Orange and Rockland Utilities, Inc.
Report on Preparation and System Restoration Performance

Hurricane Irene
August 28, 2011 through September 3, 2011
and
Tropical Storm Lee
September 5, 2011 through September 8, 2011
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This report reviews Orange and Rockland Utilities, Inc.’s (“O&R”, or the “Company”) storm preparation and system restoration efforts as a result of the prolonged wind and rain events from Hurricane Irene and Tropical Storm Lee which impacted O&R’s service territory on August 28 and September 5, 2011, respectively, and is being filed with the Public Service Commission (“Commission”) in compliance with 16 NYCRR. Part 105.4 (c).\(^1\)

I. Overview of Storm Events, Damage and Customer Outages

O&R began actively tracking Hurricane Irene on Monday, August 22, 2011 after long-term forecasts indicated that the storm could potentially make landfall on the North American continent. These monitoring activities included primarily reviewing forecasts and potential impacts developed by meteorologists from the National Weather Service (“NWS”); paid subscription services such as DTN and IBM Deep Thunder; Internet based weather services such as Intellicast or Weather.com; the National Hurricane Center; and, Con Edison’s own internal staff meteorologists. Appendix I includes the weather updates provided from August 25 to August 28.

Once it was clear that O&R’s service territory would be affected by Hurricane Irene, the only impact weather forecasts made on O&R’s preparations, was to drive the start time for mobilization of the various storm functions necessary for response to the event. After consideration was given to potential travel restrictions, road conditions and the actual forecast time for impact, O&R determined to mobilize fully by 18:00 Saturday evening, August 27.

O&R’s Electric System Emergency Plan (“ESEP”) provides specific guidance regarding preparation activities to be completed in anticipation of a storm event. O&R initiated its ESEP 120 hours prior to the forecasted impact of Hurricane Irene on its service territory, i.e., Sunday August 28. Each functional area of the plan includes a checklist of activities and responsibilities required of the respective storm function in anticipation of mobilization, including, but not limited to staffing, logistics (as it pertains to the specific function), equipment availability and operation, and supplies inventory.

For Hurricane Irene, O&R took the following actions:

1. **Tuesday, August 23 – 120 Hours, Storm Monitoring Phase**

   This period of time was used for notification and information gathering. During this phase, appropriate Company organizations factored in the potential impacts into their future operations. Once notified of the storm’s approach each organization implemented pre-storm activities designed to prepare their facilities for the event.

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\(^1\) As requested in the letter dated September 21, 2011 from Mr. Thomas Dvorsky, Director Office of Gas and Water, to Mr. William Longhi, President of O&R, this report will address “restoration activities associated with the remnants of Tropical Storm Lee.”
2. **Wednesday, August 24 – 96 Hours, 4 Days from Landfall**

During this phase, O&R’s Emergency Management employees continued to monitor the track of the storm closely and began to work with the necessary organizations within the Company to prepare for the potential storm. The Company began holding twice daily interdepartmental conference calls from Wednesday, August 24 through Saturday, August 27 to discuss the current weather forecast and necessary planning activities for the upcoming storm. The participants on these calls included primary, and in some cases secondary, coordinators for all identified storm functions, as well as representatives from gas operations, gas engineering and the gas control center.

3. **Thursday, August 25 to Saturday, August 27 – 72 Hours through 12 hours**

This period of time represents the Planning and Staging portions of the ESEP.

Thursday, August 25 - the Company secured the services of mutual assistance crews and made arrangements with utility contractors to begin travel to the service territory. The Company also began to secure hotel rooms, supplies of dry ice, and other equipment deemed necessary for the response.

Friday, August 26 - weather forecasts were continuously monitored. By late morning when it was deemed fairly certain that the center of the storm would pass within 75 statute miles of New York City, the Company mobilized to prepare for the storm by following the actions outlined in the ESEP.

Saturday, August 27 – mutual aid crews began arriving by early afternoon and planning efforts continued throughout the day.

4. **12 Hours - Storm Pre-arrival Phase**

During this phase, the Company continued planning for storm arrival and maintenance of essential services.

The Company’s Control Center continued to respond to field emergencies while weather conditions permitted without compromising the safety of personnel. The Control Center also continued to: monitor the effects of the storm including wind speed, flood levels, systems, and facilities; provide for employee safety and accountability; address emergencies through remote monitoring and control systems, where available; and prepare for restoration and maintain communication.

At 18:00 Saturday, August 27, O&R went into full mobilization of the ESEP. The storm director convened conference calls with operating and support departments three times daily to discuss the current weather forecast and weather observations, as well as the Company’s preparatory activities in advance of the storm.
5. **3 Hours - Storm Arrival Phase**

Each storm function organization operated as set forth in their respective section of the ESEP. Organizations also continued post-storm planning. Operating organizations monitored the impact to the energy delivery systems and prepared for damage assessment.

6. The weather forecast for Tropical Storm Lee indicated a rain event with minimal wind impacts. Based on the weather forecast, a Class 1 event was anticipated. As per the ESEP, “This type of storm does not serve to activate the Storm Plan.”, therefore no special actions were taken.

The corporate hurricane action items list was used as the basis for the planning of the Company’s response to Hurricane Irene. A copy of the action items list is included in Appendix II.

Hurricane Irene crossed the O&R service territory as a strong tropical storm lashing the area with wind gusts approaching 50 mph and deluging the service territory with eight to eleven inches of rainfall (Appendix III). Because Hurricane Irene was travelling more slowly than usual for a hurricane tracking up the east coast, it affected the area longer than similar storms in the past. The period of heavy rain lasted from approximately 10 p.m. on August 27 to 10 a.m. on August 28. Record flooding occurred in many areas of the service territory. The Ramapo River in Mahwah, NJ reached an all time record flood stage of 15.78 feet, the flood stage level at Mahwah is eight feet. Tropical storm force wind gusts began at approximately 1 a.m. on August 28 and continued into the evening of August 28 on the back side of the storm. The maximum wind gusts recorded for the O&R service territory are shown in Appendix IV.

The National Hurricane Center accurately forecasted the track of the hurricane. The five-day forecast from Tuesday, August 23, showed the storm would first make landfall on the Outer Banks of North Carolina and then move up the New Jersey coastline to New York City. This was the track ultimately taken by the hurricane. Fortunately, the hurricane was not as strong from a wind perspective as originally anticipated.

The devastation from the storm left some neighborhoods uninhabitable. There were over 5,400 damage locations, including 800 homes that had gas or electric service cut due to extensive flooding. The heavy rainfall contributed to the failure of the Echo Lake Dam in Arden, NY causing extensive damage to the NYS Thruway, Route 17 and devastated property along the Ramapo River in Tuxedo, Sloatsburg, Suffern and Mahwah. There were 151 broken poles, 253 overhead transformers, 83 underground transformers and nearly 50,000 feet of wire which were damaged and had to be replaced. In addition, 48 distribution circuits locked out and one 69kv as well as three 34.5kv transmission lines locked out. It was not unusual for some customers to experience more than one outage during this period.

The remnants from Tropical Storm Lee impacted the O&R service territory from September 5 to September 8, only one week after Hurricane Irene passed through the area. Tropical Storm Lee was primarily an extended rain event which deluged the Rockland and Orange County areas with as
much as eight inches of rainfall. This resulted in additional flooding and caused system interruptions to facilities which were already stressed by the impacts from Hurricane Irene.

II. Event Classification and Resource Mobilization

Prior to a storm, weather forecasts are reviewed as well as the impact of an oncoming storm through conference calls held through the New York Mutual Aid Group (“NYMAG”) and the Mid-Atlantic Mutual Aid (“MAMA”) organization. Damage extent is estimated as well as the resources that may be required, and then the planning for response begins. The intensity of this storm, and the potential impact on O&R’s electric distribution system required that preparations be made for a Class 3 event.

During mutual aid conference calls held in advance of Hurricane Irene, O&R requested 80 mutual aid line crews and 50 tree crews. O&R subsequently obtained commitments for 70 crews. These crews began arriving during the evening of August 27 and 36 mutual aid line crews were available for deployment first thing on August 28. The Company was also able to secure 15 supplemental service crews which were available on August 29.

O&R continued to request additional mutual assistance crews through the NYMAG, MAMA, and other regional mutual aid group (“RMAG”) calls until Tuesday, August 30. Due to the widespread and extensive nature of the damage caused by Hurricane Irene, no additional mutual assistance resources were available to O&R during this time.

On Wednesday, August 31, Con Edison released 6 contractor crews to O&R. On Thursday, September 1, Con Edison released an additional 6 contractor crews and ten internal Con Edison crews to O&R. On Saturday, September 3, O&R began releasing contractor crews and notified the other NYMAG utilities of these crews availability. All external contractors were released by Sunday, September 4.

The support organization for this workforce was also increased appropriately to perform damage assessment, supervise the external forces, safeguard downed wires, organize and prioritize the work and materials required, answer customer inquiries, communicate and coordinate with municipal authorities and regulatory agencies, staff county and municipal Office of Emergency Management (“OEM”) centers and assure safety and environmental integrity during the event.

The table below identifies the crew staffing levels at various times throughout the event. Please note that crews are utilized throughout the Orange and Rockland System (i.e., Rockland Electric Company (“RECO”), O&R, and Pike County Light & Power Company (“PCL&P”)), and therefore crew data is reported on an Orange and Rockland System-wide basis.
Tropical Storm Lee did not require any outside resources. Company crews and contractor crews already assigned to the O&R territory responded, and repaired all trouble associated with the impacts from Tropical Storm Lee.

### III. Service Restoration

#### a. Restoration Priorities

Public and employee safety are paramount in setting restoration priorities and restoration efforts. There were no injuries or vehicle accidents involving any of O&R’s employees or contractors directly related to the response to this event. There were two civilian fatalities associated with downed power lines in Monsey, NY. The circumstances of these deaths are still under investigation.

During such a major event, it is the Company's focus to make conditions safe, restore customers as quickly as possible, and manage repairs throughout the event. However, inability to access damaged areas due to flooding, road closures and washouts, and the amount and type of interruptions that occurred throughout our service territory, as well as the duration of the inclement weather, resulted in substantial delays in making repairs and restoring customers.

The following represents the general sequence for the restoration of the electric system and hence, damage assessment surveys:

- Transmission facilities and area substations;
- Distribution circuit lockouts;
- Sensitive customers, i.e., these customers include hospitals, water supply and sewage treatment facilities, nursing homes, police and fire stations, telephone company facilities, radio and TV stations, public transportation, life-sustaining equipment customers; and
- All other affected customers.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Line Crews</th>
<th>Tree Crews</th>
<th>Service Crews</th>
</tr>
</thead>
<tbody>
<tr>
<td>28-Aug-11</td>
<td>7:00 AM</td>
<td>52</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>29-Aug-11</td>
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</tr>
<tr>
<td>3-Sep-11</td>
<td>7:00 AM</td>
<td>52</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td>4-Sep-11</td>
<td>7:00 AM</td>
<td>52</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>
Estimated restoration times are suspended until the majority of the damage is assessed, and then updated to reflect the prioritization of restoration, the extent of damage in certain areas, and the workforce available to do the restoration. O&R uses an enterprise-wide Outage Management System (“OMS”) to coordinate all storm activities such as damage assessment information, workforce assignment, work progress, customers affected and estimated restoration times are updated throughout the event.

**b. Customer Restoration**

In total, there were 88,406 customers affected in O&R’s New York service area. In addition, there were 27,220 customers affected in RECO’s New Jersey service area, and 4,366 customers affected in PCL&P’s Pennsylvania service area. The last New York customer affected by the major event was restored on September 4th, at 23:00 hours. The table below depicts NY customer outages in 8-hour blocks, from the start of the storm at 01:00 on August 28th.
<table>
<thead>
<tr>
<th>Hrs From Start</th>
<th>Customers Affected</th>
<th>Customers Restored</th>
<th>Customers Remaining Out</th>
<th>Percent Restored</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>37,379</td>
<td>4,890</td>
<td>32,489</td>
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<td>16</td>
<td>69,128</td>
<td>19,860</td>
<td>49,268</td>
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<td>24</td>
<td>77,806</td>
<td>24,789</td>
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<td>79,461</td>
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<td>44,907</td>
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<td>40</td>
<td>83,115</td>
<td>45,838</td>
<td>37,277</td>
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<td>48</td>
<td>84,701</td>
<td>57,737</td>
<td>26,964</td>
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<td>86,155</td>
<td>63,376</td>
<td>22,779</td>
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<td>68,627</td>
<td>18,315</td>
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<td>72</td>
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<td>75,560</td>
<td>12,177</td>
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<td>9,406</td>
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<td>81,071</td>
<td>7,335</td>
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<tr>
<td>104</td>
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<td>81,896</td>
<td>6,510</td>
<td>92.6</td>
</tr>
<tr>
<td>112</td>
<td>88,406</td>
<td>83,292</td>
<td>5,114</td>
<td>94.2</td>
</tr>
<tr>
<td>120</td>
<td>88,406</td>
<td>85,154</td>
<td>3,252</td>
<td>96.3</td>
</tr>
<tr>
<td>128</td>
<td>88,406</td>
<td>85,876</td>
<td>2,530</td>
<td>97.1</td>
</tr>
<tr>
<td>136</td>
<td>88,406</td>
<td>86,937</td>
<td>1,469</td>
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<tr>
<td>144</td>
<td>88,406</td>
<td>87,688</td>
<td>718</td>
<td>99.2</td>
</tr>
<tr>
<td>152</td>
<td>88,406</td>
<td>87,752</td>
<td>654</td>
<td>99.3</td>
</tr>
<tr>
<td>160</td>
<td>88,406</td>
<td>88,067</td>
<td>339</td>
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<td>168</td>
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<td>88,347</td>
<td>59</td>
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<td>88,363</td>
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<td>184</td>
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<tr>
<td>192</td>
<td>88,406</td>
<td>88,406</td>
<td>0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Tropical Storm Lee affected 15,938 customers throughout the Orange and Rockland System with 9,216 of those customers residing in O&R’s New York service territory. The table below depicts New York customer outages in eight-hour blocks, from the start of Tropical Storm Lee at 11:00 on September 5.

<table>
<thead>
<tr>
<th>Hrs From Start</th>
<th>Customers Affected</th>
<th>Customers Restored</th>
<th>Customers Remaining Out</th>
<th>Percent Restored</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>4266</td>
<td>4217</td>
<td>49</td>
<td>45.8</td>
</tr>
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<td>5630</td>
<td>4278</td>
<td>1352</td>
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<td>24</td>
<td>5890</td>
<td>5327</td>
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<td>57.8</td>
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<td>32</td>
<td>7919</td>
<td>7667</td>
<td>252</td>
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</tr>
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<td>40</td>
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<td>8782</td>
<td>8119</td>
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<td>9216</td>
<td>8957</td>
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<td>97.2</td>
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<tr>
<td>72</td>
<td>9,216</td>
<td>9,216</td>
<td>0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**IV. Support Services**

a. Logistics

O&R Logistics provided direct support to outside crews for food (at lodging sites) and lodging during the event. Other services such as stores, security, and transportation (including fueling at lodging sites) were supplied by Logistics. Food service for internal staff at operations centers was also provided by Logistics. In addition, Purchasing cards were opened for all commodities warranted by the storm by Consolidated Edison Company of New York, Inc.’s (“Con Edison”) Purchasing Department. The Logistics team was instrumental in establishing the staging area for mutual aid line contractors at the Sheraton Crossroads Hotel complex in Mahwah, NJ.

b. Dry Ice Distribution

The distribution of dry ice was begun on Tuesday, August 30. The Company used recorded messages on local radio stations, press releases distributed to local media outlets, e-mail blasts to all Town Supervisors, Mayors, Building Inspectors, Highway Superintendents, Police Chiefs, Offices of Emergency Management and School Districts to advise of the availability of dry ice. Towns with the
capability used reverse calling to notify residents of dry ice locations. The Rockland County OEM also sent an e-bulletin to residents on their mailing list.

Dry ice distribution locations were chosen based on the number of outages in a region and the ease of accessibility to the site. Past experience with successful distribution locations and input from local elected officials was also taken into consideration. Dry ice distribution locations are listed in the press releases in Appendix VI.

Ninety thousand pounds of dry ice were distributed over the course of the event and sufficient quantities were available for all those who wanted it. Wet ice was also distributed on August 30 since the widespread damage from Irene along the east coast stressed the supply of dry ice, however, O&R was able to secure an adequate supply.

No dry ice was distributed during Tropical Storm Lee.

V. Communications

a. Internal

During Hurricane Irene the Storm Director issued periodic status reports. These updates were transmitted to all key responders involved in the restoration effort, as well as senior officers and managers in the Company. Conference call briefings were also conducted on a periodic basis, as frequently as every four hours. No specific internal communications were generated during Tropical Storm Lee.

Information regarding the number and location of outages, as well as the number of customers affected and estimated restoration times are available on the Company’s intranet web site. This information was available for both Hurricane Irene and Tropical Storm Lee.

All information regarding customer interruptions is available to customer service representatives, the automated voice response system and the staff at the OEM centers.


Communications to municipal and public officials were conducted via blast e-mail. In total, 21 blast e-mails were sent from August 25 through September 2. In addition, O&R’s Community Response Team (“CRT”) was activated and CRT municipal liaisons were located in the OEMs in Rockland County, Orange County, the City of Port Jervis as well as in the Town’s of Deerpark, Clarkstown and Orangetown. The CRT Command Center was opened at the Company’s Spring Valley Operating Center and public officials were provided with three separate telephone numbers to speak with Public Affairs Managers throughout the storm. Municipal and public officials also are provided with the cell and home phone numbers of their assigned Public Affairs Managers.
A total of 11 municipal conference calls were conducted from Sunday, August 28 through Friday, September 2. The first conference call was held on August 28 at 2PM, with subsequent calls on August 29, 30, 31, and September 1, held at 11:00 AM and 3:00PM. The final conference call was held on Friday, September 2 at 11:00 AM. During the course of the municipal conference calls when questions or issues were raised, the Storm Director researched the question and responded to the respective municipality at the following municipal conference call. In addition, the officials were referred to the Public Affairs Managers staffing the CRT command center where questions specific to a municipality were addressed. The most frequently asked questions pertained to customers receiving a busy signal when calling customer service, wires down blocking roads, and restoration information on critical infrastructure.

No municipal outreach was required during Tropical Storm Lee.

c. Customers

Over 50 time/date-stamped press releases, featuring information ranging from outage numbers to crew counts to ice distribution locations, were issued before and during the seven-day event. Thirty-five updates were posted during this period. These releases were also recorded for frequent use on 1640 Rockland Radio, Rockland County’s radio station. Typical press releases are included in Appendix V. Two e-mail blasts were issued (on August 26 and 29) to 38,000 customers with e-mails on record with us – one on Storm Preparation that featured links to our Web site and another on safety and flood cuts. About 45 percent of those e-mails were opened. A 15 percent open rate is considered successful in e-mail blasts, according to industry standards.

The Company’s three Business Offices were open 8:00 a.m. – 4:30 p.m. during the event starting on August 29. These offices, located in Blooming Grove, Spring Valley and Port Jervis, are the Company’s normal operating business offices and are staffed with experienced Customer Service Representatives. The availability of the Business Offices was provided to customers that called into the Company’s Call Center and also discussed with public officials during the Company’s municipal conference calls. The Call Center trains its employees to handle issues and problems raised by customers during an event such as Hurricane Irene. They are provided estimated time to restoration (ETR) and Company crewing updates throughout the event and have access to the Company’s OMS which provides them with outage information to convey to customers. In addition, the Company has an escalated-calls group that is activated during an event to assist customers with special requests.

VI. Lessons Learned

Each storm is unique and there are always lessons to be learned and sometimes opportunities to improve procedures and processes in the Company’s ESEP. The observations and suggestions gathered from employees, customers and community partners after a storm is critical to our ability to improve our storm restoration and recovery process. Functional coordinators conducted information gathering and debriefs during the weeks of September 12 and September 19. This information was
forwarded on to Electric Operations and Emergency Management to be reviewed and to distribute to all of the key stakeholders in the Company.

The major areas for improvement identified during Hurricane Irene and Tropical Storm Lee are as follows:

**a. Operations Support Systems**

- Several OMS improvement opportunities were identified including the use of connectivity intelligence to better manage and sort incoming calls, enhanced reporting capabilities and enhanced capacity for incident management to prevent performance deficiencies.

- To reduce radio traffic, it was suggested O&R evaluate alternate means, including the use of handheld or mobile computers, for communicating non-critical information to field crews.

- Develop a SharePoint site to centralize key storm information which is accessible to all pertinent storm function coordinators.

**b. Communication**

- Enhance and upgrade the customer service telephone capacity including the Interactive Voice Response system. Evaluate the use of outside resources for customer service functions and increase the accuracy of the ERT’s and explore the use of electronic data sharing between the Company and municipalities to facilitate identification of road closures and outages to critical infrastructure.

- Formalize the concept and use of municipal line crews and municipal priority lists. Improve communication on cut/clear operations and wire guarding incidents.

- Evaluate the cost/benefits of increasing safety messages regarding electrical safety and downed wire conditions.

**c. Outside Resources**

- Develop a process to procure costs and crew/full time equivalent (“FTE”) details prior to the event for contractor crews, process similar to that used for mutual aid crews.

- Review clearance and operating authority processes to improve efficiency but maintain safety.

- Formalize the use of retiree workforce including annual training for each so that retirees remain up to date with current operating procedures.
• Evaluate the increased use of outside resources for damage assessment and site safety functions as well as identifying necessary training.

**d. Logistics**

• Establish primary and alternate staging areas for mutual assistance crews in all operating divisions.

**h. Process Improvement**

• Develop formalized process for managing flood cuts and restores.

• Formalize the use of the engineering end of storm (i.e., 95% restored) predictive algorithm.
Appendix I – Weather Updates

Hurricane Irene Forecast - 8/25/11 - 5:30 PM

Hurricane Irene currently poses a serious threat to the Northeast.

Hurricane Irene is still a large Category 3 storm with sustained winds of 115 mph centered over the northern Bahamas. It is moving to the north-northwest at 14 mph. The latest forecast track for the hurricane issued by the National Hurricane Center at 5:00 p.m. is presented below. A Hurricane Watch has been issued for the East Coast from the Virginia/North Carolina border to Sandy Hook, New Jersey. The watch could be extended further north later tonight or tomorrow.

Hurricane Irene is expected to turn to the north toward morning tomorrow, and then move across eastern North Carolina on Saturday as a strong Category 2 hurricane with sustained winds of 110 mph. It is then forecast to ride up the coastline (slightly inland) and move directly over the New York Metropolitan Area during the day on Sunday, possibly as Category 1 hurricane (forecast sustained winds of the storm when its center is over central New Jersey at 2:00 p.m. on Sunday are 85 mph).

On this track, the hurricane would be expected to produce very significant rain, wind, and coastal flooding impacts across the area. While rain could begin during the day on Saturday well in advance of the hurricane, the outer bands of the hurricane could begin affecting the area after midnight Saturday night. Toward daybreak Sunday, wind and rain intensity would be expected to increase through the morning and peak during the afternoon into the very early evening. On this track, sustained winds are expected to be at least tropical storm force and could reach low Category 1 hurricane strength. Hurricane strength wind gusts would also be expected. Rainfall amounts of 6-10” with locally higher amounts could be expected by Sunday night.

The most uncertain threat at this point is the degree of coastal flooding. This will be greatly dependent on the track of the storm and the resulting wind speeds. Major coastal flooding at times of high tide (Sunday morning approximately 8:00 – 11:00 across the area and Sunday evening approximately 8:00 – 11:00 across the area) is possible from this relatively slow-moving hurricane. The National Weather Service is expected to begin issuing estimates of tidal departures in our area tomorrow once official watches or warnings are issued.
### Hurricane Irene

**Thursday, August 25, 2011**

5 PM ECT: Advisory 22  
NWS National Hurricane Center

**Current Information:**
- **Location:** 27.0 N 72.3 W
- **Max Sustained Wind:** 115 mph
- **Movement:** NNE at 14 mph

**Forecast Positions:**
- Tropical Cyclone
- Post-Tropical

**Sustained Winds:**
- D < 39 mph
- 39-73 mph
- 74-110 mph
- > 110 mph

### Potential Track Area:

- **Day 1-3**
- **Day 4-5**

### Watches:
- Hurricane
- Trop. Storm

### Warnings:
- Hurricane
- Trop. Storm
Hurricane Irene Forecast - 8/26/11 - 5:20 PM

Hurricane Warnings now posted for New York City, Westchester, and Rockland Counties; Tropical Storm Warning for Orange County.

Hurricane Irene weakened some today but is still a Category 2 storm with sustained winds of 100 mph centered about 265 miles south-southwest of Cape Hatteras. It is moving to the north at 14 mph. The latest forecast track for the hurricane issued by the National Hurricane Center at 5:00 p.m. is presented below.

Hurricane Irene is expected to turn to the north-northeast late tonight and move through eastern North Carolina tomorrow. As it moves up the Mid-Atlantic coastline, the storm is expected to slowly weaken, but remain a weak Category 1 hurricane as it crosses western Long Island late Sunday morning.

On this track, the hurricane is still expected to produce very significant rain, wind, and coastal flooding impacts across the area. Periods of rain should begin during the day on Saturday in advance of the hurricane. Then, the outer bands of the hurricane could begin affecting the area by around 6:00 p.m. Saturday evening. Wind and rain intensity would be expected to increase through the night, peak by late morning Sunday, then diminish in intensity Sunday afternoon as the storm pulls into New England. On this track, sustained winds are expected to be at least tropical storm force and could reach low Category 1 hurricane strength if the hurricane indeed maintains this intensity. Even if sustained winds do not reach hurricane strength in the hurricane warning area, wind gusts of hurricane strength could be achieved. Predicted rainfall amounts remain the same, i.e., 6-10” with locally higher amounts across our entire service territory.

Because the area will be under strong easterly winds for a significant duration, major coastal flooding is anticipated, and the National Weather Service has forecasted tidal surges of 4-8’ for New York Harbor/western Long Island Sound. This tidal surge forecast will be greatly dependent on the track of the storm and the resulting wind speeds. The tide of concern is Sunday morning’s high tide (8:00 – 11:00 am).
Hurricane Irene Forecast - 8/27/11 - 7:00 AM

No change in expected hurricane track; Hurricane/Tropical Storm Warnings remain in place for our area.

Hurricane Irene weakened a bit more and at 5:00 a.m. was a Category 1 storm with sustained winds of 90 mph centered about 25 miles off the southeast North Carolina coast. It is moving to the north-northeast at 14 mph. With the storm nearing the coast, Cape Hatteras recently reported sustained winds up to 55 mph and gusts to 84 mph. The latest forecast track for the hurricane issued by the National Hurricane Center at 5:00 a.m. is presented below.

Hurricane Irene is expected to continue on its current north-northeast heading through tomorrow. This course will bring it across western Long Island late tomorrow morning. Although the hurricane is expected to continue to weaken as it moves up the coast, the National Hurricane Center still expects the storm to be a weak Category 1 hurricane with sustained winds of 75-80 mph as it passes our area.

Expected impacts remain the same at present. Showers and a few thunderstorms are likely during the day today, especially this afternoon. As the large circulation of the hurricane approaches the area tonight, rain and wind will increase in intensity, and peak by late morning tomorrow, and then decrease in intensity through the afternoon as the storm pulls into New England. Sustained winds are expected to reach tropical storm force (40-73 mph) across the entire region for a significant period from late tonight into early Sunday afternoon. Peak wind gusts to 75 mph are possible, especially along the coast. There is low probability that sustained winds of hurricane strength will be experienced. Predicted rainfall amounts remain the same, i.e., 6-10” with locally higher amounts across our entire service territory.

Because the area will be under strong easterly winds for a significant duration, major coastal flooding is anticipated, and the National Weather Service still forecasts tidal surges of 4-8’ for New York Harbor/western Long Island Sound. The tide of concern remains tomorrow morning’s high tide (8:00 – 11:00 am).
Hurricane Irene Update - 8/27/11 - 11:55 AM

Track nudged a bit to the west; tropical storm force winds slowly moving up the coastline.

At 11:00 a.m., the center of Hurricane Irene was located in eastern North Carolina, 50 miles west of Cape Hatteras. It is still a Category 1 hurricane, with sustained winds now reported to be 85 mph. The storm continues to move to the north-northeast, now at 15 mph. The latest forecast track for the hurricane issued by the National Hurricane Center at 11:00 a.m. is presented below.

The new track guidance has been nudged slightly to the west such that the center of Irene will follow the coastline and pass directly over New York City tomorrow morning between 9:00 and 10:00 am. It is still presently forecast to be a 75 mph Category 1 hurricane at that time.

Sustained tropical storm force winds have spread into southeast Virginia and are expected to develop over the DelMarVa Peninsula early this afternoon. Also, heavy rain bands containing thunderstorms have spread northward into southern New Jersey.

On the current forecast track, some of the highest winds we will likely experience from the storm will coincide with tomorrow morning’s high tide. The National Weather Service continues to forecast tidal surges of 4-8’ for New York Harbor/western Long Island Sound inducing major coastal flooding at the time of high tide tomorrow morning.
Hurricane Irene Update - 8/27/11 - 5:30 PM

Track is essentially the same; Irene is still expected to reach the New York area at or near hurricane strength.

At 5:00 p.m., the center of Hurricane Irene was located in the northeastern corner of North Carolina, 50 miles south-southeast of Norfolk, VA. It has weakened a bit more, but is still a Category 1 hurricane with sustained winds of 80 mph. The storm is moving to the north-northeast at 13 mph. The latest forecast track for the hurricane issued by the National Hurricane Center at 5:00 p.m. is presented below.

The latest guidance continues to bring the storm up the coastline passing just east of New York City tomorrow morning around 10:00 a.m. at or near hurricane strength. All projected impacts across the area, i.e., heavy rainfall, tropical storm force sustained winds and possibly hurricane force wind gusts, and major coastal flooding remain the same.

Sustained tropical storm force winds have spread across the DelMarVa Peninsula with gusts up to 60 mph, and will continue spreading northward this evening.

The expected period of the most intense rain and wind will be from approximately 2 a.m. to 3 p.m. Some of the highest winds will occur around the time of tomorrow morning’s high tide. The surge forecast from the National Weather Service continues to be 4-8’ tomorrow morning.

Center of Hurricane Irene is forecast to pass just east of New York City; Tornado Watch continues for New York City, and Westchester & Rockland Counties until 11:00 a.m.
Hurricane Irene Update - 8/28/11 - 5:55 AM

At 5:00 a.m., the center of Hurricane Irene was located just southeast of Atlantic City. It remains a Category 1 hurricane with sustained winds of 75 mph. The storm is moving to the north-northeast at 18 mph. The latest forecast track for the hurricane issued by the National Hurricane Center at 5:00 a.m. is presented below.

The hurricane is expected to be over the area late morning and then move into western Connecticut this afternoon. Sustained tropical storm force winds are expected to continue over the area into mid-afternoon and then decrease toward evening. A few peak gusts to hurricane strength could occur. Periods of rain, heavy at times, will continue through the morning and taper off in the afternoon. Several more inches of rain is possible especially north and west of the City.

Surge levels in New York Harbor have already risen to approximately 3.5’, so significant to major coastal flooding is still expected at high tide later this morning.

Highest wind gusts so far have occurred across the City: 64 mph at LGA, and 59 mph at both JFK and Central Park. 3-5” of rain had already fallen across the entire service territory as of 5:00 a.m.

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**Potential Track Area:**
- **Day 1-3**

**Watches:**
- **Hurricane**
- **Trop. Storm**

**Warnings:**
- **Hurricane**
- **Trop. Storm**
Appendix II – Corporate Hurricane Pre-planning Items

Orange and Rockland Utilities
Hurricane Pre-planning Actions

**120-96 hour** preparation actions for a Tropical Storm / Hurricane.

- Initial call commences to discuss probabilities and set call schedules with the MAMA and NYMAG groups to track forecast and the impact it may have on the member companies. Crew availability from member companies and outside resources also discussed. Orange and Rockland will continue conference calls with the Mid Atlantic Mutual Aid Group, the New York Mutual Aid Group and New England utilities discussing potential need for mutual aid or assistance we may lend to others.

**72-48 hour** preparation actions for a Tropical Storm / Hurricane. These action items are as follows:

- Aggressive line patrols have taking place in (A), known trouble areas, (B) where we have had recent trip and recloser activity (C), where we have sensitive customers and finally, (D) all other areas.

- All key gas & electric equipment out of service will be brought into service or appropriately replaced or bypassed so it does not impact restoration activities should we find ourselves in a storm event.

- Planning for flood prone areas within electric and gas system. (Maps, field inspection of valve and equipment accessibility etc.) Planning for facilities that are flood prone. All necessary equipment and vehicles moved to safe location.

- Prior to storm all job sites will become secure when crews leave the work area to minimize and/or eliminate all temporary construction that could impact service reliability, tie down all loose and poorly secured facilities, remove all hardware in place for wire pulls or other construction that can be deferred.

- Verified all standby stock and poles are at maximum capacity. Reviewed with Stores storm stocking levels of items such as conductor, cross arms, fuses, tie wire, poles and transformers. Increase any stock items if appropriate. Material inventories and equipment availability issues have been addressed including topping off fuel tanks, returning vehicles to service from garages and ordering standard storm stock items.

- Line Clearance- all known tree problems cleared up, aggressive line clearance patrols initiated and corrective action immediately taken.

- Conference calls with Storm Organization Chiefs and Officers have been in place since 96 hours to discuss planning.
Communications to O&R Storm Coordinators regarding forecast, requested to review and establish staffing schedules, complete checklist reviews, test all required equipment and alternate locations. Coordinators have also been advised of the appropriate Storm Organization Chief and Officer staffing assignments.

Storm Organization Chiefs and Officers have established open communications with their responsible functions. Additional Coordinator meetings and conference calls have been scheduled.

Orange and Rockland supplemental restoration personnel (Substation, Underground Electric and Facilities) are available for service work as the situation warrants. In addition all outside contractors have been contacted for their availability to assist as required.

All back-up communications tested

Contacted Helicopter service for availability

Tested all internal storm emergency telephone and computer hook-up's

Contacted food, hotel vendors and staging area

Completed outbound calls to all customers expected to be impacted, large sensitive customers expected to be impacted and Life Support Equipment customers.

Internal and external media messages prepared and appropriately sent out. Community Response Team fax to municipalities, PD/FD’s. Internal employee safety messages prepared. Employees instructed to prepare their homes and families for the storm.

Family Emergency Support Plan reviewed and contacts verified with Salvation Army.

Contacted all Regulatory Agencies, public officials and County Emergency Management Offices commencing communications regarding planning initiatives

Will mobilize fully 12 hours prior to storm which will include 24X7 staffing of its emergency contact phones, customer service, control centers, line field crews, emergency management organization, and other critical storm functions.
Appendix III – Maximum Wind Gusts

National Weather Service - Eastern Region Hydrometeorological Event Display

Maximum Wind Gust (mph) received during previous 24 hrs ending Aug 29, 2011 at 03:35 AM
Appendix IV – Rainfall Totals
O&R RESTORES POWER TO ABOUT 82% OF CUSTOMERS

PEARL RIVER, NY Aug. 30, 2011 11 p.m. --- O&R has restored electric service to 90,000 customers, or about 82 percent of the 110,000 customers affected by Hurricane Irene.

Most of the remaining 19,800 O&R electric customers whose power was knocked out by Hurricane Irene should see their service return by midnight Friday. The rest of the customers who lost their power in the hurricane will be restored to service over the weekend.

At this hour, Orange County has about 8,100 customers without power, Rockland County has about 4,000 and Sullivan County about 1,600.

In N.J., 2,900 customers are affected in Bergen, 2,300 in Passaic and 96 in Sussex.

In Pennsylvania, about 700 customers in Pike County are without service now.

One of the reasons for the widespread destruction from the hurricane in Rockland was the fact that the hurricane’s eyewall settled for a time over Harriman State Park, according to the National Weather Service.

That resulted in the highest rainfall numbers in the region, and some of the worst flooding that closed the NYS Thruway, Route 17 and the Palisades Parkway, and flooded dozens of local roads and washed out others.

Tuxedo topped the rainfall totals with 11.48 inches, Harriman with 10.75 inches and New City with 8.75 inches.

Another contributing factor to the destruction was the high, tropical-storm strength winds. The National Weather Service Monitoring Station at the Orange County Airport measured gusts of 46 m.p.h.

That violent weather flooded O&R’s Customer Service department with the highest phone call volumes on record. From 1 a.m. Sunday to today, O&R received 167,000 phone calls from customers. That call volume peaked between 6:30 p.m. and 7:00 p.m. Sunday with 6,860 calls. That’s as many calls in a half-hour as O&R normally gets over a three-day period.

O&R will be distributing ice to customers tomorrow, August 31, at the following locations:

2:00pm to 4:00pm
Boulders Ball Field  
Pomona Road  
Pomona, NY

Orange County Government Center  
(site of the former Orange County jail as far back on Erie as possible farthest spot from Government Center)  
40 Erie Street  
Goshen, NY

Luhrs Lumber Yard  
475 Route 6 and 209  
Milford, PA 18337

**6:00pm to 8:00pm**

Ramsey OEM  
33 North Central Avenue  
Ramsey, NJ

Deer Park Town Hall  
420 Route 209  
Huguenot, NY

Hillcrest Community Center  
1810 Macopin Road  
West Milford, NJ

For the latest outage numbers updated every 15 minutes, please go to oru.com/storms. You can report an electric outage or check your outage status by entering [www.oru.com](http://www.oru.com) into your Smartphone. Your phone will automatically be directed to our mobile Web site.

Due to the severity of the storm, many of these restoration efforts require a rebuilding of portions of our electric system. Work is being prioritized in a manner that restores the greatest number of customers in the shortest period of time.

More than 180 O&R, contractor and mutual aid crews from as far as Michigan and Texas are performing system repairs. These crews are being scheduled on an around-the-clock basis in a manner to assure the safest and fastest restoration of service to our customers.
• Even though outages are being repaired, always assume a downed wire is live. Don’t touch or approach any downed wires. Call O&R immediately at 1-877-434-4100 and let line crews safely deal with the problem.

• If your electric service is interrupted, call O&R at 1-877-434-4100 to report the outage.

• If you think you smell natural gas, call O&R’s Gas Emergency Hotline at 1-800-533-5325.

FOR IMMEDIATE RELEASE

CONTACT: Michael Donovan
845-577-2430

O&R: POWER BACK TO ABOUT 86% OF CUSTOMERS AFFECTED

PEARL RIVER, NY Aug. 31, 2011 at 1 p.m. --- O&R has restored electric service to 94,760 customers, or about 86 percent of the 110,000 customers affected by Hurricane Irene.

Most of the remaining 15,200 O&R electric customers whose power was knocked out by Hurricane Irene should see their service return by midnight Friday. The rest of the customers who lost their power in the hurricane will be restored to service over the weekend.

At this hour, Orange County has about 6,300 customers without power, Rockland County has about 2,800 and Sullivan County about 1,650.

In N.J., 2,000 customers are affected in Bergen, 1,600 in Passaic and 100 in Sussex.

In Pennsylvania, about 680 customers in Pike County are without service now.

O&R will be distributing ice to customers today, August 31, at the following locations:

2:00pm to 4:00pm

Boulders Ball Field
Pomona Road
Pomona, NY

Orange County Government Center
(site of the former Orange County jail as far back on Erie as possible farthest spot from Government Center)
40 Erie Street
Goshen, NY

Luhrs Lumber Yard
One of the reasons for the widespread destruction from the hurricane in Rockland was the fact that the hurricane’s eyewall settled for a time over Harriman State Park, according to the National Weather Service.

That resulted in the highest rainfall numbers in the region, and some of the worst flooding that closed the NYS Thruway, Route 17 and the Palisades Parkway, and flooded dozens of local roads and washed out others.

Tuxedo topped the rainfall totals with 11.48 inches, Harriman with 10.75 inches and New City with 8.75 inches.

Another contributing factor to the destruction was the high, tropical-storm strength winds. The National Weather Service Monitoring Station at the Orange County Airport measured gusts of 46 m.p.h.

That violent weather flooded O&R’s Customer Service department with the highest phone call volumes on record. From 1 a.m. Sunday to Tuesday, O&R received 167,000 phone calls from customers. That call volume peaked between 6:30 p.m. and 7:00 p.m. Sunday with 6,860 calls. That’s as many calls in a half-hour as O&R normally gets over a three-day period.

For the latest outage numbers updated every 15 minutes, please go to oru.com/storms. You can report an electric outage or check your outage status by entering www.oru.com into your Smartphone. Your phone will automatically be directed to our mobile Web site.

Due to the severity of the storm, many of these restoration efforts require a rebuilding of portions of our electric system. Work is being prioritized in a manner that restores the greatest number of customers in the shortest period of time.
More than 180 O&R, contractor and mutual aid crews from as far as Michigan and Texas are performing system repairs. These crews are being scheduled on an around-the-clock basis in a manner to assure the safest and fastest restoration of service to our customers.

- Even though outages are being repaired, always assume a downed wire is live. Don’t touch or approach any downed wires. Call O&R immediately at 1-877-434-4100 and let line crews safely deal with the problem.
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FOR IMMEDIATE RELEASE

CONTACT: Michael Donovan
845-577-2430

O&R: POWER BACK TO ABOUT 87% OF CUSTOMERS AFFECTED

PEARL RIVER, NY Aug. 31, 2011 at 3 p.m. --- O&R has restored electric service to 95,900 customers, or about 87 percent of the 110,000 customers affected by Hurricane Irene.

Most of the remaining 14,000 O&R electric customers whose power was knocked out by Hurricane Irene should see their service return by midnight Friday. The rest of the customers who lost their power in the hurricane will be restored to service over the weekend.

At this hour, Orange County has about 6,000 customers without power, Rockland County has about 2,700 and Sullivan County about 1,100.

In N.J., 1,900 customers are affected in Bergen, 1,400 in Passaic and 100 in Sussex.

In Pennsylvania, about 680 customers in Pike County are without service now.

O&R will be distributing ice to customers today, August 31, at the following locations:

2:00pm to 4:00pm

Boulders Ball Field
Pomona Road
Pomona, NY
Orange County Government Center  
(site of the former Orange County jail as far back on Erie as possible farthest spot from Government Center)  
40 Erie Street  
Goshen, NY

Luhrs Lumber Yard  
475 Route 6 and 209  
Milford, PA 18337

6:00pm to 8:00pm

Ramsey OEM  
33 North Central Avenue  
Ramsey, NJ

Deer Park Town Hall  
420 Route 209  
Huguenot, NY

Hillcrest Community Center  
1810 Macopin Road  
West Milford, NJ

One of the reasons for the widespread destruction from the hurricane in Rockland was the fact that the hurricane’s eyewall settled for a time over Harriman State Park, according to the National Weather Service.

That resulted in the highest rainfall numbers in the region, and some of the worst flooding that closed the NYS Thruway, Route 17 and the Palisades Parkway, and flooded dozens of local roads and washed out others.

Tuxedo topped the rainfall totals with 11.48 inches, Harriman with 10.75 inches and New City with 8.75 inches.

Another contributing factor to the destruction was the high, tropical-storm strength winds. The National Weather Service Monitoring Station at the Orange County Airport measured gusts of 46 m.p.h.

That violent weather flooded O&R’s Customer Service department with the highest phone call volumes on record. From 1 a.m. Sunday to Tuesday, O&R received 167,000 phone calls from customers. That call volume peaked between 6:30 p.m. and 7:00 p.m. Sunday with 6,860 calls. That’s as many calls in a half-hour as O&R normally gets over a three-day period.
For the latest outage numbers updated every 15 minutes, please go to oru.com/storms. You can report an electric outage or check your outage status by entering www.oru.com into your SmartPhone. Your phone will automatically be directed to our mobile Web site.

Due to the severity of the storm, many of these restoration efforts require a rebuilding of portions of our electric system. Work is being prioritized in a manner that restores the greatest number of customers in the shortest period of time.

More than 180 O&R, contractor and mutual aid crews from as far as Michigan and Texas are performing system repairs. These crews are being scheduled on an around-the-clock basis in a manner to assure the safest and fastest restoration of service to our customers.

- Even though outages are being repaired, always assume a downed wire is live. Don’t touch or approach any downed wires. Call O&R immediately at 1-877-434-4100 and let line crews safely deal with the problem.
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FOR IMMEDIATE RELEASE

O&R: POWER BACK TO ABOUT 89% OF CUSTOMERS AFFECTED

PEARL RIVER, NY Aug. 31, 2011 at 7 p.m. --- O&R has restored electric service to 97,600 customers, or about 89 percent of the 110,000 customers affected by Hurricane Irene.

Most of the remaining 12,400 O&R electric customers whose power was knocked out by Hurricane Irene should see their service return by midnight Friday. The rest of the customers who lost their power in the hurricane will be restored to service over the weekend.

At this hour, Orange County has about 5,600 customers without power, Rockland County has about 2,300 and Sullivan County about 1,200.

In N.J., 1,500 customers are affected in Bergen, 1,000 in Passaic and 100 in Sussex.

In Pennsylvania, about 540 customers in Pike County are without service now.

O&R is again distributing ice to customers tomorrow, September 1, at the following locations:
2:00pm to 4:00pm

Boulders Ball Field
Pomona Road
Pomona, NY

Hillcrest Community Center
1810 Macopin Road
West Milford, NJ

Lumberland Town Hall
1054 Proctor Road
Glen Spey, NY

6:00pm to 8:00pm

Ramsey OEM
33 North Central Avenue
Ramsey, NJ

Luhrs Lumber Yard
475 Route 6 and 209
Milford, PA 18337

City of Middletown City Hall
16 James Street
Middletown, NY

One of the reasons for the widespread destruction from the hurricane in Rockland was the fact that the hurricane’s eyewall settled for a time over Harriman State Park, according to the National Weather Service.

That resulted in the highest rainfall numbers in the region, and some of the worst flooding that closed the NYS Thruway, Route 17 and the Palisades Parkway, and flooded dozens of local roads and washed out others.

Tuxedo topped the rainfall totals with 11.48 inches, Harriman with 10.75 inches and New City with 8.75 inches.

Another contributing factor to the destruction was the high, tropical-storm strength winds. The National Weather Service Monitoring Station at the Orange County Airport measured gusts of 46 m.p.h.

That violent weather flooded O&R’s Customer Service department with the highest phone call volumes on record. From 1 a.m. Sunday to Tuesday, O&R received 167,000 phone calls from
customers. That call volume peaked between 6:30 p.m. and 7:00 p.m. Sunday with 6,860 calls. That’s as many calls in a half-hour as O&R normally gets over a three-day period.

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Due to the severity of the storm, many of these restoration efforts require a rebuilding of portions of our electric system. Work is being prioritized in a manner that restores the greatest number of customers in the shortest period of time.

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FOR IMMEDIATE RELEASE

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845-577-2430

O&R: POWER BACK TO ABOUT 90% OF CUSTOMERS AFFECTED

PEARL RIVER, NY Aug. 31, 2011 at 9 p.m. --- O&R has restored electric service to 98,600 customers, or about 90 percent of the 110,000 customers affected by Hurricane Irene.

Most of the remaining 11,300 O&R electric customers whose power was knocked out by Hurricane Irene should see their service return by midnight Friday. The rest of the customers who lost their power in the hurricane will be restored to service over the weekend.

At this hour, Orange County has about 5,700 customers without power, Rockland County has about 1,800 and Sullivan County about 1,000.

In N.J., 1,300 customers are affected in Bergen, 850 in Passaic and 100 in Sussex.
In Pennsylvania, about 540 customers in Pike County are without service now.

O&R is again distributing ice to customers tomorrow, September 1, at the following locations:

**2:00pm to 4:00pm**

Boulders Ball Field  
Pomona Road  
Pomona, NY

Hillcrest Community Center  
1810 Macopin Road  
West Milford, NJ

Lumberland Town Hall  
1054 Proctor Road  
Glen Spey, NY

**6:00pm to 8:00pm**

Ramsey OEM  
33 North Central Avenue  
Ramsey, NJ

Luhrs Lumber Yard  
475 Route 6 and 209  
Milford, PA 18337

City of Middletown City Hall  
16 James Street  
Middletown, NY

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Tuxedo topped the rainfall totals with 11.48 inches, Harriman with 10.75 inches and New City with 8.75 inches.
Another contributing factor to the destruction was the high, tropical-storm strength winds. The National Weather Service Monitoring Station at the Orange County Airport measured gusts of 46 m.p.h.

That violent weather flooded O&R’s Customer Service department with the highest phone call volumes on record. From 1 a.m. Sunday to Tuesday, O&R received 167,000 phone calls from customers. That call volume peaked between 6:30 p.m. and 7:00 p.m. Sunday with 6,860 calls. That’s as many calls in a half-hour as O&R normally gets over a three-day period.

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- If you think you smell natural gas, call O&R’s Gas Emergency Hotline at 1-800-533-5325.

**O&R RESTORING SERVICE TO LAST 5,075 AFFECTED BY HURRICANE**

PEARL RIVER, NY Sept. 1, 2011 7 pm --- O&R crews continue today to restore service to those 5,075 remaining customers who lost power as a result of damage from Hurricane Irene last weekend.

Most of those customers will be returned to service by midnight Friday. The rest of the customers will get their electricity back over the weekend.

As a result of continued assessment of the severity of the damage from Hurricane Irene, O&R has revised its estimate of customer impacts to 120,000. O&R so far has restored electric service to 114,925 customers, or 96 percent of the estimated total customers affected.
At this hour, Orange County has about 2,409 customers without power, Rockland County has about 804 and Sullivan County about 800, as well.

In N.J., 530 customers are affected in Bergen, 398 in Passaic and seven in Sussex.

In Pennsylvania, about 123 customers in Pike County are without service now.

O&R will be distributing ice to customers today, Sept. 1, at the following locations:

**6:00pm to 8:00pm**

Ramsey OEM  
33 North Central Avenue  
Ramsey, NJ

Luhrs Lumber Yard  
475 Route 6 and 209  
Milford, PA

City of Middletown City Hall  
16 James Street  
Middletown, NY

Ice will also be distributed tomorrow, Sept. 2, at the following locations:  
**2:00pm to 4:00pm**

Hillcrest Community Center  
1810 Macopin Road  
West Milford, NJ

Town of Wallkill Town Hall  
99 Tower Drive, Building A  
Wallkill, NY

For the latest outage numbers updated every 15 minutes, please go to oru.com/storms. You can report an electric outage or check your outage status by entering www.oru.com into your SmartPhone. Your phone will automatically be directed to our mobile Web site.

**O&R RESTORING SERVICE TO LAST 5,075 AFFECTED BY HURRICANE**

PEARL RIVER, NY Sept. 1, 2011 9 pm --- O&R crews continue today to restore service to those 5,075 remaining customers who lost power as a result of damage from Hurricane Irene last weekend.
Most of those customers will be returned to service by midnight Friday. The rest of the customers will get their electricity back over the weekend.

As a result of continued assessment of the severity of the damage from Hurricane Irene, O&R has revised its estimate of customer impacts to 120,000. O&R so far has restored electric service to 114,925 customers, or 96 percent of the estimated total customers affected.

At this hour, Orange County has about 2,409 customers without power, Rockland County has about 804 and Sullivan County about 800, as well.

In N.J., 530 customers are affected in Bergen, 398 in Passaic and seven in Sussex.

In Pennsylvania, about 123 customers in Pike County are without service now.

O&R will be distributing ice to customers tomorrow, Sept. 2, at the following locations:

2:00pm to 4:00pm

Hillcrest Community Center
1810 Macopin Road
West Milford, NJ

Town of Wallkill Town Hall
99 Tower Drive, Building A
Wallkill, NY

For the latest outage numbers updated every 15 minutes, please go to oru.com/storms. You can report an electric outage or check your outage status by entering www.oru.com into your Smartphone. Your phone will automatically be directed to our mobile Web site.

OVER 200 CREWS WORK IN O&R’S FINAL PUSH TO RESTORE POWER

PEARL RIVER, NY Sept. 2, 2011 3:30 pm --- More than 200 O&R company and contractor crews are working at this hour to conduct the final push to restore electric service this weekend to all O&R customers who lost their power as a result of widespread, severe damage from Hurricane Irene.

Most of the 2,170 remaining customers without power will be restored to service by midnight tonight. The rest of the customers will get their electricity back over the weekend.

O&R so far has restored electric service to 117,830 customers of the 120,000 affected, or 98 percent of the estimated total customers affected.
At this hour, Orange County has about 1,266 customers without power, Rockland County has about 400 and Sullivan County about 250.

In N.J., 170 customers are affected in Bergen, 115 in Passaic and five in Sussex.

In Pennsylvania, about 23 customers in Pike County are without service now.

For the latest outage numbers updated every 15 minutes, please go to oru.com/storms. You can report an electric outage or check your outage status by entering www.oru.com into your Smartphone. Your phone will automatically be directed to our mobile Web site.

FOR IMMEDIATE RELEASE

CONTACT:  Michael Donovan
845-577-2430

OVER 200 CREWS WORK IN O&R’S FINAL PUSH TO RESTORE POWER

PEARL RIVER, NY Sept. 2, 2011 5 p.m. --- More than 200 O&R company and contractor crews are working to conduct the final push to restore electric service this weekend to all O&R customers who lost their power as a result of widespread, severe damage from Hurricane Irene.

Most of the 2,053 remaining customers without power will be restored to service by midnight tonight. The rest of the customers will get their electricity back over the weekend.

O&R so far has restored electric service to 117,947 customers of the 120,000 affected, or 98 percent of the estimated total customers affected.

At this hour, Orange County has about 1,235 customers without power, Rockland County has about 330 and Sullivan County about 194.

In N.J., 129 customers are affected in Bergen, 129 in Passaic and three in Sussex.

In Pennsylvania, about 27 customers in Pike County are without service now.

For the latest outage numbers updated every 15 minutes, please go to oru.com/storms. You can report an electric outage or check your outage status by entering www.oru.com into your Smartphone. Your phone will automatically be directed to our mobile Web site.
Appendix VI – Dry Ice Locations

FOR IMMEDIATE RELEASE

DRY ICE LOCATIONS

PEARL RIVER, NY August 29, 2011, 5 p.m. --- O&R, Rockland Electric and PCL&P will distribute dry ice tomorrow at the following locations and times:

8am – 10am
Ramsey OEM
35 North Central Avenue
Ramsey, NJ

Orange County Government Center
(site of the former Orange County jail)
40 Erie Street
Goshen, NY

11am – 1pm
Clarkstown Town Hall
10 Maple Avenue
New City, NY

Town of Mamakating Town Hall
2948 Route 209
Mamakating, NY

2pm – 4pm
Luhrs Lumber Yard
475 Route 6 and 209
Milford, PA 18337

FOR IMMEDIATE RELEASE

ICE LOCATIONS

CONTACT: Michael Donovan
845-577-2430
PEARL RIVER, NY August 30, 2011, 1 p.m. --- O&R is working round the clock to restore service to all customers affected by Hurricane Irene. To aid those who remain without power today, O&R will be distributing ice this afternoon and evening at the following locations:

2:00pm to 4:00pm

Ramsey OEM
33 North Central Avenue
Ramsey, NJ

Orange County Government Center
(site of the former Orange County jail as far back on Erie as possible farthest spot from Government Center)
40 Erie Street
Goshen, NY

Luhrs Lumber Yard
475 Route 6 and 209
Milford, PA 18337

6:00pm to 8:00pm

Clarkstown Town Hall (back lower lot)
10 Maple Avenue
New City, NY

Town of Mamakating Town Hall
2948 Route 209
Mamakating, NY

FOR IMMEDIATE RELEASE

CONTACT: Michael Donovan
845-577-2430

ICE LOCATIONS
PEARL RIVER, NY August 31, 2011, 7 a.m. --- O&R continues to work round the clock to restore service to all customers affected by Hurricane Irene. To aid those who remain without power today, O&R will be distributing ice this afternoon and evening at the following locations:

**2:00pm to 4:00pm**

Boulders Ball Field  
Pomona Road  
Pomona, NY

Orange County Government Center  
(site of the former Orange County jail as far back on Erie as possible farthest spot from Government Center)  
40 Erie Street  
Goshen, NY

Luhrs Lumber Yard  
475 Route 6 and 209  
Milford, PA 18337

**6:00pm to 8:00pm**

Ramsey OEM  
33 North Central Avenue  
Ramsey, NJ

Deer Park Town Hall  
420 Route 209  
Huguenot, NY

Hillcrest Community Center  
1810 Macopin Road  
West Milford, NJ

FOR IMMEDIATE RELEASE

CONTACT: Michael Donovan  
845-577-2430

ICE LOCATIONS FOR SEPTEMBER 1
PEARL RIVER, NY August 31, 2011, 7 p.m. --- O&R continues to work round the clock to restore service to all customers affected by Hurricane Irene. To aid those who remain without power, O&R will be distributing ice this afternoon and evening at the following locations:

2:00pm to 4:00pm

Boulders Ball Field
Pomona Road
Pomona, NY

Hillcrest Community Center
1810 Macopin Road
West Milford, NJ

Lumberland Town Hall
1054 Proctor Road
Glen Spey, NY

6:00pm to 8:00pm

Ramsey OEM
33 North Central Avenue
Ramsey, NJ

Luhrs Lumber Yard
475 Route 6 and 209
Milford, PA 18337

City of Middletown City Hall
16 James Street
Middletown, NY

FOR IMMEDIATE RELEASE

CONTACT: Michael Donovan
845-577-2430

ICE LOCATIONS FOR SEPTEMBER 2
PEARL RIVER, NY September 1, 2011, 6 p.m. --- O&R continues to work round the clock to restore service to all customers affected by Hurricane Irene. To aid those who remain without power, O&R will be distributing ice on Friday, September 2, at the following locations:

2:00pm to 4:00pm

Hillcrest Community Center
1810 Macopin Road
West Milford, NJ

Town of Wallkill Town Hall
99 Tower Drive, Building A
Wallkill, NY

Appendix VII - RECOVERY SOLUTION ORGANIZATION CHART

The following organizational structure to respond to a storm emergency is as follows: