
<i>Worcester</i>		2					
<i>Millbury</i>						1	
<i>Dudley</i>						2	
<i>Grafton</i>							1
<i>Oxford</i>						2	
<i>Sutton</i>						2	1
<i>Webster</i>						2	
Leominster/Gardner							
<i>Ayer</i>							
<i>Berlin</i>							
<i>Bolton</i>							
<i>Clinton</i>							
<i>Dunstable</i>							
<i>Gardner</i>							
<i>Harvard</i>						2	
<i>Hubbardston</i>							
<i>Lancaster</i>							
<i>Leominster</i>							
<i>Pepperell</i>							

Branch/Platform/Town	Number of Out-of-State Mutual Aid Tree Crews	Number of Company Wire Down Crews	Number of Contractor Wire Down Crews	Number of In- State Mutual Aid Wire Down Crews	Number of Out-of-State Mutual Aid Wire Down Crews	Number of Company Damage Appraiser Crews	Number of Contractor Damage Appraiser Crews
<i>Shirley</i>							
<i>Westminster</i>							1
<i>Winchendon</i>							1
Athol							
<i>Athol</i>		2					
<i>Barre</i>							
<i>Erving</i>							
<i>New Salem</i>							
<i>Orange</i>							
<i>Petersham</i>							
<i>Phillipston</i>							
<i>Royalston</i>							
<i>Shutesbury</i>							
<i>Warwick</i>							
<i>Wendell</i>							
Monson							
<i>Belchertown</i>							
<i>Brimfield</i>							
<i>E. Longmeadow</i>							
<i>Hampden</i>							
<i>Hardwick</i>							
<i>Holland</i>							
<i>Monson</i>							
<i>Palmer</i>							
<i>Wales</i>							
<i>Ware</i>							
<i>Warren</i>							
<i>Wilbraham</i>							
Northampton							
<i>Goshen</i>							
<i>Granby</i>							

Branch/Platform/Town	Number of Out-of-State Mutual Aid Tree Crews	Number of Company Wire Down Crews	Number of Contractor Wire Down Crews	Number of In- State Mutual Aid Wire Down Crews	Number of Out-of-State Mutual Aid Wire Down Crews	Number of Company Damage Appraiser Crews	Number of Contractor Damage Appraiser Crews
<i>Northampton</i>							
<i>Williamsburg</i>							
Great Barrington							
<i>Alford</i>							
<i>Great Barrington</i>							
<i>Lenox</i>							
<i>Monterey</i>							
<i>Nt. Washington</i>							
<i>New Marlboro</i>							
<i>Egremont</i>							
<i>Sheffield</i>							
<i>Stockbridge</i>							
<i>W. Stockbridge</i>							
North Adams							
<i>Adams</i>							
<i>Charlemont</i>							
<i>Cheshire</i>							
<i>Clarksburg</i>							
<i>Florida</i>							
<i>Hancock</i>							
<i>Hawley</i>							
<i>Heath</i>							
<i>Monroe</i>							
<i>North Adams</i>							
<i>Rowe</i>							
<i>Williamstown</i>							

Branch/Platform/Town	Number of In-State Mutual Aid Damage Appraisers	Number of Out-of-State Mutual Aid Damage Appraisers	Number of Company Substation/ Transmission Crews	Number of Contractor Substation/ Transmission Crews	In-State Mutual Aid Substation/ Transmission Crews	Out-of- State Mutual Aid Substation/ Transmission Crews	Total # of Crews Working
NE North Shore/Merrimack Valley Branch (Total)	<u>0</u>	<u>0</u>	<u>20</u>	<u>27</u>	<u>0</u>	<u>0</u>	<u>100.5</u>
Malden							6
Everett							
Lynn							
Malden							
Medford							8
Melrose							
Nahant							
Revere							
Saugus							
Swampscott							
Winthrop							
Beverly							
Beverly							
Essex							
Gloucester							
Hamilton							
Manchester-By-the-Sea							
Rockport							
Salem							
Topsfield							
Wenham							
N. Andover/Haverhill			20	27			47
Andover							2
Boxford							1
Haverhill							1
Lawrence							
Methuen							3
N.Andover							5
Tewksbury							7
Billerica							2

Branch/Platform/Town	Number of In-State Mutual Aid Damage Appraisers	Number of Out-of-State Mutual Aid Damage Appraisers	Number of Company Substation/Transmission Crews	Number of Contractor Substation/Transmission Crews	In-State Mutual Aid Substation/Transmission Crews	Out-of- State Mutual Aid Substation/Transmission Crews	Total # of Crews Working
<i>Chelmsford</i>							2
<i>Dracut</i>							
<i>Lowell</i>							
<i>Tewksbury</i>							5
<i>Tyngsboro</i>							1
<i>Westford</i>							2
Newburyport							5
<i>Amesbury</i>							
<i>Newbury</i>							
<i>Newburyport</i>							3.5
<i>Salisbury</i>							
<i>W. Newbury</i>							
NE South Branch (Total)	<u>0</u>	<u>0</u>	<u>0</u>	<u>16</u>	<u>0</u>	<u>0</u>	<u>624</u>
Marlboro							
<i>Marlboro</i>							3
<i>Northboro</i>							2
<i>Southboro</i>							2
<i>Westboro</i>							3
Somerset							6
<i>Dighton</i>							5
<i>Fall River</i>							10
<i>N. Dighton</i>							3
<i>Somerset</i>							5
<i>Swansea</i>							4
<i>Westport</i>							4
Hopedale				3			64
<i>Bellingham</i>							7
<i>Blackston</i>							6
<i>Foxboro</i>							15
<i>Franklin</i>							8
<i>Hopedale</i>							4

Branch/Platform/Town	Number of In-State Mutual Aid Damage Appraisers	Number of Out-of-State Mutual Aid Damage Appraisers	Number of Company Substation/Transmission Crews	Number of Contractor Substation/Transmission Crews	In-State Mutual Aid Substation/Transmission Crews	Out-of- State Mutual Aid Substation/Transmission Crews	Total # of Crews Working
<i>Mansfield</i>							
<i>Mendon</i>							7
<i>Milford</i>							15
<i>Plainville</i>							5
<i>Upton</i>							5
<i>Wrentham</i>							11
<i>Douglas</i>							7
<i>E. Douglas</i>							
<i>Linwood</i>							3
<i>Millville</i>							5
<i>N. Uxbridge</i>							2
<i>Northbridge</i>							6
<i>Uxbridge</i>							22
<i>Whitinsville</i>							8
Attleboro				11			42
<i>Attelboro</i>							30
<i>Norton</i>							7
<i>Rehoboth</i>							28
<i>South Attelboro</i>							
<i>Seekonk</i>							22
Brockton	0	0					93
<i>Abington</i>				2			7
<i>Avon</i>							2
<i>Bridgewater</i>							12
<i>Brockton</i>							22
<i>E Bridgewater</i>							
<i>Easton</i>							12
<i>Hanson</i>							1
<i>N. Easton</i>							
<i>Norwell</i>							

Branch/Platform/Town	Number of In-State Mutual Aid Damage Appraisers	Number of Out-of-State Mutual Aid Damage Appraisers	Number of Company Substation/Transmission Crews	Number of Contractor Substation/Transmission Crews	In-State Mutual Aid Substation/Transmission Crews	Out-of- State Mutual Aid Substation/Transmission Crews	Total # of Crews Working
<i>Sharon</i>							
<i>S. Easton</i>							
<i>Stoughton</i>							30
<i>W. Bridgewater</i>							3
<i>Whitman</i>							1
Hanover							10
<i>Cohasset</i>							2
<i>Halifax</i>							
<i>Hanover</i>							2
<i>Hanson</i>							
<i>Norwell</i>							6
<i>Pembroke</i>							12
<i>Rockland</i>							
<i>Scituate</i>							10
Quincy							
<i>Hingham</i>							
<i>Holbrook</i>							2
<i>N. Quincy</i>							
<i>N. Weymouth</i>							
<i>Quincy</i>							13
<i>Randolph</i>							5
<i>S. Weymouth</i>							
<i>Weymouth</i>							3
<i>Walliston</i>							
Nantucket							
<i>Nantucket</i>							
<i>Siasconet</i>							
Bay State West Branch (Total)	0	0	96	45	0	0	267
Spencer				19			32
<i>Brookfield</i>							1
<i>Charlton</i>							2

Branch/Platform/Town	Number of In-State Mutual Aid Damage Appraisers	Number of Out-of-State Mutual Aid Damage Appraisers	Number of Company Substation/Transmission Crews	Number of Contractor Substation/Transmission Crews	In-State Mutual Aid Substation/Transmission Crews	Out-of- State Mutual Aid Substation/Transmission Crews	Total # of Crews Working
<i>E. Brookfield</i>							2
<i>New Braintree</i>							2
<i>N. Brookfield</i>							1
<i>Oakham</i>							1
<i>Rutland</i>							
<i>Southbridge</i>							5
<i>Spencer</i>							3
<i>Sturbridge</i>							4
<i>W. Brookfield</i>							1
Worcester			43				44
<i>Auburn</i>							1
<i>Leicester</i>							
<i>Worcester</i>							16
<i>Millbury</i>							1
<i>Dudley</i>							4
<i>Grafton</i>							1
<i>Oxford</i>							4
<i>Sutton</i>							3
<i>Webster</i>							4
Leominster/Gardner							5
<i>Ayer</i>							
<i>Berlin</i>							
<i>Bolton</i>							
<i>Clinton</i>							
<i>Dunstable</i>							
<i>Gardner</i>							
<i>Harvard</i>							2
<i>Hubbardston</i>							
<i>Lancaster</i>							
<i>Leominster</i>							
<i>Pepperell</i>							

Branch/Platform/Town	Number of In-State Mutual Aid Damage Appraisers	Number of Out-of-State Mutual Aid Damage Appraisers	Number of Company Substation/Transmission Crews	Number of Contractor Substation/Transmission Crews	In-State Mutual Aid Substation/Transmission Crews	Out-of- State Mutual Aid Substation/Transmission Crews	Total # of Crews Working
<i>Shirley</i>							
<i>Westminster</i>							1
<i>Winchendon</i>							1
Athol				4			4
<i>Athol</i>							2
<i>Barre</i>							
<i>Erving</i>							1
<i>New Salem</i>							
<i>Orange</i>							
<i>Petersham</i>							
<i>Phillipston</i>							
<i>Royalston</i>							
<i>Shutesbury</i>							
<i>Warwick</i>							
<i>Wendell</i>							
Monson							14
<i>Belchertown</i>							2
<i>Brimfield</i>							1
<i>E. Longmeadow</i>							
<i>Hampden</i>							1
<i>Hardwick</i>							
<i>Holland</i>							
<i>Monson</i>							
<i>Palmer</i>							
<i>Wales</i>							
<i>Ware</i>							2
<i>Warren</i>							1
<i>Wilbraham</i>							
Northampton							
<i>Goshen</i>							
<i>Granby</i>							

Branch/Platform/Town	Number of In-State Mutual Aid Damage Appraisers	Number of Out-of-State Mutual Aid Damage Appraisers	Number of Company Substation/ Transmission Crews	Number of Contractor Substation/ Transmission Crews	In-State Mutual Aid Substation/ Transmission Crews	Out-of- State Mutual Aid Substation/ Transmission Crews	Total # of Crews Working
<i>Northampton</i>							2
<i>Williamsburg</i>							
Great Barrington							15
<i>Alford</i>							
<i>Great Barrington</i>							
<i>Lenox</i>							
<i>Monterey</i>							2
<i>Nt. Washington</i>							
<i>New Marlboro</i>							
<i>Egremont</i>							
<i>Sheffield</i>							
<i>Stockbridge</i>							
<i>W. Stockbridge</i>							2
North Adams			53	22			75
<i>Adams</i>							
<i>Charlemont</i>							
<i>Cheshire</i>							
<i>Clarksburg</i>							2
<i>Florida</i>							
<i>Hancock</i>							
<i>Hawley</i>							
<i>Heath</i>							
<i>Monroe</i>							
<i>North Adams</i>							
<i>Rowe</i>							
<i>Williamstown</i>							

Branch/Platform/Town	Number of Company Support Personnel Used	Number of Non- Company Support Personnel Used	List Source of Mutual Aid	Comments
NE North Shore/Merrimack Valley Branch (Total)	<u>11</u>	<u>1</u>		
Malden				
Everett				
Lynn				
Malden				
Medford				
Melrose				
Nahant				
Revere				
Saugus				
Swampscott				
Winthrop				
Beverly				
Beverly				
Essex				
Gloucester				
Hamilton				
Manchester-By-the-Sea				
Rockport				
Salem				
Topsfield				
Wenham				
N. Andover/Haverhill	11	1		
Andover				
Boxford				
Haverhill				
Lawrence				
Methuen				
N.Andover				
Tewksbury				
Billerica				

Branch/Platform/Town	Number of Company Support Personnel Used	Number of Non- Company Support Personnel Used	List Source of Mutual Aid	Comments
<i>Chelmsford</i>				
<i>Dracut</i>				
<i>Lowell</i>				
<i>Tewksbury</i>				
<i>Tyngsboro</i>				
<i>Westford</i>				
Newburyport				
<i>Amesbury</i>				
<i>Newbury</i>				
<i>Newburyport</i>				
<i>Salisbury</i>				
<i>W. Newbury</i>				
NE South Branch (Total)	55	2		
Marlboro				
<i>Marlboro</i>				
<i>Northboro</i>				
<i>Southboro</i>				
<i>Westboro</i>				
Somerset				
<i>Dighton</i>				
<i>Fall River</i>				
<i>N. Dighton</i>				
<i>Somerset</i>				
<i>Swansea</i>				
<i>Westport</i>				
Hopedale				
<i>Bellingham</i>				
<i>Blackston</i>				
<i>Foxboro</i>				
<i>Franklin</i>				
<i>Hopedale</i>	55	2		

Branch/Platform/Town	Number of Company Support Personnel Used	Number of Non- Company Support Personnel Used	List Source of Mutual Aid	Comments
<i>Mansfield</i>				
<i>Mendon</i>				
<i>Milford</i>				
<i>Plainville</i>				
<i>Upton</i>				
<i>Wrentham</i>				
<i>Douglas</i>				
<i>E. Douglas</i>				
<i>Linwood</i>				
<i>Millville</i>				
<i>N. Uxbridge</i>				
<i>Northbridge</i>				
<i>Uxbridge</i>				
<i>Whitinsville</i>				
Attleboro				
<i>Attelboro</i>				
<i>Norton</i>				
<i>Rehoboth</i>				
<i>South Attelboro</i>				
<i>Seekonk</i>				
Brockton				contractor line crews, column K, 5 Ngrid contractor crews (in house) is added to Pembroke
<i>Abington</i>				
<i>Avon</i>				
<i>Bridgewater</i>				
<i>Brockton</i>				
<i>E Bridgewater</i>				
<i>Easton</i>				
<i>Hanson</i>				
<i>N. Easton</i>				
<i>Norwell</i>				

Branch/Platform/Town	Number of Company Support Personnel Used	Number of Non- Company Support Personnel Used	List Source of Mutual Aid	Comments
<i>Sharon</i>				
<i>S. Easton</i>				
<i>Stoughton</i>				
<i>W. Bridgewater</i>				
<i>Whitman</i>				
Hanover				
<i>Cohasset</i>				
<i>Halifax</i>				
<i>Hanover</i>				
<i>Hanson</i>				
<i>Norwell</i>				
<i>Pembroke</i>				
<i>Rockland</i>				
<i>Scituate</i>				
Quincy				
<i>Hingham</i>				
<i>Holbrook</i>				
<i>N. Quincy</i>				
<i>N. Weymouth</i>				
<i>Quincy</i>				
<i>Randolph</i>				
<i>S. Weymouth</i>				
<i>Weymouth</i>				
<i>Walliston</i>				
Nantucket				
<i>Nantucket</i>				
<i>Siasconet</i>				
Bay State West Branch (Total)	51	0	0	
Spencer				
<i>Brookfield</i>				
<i>Charlton</i>				

Branch/Platform/Town	Number of Company Support Personnel Used	Number of Non- Company Support Personnel Used	List Source of Mutual Aid	Comments
<i>E. Brookfield</i>				
<i>New Braintree</i>				
<i>N. Brookfield</i>				
<i>Oakham</i>				
<i>Rutland</i>				
<i>Southbridge</i>				
<i>Spencer</i>				
<i>Sturbridge</i>				
<i>W. Brookfield</i>				
Worcester				
<i>Auburn</i>				
<i>Leicester</i>				
<i>Worcester</i>	50			
<i>Millbury</i>				
<i>Dudley</i>				
<i>Grafton</i>				
<i>Oxford</i>				
<i>Sutton</i>				
<i>Webster</i>				
Leominster/Gardner				
<i>Ayer</i>				
<i>Berlin</i>				
<i>Bolton</i>				
<i>Clinton</i>				
<i>Dunstable</i>				
<i>Gardner</i>				
<i>Harvard</i>				
<i>Hubbardston</i>				
<i>Lancaster</i>				
<i>Leominster</i>				
<i>Pepperell</i>				

Branch/Platform/Town	Number of Company Support Personnel Used	Number of Non- Company Support Personnel Used	List Source of Mutual Aid	Comments
<i>Shirley</i>				
<i>Westminster</i>				
<i>Winchendon</i>				
Athol				
<i>Athol</i>				
<i>Barre</i>				
<i>Erving</i>				
<i>New Salem</i>				
<i>Orange</i>				
<i>Petersham</i>				
<i>Phillipston</i>				
<i>Royalston</i>				
<i>Shutesbury</i>				
<i>Warwick</i>				
<i>Wendell</i>				
Monson				
<i>Belchertown</i>				
<i>Brimfield</i>				
<i>E. Longmeadow</i>				
<i>Hampden</i>				
<i>Hardwick</i>				
<i>Holland</i>				
<i>Monson</i>				
<i>Palmer</i>				
<i>Wales</i>				
<i>Ware</i>				
<i>Warren</i>				
<i>Wilbraham</i>				
Northampton				
<i>Goshen</i>				
<i>Granby</i>	1			

Branch/Platform/Town	Number of Company Support Personnel Used	Number of Non- Company Support Personnel Used	List Source of Mutual Aid	Comments
<i>Northampton</i>				
<i>Williamsburg</i>				
Great Barrington				
<i>Alford</i>				
<i>Great Barrington</i>				
<i>Lenox</i>				
<i>Monterey</i>				
<i>Nt. Washington</i>				
<i>New Marlboro</i>				
<i>Egremont</i>				
<i>Sheffield</i>				
<i>Stockbridge</i>				
<i>W. Stockbridge</i>				
North Adams				
<i>Adams</i>				
<i>Charlemont</i>				
<i>Cheshire</i>				
<i>Clarksburg</i>				
<i>Florida</i>				
<i>Hancock</i>				
<i>Hawley</i>				
<i>Heath</i>				
<i>Monroe</i>				
<i>North Adams</i>				
<i>Rowe</i>				
<i>Williamstown</i>				

[illegible]

Town Name	Customers Served in Town	Total # of Customers Without Power in Town	Customers Without Power in Town	Estimated Restoration Time	Number of Trouble Locations in Town	Services to be Repaired in Town
ABINGTON	7,130	308	4.3%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	34	29
ATTLEBORO	19,299	2,699	14.0%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	75	56
AUBURN	7,602	4	0.1%	Restoration expected on Thursday	4	5
AVON	2,158	59	2.7%	Restoration expected on Thursday	12	0
BARRE	2,391	1	0.0%	Restoration Complete *	1	0
BELLINGHAM	5,358	107	2.0%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	11	15
BLACKSTONE	3,778	333	8.8%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	17	14
BOLTON	1,910	1	0.1%	Restoration Complete *	1	1
BRIDGEWATER	9,197	709	7.7%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	60	47
BRIMFIELD	1,734	1	0.1%	Restoration Complete *	1	4
BROCKTON	37,615	1,431	3.8%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	186	170
BROOKFIELD	1,659	33	2.0%	Restoration Complete *	5	6
CHARLTON	5,449	57	1.1%	Restoration begins Wednesday and will be completed by Thursday.	9	10
CLINTON	6,838	1	0.0%	Restoration Complete *	1	1
COHASSET	3,452	274	7.9%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	37	40
DIGHTON	2,463	337	13.7%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	22	10
DOUGLAS	3,773	1,714	45.4%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	47	28
DUDLEY	4,817	24	0.5%	Restoration begins Wednesday and will be completed by Thursday.	5	4
EAST BRIDGEWATER	5,450	727	13.3%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	45	35
EAST BROOKFIELD	1,080	7	0.7%	Restoration Complete *	5	5
EASTON	9,311	1,157	12.4%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	64	1
FALL RIVER	42,945	490	1.1%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	62	55
FOXBOROUGH	7,820	1,620	20.7%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	55	0
FRANKLIN	12,715	1,123	8.8%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	70	83
GARDNER	9,730	2	0.0%	Restoration Complete *	2	2
GRAFTON	7,998	7	0.1%	Restoration begins Wednesday and will be completed by Thursday.	7	3
HALIFAX	3,301	856	25.9%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	43	23
HANOVER	5,843	764	13.1%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	52	48
HANSON	4,019	655	16.3%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	35	26
HOLBROOK	4,670	66	1.4%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	20	21
HOPEDALE	2,457	141	5.7%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	10	11
HUBBARDSTON	1,868	1	0.1%	#N/A	1	1
LANCASTER	2,907	1	0.0%	Restoration Complete *	1	1
LAWRENCE	27,912	1	0.0%	Restoration Complete *	1	3
LEICESTER	4,560	2	0.0%	Restoration begins Wednesday and will be completed by Thursday.	2	3
MARLBOROUGH	18,176	30	0.2%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	20	22
MENDON	2,422	575	23.7%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	29	23
METHUEN	19,707	1	0.0%	Restoration Complete *	1	2
MILFORD	12,491	1,018	8.2%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	44	41
MILLBURY	6,091	13	0.2%	Restoration begins Wednesday and will be completed by Thursday.	8	7
MILLVILLE	1,264	666	52.7%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	17	6
NEW BRAintree	456	37	8.1%	Restoration begins Wednesday and will be completed by Thursday.	5	4
NORTH ANDOVER	11,971	2	0.0%	Restoration expected on Thursday.	2	7
NORTH BROOKFIELD	2,248	11	0.5%	Restoration begins Wednesday and will be completed by Thursday.	8	7
NORTHBOROUGH	6,477	6	0.1%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	4	3
NORTHBRIDGE	6,841	877	12.8%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	34	19
NORTON	7,345	77	1.1%	Restoration Complete *	6	4
NORWELL	4,371	716	16.4%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	59	58
OAKHAM	932	4	0.4%	Restoration begins Wednesday and will be completed by Thursday.	2	2
OXFORD	6,121	9	0.2%	Restoration begins Wednesday and will be completed by Thursday.	5	11
PALMER	6,339	1	0.0%	Restoration Complete *	1	0
PEMBROKE	7,510	2,447	32.6%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	66	58
PLAINVILLE	4,254	590	13.9%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	30	33
QUINCY	43,574	1,833	4.2%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	106	55
RANDOLPH	12,599	1,468	11.7%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	89	67
REHOBOTH	4,909	3,595	73.2%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	28	10

Town Name	Customers Served in Town	Total # of Customers Without Power in Town	Customers Without Power in Town	Estimated Restoration Time	Number of Trouble Locations in Town	Services to be Repaired in Town
ROCKLAND	7,770	311	4.0%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	21	28
RUTLAND	3,325	23	0.7%	Restoration begins Wednesday and will be completed by Thursday.	4	1
SAUGUS	11,667	1	0.0%	Restoration Complete *	1	1
SCITUATE	8,033	2,361	29.4%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	68	59
SCITUATE	4,596	1	0.0%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	1	59
SEEKONK	6,286	1,575	25.1%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	75	45
SHARON	58	51	87.9%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	2	1
SOMERSET	7,791	163	2.1%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	28	30
SOUTHBOROUGH	4,008	16	0.4%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	15	25
SOUTHBRIDGE	8,104	27	0.3%	Restoration begins Wednesday and will be completed by Thursday.	7	7
SPENCER	5,721	76	1.3%	Restoration begins Wednesday and will be completed by Thursday.	10	12
STOUGHTON	11,893	1,688	14.2%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	91	60
STURBRIDGE	4,725	184	3.9%	Restoration begins Wednesday and will be completed by Thursday.	15	9
SUTTON	3,865	32	0.8%	Restoration begins Wednesday and will be completed by Thursday.	12	13
SWANSEA	7,117	750	10.5%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	61	45
TEWKSBURY	12,442	1	0.0%	Restoration Complete *	1	3
UPTON	3,006	205	6.8%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	13	6
UXBRIDGE	5,899	465	7.9%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	35	34
WARE	4,993	8	0.2%	Restoration begins Wednesday and will be completed by Thursday.	2	7
WEBSTER	8,813	13	0.2%	Restoration begins Wednesday and will be completed by Thursday.	13	17
WEST BRIDGEWATER	3,379	249	7.4%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	36	0
WEST BROOKFIELD	1,863	12	0.6%	Restoration begins Wednesday and will be completed by Thursday.	3	2
WESTBOROUGH	7,940	14	0.2%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	14	21
WESTPORT	3,065	80	2.6%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	7	7
WEYMOUTH	24,269	977	4.0%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	66	62
WHITMAN	6,085	288	4.7%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	21	36
WILBRAHAM	5,968	2	0.0%	Restoration Complete *	2	2
WINCHENDON	4,316	23	1%	Restoration Complete *	1	0
WORCESTER	76,022	602	1%	Restoration begins Wednesday and will be completed by Thursday.	86	95
WRENTHAM	4,645	893	19%	Restoration begins Wednesday and will be mostly completed by Friday with the remaining customers restored by Sunday.	40	37

Granite State Electric Company d/b/a National Grid Tropical Storm Irene Self-Assessment

The response of Granite State Electric Company d/b/a National Grid (the Company) to Tropical Storm Irene was coordinated, well-structured, and in compliance with documented procedures. A complete cross functional after action review of key planning and restoration activities provided value in identifying strategies to improve the effectiveness of future storm response in terms of safety, restoration time, public information flow, process efficiency, workforce utilization, and customer satisfaction.

Hurricane Irene moved up the eastern seaboard on the United States during the week of August 22nd causing an estimated \$7 Billion in damages and interrupting electric service to over 6 million customers. Irene impacted New England on August 28th as a strong Tropical Storm, bringing strong winds and significant rainfall. The Company began experiencing customer interruption in New Hampshire because of the storm early on August 28th and with a peak of approximately 11,500 customers interrupted that afternoon. Due largely to the amount of pre-landfall planning conducted by the Company, 90% of those customers were restored in less than 24 hours (Fig 1). All remaining customers were restored in just over 48 hours. A total of 16,970 the Company's customers were impacted by Tropical Storm Irene (Fig 2).

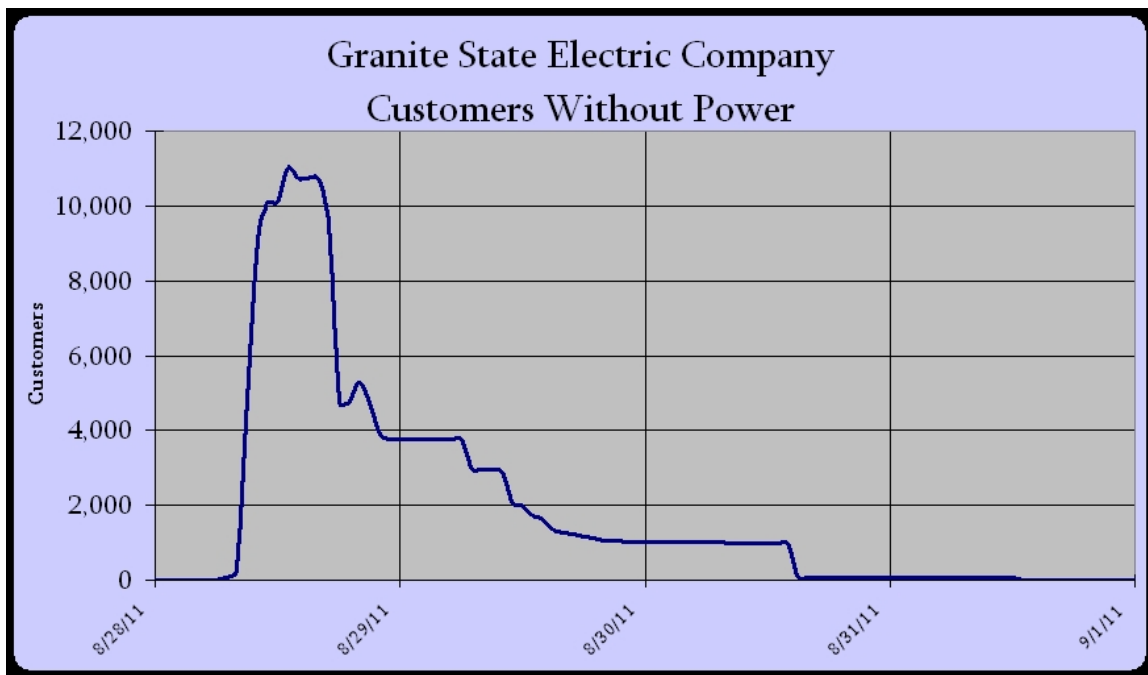


Figure 1

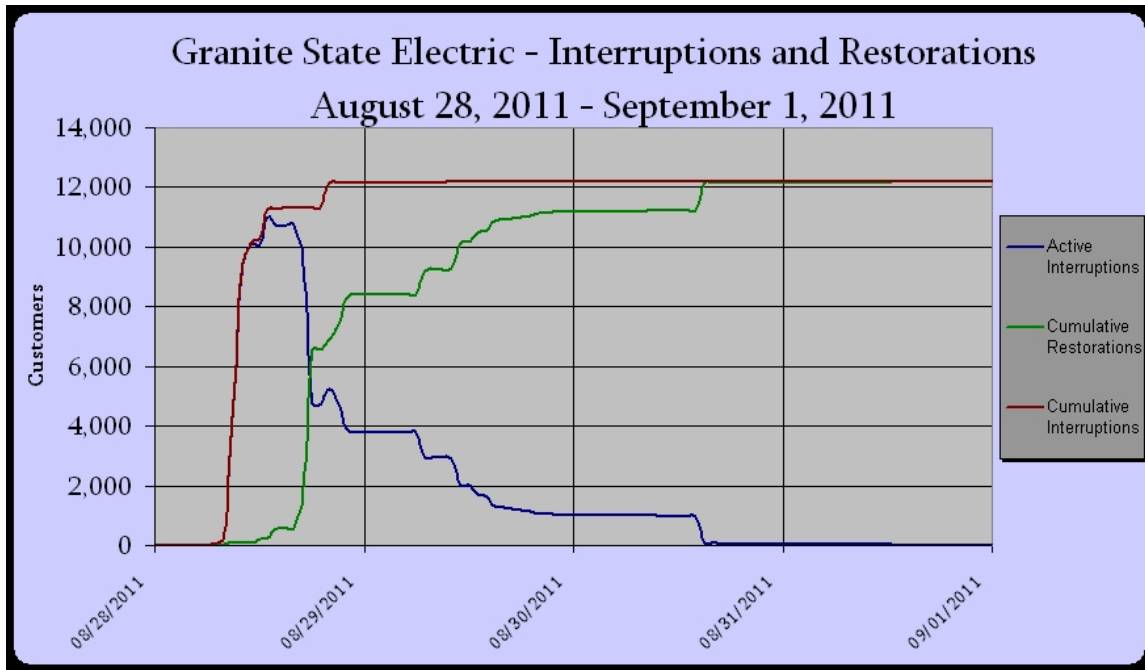


Figure 2

In the normal course of managing system operations, the Company continually monitors the weather. On August 23, when it became apparent that there was a risk of a hurricane coming to New England, the Company began planning for Irene's impact. Leadership analyzed storm plans and reviewed preparedness with suppliers and employees in anticipation of the storm. Formal reviews of hurricane preparation checklists were undertaken to ensure the Company was positioned to protect public safety, properly assess damage, and restore power as safely and efficiently as possible. This phase of emergency preparedness is referred to as the Anticipation Phase. During this phase, weather forecasts for New England predicted that a strong or low category 1 hurricane would take a very wide path through the region with the center going over the Berkshire Mountains in Massachusetts. In accordance with the Company's Electric Emergency Procedures (EEP), the Incident Command Structure (ICS) was activated at the Regional and Branch levels during this phase.

Observations and Recommendations

1. Observation:

Due to the infrequent nature of catastrophic events such as Irene, additional resources above and beyond those normally required were called in to support certain central functions during the storm, such as coordinating meals, lodging, and transportation for crews. As a result, some individuals activated for support functions had limited experience beyond initial training and annual drills.

Recommendation:

The Company will continue to review and improve the training requirements for each storm assignment to support central functions and ensure refresher training is available on an on-going basis.

2. Observation:

The Company utilizes the ICS as a framework to manage emergency events classified as Levels III, IV, and V. Additional resources to staff ICS roles supporting central functions were required to support the magnitude of this storm.

Recommendation:

Identify and train additional resources to perform the roles contained within the ICS at the Regional and Branch levels.

3. Observation:

The Company is a member of the Northeast Mutual Assistance Group (NEMAG), which facilitates the sharing of crews during emergencies. The Company participated in mutual aid discussions regarding the acquisition of additional resources during the incident anticipation and restoration phases. Due to the magnitude and severity of anticipated damage to electric utility infrastructure along the eastern United States, dozens of utilities in numerous states mobilized activities to secure external crews for service restoration from the same pool of resources. This resulted in a much greater number of utilities competing for the same resources, and the availability of mutual assistance resources was constrained.

Recommendation:

Review current mutual aid process to determine if improvements can be made that could potentially result in additional resource availability for future storm events of this magnitude.

4. Observation:

As part of a pilot program to leverage additional resources, the Company successfully utilized its gas field employees to assist in restoration efforts.

Recommendation:

Investigate the opportunity to expand the utilization of gas resources and include procedures to expedite electrical restoration.

5. Observation:

The Company's outage management system, known as PowerOn, is not designed to handle the volume of calls produced by a storm of this magnitude. As a result, the system was not able to accurately analyze trouble orders, which limited the Company's ability to predict the extent of the trouble.

Recommendation:

Subsequent to Irene, measures were taken to increase the capacity of the outage management system. Further discussions are currently taking place to assess the feasibility of making additional enhancements to PowerOn. Also, the Company is investing in the development of a new outage management

system/distribution management system that is projected to be complete within the next two years.

6. Observation:

The Company recognizes the criticality of providing accurate, up-to-date Estimated Times of Restoration (ETR) to customers and stakeholders as soon as possible after a storm ends, and, while the Company had no specific issues that arose during this storm, it is continually looking to improve the availability of ETRs.

Recommendation:

The Company will review the ETR processes and tools to improve access, timing and accuracy of ETRs.

7. Observation:

Damage Appraisal teams were deployed as soon as practicable the first morning after the storm ended. The Company recognizes that, while it had no specific issues that arose during this storm, the efficiency and speed with which results of damage surveys are returned to the storm rooms can always be improved resulting in more efficient restoration efforts.

Recommendation:

Review processes and tools utilized for Damage Appraisal and make any recommendations for improvement.

8. Observation:

Although a full analysis is still ongoing, the Company acknowledges that the Outage Central web-page did not provide outage information and estimated ETRs with the speed or accuracy that customers expected. As a result, the Company took steps during Irene to rectify the problem by manually posting ETR information on the web-page. The Company also recognizes that the web-page was overwhelmed by customer demand during the early part of the week of August 28.

Recommendation:

The Company is reviewing ways to improve the Outage Central web page.

9. Observation:

Life support customers were contacted prior to the start of the storm and then daily throughout the restoration. Some life support customers expressed concern over too many calls and asked the Company to discontinue follow-up calls to their location.

Recommendation:

The Company will solicit customer feedback on the effectiveness of these calls.