



PSEG Long Island Emergency Restoration Plan

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1. INTRODUCTION

It is essential that there be a continuing effort to harden the company's infrastructure and continually improve the resiliency of the electric system to withstand, anticipate, and prevent interruptions to our customers' electric service. The Public Service Enterprise Group (PSEG) Long Island Emergency Restoration Plan is designed to mitigate consequences when, in spite of such vigilance, electric service interruptions do occur during large-scale storms and other system emergencies. The Emergency Restoration Plan is intended to ensure an efficient and well-coordinated restoration effort, with a commitment to continuously improving electric utility response to storms and storm-like emergencies.

This plan provides an overview of the organization and procedures used to restore service to our customers following interruptions caused by severe storms or other catastrophic events. It outlines the scope of operations, logistics, and communications activities and details the strategies, processes, and assignments necessary for an efficient, well-coordinated storm restoration effort.

The plan is scalable and maintains the flexibility to provide for readiness and action as applied to events of severe, significant, or moderate scope and varied weather conditions. It details organizational responsibilities and processes to safely, expediently, and efficiently restore electric service to our customers, following interruptions caused by severe storms and other catastrophic events.

It is imperative that our customers, regulators, state, county and municipal agencies, emergency services, and the media be kept fully informed as to the severity and impact of each event, as well as the company's planned response, progress, and estimated time of restoration. The plan has application to virtually all electric emergencies and will be used accordingly. It complies with all the rules and regulations of the Public Service Commission (PSC) at 16 NYCRR Part 105 – Electric Utility Emergency Plans, as shown in Appendix A.

1.1 Program Review and Plan Responsibilities

PSEG Long Island is committed to continuous improvement and thus its Emergency Restoration Plan is a living document, continuously incorporating changes and lessons learned. Accordingly, efforts are undertaken throughout the year to ensure that the Emergency Restoration Plan is modified on a timely basis and that any changes are appropriately communicated to all affected parties.

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This notwithstanding, prior to December 15th of each year, PSEG Long Island will review all relevant guidelines, protocols, and checklists relating to emergency restoration and revise them as necessary to comply with New York State (NYS) PSC Law.

Of particular note, all responsible organizations with restoration responsibilities will review, revise, and/or update their key contact lists at least semi-annually, each year. These lists include, but are not limited to:

- All PSEG Long Island emergency restoration personnel, including key contacts from Public Service Electric & Gas (PSE&G) New Jersey
- Critical Facilities
- Life Support Equipment (LSE) and Special Needs (SN) customers
- State, county, and local elected/municipal officials
- Law enforcement and other key emergency response organizations
- Human Service agencies
- Medical Facilities (hospitals, nursing homes, etc.)
- Utility counterparts including the Cable Television Company (CATVCo), Telephone Company (TelCo), and Gas Company (GasCo)
- Mutual assistance agreements, contractors, and supporting companies
- Managers and operators of lodging facilities, restaurants, and other support facilities
- Staging and Material “Lay Down” sites
- Key materials vendors and suppliers
- Print and broadcast media

All updates and changes to the above referenced lists will be tracked and incorporated into PSEG Long Island’s Emergency Restoration Plan filing in the subsequent year.

1.2 Purpose, Policies, and Objectives

PSEG Long Island’s Emergency Restoration Plan has been developed with input from all groups which have direct responsibilities within the organization during an emergency response event. This not only includes input from PSEG Long Island employees, but incorporates lessons learned and best practices from PSE&G and other utilities, as well as input from other key stakeholder groups.

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The plan is to be adhered to whenever a large-scale interruption of electric service occurs and provides the framework for establishing uniform readiness and guidelines for prompt, standardized action. It establishes a structure for determining an event's severity (classification) and defines the appropriate required measures to be implemented.

In the event of an interruption of electric service, PSEG Long Island's crews work around the clock to restore power to customers. Their primary concern is the health and safety of employees, contractors, and the public. Crews work to restore power to the largest numbers of customers first, taking into account "priority" customers, such as hospitals, police stations, fire stations, water/sewer facilities, communications facilities (Television/Radio/Telephone), and other public safety venues. At the same time, the utility restores power to homes and businesses, starting with substation and transmission facilities, and then moves to local neighborhoods, first addressing the circuits serving the largest number of customers.

PSEG Long Island views communications as a key element in the overall restoration effort. PSEG Long Island strives to communicate timely and accurate information to our customers and stakeholders prior to, during, and following the impact of an event. The Company utilizes localized conference calls with municipalities and executive level outreach, as well as traditional and social media channels, as tools to deliver communications.

The PSEG Long Island Electric Utility Emergency Restoration Plan and associated procedures are activated in two scenarios:

- 1) Mobilization to prepare for a major storm when a weather advisory has been issued by the National Weather Service (NWS) indicating a major storm may impact Long Island and the Rockaways' Service Territory within the next three to five days.
- 2) Mobilization due to a small storm that grows in intensity or a forecasted small storm which results in a more severe outcome than originally predicted.

1.3 Structure of Plan

The Emergency Restoration Plan is formatted as a top down, outline centric blueprint of operations. The plan details key strategies and guidelines that will be used by PSEG Long Island during all phases of an emergency. The plan is structured to follow the chronological order of an emergency, while focusing on the efforts performed by our primary operational areas, including operations, logistics, and communications.

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The plan is supported by Emergency Response Implementation Procedures (ERIPs) and Logistic Support Emergency Procedures (LSEPs) which provide the tactical details (i.e., procedures and checklists). These ERIPs and LSEPs offer activity and role level details to be adhered to throughout Long Island and the Rockaways' Service Territory in the event of large-scale electric service interruption (see Appendix B and C). These procedures have been developed with input from all groups who have direct responsibilities for implementation. They provide the framework for establishing uniform readiness and guidelines for prompt, standardized action. They establish a structure for determining an event's severity (classification) and define the appropriate required measures to be implemented. They offer detailed procedures to be used for mutual assistance mobilization and instructions for communication and logistical support to be adhered to throughout Long Island and the Rockaways' Service Territory whenever interruption of electric service occurs.

To be effective, it is vital that all elements of the Emergency Restoration Plan and supporting ERIPs, LSEPs, and attachments continue to be thoroughly reviewed and updated by participating employees through collaboration, training, regularly scheduled review sessions, and scenario-based drills and exercises.

1.3.1 Layout

The Emergency Restoration Plan is organized in a chronological perspective starting with pertinent company and service territory information. The plan then focuses on PSEG Long Island's pre-storm initiatives and key guidelines/systems to be used during an emergency. The plan then describes the protocols of our three major business units during activation. All emergency actions and responsibilities have been coordinated under these units for organizational and accountability purposes. The breakdown is as follows:

- 1) Operations
 - a) System Headquarters
 - b) Division Headquarters
 - c) Substation
- 2) Communications and Media
- 3) Logistics

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Finally, the Emergency Restoration Plan details post-event performance review initiatives and all relevant appendices needed to support our emergency response efforts. Among other pertinent information, the appendices include a full listing of our formal storm response procedures and checklist documents (ERIPs and LSEPs), critical customer and facility listings, key contacts, and emergency agreements.

1.3.2 Incident Command System (ICS)

The Incident Command System (ICS) has been successfully tested, for more than 40 years, in both emergency and non-emergency applications. All levels of government are required to maintain differing levels of ICS training and private sector organizations, including many electric utilities now regularly using ICS for management of events. ICS provides a common platform to enhance coordination with local governments and incident response agencies. Additionally, the use of ICS facilitates the meeting of basic goals of clear communication, accountability, and the efficient use of resources common to incidents, such as electric power restoration and emergency management.

PSEG Long Island is in the initial stages of implementing the National Incident Management System (NIMS) ICS. The decision has been made to move forward to incorporate the use of ICS into the PSEG Long Island storm response process. Necessary training levels are being identified and once the current ICS competencies are ascertained a training program schedule will be finalized. Initial training requirements will entail on-line certification classes provided through the Emergency Management Institute and Federal Emergency Management Agency (FEMA).

Supervisory personnel and executives will receive more advanced levels of training, which will involve classroom instructor facilitated courses. Training certifications for all levels of training will be tracked. As PSEG Long Island transitions to using ICS for incident response, the PSEG Long Island Emergency Restoration Plan will be updated to accurately reflect roles, responsibilities, and any changes to organizational structure or processes that become necessary.

1.3.3 Emergency Management Phases

PSEG Long Island's Emergency Restoration Plan also incorporates the emergency management cycle into its current methodology, structure, and planning initiatives. The Emergency Management Cycle is broken down into four revolving phases: Mitigation, Preparedness, Response, and Recovery (see Figure 1.1).

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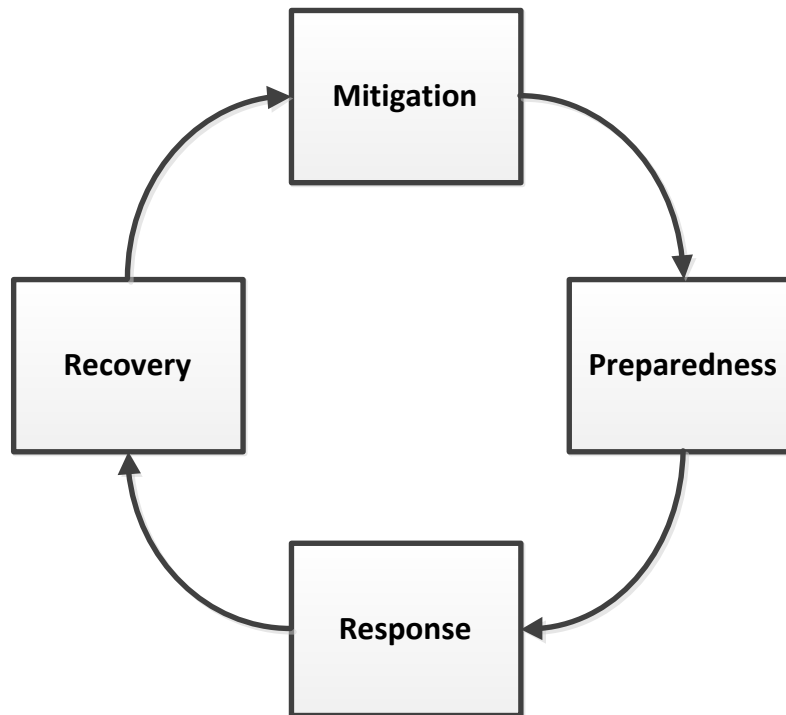


Figure 1.1 – Emergency Management Cycle

By effectively aligning its emergency response activities with this cycle, PSEG Long Island ensures that its plans, processes, procedures, and personnel are positioned to provide a safe and efficient response. These include timely and accurate communications with its customers and key stakeholders. Key aspects of the cycle include:

- Conducting appropriate and effective risk assessments across the organization (including operations, logistics, and communications functions)
- Developing appropriate prevention or risk mitigation strategies
- Developing comprehensive emergency preparedness processes, plans, and procedures
- Providing appropriate training, drills, and exercises to ensure readiness of the workforce
- Executing the Emergency Restoration Plan with appropriate resources to address the given emergency
- Communicating in a timely and accurate manner with customers and other key stakeholders across a wide variety of communications' mediums
- Recovering from events in an expeditious manner
- Openly embracing continuous improvement through a thorough and comprehensive After-Action Review (AAR) process

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Incorporating the Emergency Management Cycle into PSEG Long Island's Emergency Restoration Plan encourages preparation to occur at all phases of an emergency. The cycle highlights the interrelationships that occur between phases and their reliance on one another. Therefore, efforts conducted at one phase will have a beneficial impact on another segment at a later stage.

PSEG Long Island's Emergency Restoration Plan is a continuously and evolving document with planning occurring at all phases of the Emergency Management Cycle. While preparatory and planning efforts are stepped up in preparation for approaching storms, the planning, education, and training process is continuous and takes place throughout the year.

1.4 Service Territory

1.4.1 Background

Long Island is the largest island adjoining the continental United States, extending approximately 118 miles east-northeast from the mouth of the Hudson River. It is separated from the mainland on the north by the Long Island Sound and bounded by the Atlantic Ocean to the south and east. Twenty miles at its widest point, Long Island is composed of low plateaus on the north, longitudinal ridges of glacial moraine through the central parts of the island, and gently sloping plains to the south.

The East End of the island is made up of two peninsular forks. The North Fork, terminating at Orient Point, is approximately 28 miles long. Plum Island and Fishers Island lie northeast of Orient Point. The South Fork, terminating at Montauk Point, is about 44 miles in length. Peconic and Gardiners Bays separate the two forks. Shelter Island lies between Peconic Bay and Gardiners Bay. Gardiners Island is located in Gardiners Bay.

Totaling 1,377 square miles of land area, Long Island is divided into four counties: Kings (Brooklyn), Queens, Nassau, and Suffolk. Suffolk is the easternmost county and by far the largest of the four, covering an expanse of 911 square miles. Moving westward from Suffolk County is Nassau County with 287 square miles. Next is Queens County with 109 square miles, followed by Kings County, the westernmost county, with 70 square miles. Kings and Queens Counties are synonymous with the Boroughs of Brooklyn and Queens, which are within the jurisdiction of New York City.

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The topography of the region is very unique and varies throughout the service territory. Long Island includes large residential communities, rural areas, and beachfront properties. Long Island is also heavily treed with a large amount of rear property facilities supporting electric service (i.e., poles and wires run through customer backyards). PSEG Long Island aims to tailor its restoration actions based on the territory's overall layout and unique challenges.

1.4.2 System

PSEG Long Island provides electric service to more than 1.1 million customers within Long Island and the Rockaways' Service Territory, which consists of Nassau County, Suffolk County, and the Fifth Ward of Queens County (Rockaway Peninsula). There are also three municipally owned utilities within the territory whose customers are not directly served by PSEG Long Island. These municipalities include Freeport, Rockville Centre, and Greenport. Long Island and the Rockaways' Service Territory is divided into four Divisional Areas (Queens/Nassau, Central, Western Suffolk, and Eastern Suffolk). Divisions are then segregated further into sixteen consoles which span the entire service territory. Each division and console encompasses a number of municipalities, villages, and/or towns (see Figure 1.2).

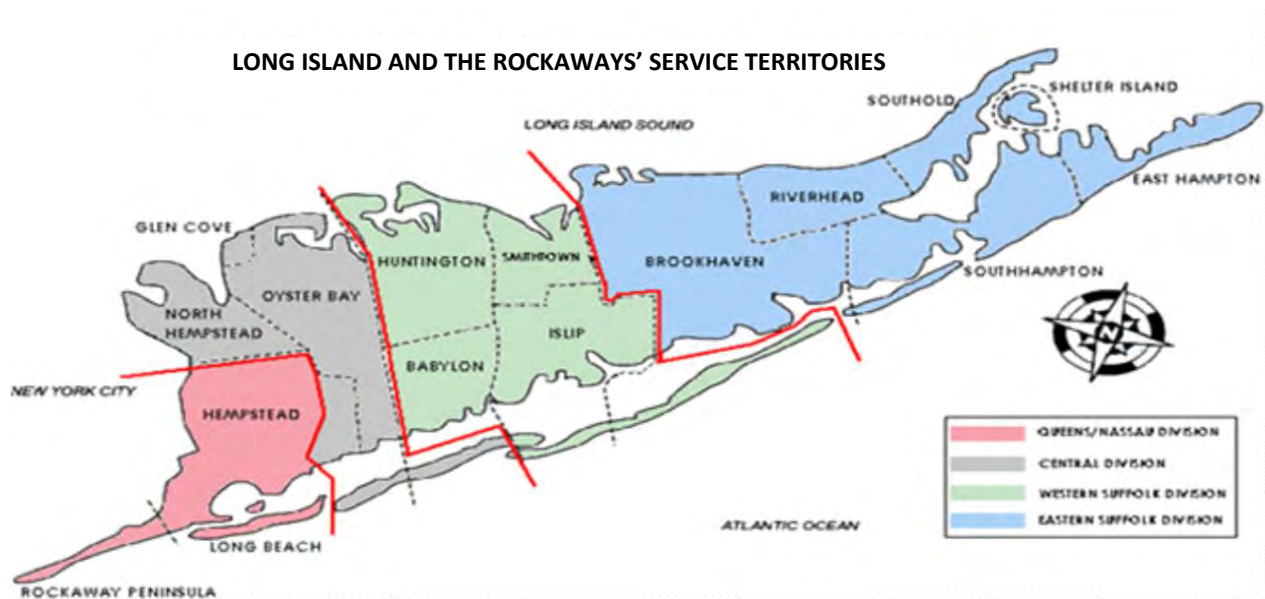


Figure 1.2 – Long Island and the Rockaways' Service Territory

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1.4.3 Operating Divisions

The Transmission & Distribution (T&D) system on Long Island is comprised of four major divisions, each with unique challenges to restoring power. For example:

- 1) Queens/Nassau Division – Hewlett
 - High population density and traffic congestion
- 2) Central Division - Hicksville
 - Heavy tree conditions and rear property construction
- 3) Western Suffolk Division - Brentwood
 - Barrier beach and underground construction
- 4) Eastern Suffolk Division – Riverhead
 - Large geographic area and isolated forks

In the event of a system emergency, PSEG Long Island works closely with local government officials to coordinate electric restoration efforts throughout our divisions.

1.4.4 Console Areas

During an emergency, PSEG Long Island further segregates the divisions into console areas to facilitate better control of the workforce and better coordination of restoration efforts. Customers with service problems call a single telephone number regardless of the division or console area in which they reside (see Figure 1.3).

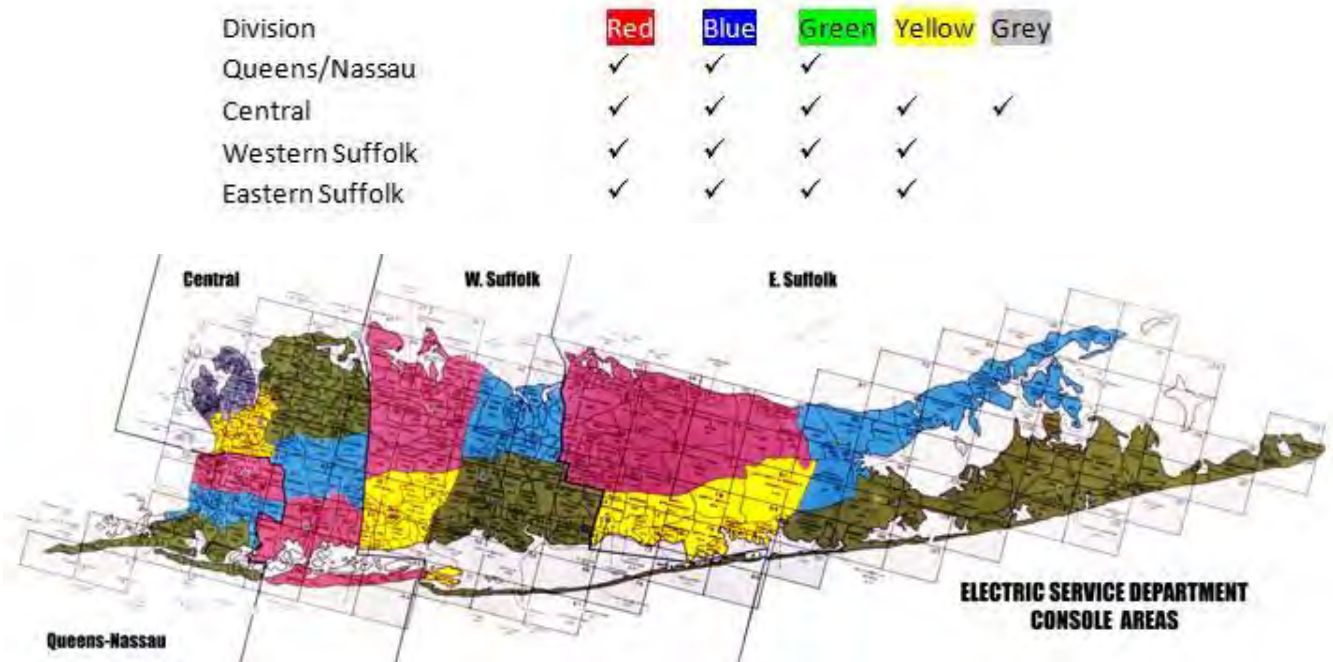


Figure 1.3 – PSEG Long Island Division Console Areas

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2. PERSONNEL RESPONSIBILITIES

This section outlines the functions of the various components and positions of the Storm Restoration Team and organizational structure. An orderly and consistent flow of information between System Headquarters and Division Headquarters is necessary in times of storm emergencies. Organizational charts indicating lines of authority and the interrelation between organizational groups are included.

2.1 Senior Leadership at PSEG Long Island/PSE&G

Prior to and during major storm events, senior leadership at PSEG Long Island and PSE&G New Jersey maintain on-going and open dialog to discuss and share intelligence regarding the impending weather event. This proactive dialog helps to ensure the most complete and timely “situational awareness” between leadership teams and provides a platform to facilitate discussions regarding the potential sharing of resources and other support between entities. This coordinated approach is also important to the overall restoration response, from a communications perspective, as it provides the mechanism for consistent messaging to both employees and external stakeholders.

With the threat of a major storm or other system emergency, PSEG Long Island’s leadership team will activate across all applicable functional areas (i.e., Operations, Planning, Communications, Logistics, etc.) to discuss and strategize a response to the particular event. Decisions made by the senior leadership team are openly communicated to the broad response organization and help to ensure visibility to the storm event, while setting expectations regarding the response among those involved with the restoration effort. As delineated in the following sections, senior leadership from PSEG Long Island assumes leadership positions with the Incident Command Structure for a major event.

2.2 Emergency Restoration Organizational Charts

Figure 2.1 details PSEG Long Island's complete organizational structure during restoration procedures, including all functions of operations, planning, logistics, communications, and supporting functional areas.

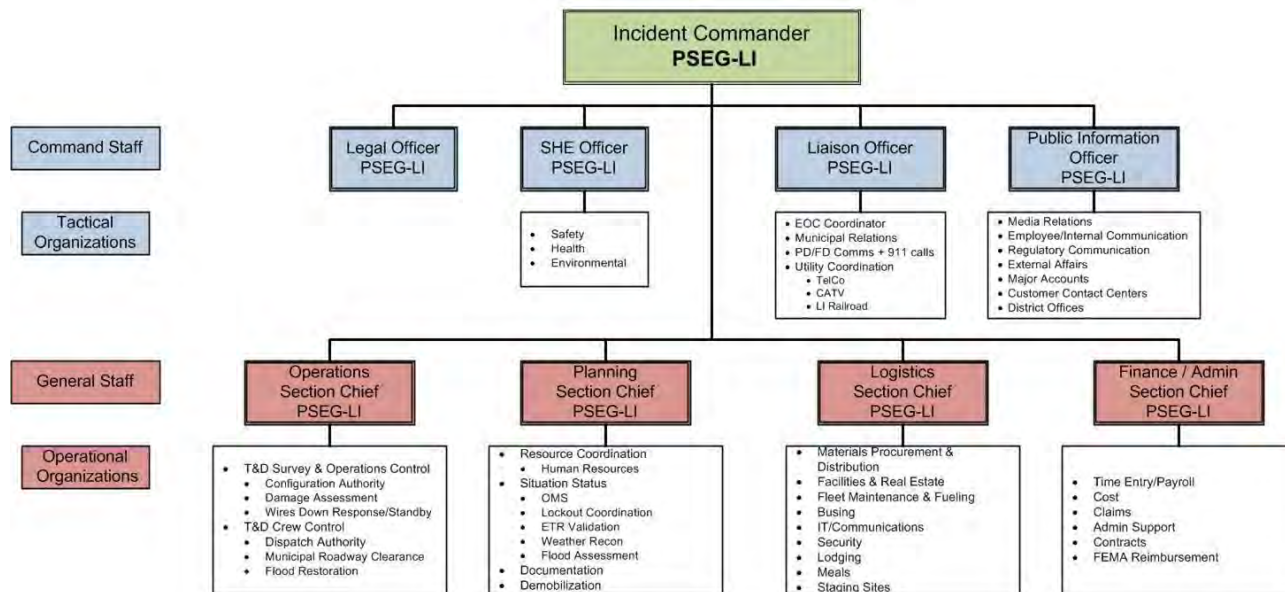


Figure 2.1 – Command and General Staff Organizational Chart

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Figure 2.2 details PSEG Long Island's Communications organizational structure during restoration procedures, including all functions of customer contact, governmental relations, external affairs, social media coordination, and supporting functional areas.

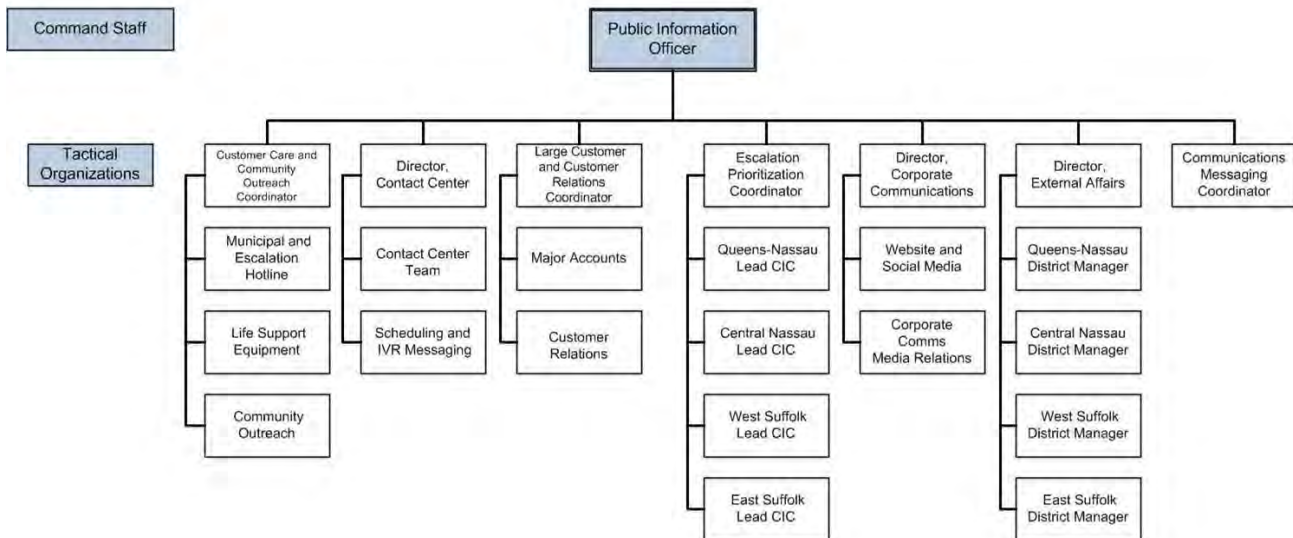


Figure 2.2 – Public Information Officer (PIO) Organizational Chart

Figure 2.3 details PSEG Long Island's Liaison Support organizational structure during restoration procedures, including all functions of emergency management and supporting functional areas.

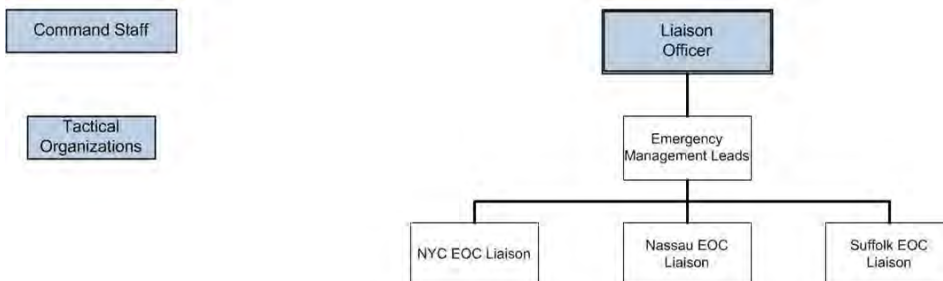


Figure 2.3 – Liaison Officer Organizational Chart

Figure 2.4 details PSEG Long Island's Safety, Health, and Environmental (SHE) Support organizational structure during restoration procedures, including all functions of safety, health, and environmental functional areas.

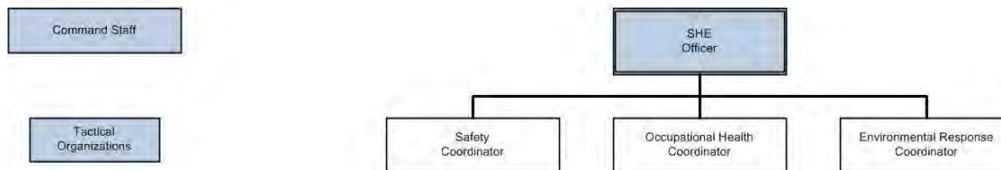


Figure 2.4 – SHE Officer Organizational Chart

Figure 2.5 details PSEG Long Island's Legal Support organizational structure during restoration procedures, including all functions of legal coordination and supporting functional areas.



Figure 2.5 – Legal Officer Organizational Chart

Figure 2.6 details PSEG Long Island's Operations organizational structure during restoration procedures, including all functions of field resource deployments, crew control, survey operations, damage assessments, and supporting functional areas.

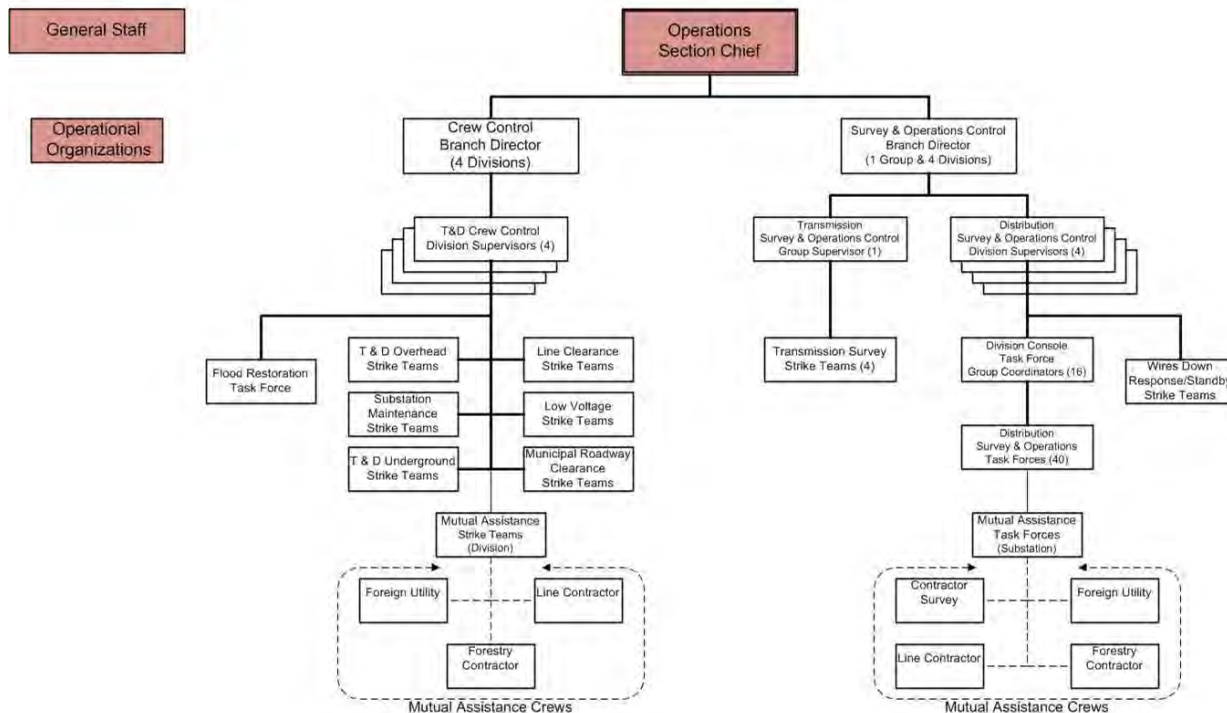


Figure 2.6 – Operations Organizational Chart

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Figure 2.7 details PSEG Long Island's Planning organizational structure during restoration procedures, including all functions of situational awareness, resource coordination, documentation, and supporting functional areas.

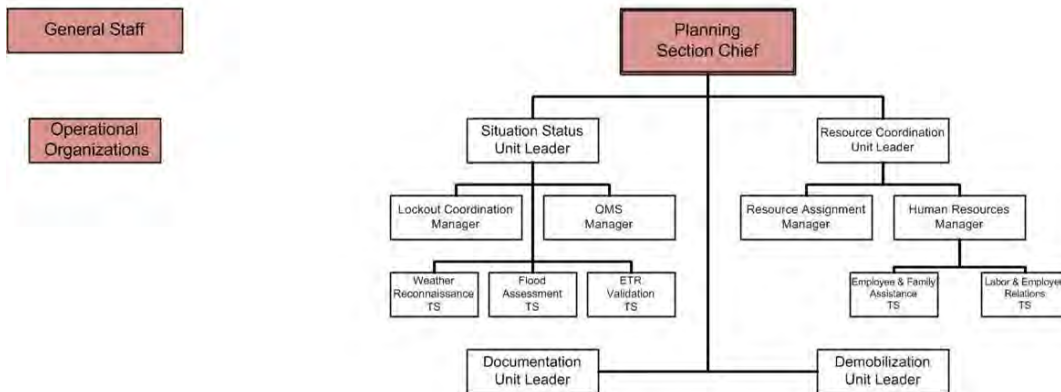


Figure 2.7 – Planning Organizational Chart

Figure 2.8 details PSEG Long Island's Logistics organizational structure during restoration procedures, including all functions of support, staging, and service operations.

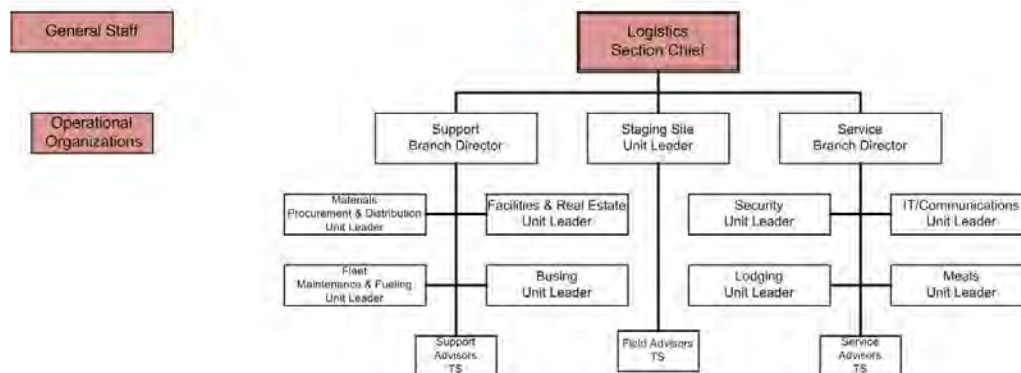


Figure 2.8 – Logistics Organizational Chart

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Figure 2.9 details PSEG Long Island's Finance/Administration organizational structure during restoration procedures, including all functions of time/cost reporting, reimbursements, contracts, claims, and supporting functional areas.

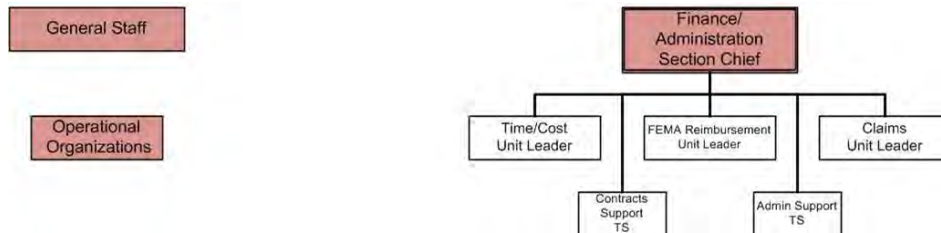


Figure 2.9 – Finance/Administration Organizational Chart

2.3 Storm Assignments

A key component of PSEG Long Island's ability to implement its Emergency Restoration Plan is the readiness of its employees to respond to an outage emergency. All PSEG Long Island employees are assigned a specific storm restoration assignment that they are required to fulfill when emergency conditions dictate. Storm anticipation and emergency classification protocols (described in Sections 5 and 6) determine the activation levels and the corresponding personnel needs. While many PSEG Long Island employees currently play a role in daily operations, others are shifted from support functions to their storm support role. These additional personnel resources help PSEG Long Island to better manage and respond to widespread outages and other system emergencies.

Storm assignments center on PSEG Long Island's three main emergency focus areas: operations, communications, and logistics. Training is conducted on all storm restoration assignments throughout the year, with drills and exercises utilized to practice storm assignments.

PSEG Long Island's Emergency Restoration Preparedness (ERP) Department is responsible for administering and maintaining the readiness of personnel and tracking assignments through the company's storm assignment database throughout the year. Upon hiring, all employees are provided a storm restoration assignment. These roles are determined by the employee's current job function, work and home location, and PSEG Long Island's storm restoration needs. Efforts are also made to best match roles to the skill sets of the assigned personnel when possible.

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Employees and their direct supervisors are notified via e-mail and/or telephone of their assigned roles. The ERP Department ensures all employees are aware of their emergency assignment, responsibilities, and corresponding work location. The ERP Department ensures all storm restoration employees have been provided the training and resources to effectively perform their storm role. The ERP Department also regularly verifies the required staffing levels for restoration efforts and adjusts manpower as necessary. Additionally, the ERP Department sends out notifications to employees throughout the year pertaining to storm restoration changes and/or updates. The ERP Department also makes sure storm restoration roles and staffing levels are, at a minimum, updated semi-annually and maintained throughout the year.

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2.4 Roles and Responsibilities

Figure 2.10 details the key roles during restoration operations and their corresponding function(s).

ROLE	CATEGORY	FUNCTION(S)
Incident Commander	Command	<ul style="list-style-type: none"> -routinely assesses the situation -receives updated incident information -sets operational period incident objectives and strategies -establishes immediate priorities -develops an appropriate response organization -approves and authorizes the operational period Incident Action Plan (IAP) -coordinates with key staff and officials -approves requests for resources and release of resources -authorizes the release of information to the media -demobilizes of the incident, as appropriate
Legal Officer	Command	<ul style="list-style-type: none"> -provides legal advice to the Incident Commander and the Command Staff -ensures all plans, procedures, policies and directives are consistent with Federal, State and Local law -provides support to the Documentation Unit of the Planning Section to ensure all incident records are accurate and maintained in accordance with all applicable laws and regulations -understands the NYCRR 16 Rules and Regulations of the PSC
SHE Officer	Command	<ul style="list-style-type: none"> -oversees the SHE Organization -develops recommended measures to assure personnel safety -assesses and/or anticipates hazardous or unsafe conditions -implements appropriate corrective actions -investigates accidents and/or injuries -participates in planning meetings
Liaison Officer	Command	<ul style="list-style-type: none"> -oversees the Liaison Organization interface -coordinates with assisting agencies, cooperating agencies and Agency Representatives during a restoration event
Public Information Officer	Communications	<ul style="list-style-type: none"> -leads the Communications Teams to assess, respond to and communicate warnings and status updates associated with potential threats and electrical emergencies across the system
Communications Messaging Officer	Communications	<ul style="list-style-type: none"> -supports and engages with all Communication Team Leads to ensure they have access to their assigned checklists and key contact information -actively coordinates the collection of information, completed Communication checklists and departmental updates to track the progress of PSEG Long Island's storm response prior to, during and following an event

Figure 2.10 – ICS Restoration Roles and Responsibilities

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ROLE	CATEGORY	FUNCTION(S)
Customer Care and Community Outreach Coordinator	Communications	-assures the effective communication with LSE and SN customers -maintains 24x7 coverage for the Municipal and Escalation Hotline -plans for the needs of affected communities and opening Community Outreach centers.
Director, Contact Center	Communications	-ensures the efficient operation of Contact Center operations during emergency conditions -actively managing the Interactive Voice Response (IVR) and High Volume Call Application (HVCA) systems and their associated messaging -recruits overtime and additional staffing to provide the best possible access to live agents during emergency situations
Large Customer and Customer Relations Coordinator	Communications	-establishes clear communication channels for the Customer Relations team to support the Department of Public Service (DPS) inbound call center and for the Major Accounts team to reach out to and response to Large Commercial Customers, Major Accounts and Critical Facilities across all business segments
Escalation Prioritization Coordinator	Communications	-oversees the process of utilizing the information available in the Outage Management System (OMS) and the Emergency Response Escalation Tracker (ERET) to coordinate, track and communicate the highest restoration priorities by color console area, township, division and county
Director, Corporate Communications	Communications	-develops and distributes communication materials to share our status and provide information, key talking points and external messaging for and to Employees, the General Public, Media outlets, PSEG Long Island's Website and its Social Media channels (including Facebook, Twitter and YouTube)
Director, External Affairs	Communications	-communicates the status of PSEG Long Island's storm preparation and/or emergency response efforts with external government, public service and public safety officials
Operations Section Chief	Operations	-oversees the Operations Section and the management of all operations directly related to the primary mission during an incident -determines the need for resources -develops the Operations Section of the Operational Period IAP -keeps the Incident commander and Planning Section Chief advised regarding changing conditions and or special activities, events or occurrences
Crew Control Branch Director	Operations	-implements the portion of the IAP appropriate to the Crew Control Branch, under the direction of the Operations Section Chief
Survey & Operations Control Branch Director	Operations	-implements the portion of the IAP appropriate to the Survey & Operations Control Branch, under the direction of the Operations Section Chief

Figure 2.10 (continued) – ICS Restoration Roles and Responsibilities

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ROLE	CATEGORY	FUNCTION(S)
Planning Section Chief	Planning	<ul style="list-style-type: none"> -oversees the Planning Section which includes collection, evaluation, and dissemination of information surrounding the development of the incident -predicts the probable future development of incident events, based on available intelligence -recommends alternative strategies and control operations for the incident -provides resource status -supervises preparation of and provides input to the Incident Commander and Operations Section Chief for the IAP
Situation Status Unit Leader	Planning	<ul style="list-style-type: none"> -collects, processes, analyzes, and organizes all incident information
Resource Coordination Unit Leader	Planning	<ul style="list-style-type: none"> -maintains the status of all assigned personnel resources (primary and support) -maintains a system indicating current location and status of all personnel resources -maintains a master list of all resources (e.g., key supervisory personnel, primary and support resources, etc.)
Documentation Unit Leader	Planning	<ul style="list-style-type: none"> -maintains accurate and up to date incident files -files all official forms -reviews records and documents for accuracy and completeness -provides incident documentation as required -stores files for post incident use
Demobilization Unit Leader	Planning	<ul style="list-style-type: none"> -develops the demobilization plan -monitors ongoing Operations Section resource needs -reviews resource records and, based on analysis of the aforementioned -ascertains the size and extent of the demobilization effort -supervises the implementation of the incident Demobilization Plan
Logistics Section Chief	Logistics	<ul style="list-style-type: none"> -oversees activities under the Logistics Section which include providing facilities, services, ground support, and materials in support of the incident -develops Communications Plan, Medical Plan, Traffic Plan, Food Services, Communications, and Information Technology (IT)
Support Branch Director	Logistics	<ul style="list-style-type: none"> -supports the supply, facilities and ground support
Service Branch Director	Logistics	<ul style="list-style-type: none"> -services food, communications, and medical in support of incident responders
Staging Site Unit Leader	Logistics	<ul style="list-style-type: none"> -manages staging areas, including check-in -determines support needs for feeding, sanitation, equipment, security, and maintenance services -communicates status of resources in staging -maintains staging area in an orderly manner

Figure 2.10 (continued) – ICS Restoration Roles and Responsibilities

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ROLE	CATEGORY	FUNCTION(S)
Finance Section Chief	Finance/Administration	<ul style="list-style-type: none"> -manages the Finance Section unit, which has oversight of all financial, administrative, and cost analysis aspects of an incident -provides financial and cost analysis -sets up an incident commissary -ensures all personnel time cards/records are accurately completed and forwarded to home agencies/companies -briefs agency administrative personnel on all incident related financial issues
Time/Cost Unit Leader	Finance/Administration	<ul style="list-style-type: none"> -maintains accurate time recording for equipment and personnel -manages commissary operations
FEMA Reimbursement Technical Specialist	Finance/Administration	<ul style="list-style-type: none"> -provides guidance on proper documentation requirements, and insofar as all costs and expenditures that will or will not likely qualify for FEMA related reimbursement -appropriately captures those costs and expenditures
Compensation/Claims Unit Leader	Finance/Administration	<ul style="list-style-type: none"> -manages and directs all administrative matters pertaining to compensation of injury and other claims related activities for an incident -coordinates activities and information dissemination with Incident Safety and the Medical Unit

Figure 2.10 (continued) – ICS Restoration Roles and Responsibilities

2.5 Supplemental ERP Contact Sheet

PSEG Long Island maintains a supplemental contact sheet for all roles detailed within the ICS Restoration Roles and Responsibilities in Figure 2.10. PSEG Long Island continues to update the list semi-annually or when required, due to personnel changes and/or updates. The full supplemental contact sheet can be found within Appendix L.

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3. SAFETY AND SECURITY

3.1 Safety

The safety of employees, contractors, emergency responders, and the public is of the utmost importance to PSEG Long Island each and every day. Large-scale outage events and emergencies however, do further heighten the company's safety focus. It does so due to increased personnel levels, unique and hazardous working conditions, mutual assistance resources unfamiliar with Long Island and the Rockaways' Service Territory, and the importance of our restoration goals. During major events, PSEG Long Island's Safety Manager is assigned to serve as the Safety Resource Lead and reports directly to the Incident Commander as the Incident Safety Officer. The company's safety response includes a multitude of safety professionals and safety advocates with varying roles.

PSEG Long Island's safety response initiatives include, but are not limited to, the following:

- Support and guidance
- Safety briefings and communications
- Safety education, training, and exercises
- Incident reporting and tracking
- Assessments of hazardous and unsafe conditions
- Monitoring and enforcement
- Investigation and management of accidents

These important roles assist in ensuring safe work practices are being conducted at all PSEG Long Island work locations, including operations centers, staging areas, crew housing facilities, fueling locations, and Foreign Crews' receiving sites. An Assistant Incident Safety Officer, along with additional safety resources, is assigned to each work location throughout the duration of the storm restoration process.

The communication of safety initiatives and messages is an important aspect of restoration activities. Safety communications begin pre-event and continue throughout the response and recovery phases of the emergency. Safety communications include companywide initiatives, restoration focused plans, and/or daily briefings. Safety related communications are also modified to address any specific concerns that may arise, including event developments, incident trends, and public safety concerns.

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Foreign Crews working with PSEG Long Island during an outage receive additional safety information due to their unfamiliarity with the company, its systems, and landscape. All Foreign Crews receive safety briefings delivered by safety professionals upon arrival into the territory. They are provided with a Foreign Crew guide book and other pertinent information related to the outage and their work assignment. All Foreign Crew members are provided daily safety briefings before leaving the staging area and upon re-entry when warranted.

All incidents, including accidents, near-misses, and personnel injuries to the public, employees, contractors, and foreign restoration crews are to be reported, investigated, and tracked. Spills and other hazardous releases to the environment are also to be documented and managed by safety professionals. All incidents are addressed in accordance with the appropriate PSEG Long Island safety and environmental procedures. Incident summaries are reported to the leadership team during regular briefings and are communicated outward through daily safety messages.

PSEG Long Island safety professionals, along with Contractor and Foreign Crews' safety personnel, participate in daily status calls at least once during each operational period. Safety continues to be a major focus area for PSEG Long Island throughout the storm restoration process and maintained thereafter.

3.2 Security

PSEG Long Island takes the security of its company locations, property, and employees very seriously. PSEG Long Island utilizes a variety of methods to protect these important assets each and every day, and expands such activities during major storm events.

These actions include, but are not limited to:

- Monitoring
- Investigations
- Assessments
- Coordination with law enforcement
- Training and exercises

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Other protective measures put in place by PSEG Long Island include, but are not limited to:

- Closed Circuit Television (CCTV) Cameras
- Access card control protocols
- Perimeter fencing and barriers
- Security guards

During large-scale emergencies and restoration events, PSEG Long Island will take additional steps to protect the security of its employees and company property. These events often bring about unique circumstances that require increased awareness and additional actions to be taken by security. Outside of normal security protocols, the additional steps can include:

- Protection of critical restoration sites:
 - Yards
 - Remote sites
 - Staging areas
 - Crew processing sites
 - Key power and generation sites
 - Fueling sites
- Theft prevention
- Vandalism prevention
- Protection from unruly and/or irate persons

PSEG Long Island takes the security of its employees and company assets very seriously and will take all the necessary steps to ensure their protection during normal and emergency operational periods.

4. MITIGATION ACTIVITIES

4.1 Overview

PSEG Long Island understands the importance of pre-planning and its correlation to a timely and effect restoration response. PSEG Long Island undertakes a variety of initiatives to better prepare its employees, infrastructure, and the communities it serves. These initiatives include community awareness programs, employee training, drills/exercises, and storm hardening projects. These pre-storm actions ultimately equip PSEG Long Island to respond to outages more effectively, while ensuring that customers and employees are better informed and prepared when disasters strike.

4.2 Training

An important aspect of storm restoration planning is the advance training of company personnel. Training is vital to a timely and effect restoration effort and PSEG Long Island goes to great lengths to ensure its employees are properly trained on their restoration roles and responsibilities. There is often very little time for training pending the onset of a storm, so advanced training during normal conditions is vital to ensuring all employees are ready to collectively respond during emergencies.

As detailed earlier within Section 2, all employees are assigned a restoration role upon their hiring. Ultimately, PSEG Long Island ensures all its employees are properly trained on their storm assignments and ready to assist if restoration protocols are put in effect. The ERP organization is responsible for identifying, developing, and coordinating all restoration roles and associated training. Training can vary in length depending on an employee's work experience and their associated role. For example, upon hiring, some employees will receive more in-depth training while other employees will undergo annual refresher courses on restoration roles throughout the year.

PSEG Long Island utilizes a variety of training programs and methods when training its employees for emergency restoration operations. Training can include lectures, exercises, and video presentations. Modular training sessions are also used for training employees. Modular training sessions can be both self-taught and/or traditional with classroom instructors running the training. Interactive classroom style training often provides the greatest amount of success and is one of the main sources of training companywide. Ultimately, these sessions allow employees to work hands-on and experience real life training scenarios. This hands-on training method allows employees to better comprehend and anticipate their expected roles during an emergency.

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4.3 Exercises and Drills

4.3.1 Exercises

Exercises are an important part of PSEG Long Island's overall preparedness initiatives. They play a vital role in testing the readiness and effectiveness of our planned response actions. Exercises allow PSEG Long Island to test our plans and determine the corresponding results of each, during non-emergency, yet lifelike situations. These simulations will assist in identifying the areas in need of improvement or additional attention going forward. Exercises will also assist with employee development by keeping employees better prepared through practice and will ultimately assist with identifying the areas where additional training or support may be necessary.

Recently, PSEG Long Island began to incorporate concepts and elements of the Homeland Security Exercise and Evaluation Program (HSEEP) in developing and evaluating exercises, as well as for actual events.

PSEG Long Island utilizes both discussion based and operational based exercises. PSEG Long Island exercises categorized as discussion based, generally include seminars, workshops, and tabletop exercises. Operational based exercises generally include drills and functional exercises.

The goal of each will be to practice a planned restoration function(s) and to identify potential areas for improvement. In turn, each exercise is tailored accordingly and can be developed in a variety of ways including:

- Role specific
- Organization specific
- Location specific
- Goal specific
- Condition specific

Large-scale functional exercises are also conducted by PSEG Long Island throughout the year. These larger simulations often bring together both internal personnel and external stakeholders groups to gauge the interaction and coordination among them. Large-scale exercises provide an additional level of focus due to its increased size and scope.

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4.3.1.1 Annual Hurricane Preparedness Tabletop Exercise

PSEG Long Island conducts a minimum of one company-wide annual hurricane preparedness tabletop exercise to test the abilities and coordination of all restoration personnel and departments. More importantly, this discussion based exercise tests the effectiveness of employees performing job functions outside their normal areas of responsibility. The tabletop exercise is designed to fully simulate all planning, execution, and the follow-up activities associated with large scale outages. The annual hurricane preparedness exercise brings together all the relevant departments needed for an effective response.

Coordination across organizational lines is vital during emergencies. Our annual tabletop exercise sharpens our one-team approach. The annual hurricane tabletop exercise requires participants to make real-time decisions as if they were responding to an actual event. The storm exercise scenario is usually based around a large-scale electric service interruption (i.e., tropical storm or hurricane). The Emergency Planning Senior Manager will oversee the drill's design, implementation, and results. The goals of the tabletop exercise can include, but will not be limited to:

- Test and evaluate company plans, policies, and procedures
- Reveal any plan weaknesses
- Identify resource gaps that may be present
- Improve performance, communication, and coordination
- Train personnel and clarify roles and responsibilities
- Test and evaluate company used systems and software
- Satisfy regulatory requirements
- Illustrate coordination of activities with outside agencies

PSEG Long Island will also invite outside agencies such as fire, law enforcement, public safety, emergency management personnel, Long Island Power Authority (LIPA), and DPS to participate in the annual storm drill. Ultimately, effective coordination between PSEG Long Island and the first responder community is vital to any restoration event and all relevant entities will be urged to participate.

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Following the yearly hurricane preparedness tabletop exercise, PSEG Long Island will review the event in its entirety to identify areas for improvement. PSEG Long Island's Emergency Planning Organization will conduct the after-action review to validate strengths and document areas that need additional improvement. The Emergency Restoration Steering Committee conducts an after-action review, identifies improvements to be made, implements corrective actions, and/or institute additional training of employees.

4.3.2 Drills

Drills typically have a narrow focus and are conducted in a training environment. Drills test one operation or organization in isolation from other response elements and involve personnel and equipment in a realistic environment. All employees affected by the planned drill will be mobilized, prepped, and observed throughout.

PSEG Long Island conducts drills regularly in all operational departments with restoration responsibilities. Drills can range from dispatching drills for our operators down to substation drills that simulate large-scale outages. In the long run, drills better prepare our employees for real-life emergencies and PSEG Long Island will continue to train its employees through simulation and practice

4.3.3 2015 Drill and Training Schedule

PSEG Long Island is committed to continued training for the benefit of preparedness and restoration operations. Figure 4.1 details PSEG Long Island's tentative 2015 Exercise and Drill schedule, followed by Figure 4.2 which details the 2015 Training Schedule. Modifications to the schedule may be introduced through the year, as training requirements dictate.

Exercise/Drill	Description	Target Audience	Targeted Time Frame
Alternate Control Center (ACC)	Drill activation of the ACC in response to an emergency at main Control Center	Transmission Control Center personnel	2 nd Quarter
Logistics	Drill activities related to the activation of the Logistics Support Center (LSC)	Logistics Support Center (LSC) personnel	2 nd Quarter
Crew Processing	Drill activities related to the activation of the Crew Processing Center	Crew Processing Center personnel	2 nd Quarter
Annual Hurricane Tabletop Exercise	<p>Simulate PSEG Long Island's response to an incident and demonstrate effectiveness of the command structure</p> <p>The objectives of this exercise are to:</p> <ul style="list-style-type: none"> • Direct, coordinate, and perform emergency restoration preparation & response activities • Develop and provide consistent, timely, and accurate pre-storm and post-storm messaging to PSEG Long Island customers and stakeholders • Coordinate the logistics needs of all groups within the organization 	PSEG Long Island Command and General Staff with injects for other utilities, external emergency response organizations, NYS DPS, etc.	2 nd Quarter <i>Prior to June 1st</i>
Cross-River Resource Sharing	Drill activities related to the process of sharing resources (personnel, equipment, and material) between Long Island and New Jersey	PSEG Long Island Operations, Logistics, and Communications Leadership in conjunction with parallel PSE&G New Jersey Leaders	3 rd Quarter

Figure 4.1 – 2015 Exercise/Drill Schedule

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Exercise/Drill	Description	Target Audience	Targeted Time Frame
Division Communications Drills	<p>Simulate the activities at the division level related to the collection and dissemination of restoration info to Muni Liaisons and other key comms personnel</p> <p>The objectives of these exercises are to:</p> <ul style="list-style-type: none"> • Test, practice, and demonstrate the effectiveness of the Division Comms and Muni Comms process • Confirm roles and responsibilities 	<p>Division Coords</p> <p>Division Estimated Time of Restoration (ETR) Coords</p> <p>Division Comms Liaisons</p> <p>District Managers</p> <p>Muni Liaisons</p>	1 st Quarter
Divisional Survey Drills	<p>Simulate the activities at the division a console levels related to the activation, preparation and implementation of Divisional Survey and/or Substation Survey</p> <p>The objectives of these exercises are to:</p> <ul style="list-style-type: none"> • Test, practice, and demonstrate the effectiveness of the Divisional Survey process • Collect, record, and process damage information from both Console Survey and Substation Survey operations • Confirm roles and responsibilities 	<p>Division Chief Group Coord</p> <p>Division Survey/Wire Down Coords</p> <hr/> <p>Console Group Coords</p> <p>Console Survey/Wire Down Coords</p> <p>Console PC Ops</p>	2 nd Quarter
Substation Workshops	<p>Reinforce the activities performed at the substation level as they relate to the collection and reporting of damage and repair information.</p> <p>Additionally, responsibilities and tasks will be confirmed.</p>	<p>Substation Area Coordinators (SACs)</p> <p>Alternate Substation Area Coordinators (ASACs)</p> <p>Sub Personal Computer (PC) Ops</p>	2 nd Quarter

Figure 4.1 (continued) – 2015 Exercise/Drill Schedule

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Training	Description	Target Audience	Targeted Time Frame
PSC Scorecard Metrics	Awareness	PSEG Long Island Leadership Team	Ongoing
Storm Response including: • Restoration Process • Roles and Expectations • Civic Structure • OMS • ICS	Initial/Refresher	Key Customer facing roles: Emergency Operation Center (EOC) Liaisons District Managers Muni Liaisons Division Comms Liaisons Major Account Executives	1 st Quarter and 3 rd Quarter
Division Survey Coordination	Refresher	Division and Console Survey/Wire Down Coords	2 nd / 3 rd Quarter
Transmission Survey	Initial/Refresher	New Transmission Survey Teams	1 st Quarter
Distribution Survey	Initial	New Distribution Survey Teams	1 st Quarter and 3 rd Quarter
Distribution Survey	Refresher	Distribution Survey Teams	2 nd Quarter and 4 th Quarter
Division Console Coordination	Refresher	Group Coord	1 st Quarter
Substation Area Coord and Alt Coord	Initial	New SACs New ASACs	1 st Quarter
Substation Area Coord and Alt Coord	Refresher	SAC ASAC	1 st Quarter
PC Operator	Initial	New PC Ops	1 st Quarter
PC Operator	Refresher	PC Operator	1 st Quarter
Crew Processing	Initial/Refresher	Crew Processing Organization	4 th Quarter

Figure 4.2 – 2015 Training Schedule

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Training	Description	Target Audience	Targeted Time Frame
IS-100.B Intro to ICS, ICS-100	Independent Study through FEMA Emergency Management Institute website	PSEG Long Island Leadership Team (Executive and Director Levels)	Ongoing
IS-700.A National Incident Management System NIMS, An Introduction			
IS-200.B ICS for Single Resources and Initial Action Incidents			

Figure 4.2 (continued) – 2015 Training Schedule

4.4 Community Outreach

4.4.1 General Public

An important aspect of PSEG Long Island's storm preparation initiatives is its focus on educating the community it serves on the importance of preparedness and safety. Education of the public is vital to an efficient and safe restoration effort and PSEG Long Island takes many paths to inform its customers of what to expect before, during, and after large-scale storm events. Information is distributed to the public through numerous mediums, such as PSEG Long Island's Storm Center website, mailings, social media, and its participation in community seminars, briefings, and exercises. PSEG Long Island understands that customer education is a year round process and does not leave such important activities to the few days preceding a storm event. Information disseminated to the public will include a variety of topics including:

- Preparing your home and family
- Preparing your business
- Power outages Frequently Asked Questions (FAQs)
- Storm safety and preparedness
- Downed wires
- Generator safety
- Outage reporting
- Important PSEG Long Island contact information

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PSEG Long Island also maintains a comprehensive “Storm Center” website that contains additional information on the topics detailed above, along with educational videos. These videos focus on storm safety and preparedness and includes topics such as:

- Preparing your family
- Evacuating
- Staying in touch
- Our restoration process

4.4.2 First Responder and Government Organizations

PSEG Long Island engages many first responder organizations on preparedness and training efforts including government officials, state/county/local emergency management organizations, police and fire organizations, and local municipalities. This alignment helps to ensure a clear and coordinated response, if and when an emergency does occur. PSEG Long Island regularly participates in workshops, training sessions, and exercises hosted by our first responder agencies and welcomes these same entities to participate in the company’s annual tabletop exercise and other relevant events. PSEG Long Island aims to further develop relationships through information sharing and collaboration throughout the year, for the benefit of response and recovery efforts during emergency outage scenarios.

PSEG Long Island also seeks the input of our first responder organizations when instituting new emergency planning procedures including customer communication protocols, restoration management systems, and storm hardening efforts. PSEG Long Island aims to coordinate its planning initiatives with our first responder agencies for the benefit of all customers and municipalities served.

PSEG Long Island also strives to coordinate with our government and emergency first responder organizations during emergency preparations. PSEG Long Island may host pre-storm calls and/or meetings to discuss operational strategies, timelines, activation schedules, and anticipated results. Further coordination is seen between entities through the deployment of municipal and EOC liaisons. These liaisons work directly within a town or county’s command site and assist with information sharing, escalation protocols, and overall coordination.

Coordination between PSEG Long Island and our municipal, government, and emergency management partners is paramount to an efficient response. All efforts will be taken to support and advance this partnership.

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4.4.3 Life Support Equipment (LSE) & Special Needs (SN) Customers

PSEG Long Island takes additional preparedness measures with respect to its SN and LSE customers. Annual notifications are sent out to qualifying participants and a database is maintained and utilized for communications during emergency restoration procedures. More information on the protocols for SN and LSE customers can be found in Section 11. These efforts focus on ensuring the most up to date and complete listing of qualifying customers so that PSEG Long Island may proactively communicate with these groups prior to and during large-scale storm events.

4.5 Storm Hardening Efforts

PSEG Long Island has taken many steps to harden the Long Island electrical system against the effects of major storms and to make the system more resilient in the face of natural disasters. PSEG Long Island aims to harden its system to address major storms, hurricanes, flooding, high winds, and ice. Hurricane Irene and Superstorm Sandy emphasized the need to focus on prevention, survivability, and recovery in the long term. Since the time that PSEG Long Island has undertaken its role as Long Island's electrical service provider, this activity has continued with renewed emphasis. Storm hardening and resiliency initiatives underway include:

- All critical transportation crossings are targeted to be hardened to withstand 100+ Miles Per Hour (MPH) winds.
- All Automatic Sectionalizing Units (ASU) locations are targeted to be hardened for the same wind strengths.
- Flood surge zones are taken into account when designing new substations and modifying/expanding existing infrastructure.
- Approximately 1,700 miles of distribution circuit trim is to be completed annually, over a four year cycle.
- Use of innovative alternatives to underground T&D lines in flood and surge zones. PSEG Long Island is pursuing use of overhead distribution facilities in flood prone areas where tree coverage is limited. This eliminates risk of flooding and debris damage.
- Selected underground and pad mounted equipment in flood prone areas is being replaced with submersible equipment to protect distribution equipment from storm surge damage.
- PSEG Long Island has expanded its pole inspection program that is used to inspect and replace inadequate poles and equipment.
- The hardware and equipment on poor performing T&D lines are inspected and upgraded as part of Circuit Improvement Programs.

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- Along the Route 110 Corridor, distribution automation systems will be used to manage the scope of outages and speed reconfiguration and restoration.
- Long-term plans are under development to permanently protect substations in flood zones. In the interim, temporary trap bags or barrier systems have been installed around the perimeter of ten substations to address the impact on equipment of substations flooded by Superstorm Sandy. Water level monitoring systems have also been installed at substations to increase our early detection capabilities.

LIPA has also received significant grant funding from FEMA to address hardening and resiliency. The grant will support several projects as follows:

- PSEG Long Island is targeting to elevate ten substations damaged during Sandy. The mitigation work has already started at six of the stations – Arverne, Far Rockaway, Rockaway Beach, Long Beach, Park Place, and Woodmere.
- Transmission lines damaged by Sandy will be strengthened to minimize the interruption of important transportation corridors due to falling conductors and rebuild portions of damaged transmission lines.
- The installation of additional automatic sectionalizers will further improve the resiliency of the system by reducing the number of customers impacted by a single line outage. The new devices will be intelligent devices that will be less reliant on operator interface to restore customer load and almost double the existing automatic sectionalizing capabilities.
- Mainline distribution circuits damaged during Sandy will be rebuilt with some combination of Overhead/Underground (OH/UG) solutions expected to maximize the benefit of this investment.

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5. STORM ANTICIPATION

An effective response to any storm emergency often hinges on a comprehensive anticipation and early warning system. An early appraisal based on known conditions and prior storm experience becomes a major component of an effective restoration effort. Each storm presents varying types and degrees of intensity and produces differing results which vary considerably in severity and extent. For example, a slow moving ice storm results in a substantially different outcome and restoration challenges as compared to a hurricane or tropical storm. Accordingly, a detailed storm anticipation system must be utilized for restoration efforts to have the greatest impact.

An effective anticipation system provides vital information such as the predicted size, scope, and arrival time of a potential storm or weather system. This information proves to be very valuable when pre-planning resources and manpower. PSEG Long Island employs various tools and analyses, in conjunction with active weather monitoring, to position itself to be best prepared for impending storm events and the ensuing response. This awareness and planning allows for appropriate decision making to occur, in terms of readying the system and ensuring adequate resources are targeted to efficiently respond to the damage sustained.

Keeping employees and customers informed is also at the forefront of PSEG Long Island's storm anticipation protocols. The more information known ahead of a storm's onset allows PSEG Long Island to disseminate its plans and intentions to all parties accordingly. This early warning will help our employees and customers better prepare for the impending storm and our planned restoration activities. Most importantly, it helps to set expectations for customers and other key stakeholders so that they, too, can be best prepared for the impending storm.

Storm anticipation is also vital to PSEG Long Island's pre-planning efforts surrounding the potential need for additional resources during restoration efforts. Most large-scale outage events require assistance from other utility partners and a timely appraisal of a pending storm. Its severity allows key operational decisions to be made ahead of time. This early anticipation and decision making leaves the company better positioned to recover and manage its restoration effort.

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5.1 Preparatory Responsibility

It is the responsibility of PSEG Long Island's T&D Electric Operations Vice President (VP) and the Operations Section Chief to closely monitor all predicted storms and to evaluate their size, scale, and complexity. The importance of evaluation cannot be overstated and must be made at the earliest possible time. The PSEG Long Island's T&D Electric Operations VP and the Operations Section Chief have the responsibility to implement emergency procedures within the affected division, commensurate with the size, scale, and complexity of the emergency.

5.2 Weather Monitoring Approach

It is PSEG Long Island's policy to obtain weather information and alerts from a variety of sources and to disseminate the information to the appropriate personnel due to its potential to affect the electric T&D system on Long Island. Forecasts of inclement weather may cause PSEG Long Island to take preparatory actions, including the possible alert or mobilization of various components of the storm restoration organization. An effective weather monitoring approach assists in both short and long term planning with regards to restoration efforts.

Weather data and forecasts are received and reviewed by the T&D Electric Operations Department on a daily basis. Reports and advisories are received from the NWS, a government agency, and Schneider Electric's Telvent Data Transmission Network (DTN) Meteorlogix Weather Service. The NWS provides weather reports from its New York office at varying intervals throughout the day based on the severity of the storm. Copies of the reports are made immediately available to the appropriate departments and key personnel are notified accordingly.

Key personnel and field locations across the service territory are provided with access to the Schneider Electric services for monitoring and receiving automated weather alerts for their respective service areas. Weather summary briefings are provided on daily operations calls and on conference calls conducted prior to and during an event.

Weather information and advisories are also obtained from the following services on a daily basis:

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- Subscription Services
 - Schneider Electric Televant DTN Meteorlogix (Internet, e-mail/text notifications and verbal discussion with a meteorologist)
 - www.schneider-electric.com
 - AccuWeather (Internet)
 - www.accuweather.com
- Non-subscription services
 - National Weather Services (Internet)
 - www.weather.gov
 - www.noaa.gov
 - The Weather Channel (Television (TV) and Internet)
 - www.weather.com
 - Weather Underground (Internet)
 - www.wunderground.com

In addition, hurricane tracking weather maps are received by the Electric System Operations Department from the NWS and its Hurricane Center when necessary. These maps assist in the decision making process relative to restoration preparedness and response efforts (see Figure 5.1).

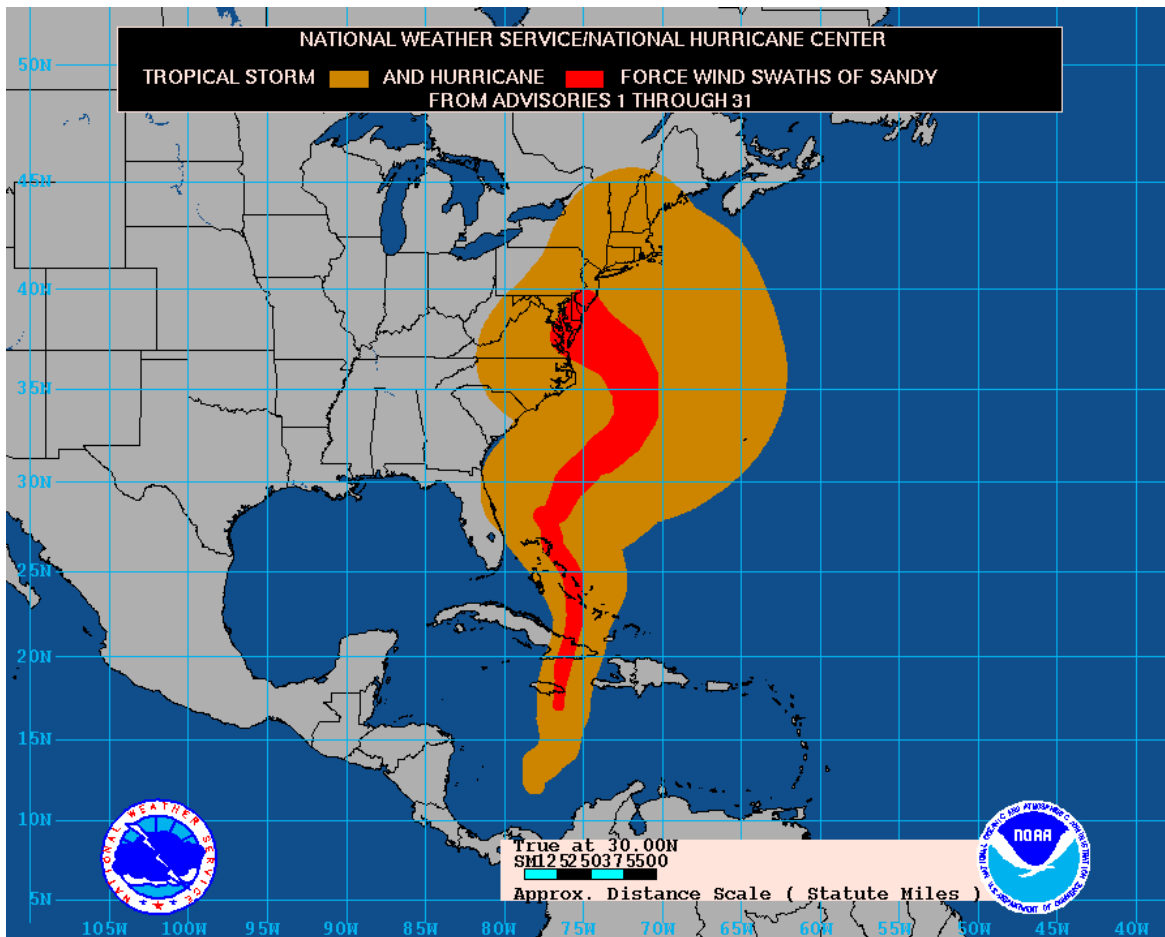


Figure 5.1 – Sample Hurricane Tracking Map

5.3 Storm Descriptions

The application of weather monitoring tools and analyses is vital when planning an effective restoration response. The various types of storms experienced in Long Island and the Rockaways' service area provide many challenges when preparing for such events. Each type of storm or weather condition varies and requires differing levels of preparation. Given its geography, topography, and location, Long Island is susceptible to a variety of storms and weather conditions that can yield damage to its electrical facilities and result in outages to its customers. The list of potential weather hazards and their effect on our electrical system are outlined in the following sections.

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5.3.1 Thunderstorms

Thunderstorms can have an effect on PSEG Long Island's primary and sub-transmission facilities. However, severe widespread thunderstorms will have a larger effect on our secondary facilities and individual house services.

5.3.2 Tropical Storms and Hurricanes

Both tropical storms and hurricanes can have a lasting and devastating effect on the electrical system as a whole. The severity of the damage will vary depending on the size, scope, and length of the storm. To start, heavy rain will affect sub-transmission facilities and individual house service. Heavy winds can have a large influence on transmission and individual house service as well, due to the possibility of widespread wire down conditions and pole damage. Storms with severe wind conditions also have the potential to cause large-scale outages from both a system and individual service level. Tropical storms and hurricanes often require an appropriate mobilization of field resources, in advance of the storm's arrival, due to its large impact. Storm severity may also require the application of the "cut clear" phase and include significant tree removal efforts before effective restoration operations can begin.

5.3.3 Winter Storms

5.3.3.1 Nor'easters

Nor'easters can bring heavy rains, strong winds, and blizzard-like conditions that often create significant damage to the T&D Electric system. Damage is often widespread affecting all parts of the electrical system. Nor'easters often bring significant downed wires and pole damage, as a result of falling trees and strong winds.

5.3.3.2 Major Sleet, Ice, or Wet Snow Storms

These storms have the ability to build up slowly with damage continuing over a period of several days. The area affected is often localized in ice storms and widespread in wet snow storms. Because of their slow prolonged buildup, damage assessments are often difficult to anticipate. The important aspect of these storms is that the majority of damage usually occurs at the individual house level. Therefore, maximum mobilization of house service restoration crews and tree crews are instituted as soon as possible.

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5.3.4 Heat Waves

While the result of a heat wave may vary greatly from a winter storm or hurricane, its effect can be just as damaging. Heat waves can put an undue burden on our electrical system due to the increased usage by commercial and individual users. Heat waves can also damage our T&D equipment through overheating caused by increased output levels. Heat waves can have a lasting effect on service and could potentially lead to wide spread outages in extreme circumstances.

5.3.5 Flooding

Flooding is a serious threat facing electrical utility providers, including PSEG Long Island. The severity is further heightened for the company when the service territory is a highly populated island, such as Long Island. This threat faced by PSEG Long Island is a serious one, which requires increased planning for the prevention of a large-scale outage and a quick response when such conditions are experienced. Flooding can have a dramatic effect on PSEG Long Island's electrical system depending on the size, proximity, and timing of impact. Flooding could greatly damage our electrical distribution facilities and leave the surrounding territory with large-scale outages. Additionally, flooding can cause damage to sub-transmission facilities, transformers, wiring, and other vital support equipment and locations. Large-scale flooding can also have an effect on customer-owned equipment, which adds additional complexities to safe re-energization protocols taken after flooding. Resource mobilization and travel difficulties may also arise during restoration efforts due to flooding and its devastating effects. Please see Section 10.5 for more information regarding specific flooding guidelines and protocols taken by PSEG Long Island during restoration activations.

5.4 Damage Predictions

The ability to accurately predict damage associated with an impending storm and/or weather event is essential in preparing for and executing a successful restoration effort. PSEG Long Island employs various tools and draws upon its institutional knowledge and experience from past events to develop preliminary damage reports. Weather and its projected intensity and impact are closely monitored to provide an estimate for damage potential. Forecasting, in conjunction with data from past events, is also conducted to assist in the preparation of damage predictions.

While the accuracy of damage predictions cannot be guaranteed, its significance is vital to PSEG Long Island's restoration efforts. Damage predictions set the operational tone of actions to be taken post impact and have wide-ranging implications. First, damage predictions are used when developing global and regional ETRs. These predictions assist with identifying the time needed to assess and repair a specific outage and, ultimately, become the expected time of restoration to our customers. Secondly, damage predictions are used when estimating potential manpower needs during an anticipated outage. This is of great significance when the need for Foreign Crews is anticipated. Finally, damage predictions help to define the logistical needs of a potential storm. It assists with identifying possible material and facility needs in order to properly stock, stage, and deploy adequate resources.

6. EMERGENCY CLASSIFICATIONS AND STORM LEVELS

6.1 Guidelines

PSEG Long Island maintains an internal emergency classification and storm level matrix that is utilized in anticipation of storm conditions and/or an emergency. These descriptions work in unison and assist in the preparation and response efforts conducted by the company, system wide. Whenever interruption of electric service occurs, the Emergency Response Organization is activated to the level required to efficiently and effectively manage the event. The classification of an emergency is dependent upon how severe and geographically widespread the emergency is. The system is sufficiently versatile so that a smooth transition may be made from one condition to another as weather conditions change. Figure 6.1 has been developed to categorize the planned anticipation of emergencies based on their severity.

STORM LEVEL	CLASSIFICATION	DESCRIPTION
III	White	Normal Operation and Minor Storm Events
II	Blue	Major Storm Events
I	Red	System Disaster

Figure 6.1 – Classification and Description of Different Storm Levels

6.2 Emergency Classifications and Storm Level Descriptions

6.2.1 Condition III “White” Storm

6.2.1.1 Scope

Under Condition III “White”, the severity of the resulting damage is moderate, consisting mainly of localized or limited system damage. This includes normal operations and minor storm events. Expectations are such that complete restoration of system circuits and stations interruptions can be accomplished, utilizing existing divisional manpower, within an eight hour period. The Distribution Operations Department is able to institute repairs to the T&D Electric systems with minor additional assistance from the division’s OH/UG Lines Department.

Events in this classification typically possess any of the following characteristics: gusty winds, heat, rain, freezing rain, snow, and/or lightning. The Distribution Operations Department maintains an around-the-clock, emergency organization in each of its four operating divisions. It consists of a Distribution Service Operator who provides overall

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direction of the organization on shift. The department also includes dispatchers to initiate job assignments and direct the movement of the service personnel. Emergency service personnel and service supervisors, in the field, investigate electric problems and make repairs. The Customer Services Department also maintains an around-the-clock Customer Assistance Center, which coordinates closely with the Operations dispatch organization.

6.2.1.2 Operations

The distribution dispatchers utilize the OMS to diagnose electric distribution system problems, create job assignments for field personnel, and develop restoration estimates for customers out of service. Recorded telephone messages may be created for incoming customer calls during special situations, such as circuit lockouts.

6.2.1.3 Additional Help

If the workload is greater than that which can be handled by personnel on shift, additional Distribution Operations personnel may be called in from home and help may be requested from the OH/UG Lines Department. During regular business hours, Line Crews are provided by the OH/UG Lines Department within their respective areas through contact with Area Supervisors. During off hours, standby supervisors are provided by the OH/UG Lines Department on an around-the-clock basis. Line Crew help is available to the Distribution Operations Department at any time through these supervisors. Under Condition III "White", additional Line Crews are dispatched by the Distribution Operations Department (usually five or less crews per division).

6.2.2 Condition II "Blue" Storm

6.2.2.1 Scope

Under Condition II "Blue", the severity of the resulting damage is more significant, consisting mainly of extensive localized damage or moderate system damage throughout the entire service territory. Expectation is such that complete restoration of system circuits and stations interruptions can be accomplished, using available company resources, within a 24 hour period. When storm damage makes it necessary, for the Distribution Operations Department, to request substantial assistance from other organizations within the company, the state of readiness is shifted from Condition III "White" to Condition II "Blue". This escalation ordinarily occurs by divisions as soon as the assistance of more than five OH/UG Line Crews is required in any one division.

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Events in this classification often possess any of the following characteristics: high winds over a prolonged period, heavy rain, freezing rain, sleet, wet snow, ice, and/or heavy lightning. As needed, the Customer Services Department will increase the customer representative staffing of its call-in centers after consultation with the Distribution Operations Department.

6.2.2.2 Operations

The Distribution Operations Department shifts to Console Operations, which are geographic subdivisions of each Division. This reduces geography and customer count managed at each console simplifying the increased workload. The consoles conform to physical and municipal boundaries whenever possible and are equipped with an OMS workstation. Console Operators are mobilized to perform trouble analysis utilizing the OMS workstations and to produce jobs to be dispatched to Line Crews or emergency service personnel. Each operations division is subdivided into color-coded console areas which are the same areas assigned to Group Coordinators under Condition I “Red,” as shown below.

6.2.2.3 Additional Help

1) Line Crews

The OH/UG Lines Division(s) mobilize their own dispatching group(s) and begin dispatching job assignments to Line Crews. Long Island-based contractor Line Crews may be mobilized to support the Condition Blue restoration efforts. Distribution Operations division boundaries are used to define repair responsibility. An OH/UG Line dispatching facility is maintained at each division headquarters near the distribution operations dispatch room. OH/UG Lines may also mobilize their own “makeup” crew organization, which is staffed from their underground splicing group.

2) Two-Man Makeup Crews

The Substation, Protection and Telecommunications Department has been assigned the responsibility for the Two-Man Makeup Crew organization. This specialized force has been trained to make low voltage repairs, such as house services and transformer secondary connections. Many can also perform high voltage switching at ground-operated switches and some can re-fuse primary cutouts. Two-Man Makeup Crews are further augmented by Meter and Test Personnel as well.

3) Survey

A wire down survey operation is usually implemented in Condition II “Blue”. Qualified PSEG Long Island personnel are dispatched to confirm whenever wire down reports are generated from customer or police reports of wires down. This serves to expedite the repairs by confirming the event and collecting the data to dispatch the appropriate crew type, material, and equipment. It also serves to eliminate any reports which may be

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incomplete or erroneous, such as cable and telecommunication wires, and poor addresses, which could result in unnecessary visits by Repair Crews. Wire down surveyors are different from Condition I “Red” Survey Teams. They usually ride alone during the day and double up only after dark. They are furnished by the Network Strategy Department along with their own survey dispatch organization.

4) Lockout Organization

If weather conditions continue to deteriorate or if weather is predicted to be more severe, the Transmission Operations Department may elect to man certain substations to assist in information gathering and substation operation. When this mode of operation is authorized, the situation is approaching Condition I “Red”. The Lockout Information Center is concurrently mobilized. This group assists the District Operators with the dissemination of T&D lockout data to the four distribution operations divisions and to the ERP Organization’s Lockout Coordinator.

6.2.3 Condition I “Red” Storm

6.2.3.1 Scope

Under Condition I “Red”, the severity of the resulting damage is severe and/or widespread, consisting mainly of extensive localized damage or acute system damage throughout the entire service territory. It includes system disasters. Expectations are such that complete restoration cannot be accomplished in a 24 hour period utilizing all Company resources and requires assistance from other utilities, contractors, etc. Events in this classification include severe storms, such as tropical storms, hurricanes, nor’easters, prolonged high wind events, heavy icing, accumulation of heavy or wet snow, severe lightning, flooding, and straight-line wind events. Also included are other conditions which produce widespread outages, high customer call volume, extensive damage, and a large number of circuit lockouts. When any or all of the following actions are taken, Condition I “Red” is in effect:

- One or more substations are mobilized to perform damage assessments
- Foreign Crews are called in to augment the PSEG Long Island repair force
- One or more substations are placed under ‘Local Operation Control’ to direct the repair operations on distribution feeders emanating from that substation

Normally, the declaration of Condition I “Red” is made by the Operations Section Chief after consulting with the PSEG Long Island T&D VP. The Operations Section Chief is authorized to declare a Condition I “Red” response in the absence of the PSEG Long Island T&D VP as well.

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6.2.3.2 Operations

The Operations organization is comprised of two groups along with their support staff and resources. The Operations and Survey Control group performs the following actions:

- 1) Manning and monitoring of substations
- 2) Surveying for damage assessment
- 3) Coordinating restoration activities

The Crew Control group performs the following actions:

- 1) Mobilizes the response crews
- 2) Repairs the electrical system
- 3) Manages the Foreign and Contractor Crews

6.2.3.3 Additional Help

- 1) Rapid Survey

When sufficient damage information affecting the distribution facilities of one or more substations has occurred or is anticipated, these substations may be placed in Condition "Red" to perform Rapid Surveys. Rapid Surveys are defined as a patrol of the main line 3-Phase distribution facilities, while control of the system is maintained by the System Operations Department. Mobilization for Rapid Surveys may be immediate or scheduled at a subsequent time.

- 2) Calling in Foreign Crews

When damage assessment indicates that the restoration effort will exceed 48 hours using only PSEG Long Island crews, requests will be made to obtain Foreign Crews. The initial number of Foreign Crews requested will be based on the extent of damage suggested by the lockout information and adjusted to account for other factors, such as wind speed, accumulation of ice, etc. The number of crews will be modified as damage assessments proceed and additional intelligence is gathered. Based on the severity of the outage and damage, additional manpower may be mobilized. These include damage assessors, wire watchers, and flood assessment personnel.

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3) Substations placed under Local Operational Control

Substations placed under Local Operational Control provide compact geographic areas as reporting locations for Foreign Crews and localized survey and dispatch operations. Foreign Crews will be assigned to only those substations that are under Local Operational Control. PSEG Long Island crews may also be assigned to substations under Local Control. Grouping Foreign Crews from each company together within console areas is desirable because it provides a means for their own supervision to maintain better crew control. Protocols for decentralization are further detailed under Section 10.4.2, which expands upon Substation Dispatch Authority (SDA) and Substation Local Control (SLC).

6.3 Storm Severity Matrix

PSEG Long Island's Storm Severity Matrix is a reference guide used for restoration planning and response operations. The Storm Severity Matrix, as seen in Figure 6.2 below, incorporates PSEG Long Island's three storm levels and the anticipated result and/or operational action plan for each condition.

STORM LEVEL EMERGENCY CLASSIFICATION	CONDITION III – “WHITE”	CONDITION II – “BLUE”	CONDITION I – “RED”
Weather Conditions	Normal Weather Minor/Moderate Lightning Light/Moderate Snow Light/Moderate Winds	Tropical Storm, Nor’easter Severe Lightning Heavy Snow >6” with Snow to Liquid Ratio <10:1; Ice Accretion >3/8”	Cat 1-3 Hurricane, Tropical Storm, Nor’easter, Major Ice Storm Heavy Snow >6” with Snow to Liquid Ratio <5:1; Ice Accretion >1”
Sustained Wind Speeds (months)	<30 MPH (4/1 – 10/31) <45 MPH (11/1 – 3/31)	30 – 65 MPH (4/1 – 10/31) 45 – 75 MPH (11/1 – 3/31)	>65 MPH (4/1 – 10/31) >75 MPH (11/1 – 3/31)
Expected Customers Interrupted	<5,000	5,000 – 150,000	>150,000
Expected Damage	Minimal to Minor	Moderate; Isolated	Severe; Widespread
Expected Restoration Duration	N/A	1 – 3 Days	4+ Days
OMS Incidents *	Up to 75 per Division	75 – 250 per Division	>250 per Division
Manpower	Division handles storm with normal staffing	Division handles storm with additional internal staffing; Construction and Survey consoles activated; Potential increased use of local contractors or Mutual Assistance	Full activation of Restoration Organization; Mutual Assistance mobilized and/or activated; North Atlantic Mutual Assistance Group (NAMAG) or National Response Event (NRE) engaged
Line FTEs beyond PSEG Long Island	0	Up to 150 per Division	150 – 1000 per Division
Mutual Assistance Commitment	None	1 Day Prior	2 – 4 Days Prior
Manpower – Damage Assessment	Division	Division Console	Division Console Substations Supplemented with Mutual Assistance and Contractors
Restoration Procedures	Normal Cut/Clear	Cut/Clear Dispatch Authority	Cut/Clear Dispatch Authority Local Control
ERP Team	No	Monitored remotely Potential partial staffing	Full Activation
Estimated Times of Restoration (ETR)	Default	Default with Weather Multiplier	Per DPS Guidelines
Logistics & Materials Operations	Normal	Storerooms Open 24x7	Full activation of LSC
Fleet Operations	Normal	Garages Open 24x7	Full activation of LSC
Corporate Communications	Normal	Monitoring – Partial activation	Full activation of Corporate Communications Center
Customer Operations	Normal	Monitoring – Partial activation	Full activation
County, State, Municipality Staffing	Normal	Soft Activation (as required)	Full activation

*OMS Incidents include both outage and non-outage jobs

Figure 6.2 – Storm Severity Matrix

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7. PRIORITY MATRIX GUIDELINES

PSEG Long Island understands the challenges and disruption to its customers' lives resulting from electrical outages. PSEG Long Island strives to return all customers back to working order in the shortest and safest manner possible. In support, PSEG Long Island utilizes a priority matrix system during both normal and emergency operations. All outages are prioritized using a variety of factors including, but not limited to, customer type, number of affected customers, and outages involving safety conditions.

7.1 Normal conditions

During normal working conditions, all outage work tickets are analyzed by dispatch personnel, and a determination is made as to the job priority for restoring electrical service on the distribution system. Work is then assigned in accordance with the following set of general priorities:

- 1) Eliminate unsafe conditions
- 2) Restore distribution system lockouts
- 3) Proceed so that each hour of work will return the maximum number of customers to service

Furthermore, pending jobs are then assigned priority classifications, as listed below in Figure 7.1. These classifications are designed to aid in achieving dispatching and restoration goals. Assigning jobs using the Priority Matrix below maximizes the restoration effectiveness while ensuring that restoration time is minimized. Using this Priority Matrix, PSEG Long Island strives to restore the largest number of affected customers in the most timely and efficient manner.

CODE	DESCRIPTION	EXPLANATION	NORMAL ASSIGNMENT
LO ASU	Lockout ASU Lockout	First fault on switchable 3-Phase primary main line locked out feeder (protected by the substation breaker or an ASU)	Electric Service Personnel or Overhead Line Crews
AAA	Main Line Primary Down With Outage.	Any 3-Phase switchable primary main line which is unfused (protected by the substation breaker)	Overhead Line Crews, Foreign Utility Crews, or Contractor Primary Crews
AA	Branch Line Primary Down With Outage Primary Transformer Tap	Any fused circuit tap or extension (1-Phase, 2-Phase, 3-Phase, switchable) or a field determination is made that the primary transformer tap is off.	Overhead Line Crews, Foreign Utility Crews, or Contractor Primary Crews
A	Secondary Down	Used when outage confined around secondary bus with a report of wire down (Note: If no outage, job is assigned a "D" priority)	Two-Man Makeup Crews, Overhead Line Crews, Foreign Utility Crews, or Contractor Primary Crews
B	Line Fuse Blown or Check Line Fuse	Used when outage pattern shows customers affected downstream side of fuse and not confined to a single secondary bus system.	Electric Service Personnel (some Two-Man Makeup Crews can refuse cutouts)
C	Check Transformer or Reset Transformer or Replace Transformer	Used when multiple customers affected and confined to the same secondary bus with no reported wire down.	Electric Service Personnel or Two-Man Makeup Crews
S	Single	Any individual customer affected and not associated with another customer or interruption.	Two-Man Makeup Crews
D	Follow-Up With No Outage	Any job requiring repair or correction with no customers affected	Any crews available that can handle this type task

Figure 7.1 – Priority Matrix

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PSEG Long Island also places an additional emphasis on critical facilities and other vital service locations. Critical facility customers, first responder organizations, and other vital sites, such as airports, hospitals, and water treatment plants are automatically coded by PSEG Long Island's OMS indicating their highest level of importance. These customer outages are given an electric service restoration priority, in accordance with the DPS information, shown below in Figure 7.2.

NEW YORK STATE PUBLIC SERVICE COMMISSION CRITICAL FACILITY CODES --							
1	HIGH RISE BUILDING	6	TELEPHONE CENTER	12	ELECTRIC DRAWBRIDGE		
2	CRITICAL INDUSTRY	7	RADIO, TV OR NEWS CENTER	13	PRIVATE HEALTH DEVICE		
3	HOSPITAL	8	WATER FILTER OR PUMPING STATION.	14	DAIRY OR FREEZING PLANT		
3A	HEALTH-RELATED FAC.	9	SEWAGE TREATMENT OR PUMPING STA.	15	MILITARY HEADQUARTERS		
4	POLICE DEPARTMENT	10	LIRR RECTIFIER	16	CIVIL DEFENSE FACILITY		
5	FIRE DEPARTMENT	11	AIRPORT				
CRITICAL FACILITY CUSTOMERS ARE TO BE GIVEN ELECTRIC SERVICE RESTORATION PRIORITY IN ACCORDANCE WITH THE FOLLOWING ORDER:							
15&16	MILITARY HEADQUARTERS, LIGHTHOUSES, AND *COUNTY AND TOWN HEADQUARTERS OF CIVILIAN DEFENSE	7&11	COMM. RADIO & COMMUNICATNS, NEWSPAPERS, AIRPORTS				
8	WATER PUMPING STATIONS	9	SEWER PUMPS				
3,3A,13	HOSPITALS, MEDICAL CENTERS, CLINICS, IRON LUNGS, AND INDIVIDUAL CUSTOMERS WITH LIFE SUPPORT EQUIPMENT	6	TELEPHONE CENTRAL OFFICES				
9	SEWAGE DISPOSAL PLANTS	5	FIRE HOUSES				
14	DAIRIES AND COMMUNITY FREEZING PLANTS	4	POLICE HEADQUARTERS				
		1,2,10,12	ALL OTHER CUSTOMERS				
*IN CASE OF MILITARY ATTACK							
CIRCUIT NUMBER	GRID NUMBER	CRIT FAC CODE	CUSTOMER NAME	SERVICE ADDRESS	SERVICE TOWN	PHONE NUMBER	ACCOUNT NUMBER

Figure 7.2 – Critical Facility Codes

7.2 Storm Conditions

Priority Matrix and Critical Facility Code protocols are consistent between normal and storm condition operations. If the storm damage is so severe that all available construction forces cannot cover the entire volume of the T&D system damage locations, then PSEG Long Island's restoration efforts will focus on the major prioritization objectives listed below:

- 1) Responding with appropriate resources to address the emergency and life threatening conditions
- 2) Clearing of downed wires to facilitate prompt clearing of public hazards and opening critical transportation corridors
- 3) Coordination with municipalities to open critical roadways by clearing electric hazards that prevent the removal of down and/or damaged trees; this coordination also pertains to the removal of electric hazards from Long Island Rail Road (LIRR) transportation "Right-of-Ways"
- 4) Restoration of PSEG Long Island Transmission Lines and Substation Facilities

Emphasis will be placed on restoration of service to PSEG Long Island Transmission Lines feeding substations with a loss of supply.

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- 5) Restoration of feeder breaker lockouts to restore large numbers of customers
- 6) Restoration to Critical Infrastructure/Facilities/Customers
Service will be restored to critical service locations and facilities as quickly as possible. These circuits and locations will be placed at the top of the restoration priority.
- 7) Communications with Customers and Key Stakeholders
It is vital that early and accurate communication of system conditions be made known and continuous updating occurs, as the storm restoration activities continue. It is essential that our customers be kept informed of the status of restoration (i.e., global, regional, and localized ETR).
- 8) Minimum Restoration Time
Plans have been formulated to complete restoration efforts on all interrupted customers following a severe storm as quickly as possible. Restoration efforts will be coordinated to restore the largest number of customers out first, followed by smaller area outages and finally individual house service.

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8. OUTAGE MANAGEMENT SYSTEM (OMS)

PSEG Long Island's OMS is a vendor-provided solution that is hosted in the PSEG Long Island Corporate Data Center. The system consists of OMS applications, mobile applications, Geographic Information System (GIS) integration, Enterprise Reporting and Business Intelligence (BI), and interfaces to external systems.

The OMS is intended to help meet the ever-increasing expectations of customers and regulators by significantly improving PSEG Long Island's ability to identify and manage outage conditions. This system also significantly improves the outage and restoration information available to Customer Service Representatives (CSRs), system operators, customers, municipal and elected officials, and other key stakeholders. In addition, it is expected that the following benefits will also be realized, as a result of the recent adoption of the new OMS at PSEG Long Island:

OMS Benefits:

- More accurate ETRs
- Improved efficiency and expediency when deploying utility crews and resources
- Increased awareness and timely status updates
- Improved accuracy in the identification of outage locations through a "Connected Model" analysis system
- Improved information flow between customers and dispatch personnel and/or restoration crews
- Improved prioritization of outages and response times
- Improved decision-making through additional informational tools

OMS Capabilities:

- Connectivity-based outage prediction and management
- Fully integrated platform for all job types, crew types, and referral work
- Outstanding ability for sorting, filtering, and viewing work
- Ability for users to create their own custom views
- Integrated graphical display and management of jobs and crews
- SAS Virtual Analytics reporting tool will allow for user-generated self-service ad-hoc reporting and data analysis

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8.1 Outage Management System (OMS) Tools

CGI's OMS, now in use at PSEG Long Island, is a Commercial Off-The-Shelf (COTS) software solution. PragmaLINE OMS is used by utilities ranging in size from 68,000 to 4.6 million customers. CGI's outage management product has proven scalable for electric, gas, and water utility providers.

The transition to a mature, proven, and comprehensive CGI Outage Management Solution (CGI OMS System and PSE&G Storm Management Process) for PSEG Long Island has a useful record of success by PSE&G for 10+ years and includes:

- Storm restoration process changes
- Accurate outage detection
- Integrated data analysis and reporting
- Improved crew management
- Work order updates
- Outage communications

Figure 8.1 details the OMS flow chart and how it interrelates with its operational system tools and features. It also specifies the informational flow and its corresponding inputs, outputs, and operators.

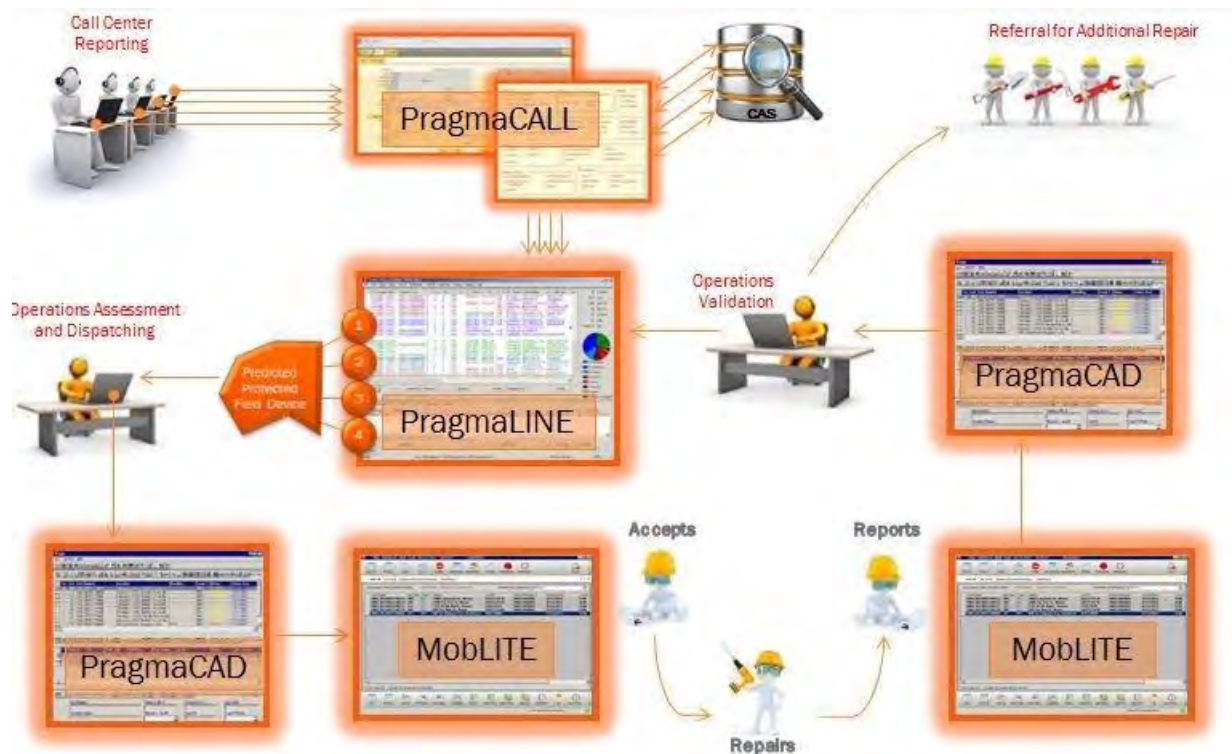


Figure 8.1 – OMS Flow Chart

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8.1.1 PragmaLINE

PragmaLINE manages the entire outage restoration lifecycle, from initial detection to full restoration, including the following:

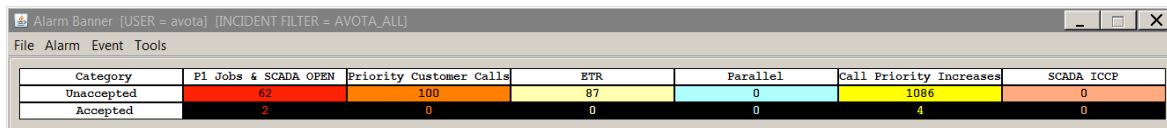
1) Incident Management

It provides intelligent analysis of call and incident information received from customer information and IVR systems, as well as telemetry data from other sources. This includes Supervisory Control and Data Acquisition (SCADA) substation distribution feeder breakers and Distribution Automation Supervisory Switches, such as ASU and Automatic Circuit Reclosers (ACR). Figure 8.2 shows the main Incident Manager Job List.

Job Number (EVT)	Attach	Creation Date	E.C.	E. Cell Type	E. Job Type	E. Job Type Descri	E. Priority	E. PROT SE	Phase	E. Job Status	Caller Address	Caller Busse Street	E. G. A.
ESD-2014000-0024		10/9/2014 15:00:14	107912	OUT	222	AREA OUT	100	OUT EMER	FEED_OR	A	Emergency (Serv)		107912
ESD-2014000-0004		10/6/2014 09:32:32	94764	OUT	200	WACCA VIEW	100	WACCA VIEW	WACCA	ABC	Emergency (Serv)		94764
ESD-2014000-0007		10/6/2014 10:40:01	839541	OUT	222	AREA OUT	100	OUT EMER	FEED_OR	B	Emergency (Serv)		839541
ESD-2014000-0008		10/6/2014 14:14:11	92807	OUT	222	AREA OUT	100	OUT EMER	FEED_OR	B	Emergency (Serv)		92807
ESD-2014000-0002		10/6/2014 15:53:31	658280	OUT	100	S-Single	100	OUT EMER	FEED_OR	A	Emergency (Serv)		658280
ESD-2014000-0002		10/6/2014 16:15:49	718945	OUT	222	AREA OUT	100	OUT EMER	FEED_OR	A	Emergency (Serv)		718945
ESD-2014000-0008		10/6/2014 13:52:11	92807	OUT	100	NO POWER	100	OUT EMER	FEED_OR	C	Emergency (Serv)		92807
ESD-2014000-0005		10/6/2014 17:50:25	728944	OUT	222	OTHER (WITH COMMENTS)	100	OUT EMER	FEED_OR	A	Emergency (Serv)		728944
ESD-2014000-0001		10/6/2014 13:52:11	92807	OUT	100	OTHER (WITH COMMENTS)	100	OUT EMER	FEED_OR	C	Emergency (Serv)		92807
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	100	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	C	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
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ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	A	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24	78792	OUT	222	AAA-Kain Line Pri	100	OUT EMER	FEED_OR	B	Emergency (Serv)		78792
ESD-2014000-0001		10/10/2014 08:10:24											

2) Alarm and Event Management Module

It provides dispatch operators with alerts and notifications configured to match their areas of interest. Figure 8.3 shows the Alarm and Event Manager and the six categories of alarms. Some of the areas of interest for alarm management are SCADA outages and Priority 1 calls, jobs containing calls from priority customers, and jobs with approaching and/or expired ETRs.

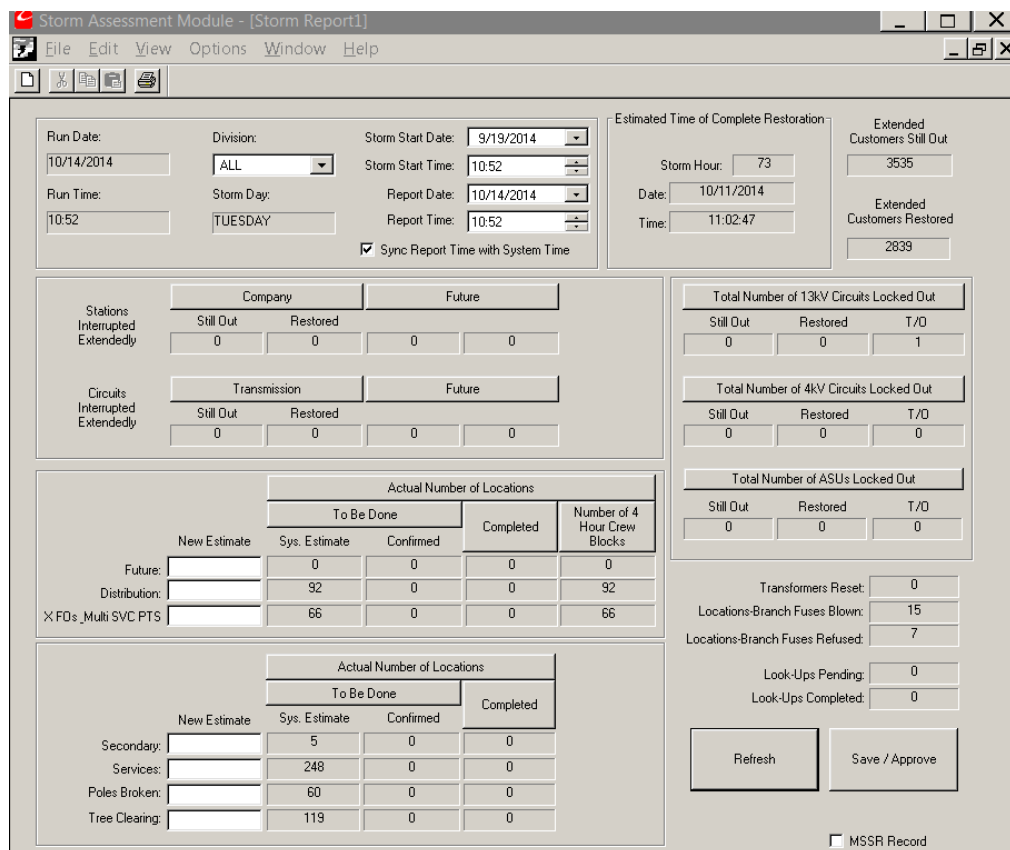


Category	P1 Jobs & SCADA OPEN	Priority Customer Calls	ETR	Parallel	Call Priority Increases	SCADA ICCP
Unaccepted	62	100	87	0	1086	0
Accepted	2	0	0	0	4	0

Figure 8.3 – Alarm and Event Manager

3) Storm Assessment Module

It displays a summarized state of affairs for storm outages and damage to help prioritize repairs (see Figure 8.4).



Storm Assessment Module - [Storm Report1]

File Edit View Options Window Help

Run Date: 10/14/2014 Division: ALL Storm Start Date: 9/19/2014 Storm Start Time: 10:52 Report Date: 10/14/2014 Report Time: 10:52 Sync Report Time with System Time ☒

Estimated Time of Complete Restoration: Storm Hour: 73 Date: 10/11/2014 Time: 11:02:47

Extended Customers Still Out: 3535 Extended Customers Restored: 2839

Company		Future	
Still Out	Restored	Still Out	Restored
0	0	0	0

Transmission		Future	
Still Out	Restored	Still Out	Restored
0	0	0	0

Actual Number of Locations				
	To Be Done	Completed	Number of 4 Hour Crew Blocks	
New Estimate	Sys. Estimate	Confirmed		
Future:	0	0	0	0
Distribution:	92	0	0	92
X F0s_Multi SVC PTS	66	0	0	66

Actual Number of Locations			
	To Be Done	Completed	
New Estimate	Sys. Estimate	Confirmed	
Secondary:	5	0	0
Services:	248	0	0
Poles Broken:	60	0	0
Tree Clearing:	119	0	0

Total Number of 13kV Circuits Locked Out		
Still Out	Restored	T/O
0	0	1

Total Number of 4kV Circuits Locked Out		
Still Out	Restored	T/O
0	0	0

Total Number of ASUs Locked Out		
Still Out	Restored	T/O
0	0	0

Transformers Reset: 0
Locations-Branch Fuses Blown: 15
Locations-Branch Fuses Refused: 7
Look-Ups Pending: 0
Look-Ups Completed: 0

Refresh Save / Approve

☐ MSSR Record

Figure 8.4 – Storm Assessment Module's User Interface

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4) Event Replay

It simulates large-scale outage events and re-creates past outage conditions from archived data for operator training, performance testing, and post-event analysis. Simulated storm events may be created ad hoc or based on an interactive query and selection of past high-volume call and outage events (see Figure 8.5).

The screenshot shows the 'EventReplay' application window. It has a menu bar with 'Storm', 'District', 'Create Calls From District', 'Create Calls From Circuit', and 'PlayBack'. Below the menu bar is a file path input field: '\\Client\H\$\Event Replay\16K calls stress load runner test 062614.mdb', with a 'Browse' button. The main area contains two tables. The first table lists call data with columns: Call ID, Call Type, Clue Cd, Call DT, Dist No, and Premise Cust ID. The second table lists device data with columns: Device ID, Equip Strn No, Operation, Creation DateTime, and Circuit. At the bottom, there are input fields for 'Start DT' (06/26/2014 07:05:33), 'End DT' (06/26/2014 15:00:27), 'Storm ID' (0), 'Affected District' (1 (Queens - Nas)), '# Calls' (16162), 'Transactions' (# 0), and 'Total Duration' (07:54:54). There are 'Reset', 'Start', and 'Close' buttons.

Call ID	Call Type	Clue Cd	Call DT	Dist No	Premise Cust ID
	OUT	100	06/26/2014 07:05:33	2 (Centr...	
	OUT	099	06/26/2014 07:06:10	1 (Queue...	
	OUT	100	06/26/2014 07:06:13	2 (Centr...	
	OUT	099	06/26/2014 07:06:49	2 (Centr...	
	OUT	099	06/26/2014 07:07:01	2 (Centr...	
	OUT	100	06/26/2014 07:07:14	2 (Centr...	
	OUT	099	06/26/2014 07:08:11	2 (Centr...	
	OUT	098	06/26/2014 07:08:29	3 (West...	

Device ID	Equip Strn No	Operation	Creation DateTime	Circuit

Start DT: 06/26/2014 07:05:33 Storm ID: 0 # Calls: 16162
End DT: 06/26/2014 15:00:27 Affected District: 1 (Queens - Nas) Transactions: # 0
Total Duration: 07:54:54
Buttons: Reset, Start, Close

Figure 8.5 – Event Replay Module’s User Interface

8.1.2 PragmaCAD

1) Centralized Dispatch

It manages all types of field work, from routine to complex, including trouble/outage, service, maintenance, repair, inspection, and construction. PragmaCAD provides a graphical toolset that includes interactive views of the work order process, as well as centralized, real-time monitoring of mobile field personnel (see Figure 8.6 and 8.7).

2) Field communication

It streamlines field work order management by providing field resources with remote access to critical information. Field personnel can receive, accept, update, and complete work orders, while maintaining process and data consistency during the work order lifecycle.

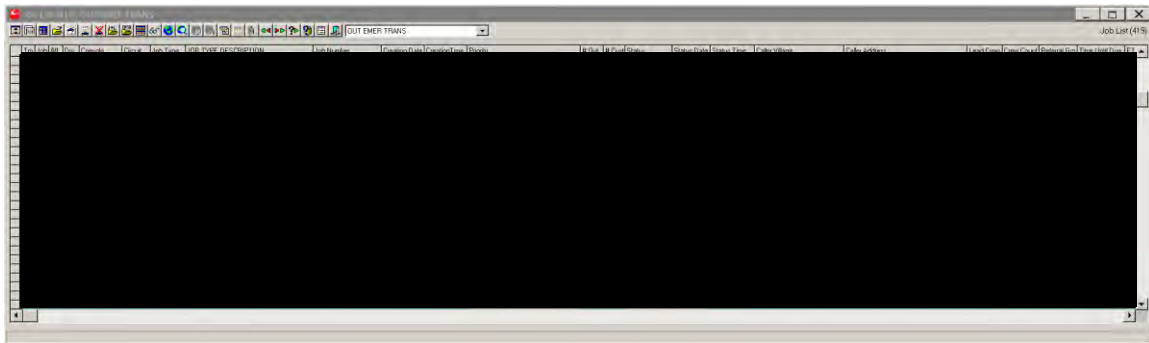


Figure 8.6 – PragmaCAD Job List

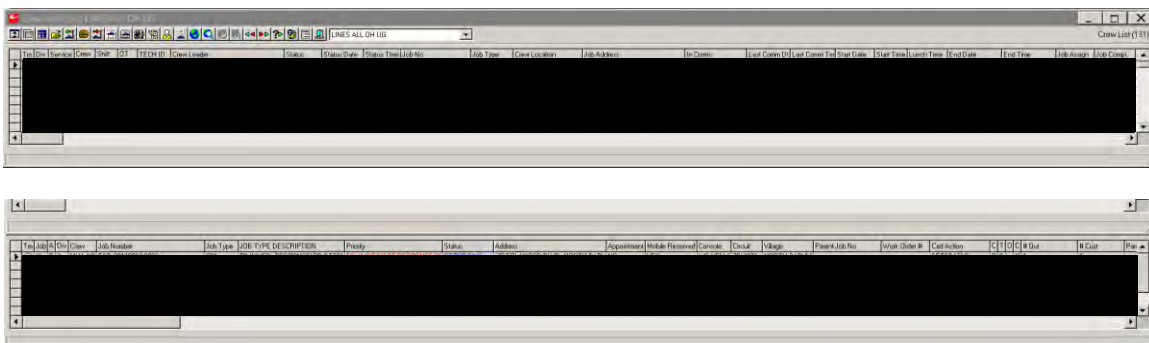


Figure 8.7 – PragmaCAD Crew and Assignment Lists

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8.1.3 PragmaCALL

Web-based call taking is utilized by CSRs accessing the system via an intranet web browser. CSRs and other employees can submit customer outage and service calls, inquire status for existing calls (ETRs, power restored, etc.), and search incidents with a view-only version of the PragmaLINE Incident Manager (see Figure 8.8).

Figure 8.8 – PragmaCALL Call Taking Module (Top: Search Screen; Bottom: Call Taking Screen)

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8.1.4 PragmaGEO Map Views

1) Geospatial Displays

It provides digital representations of real-world network conditions to help prevent and quickly respond to outages. Distribution network connectivity is displayed on a geographically-referenced land base, which is enhanced by GIS information supplied by PSEG Long Island. Map icons display customer calls, jobs, and crews in a geo-referenced context (see Figure 8.9).

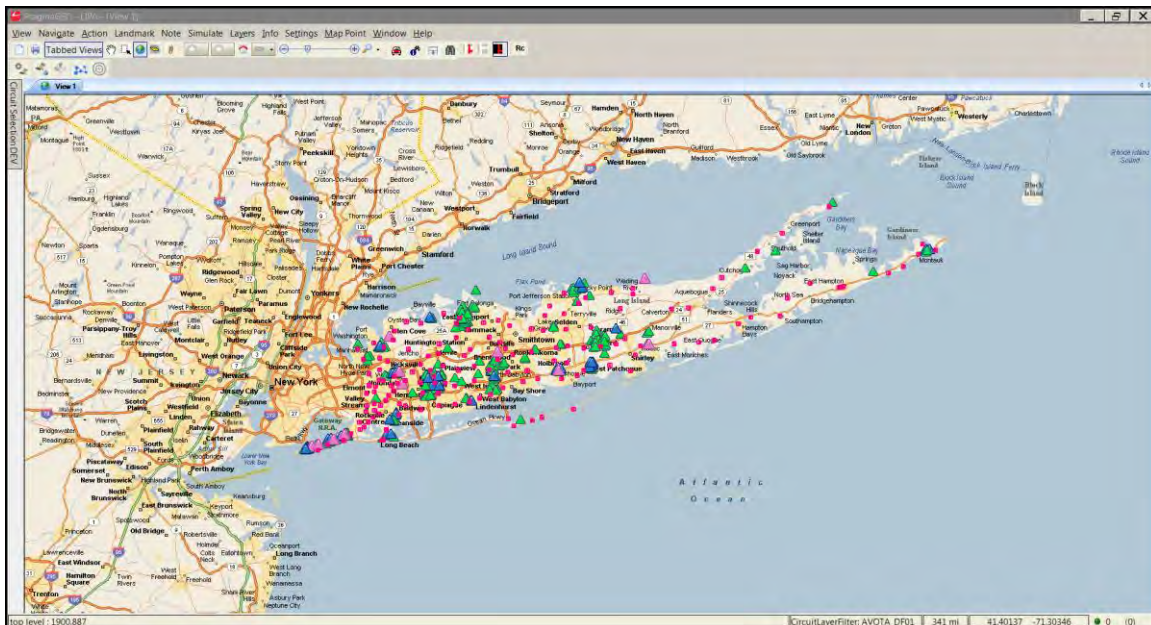


Figure 8.9 – PragmaGEO Map View Long Island Overview with Outage Markers

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8.1.5 MOBLITE

The PragmaCAD Mobile Data Terminals (MDTs) is currently deployed in the Electric Service Department's Emergency Service personnel single bucket trucks. There are approximately 120 vehicles equipped with MDTs running the MOBLITE software application. MOBLITE is used by these emergency service personnel who are the first responders to outages and emergency calls, such as wire down calls on normal days and during storm conditions. The MDT has access to many of the same OMS tools available to office personnel, such as the GIS Viewer and PragmaCALL (see Figure 8.10).

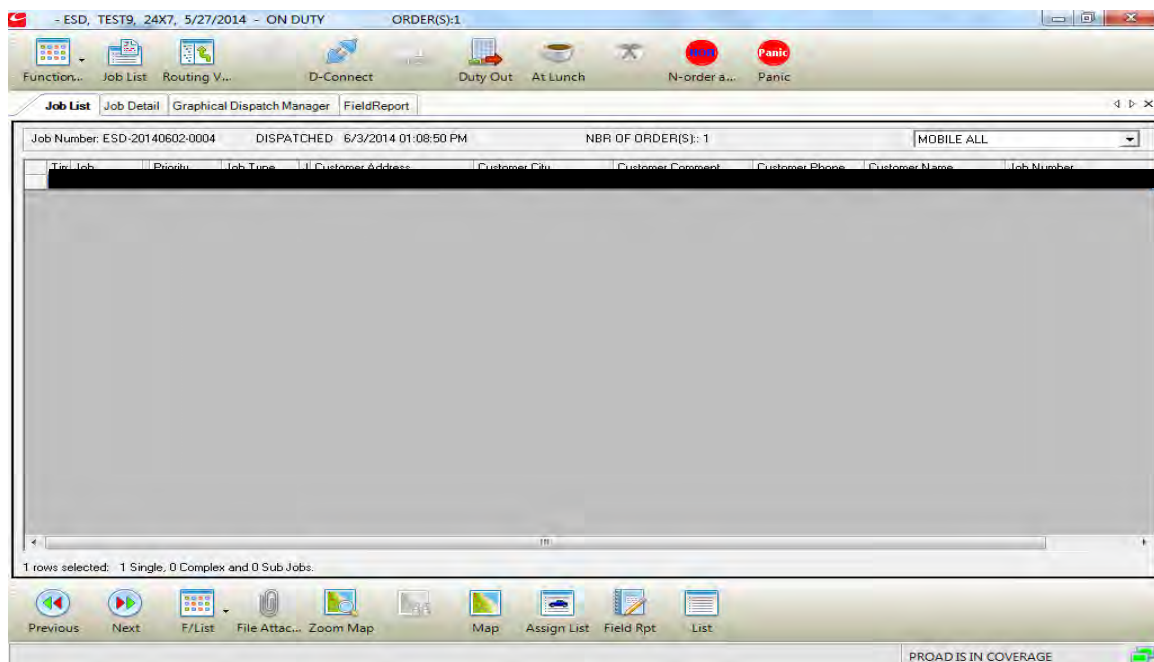


Figure 8.10 – MOBLITE Mobile Data Terminal Job List

8.2 Other OMS Related Applications

In addition to the CGI of OMS applications, OMS is supported by additional ancillary applications that aid in the day-to-day and storm operations. These include ESRI GIS Viewer application and SAS Visual Analytics (VA) Reporting and BI tools.

8.2.1 Geographic Information System (GIS) Viewer

The electric network model used in the OMS is sourced from GIS data from the PSEG Long Island GIS. This electric network model and GIS land base are available to all users via an Intranet-based web browser that supports various base maps, land base, and electric layers.

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The GIS Viewer supports the following electric network model layers:

- Transmission
- Primary
- Secondary
- Underground

The GIS Map Viewer (see Figure 8.11) supports the following land base layers:

- Grid (an overview layer of the company's legacy grid coordinate system)
- Village (an overview layer showing the geographic boundaries of the individual villages)
- Division (an overview layer showing the geographic boundaries of the four service divisions)
- Parcel (an overview layer showing the geographic boundaries of the parcels)
- PSEG Long Island land base (static layer with equipment i.e., poles)

The GIS Viewer supports the following base maps:

- Streets
- Imagery (aerial photos)
- Gray canvas

The GIS Viewer supports various tools to search for locations by street address, equipment by grid number or latitude/longitude coordinates, device name/number, and equipment type. The GIS Viewer also supports a "Find My Location" function that can show the user's location based on Global Positioning System (GPS) or geo-location data and can zoom into the user's current location on the map. A related records view allows a user to see information about the customer(s) attached to various service points on the network.

The GIS Viewer is designed to easily integrate a piece of equipment on the electric network model and present key data about that asset in an information box. The geographic location and other asset related data, presented in those information boxes, is readily transferrable to OMS Field Reports, via standard Windows' Operating System "Cut/Paste" operations.

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The GIS Viewer has support tools that allow a user to annotate on a map and produce a map of the area. This map indicates damaged assets that are in need of repair, in order to restore electric service or make other repairs to the electric network. These maps can be printed to Portable Document Format (PDF) and attached as electronic files that can be forwarded with the OMS job order to MDT-equipped mobile users. The maps can also be accessed as attachments by other Storm Crew Dispatchers that may be dispatching non-mobile repair crews. The GIS Viewer maps can also be sent to printers for a printed hardcopy output.

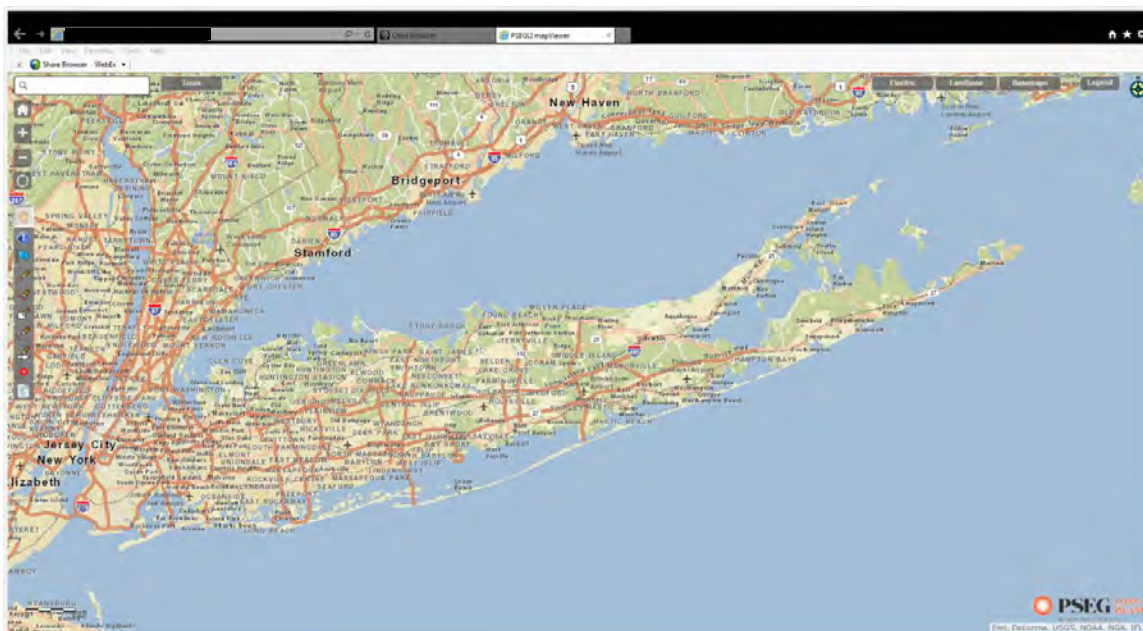


Figure 8.11 – GIS Map Viewer

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8.2.2 SAS Visual Analytics (VA)

Reporting and BI for the OMS is provided by the SAS VA suite of products. The SAS reports are available to all OMS users and other key stakeholders throughout PSEG Long Island. They are accessed via an intranet web browser and are available to authorized users. Most OMS users and company employees can access view-only versions of the OMS reports (see Figure 8.12).

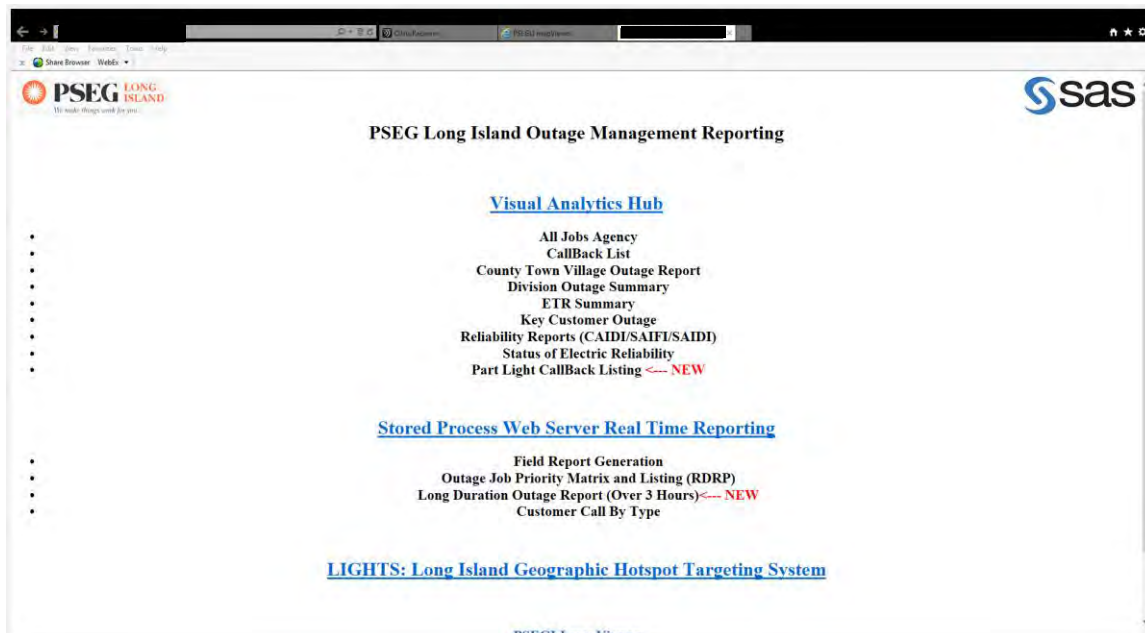


Figure 8.12 – SAS OMS Reports Landing Page

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SAS Stored Process Web Server supports near real-time reports. These reports are usually of a fixed format and allow the user to select from a few preset input parameters, such as Date Range, Division, Job Types, etc. (see Figure 8.13).

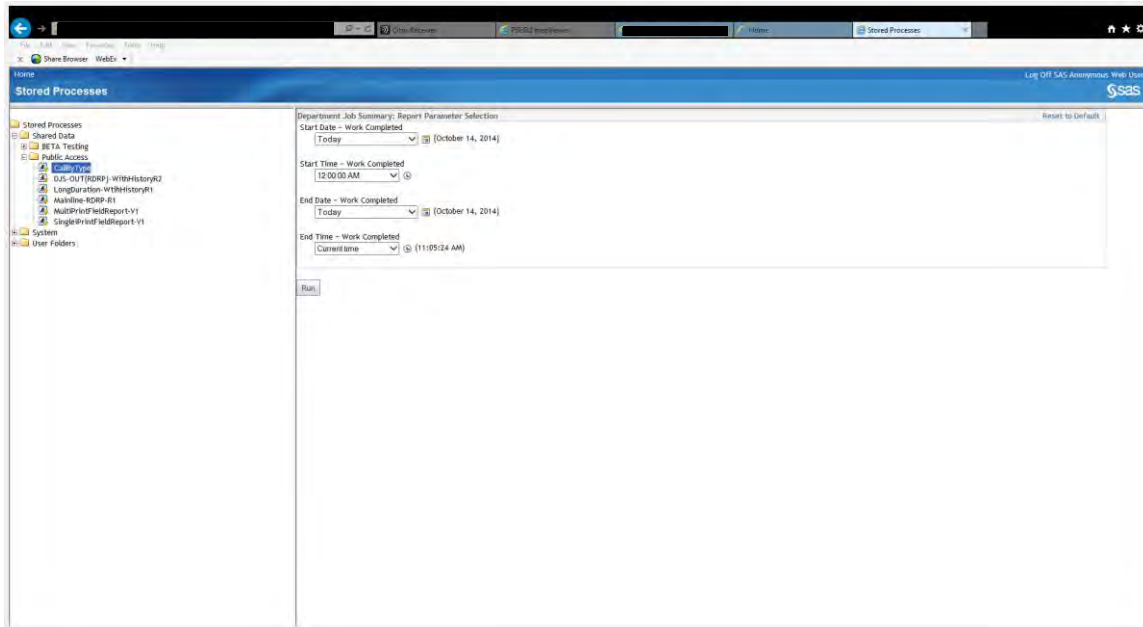


Figure 8.13 – SAS Stored Processes OMS Reporting Screen

SAS VA OMS Reporting Hub (see Figure 8.14) uses fifteen minute delayed data and allows for a more interactive user experience, where the user can make multiple selections and drill down from a high level geographical based hierarchy and add or remove report criteria as they navigate.

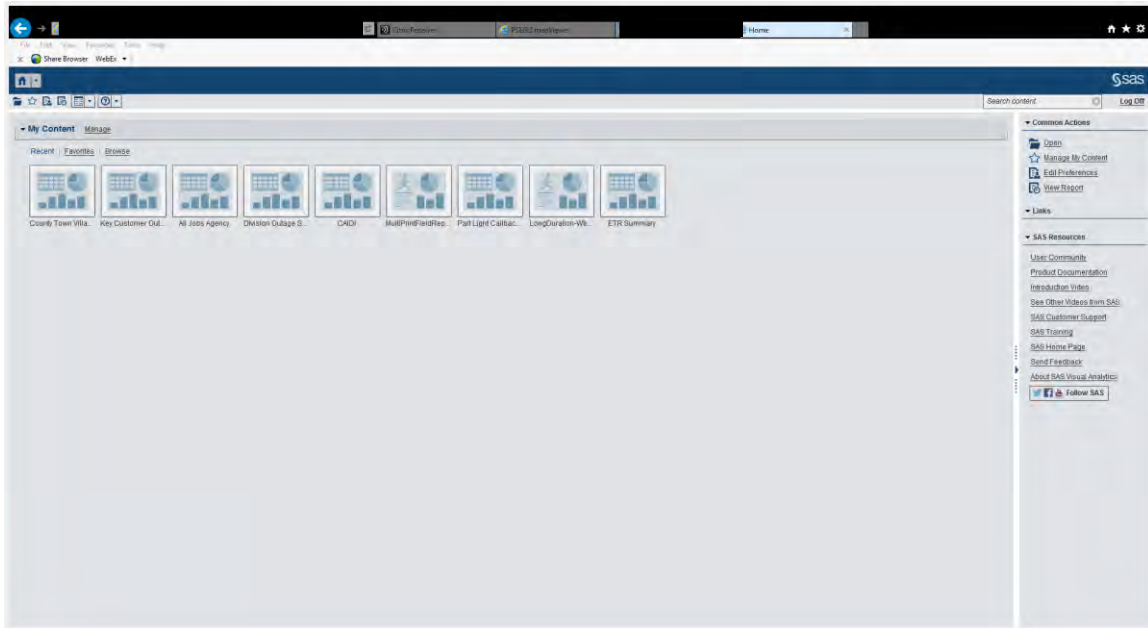


Figure 8.14 – SAS VA OMS Reporting Hub

8.2.2.1 Key Reports to Support Outage Management

Some of the key reports available from the SAS Stored Process Web Server are:

- Field report generation (printing of completion records and field damage reports)
- Outage Job Priority Matrix and Listings (summary of outages by outage priority/customers out)
- Long Duration Outage Report (over 3 hours)
- Customer Calls by type (summary of calls for outages, non-outages, emergencies, tree trim, etc.)

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Some of the key reports available from the SAS VA Hub Reporting Tool are:

- All Jobs Agency (user selectable drill down by job type, job status, and geographic area)
- Call Back List (a listing of single outage calls to use to manually call back for power on checks)
- County/Town/Village Outage Report (summary of outages and ETRs by geographic area)
- Division Outage Summary (summary of outages by priority/customers out)
- ETR Summary (status of ETRs for outage jobs)
- Key Customer Outage (report of outages affecting Critical Facility and Major Account customers)
- Reliability Reports (Standard Reliability indices reports)
 - Customer Average Interruption Duration Index (CAIDI)
 - System Average Interruption Frequency Index (SAIFI)
 - System Average Interruption Duration Index (SAIDI)
- Status of Electric Reliability (summary of Reliability Reports)
- Part Light Call Back Listing (listing of customers that experienced part power for survey follow-up)

8.3 External System Interfaces

8.3.1 Customer Accounting System (CAS)

The OMS interfaces to the PSEG Long Island CAS to receive data on customer account information for use by the OMS. This data includes basic customer information, location information, and electric account specific information, such as:

- Account number
- Rate code
- Classification of customer (residential, commercial, and other)
- Priority customer classification (Critical Facility, Major Account, Co-Gen)

The OMS was bulk loaded with all customer account data on “Go-Live” and the interface maintains nightly updates of the delta changes in account information as customers move in/move out.

In addition to the nightly batch load, there is a near real-time interface that reflects status changes for customers that may have been cut-off for non-payment during the work day.

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8.3.2 Geographic Information System (GIS)

The distribution circuit data used by OMS is received via an interface to the ESRI GIS. All distribution feeders were initially extracted from GIS and loaded into OMS. As feeders change with circuit reconfigurations and/or additions or deletions of customer load, the feeders that change on any given week are extracted and reprocessed back to the OMS to reflect the updates in OMS.

The GIS to OMS interface supports the ability to extract a feeder “on demand,” known as an immediate update. This allows for critical updates to be made in a timely manner.

On a monthly basis initially and a quarterly cycle going forward, all feeders are extracted and processed to OMS whether or not they have had any major reconfigurations. This allows background asset data changes, such as transformer sizes, fuse sizes, and/or wire sizes that may have to be updated. It also keeps the customer account changes synced between the GIS, CAS, and OMS.

8.3.3 Employee Personnel

All PSEG Long Island employees exist in the OMS system for the purpose of being able to be assigned to a repair or survey crew. Basic employee data, such as name, job title, work location, phone number, etc., are available in the OMS Crew Management function.

Employee personnel data was initially bulk loaded into the OMS. A manual update process is currently in place, as the final interface, to the new employee data SAP system that is planned for deployment in 2015.

The OMS also supports crew data for certain on-island Contractor Crews that regularly work for PSEG Long Island on a day-to-day basis and during storms.

For major storms, the system is equipped to handle Foreign Mutual Aid Crews, via the Crew Management function, but this is a manual data entry process at this point in time.

8.3.4 Interactive Voice Response (IVR), Web, Text

The OMS is interfaced to the Customer Relations IVR systems and enables customers to report power outages via an IVR. Basic no light calls can be received by the IVR and passed to the OMS, via the interface. Any wire down report callers are transferred to a live CSR to report their problem directly with a representative to ensure all pertinent information is captured.

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The OMS is interfaced to the PSEG Long Island web site where a customer is able to report a power outage, via a web page form, if they have signed up for an online account. Status updates on the outage reported are returned to the customer via e-mail notifications.

The OMS is interfaced to the iFactor iNotifi system and customers that register for this service can report power outages and receive status updates, via text messages on their mobile devices.

8.3.5 Supervisory Control And Data Acquisition (SCADA)

PSEG Long Island has near 100 percent SCADA coverage for distribution feeder breakers. In addition, an extensive network of automated distribution remote supervisory controlled switches on the distribution circuits exists. These SCADA breakers and switches report their status via various wired and wireless communications links from the field, back to the SCADA head end devices. The breaker and switch positions are stored in near real-time to the Process Intelligence (PI) Historian system. OMS is interfaced to the PI Historian system, and any changes in state of the SCADA devices are immediately conveyed to the OMS by way of the SCADA PI Historian interface via the Enterprise Service Bus (ESB).

This interface allows the OMS to become aware of large area outages affecting hundreds to thousands of customers within one minute of the SCADA devices opening up. This allows the OMS to group subsequent outage calls behind these SCADA devices and helps the outage call grouping algorithms of the OMS perform more efficiently.

8.3.6 Outage Historian (OH)

All current and completed job data, from the OMS, is stored in a corporate database referred to as OH. The OMS publishes outage data across the ESB into OH whenever a significant change in status or core information has occurred. These messages are a complete and time stamped snapshot of the information for each outage job. For example, it includes a list of service points (customer accounts) affected, the ETR for the outage, and the status of the job (pending, dispatched, crew en route, crew onsite, and/or restored (energized)).

These messages sent to OH are then available to be retrieved by the OMS reports, iFactor outage map on the PSEG Long Island Storm Center website, IVR systems, and customer representatives that are taking calls from customers.

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8.3.7 iFactor Outage Map

The PSEG Long Island web site utilizes an industry standard outage map on its Storm Center page (see Figure 8.15). This outage map is provided by a third party, iFactor Consulting. The outage data from the OMS that is stored in the OH database is periodically queried to provide fifteen minute updates to PSEG Long Island customers.

The outage map indicates an icon on the map in the general area of the outage. The size and color of the icon indicates the number of customers affected by the outage. Hovering over or clicking on the icon provides the customer with the ETR for the outage as well as crew status (pending, dispatched, en-route, onsite, etc.). A hard hat icon is used to indicate jobs that have crews assigned to them.

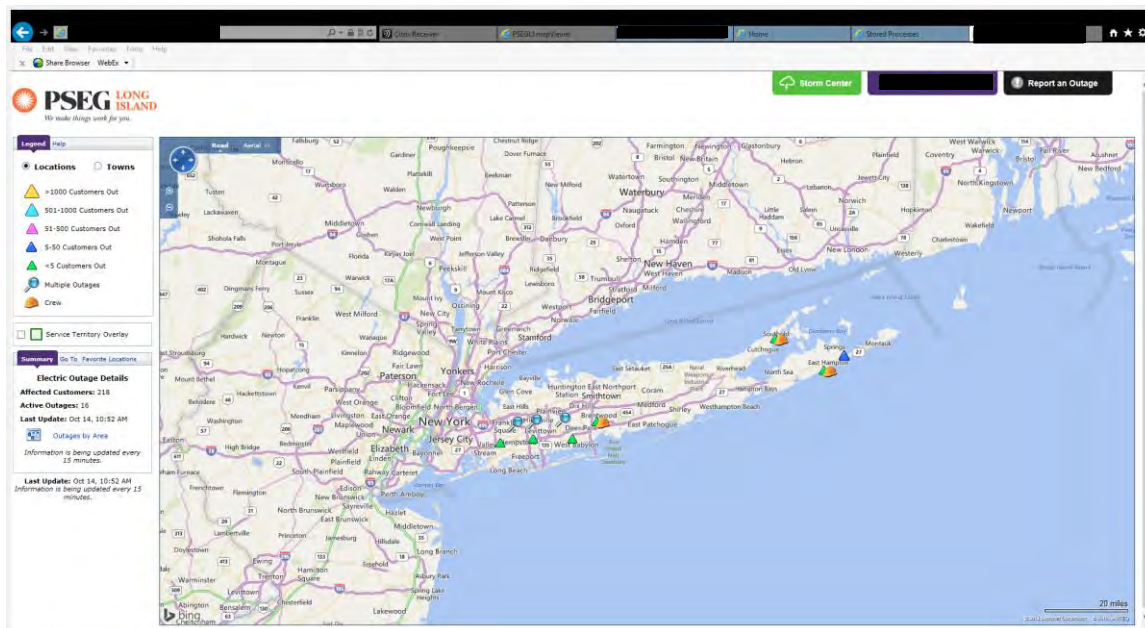


Figure 8.15 – PSEG Long Island Storm Center Outage Map

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The outage map also has tabular summaries of outages by County, Township, and Village (see Figure 8.16). During larger storm events with widespread outages, the outage map can be changed by an administrator to report at the aggregated level for villages, instead of reporting at the individual outage locations. This helps with providing Global, Regional/County, and Local/Municipal ETRs in accordance with ETR protocol.

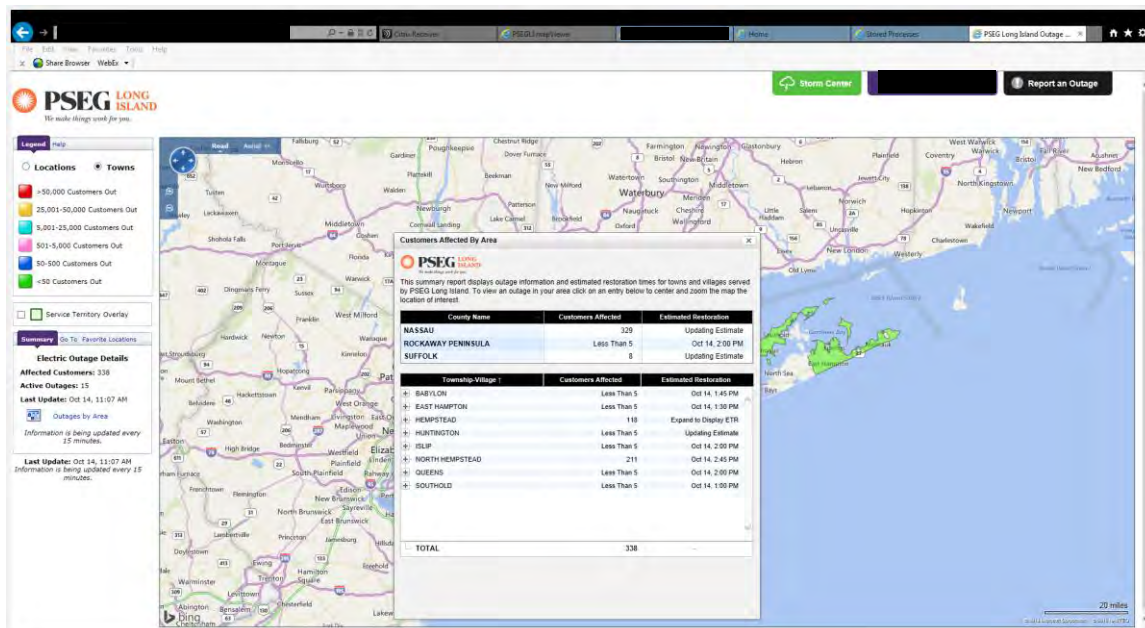


Figure 8.16 – PSEG Long Island Storm Center Outage Map Tabular View

The outage map also has a message board function that can be initiated by an administrator that allows a custom message to be displayed along the top of the outage map. This can be used to display any additional information to the customers viewing the outage map on the website.

In a large-scale storm restoration event, the banner message inserted on the top of the map can be used to provide important messages, links, and ETRs via this web page outage map.

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At the start of an event, such as a hurricane or ice storm, this banner message may initially display the global ETR for a storm of the anticipated magnitude based on historical events. For example, the message may warn that customers should expect to be out for 10 days if a major hurricane is approaching. Once damage assessment is complete after the storm, this global ETR could be refined accordingly for all of the service territory.

As the storm progresses, the table shown within Figure 8.16 would be updated to provide the Regional/County ETR (ETRs for Nassau, Suffolk, and/or Rockaway Peninsula).

As the storm restoration progresses into the second to third day, the local/municipal ETRs would be provided on the Village view drill down of the table shown within Figure 8.16.

9. ESTIMATED TIME OF RESTORATION (ETR) GUIDELINES

9.1 Overview

Providing accurate and timely ETRs is a top priority of PSEG Long Island's overall restoration process. An ETR provides an estimate of when service will be restored to a customer, location, and/or work assignment. ETRs help to provide an approximation of restoration time, based on the conditions seen on site, along with supporting historical data. ETR calculations are ultimately constructed based on average restoration clear times, damage assessments, and manpower availability totals. ETRs assist utility providers when taking preparatory steps during restoration operations, by serving as a predictor of outage lengths, which assist with determining the operational resources and actions required.

Naturally, the magnitude and impact of an event will factor into ETR input times, but establishing a baseline of projections will assist when determining operational goals and timelines. PSEG Long Island also aims to better serve its customers, municipal officials, and emergency support organizations through ETR administration and the communication of such. These projected restoration times are vital to external groups and often formulate the basis for personnel planning and early preparedness efforts, based on the outage and ETR data given.

9.2 ETR Classifications and Inputs

9.2.1 ETR Classifications

ETRs are segregated into three types: Global, Regional, and Local. These multiple classification levels allow PSEG Long Island to provide its customers with more accurate restoration estimates, based on the storm conditions and the corresponding restoration efforts. The classifications are naturally interconnected and follow a top-down input methodology based on anticipated operational actions, results, and damage assessments. The ETR information will ultimately become more precise as additional data and information is obtained, on a local level, and as restoration efforts progress.

- Global ETRs: Information is determined at a system-wide level
- Regional ETRs: Information is determined at a county and/or division level
- Local ETRs: Information is determined at municipal level

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Figure 9.1 provides a high level overview of the ETR process during restoration efforts and includes a summary of targeted efforts and information availability during various stages of restoration.

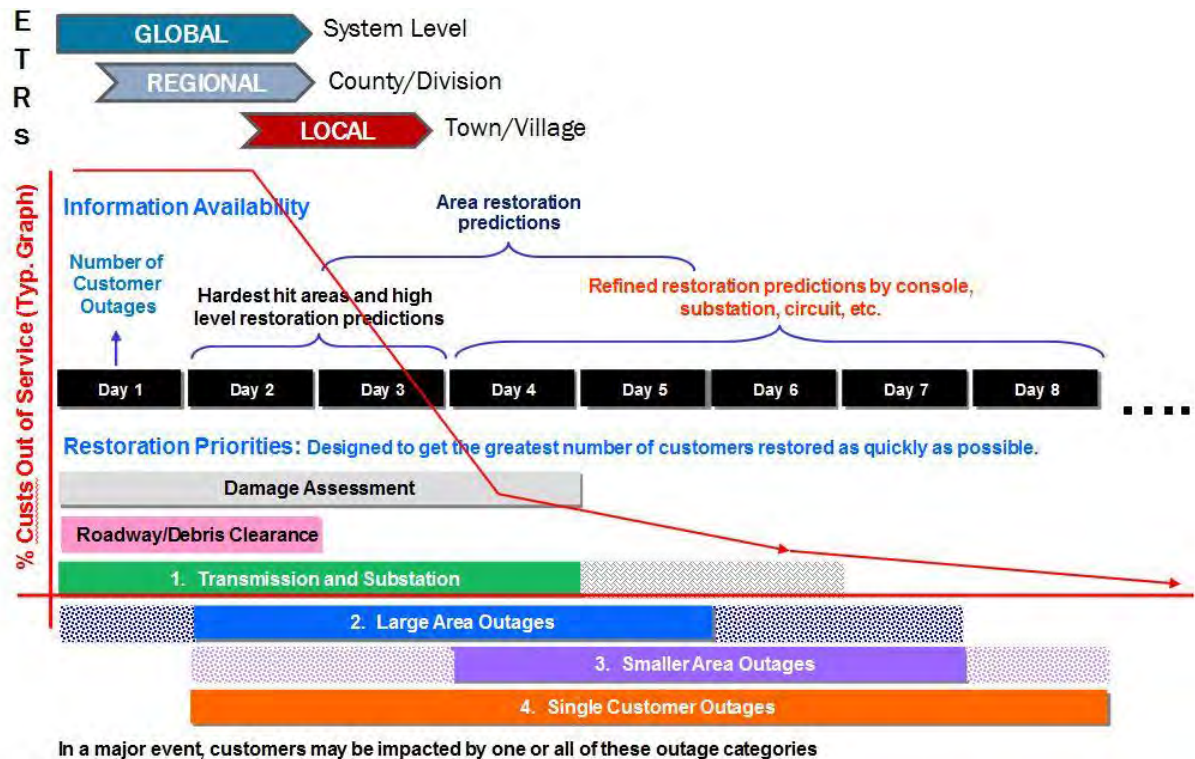


Figure 9.1 – Restoration Priorities, ETRs, and Predictions for Major Events

9.2.2 ETR Inputs

Data used to populate ETRs on outage reports is derived from a variety of sources. Initially, ETR estimates are based on past storm history and operational experience while considering the projected path, severity, and impact of the potential storm. These high level global estimates often provided, prior to or shortly after a storm, help to set customer expectations regarding the predicted outage duration at a system level. In any large-scale outage, three vital pieces of information must be gathered for ETR purposes:

- Number of electric customers out of service
- Amount of damage to the T&D Electric system
- Manpower availability

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Once this information has been collected, restoration plans can be executed more efficiently and ETRs can begin to be computed and disseminated accordingly. PSEG Long Island utilizes multiple forecasting and modeling practices to better determine ETRs on all outages.

While projecting ETRs is ultimately based on the analysis of pending outages and the manpower available for restoration, many other informational sources are taken into consideration when calculating ETRs including:

- Outage Information
 - Damage assessments
 - Circuit lockout totals
 - Substation(s) status
 - Average trouble clear times
 - Number of trouble reports
 - Trouble reporting times (pre, mid, and post storm)
 - Historical data and trends
 - Work conditions
- Storm Data
 - Storm type (hurricane, nor'easter, etc.)
 - Storm category
 - Storm path
 - Associated weather
 - Severity of damage
 - Future weather patterns
- Resources
 - Crewing
 - Manpower availability
 - Average crew and manpower clear times
 - Travel and roadway conditions
 - Resource and asset availability

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9.3 ETR Strategies

Providing accurate ETRs is a key component of the overall restoration process. The ability to provide such an estimate is a deliberate process which begins with a high level system-wide (global) estimate that is progressively refined throughout the restoration process.

At minimum, and consistent with NYS DPS ETR protocols, PSEG Long Island will utilize the most up-to-date information available to provide accurate global, regional, and local ETRs, with the goal of aligning them with the NYS DPS ETR protocols and ETR accuracy expectations.

Such ETRs will be developed on a timely basis and communicated to affected customers and stakeholders, utilizing multiple channels and communications mediums. Outages occur under a variety of circumstances, such as normal day, minor storm, and major storm. Each condition requires a different methodology for creating customer messages and ETRs. In some cases, it may not be possible to provide an automated estimate until a good cross-section of damage conditions are assessed and analyzed by field survey teams. Depending on the scale and scope of the storm, the surveying process can take several hours or multiple days.

Customer messaging is an important function pertaining to ETRs. A typical customer message is comprised of three parts: size of the area affected by the outage, dispatch status, and an ETR, if one exists. Customer messages are communicated via Nuance IVR, Twenty-First Century IVR (via call back), CSR, text messaging, e-mail, PSEG Long Island's Storm Central, various paths of social media, media outlets, and press briefings. In addition, manual/automated outbound messaging may also be utilized.

PSEG Long Island's Storm Central web site is another major provider of ETR related information to customers. The website presents outage data in the form of a map of the service territory with icons displaying the number of outage jobs, customer counts out of service, and the ETR, if available.

9.4 ETR Conditional Strategies

PSEG Long Island employs a variety of strategies pertaining to ETR administration, depending on the overall severity and impact of the storm. Conditional ETR strategies for PSEG Long Island align with our Emergency Classifications as described in Section 6 of this Emergency Restoration Plan. Each conditional strategy utilizes different methods of ETR management with the overall goal of more accurate ETRs and a better informed customer base.

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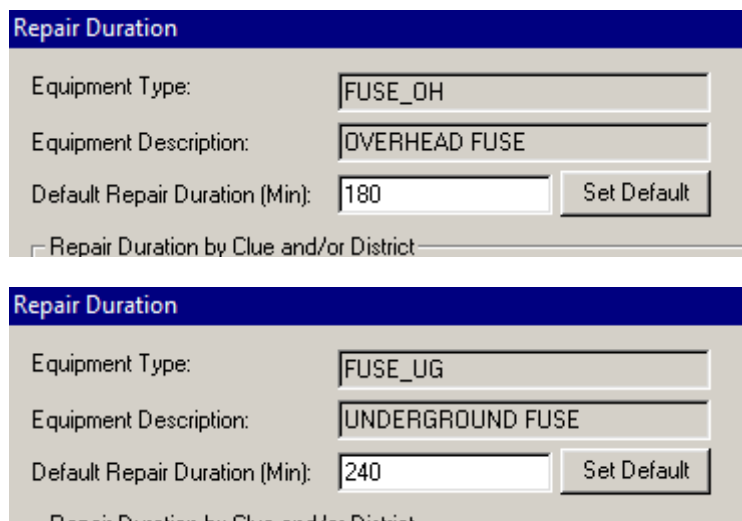
9.4.1 Condition III “White” ETR Strategies

These strategies align with the everyday practices and procedures employed by PSEG Long Island on a normal condition “White” day. These protocols include:

1) Outage Management System (OMS)

ETRs are populated when the outage report is entered based on average repair durations by equipment type and historical data.

As Figure 9.2 shows, repair durations and ETRs will differ between equipment types, such as OH/UG fuses (shown) and transformers (not shown).



The figure displays two screenshots of the 'Repair Duration' form in the OMS. The top screenshot is for 'FUSE_OH' (OVERHEAD FUSE) with a default repair duration of 180 minutes. The bottom screenshot is for 'FUSE_UG' (UNDERGROUND FUSE) with a default repair duration of 240 minutes. Both forms include a 'Set Default' button and a checkbox for 'Repair Duration by Clue and/or District'.

Figure 9.2 – OMS Sample Repair Durations by Equipment Type for ETR Calculations

2) Dispatch Representatives

ETRs are entered and modified by dispatch personnel for non-mobile users. As Figure 9.3 shows, dispatch representatives can manually update ETRs when necessary.

RECEIVED 10/27/2014 11:10 Job Order

Job Number: [REDACTED] OMS Location ID: [REDACTED] Drive/Console: CN-RED Created Date: 10/27/2014 Created Time: 11:06:22

Customer Name: [REDACTED] FD/PO Call: [REDACTED] ETA / Appt. Date: [REDACTED] ETR / Due Date: 10/27/2014 13:00:00

Address: [REDACTED] Village: [REDACTED] Township: [REDACTED] GIS Village: [REDACTED]

Priority: ASU-Lockout Job Type: 200 Job Type - Description: SCADA OPEN Lead Crew: [REDACTED] Referral Group: MA1

Time Zone (GMT-5:00) Eastern Time (US) Approval: [REDACTED] Restored Date: [REDACTED]

N/A | Date/Time | Job Detail | Completion Info | Remarks

Outage Category: [REDACTED] Failure Code: [REDACTED] Cause Code: [REDACTED]

Work Order #: [REDACTED] Customer Comments: QUICK INCIDENT ON RED SRSNS / 13 KV / SR Bellevue SUB

Customer: [REDACTED] Equipment: [REDACTED]

Objects: [REDACTED] Haz Mat: [REDACTED] C & D Log: [REDACTED] Person Log: [REDACTED] Equipment Log: [REDACTED]

Figure 9.3 – OMS PragmaCAD Job Order Detail Screen

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3) On-Site Technician

ETRs can be refined and updated by field personnel upon arrival on the jobsite. On-site conditions and the work to be performed may alter the ETR and can be entered via mobile laptops, as seen in Figure 9.4.

The screenshot displays a mobile application interface for job order details. At the top, it shows 'Job Number' and 'DISPATCHED 09/23/2014 10:43:05'. Below this, there are fields for 'Job Number', 'OMS Location ID', 'Div/Console', 'Created Date', and 'Created Time'. A red box highlights the 'ETR/Due Date' field, which is set to '09/23/2014' and '11:45:00'. Another red box highlights the 'Outage Category', 'Failure Code', and 'Cause Code' fields. The interface also includes sections for 'Address', 'Job Type - Description', 'Job Type', 'Priority', 'Lead Crew', 'Referral Group', 'N/A - Job Detail', 'For Office Use Only', 'Remarks', 'Customer', 'Equipment', and 'X-STREET/LANDMARK'. At the bottom, there are navigation buttons: 'Previous', 'Next', 'F/Link', 'Field Rpt', 'File Attac...', 'Save', 'EARTH20...', 'ASSIGN...', and 'Suspend'.

Figure 9.4 – Mobile User Job Order Detail for Updating ETR and Outage Cause (if known)

9.4.2 Condition II “Blue” ETR Strategies

These strategies employ the same tactics as Condition III “White” but include additional actions due to the higher level of outages seen in Condition II “Blue” scenarios.

1) Damage Assessments

During a Condition II “Blue” outage, damage assessments will begin immediately, once conditions are safe. This on-site information will ultimately give our Operations management and Dispatch personnel a better understanding of the conditions on the ground and will set up the basis for ETR modifications, based on outage and manpower levels. Damage assessments play a key role in projected restoration times and the issuance of more accurate ETRs.

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2) Outage Management System (OMS): Weather Multiplier

OMS supports the concept of a Weather Multiplier within its dispatching and ETR controls. The Weather Multiplier function allows PSEG Long Island to manipulate the original ETR calculations based on the weather experienced and crew availability. For example, lightning, rain, and winds will slow down restoration efforts due to the safety concerns of our field personnel. In turn, a Weather Multiplier may be utilized on all jobs while the weather conditions persist, as seen in Figure 9.5. Ultimately, the Weather Multiplier will extend all specified computer-generated ETRs based on the anticipated conditions and can be further adjusted, up or down, if conditions dictate. The Weather Multiplier can be applied at the Global or Regional level, which assists PSEG Long Island issuing more accurate ETRs.

Printer/Weather Modification

Division Information

Storm Id: 0 Division: 1 Queens - Nassau

Test Zone: 1

Division Settings

ETR Multiplier: 43 2.5X LTNING, RAIN & WIND Printer:

Automatic Notification for ETR changes

ETR Notification Enabled ☐ ETR Notification Availability ☐

Preponed Notification Threshold (Min): 0

Postponed Notification Threshold (Min): 0

Save Cancel

Figure 9.5 – OMS Weather Multiplier for 2.5X Factor for Rain, Wind, Lightning

3) Console and Division Management Interaction

Operations management personnel will make recommendations based on the conditions seen within their consoles and/or divisions. Management will work with Dispatch personnel to adjust projected ETR values based on further damage assessments, the anticipated work plans, and manpower levels available.

9.4.3 Condition I “Red” ETR Strategies

These strategies employ the same tactics as Condition II “Blue” but include additional actions due to the severe level of outages seen in Condition I “Red” scenarios.

1) Crewing and Manpower

Availability of crews and the timing of their arrival play a significant role in outage management and corresponding ETRs. Adding additional resources dramatically assists with reducing the enlarged workload and form the basis for more accurate, consistent, and timely ETRs.

2) Damage Assessments

Damage assessments play a pivotal role in ETR accuracy and associated company work plans. Damage assessments will increase exponentially as conditions worsen during outage scenarios. A top-down approach will ultimately ensue and will form the basis for ETR administration going forward.

Survey teams are utilized and deployed during Condition I “Red” outages. These teams will assess damage, territory-wide, with the goal of expediting the anticipated work plans and ETR administration in the future.

3) ETR Coordinator

ETR coordinators play a vital role during large-scale restoration efforts. These coordinators act as intermediaries between the Division managers, Console Information Coordinators (CIC) and our Substation personnel. The ETR coordinator will assist with the development of more refined ETR calculations based on the information provided to them.

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4) OMS - ETR Override (Storm ETR)

OMS allows for our Dispatch Management personnel to override the ETRs generated by the system. Conditions may be so severe that ETR estimates may need to be revised until a better understanding of the damage has been determined. These overrides can be done from a Global (System) or Division level which will assist with more accurate ETRs based on the segregation of hardest hit areas, as seen in Figure 9.6.

Status	Description	Code
<input checked="" type="checkbox"/>	1 Queens -	1
<input checked="" type="checkbox"/>	2 Central -	2
<input checked="" type="checkbox"/>	3 Western -	3
<input checked="" type="checkbox"/>	4 Eastern -	4

Storm ETR Date/Time can be provided for Entire System or any combination of Divisions.

This Storm ETR overrides all previously generated ETRs going back to Storm Opening Date/Time...

Figure 9.6 – OMS Storm ETR Dialog

5) Storm Website/iFactor (Storm Center – Outage Map)

Due to the size of the storm and the corresponding outages, automatic ETR updates may be disabled during the initial days of a Condition I “Red” outage. ETR and outage information is then entered manually based on anticipated work plans and restoration goals. ETR updates are then inputted for larger geographic areas, such as consoles or municipalities, based on planned restoration results. This alignment between ETRs and work plans allows PSEG Long Island to produce more accurate ETRs, as we complete our restoration goals from locality to locality.

Figures 9.7 through 9.9 show examples of modifications made to the iFactor Outage Map due to a large-scale outage.

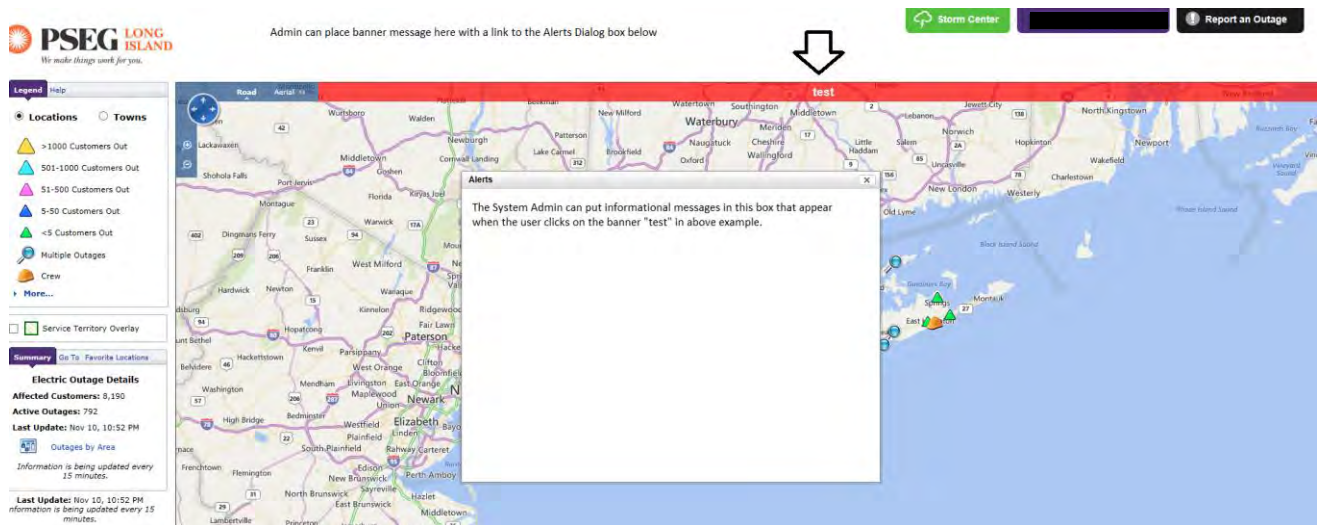


Figure 9.7 – iFactor Map with System-wide Alerts

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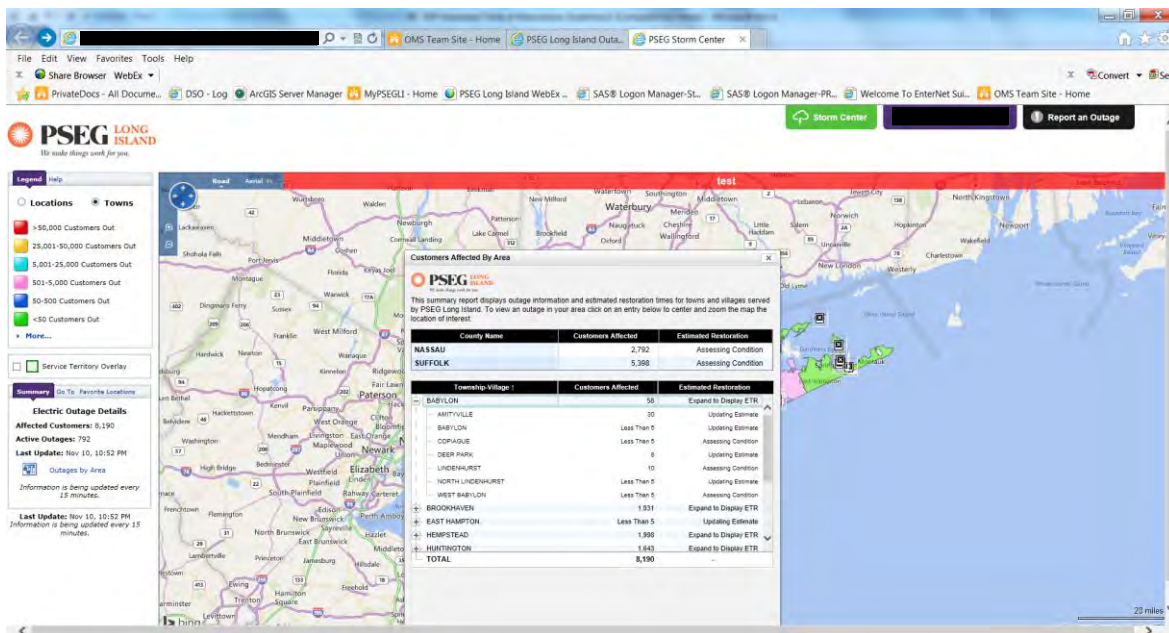


Figure 9.8 – iFactor Map with Customer Outages

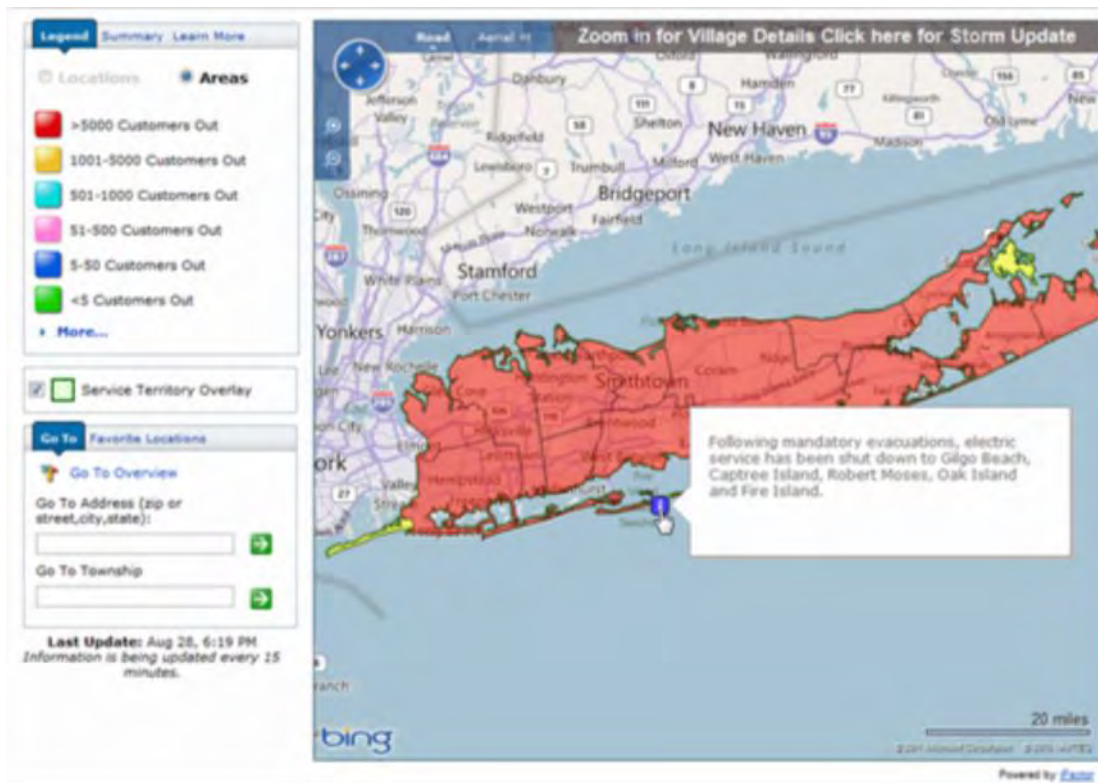


Figure 9.9 – iFactor Map with System-wide Notifications

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6) Load and Lock Out Reporting

Load and Lock Out reports will also be reviewed and analyzed by Operations Management personnel during large-scale outages. These reports provide vital information on current work load conditions and serve as the basis for future work plans and project initiatives. Senior management may make ETR adjustments based on the overall damage conditions seen and anticipated work plans. ETR adjustments will be refined as conditions and information develops. Load and Lock Out reports assist with operational efficiency and, ultimately, the corresponding ETRs.

9.5 New York State (NYS) Department of Public Service (DPS) ETR Guidelines

PSEG Long Island will work to continuously refine and communicate ETRs, as additional information becomes available, throughout the restoration process. At a minimum, ETRs will be provided in accordance to Department of Public Service (DPS) Case 13-E-0140, Estimated Time of Restoration Guidelines (Appendix H).

DPS protocols set expectations of when information will be available and/or provided in response to storms or storm-like electric emergencies when either criteria is met:

- More than 5,000 customers are interrupted for more than thirty minutes within a division
- More than 20,000 customers are interrupted for more than thirty minutes companywide
- ETRs provided should be applicable to at least 90% of the affected customers in the reported level (Global, Regional and Local)

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Figure 9.10 and 9.11 clarify the necessary actions to be taken by PSEG Long Island within the outage period for the specific event.

ACTIONS REQUIRED BY UTILITY FOR OUTAGE LASTING ≤ 48 HOURS	
<i>Within the first 6 hours of the restoration period</i>	
<ul style="list-style-type: none"> • Notify DPS staff of expectation that the event will last less than 48 hours. The notification to DPS staff will state what the Company has defined as the start of the restoration period. For events expected to last less than 24 hours, notification may be via Electric Information Reporting System (EIRS). • Provide available information to the public via customer representatives, IVR systems, and web sites. • In certain situations (e.g., nighttime event), only limited information may be available within the initial six hour window. In these situations, the expectation is that the companies will inform staff of the delay in determining the initial outage duration within six hours and the notification will occur in an expedited manner as information becomes known. Following a nighttime storm, the determination of whether the restoration period will be 48 hours (or less) will be communicated as soon as possible, but no later than noon the following day. Any delay in establishing the initial storm expectations will <u>not</u> affect the time requirements below. 	
<i>Within the first 12 hours of the restoration period</i>	
<ul style="list-style-type: none"> • Provide DPS staff with a global ETR and any available regional ETRs. • Prepare a statement for the press that includes known ETRs in time for the next upcoming news cycle and communicate with affected municipal and governmental officials (may or may not be by way of a municipal conference call). 	
<i>Within the first 18 hours of the restoration period</i>	
<ul style="list-style-type: none"> • Establish ETRs for each locality affected and make them available to the public via customer representatives, IVR systems, and web sites. 	
<i>Within the first 24 hours of the restoration period</i>	
<ul style="list-style-type: none"> • Consider issuing a press release in time for the upcoming news cycle based on conditions. 	
<i>Reporting requirements during the event</i>	
<ul style="list-style-type: none"> • Provide restoration information updates four times daily to DPS staff (7AM, 11AM, 3PM, and 7PM) if notified by staff. Updates should continue until otherwise directed by staff. • Notify DPS staff when all storm related interruptions have been restored. 	

Figure 9.10 – DPS Guidelines for an Event Expected to Last 48 Hours or Less*

* Although the scorecard refers to events where outages last more than three days, utilities are required to comply with the ETR protocols for events lasting less than 48 hours.

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ACTIONS REQUIRED BY UTILITY FOR OUTAGE LASTING > 48 HOURS	
<i>Within the first 6 hours of the restoration period</i>	
<ul style="list-style-type: none"> The utility shall indicate that it will be a multi-day event (i.e., greater than 48 hours). Notification shall be made to DPS staff and will state what the company has defined as the start of the restoration period. Provide a public statement indicating the likelihood of extended outages and make this information available via customer representatives, IVR systems, and web sites. In certain situations (e.g., nighttime event), only limited information may be available within the initial six hour window. In these situations, the expectation is that the companies will inform DPS staff of the delay in determining the initial outage duration within six hours and the notification will occur in an expedited manner as information becomes known. Following a nighttime storm, the determination of whether the restoration period will be greater than 48 hours will be communicated as soon as possible, but no later than noon the following day. Any delay in establishing the initial storm expectations will <u>not</u> affect the time requirements below. 	
<i>Within the first 12 hours of the restoration period</i>	
<ul style="list-style-type: none"> Prepare a press release for issuance in time for the next upcoming news cycle and communicate with affected municipal and governmental officials (may or may not be by way of a municipal conference call). 	
<i>Within the first 18 hours of the restoration period</i>	
<ul style="list-style-type: none"> Schedule municipal conference call(s), unless an alternative municipal contact method is more appropriate. The first scheduled municipal conference call does not necessarily have to occur within the first 18 hours, but shall take place within the first 36 hours. 	
<i>Within the first 24 hours of the restoration period</i>	
<ul style="list-style-type: none"> Notify DPS staff of what areas sustained the most damage to the electric system and ETRs, where known, on a general geographic basis. Issue a press release(s) in time for upcoming news cycles with the information described in previous bullet. 	

Figure 9.11 – DPS Guidelines for an Event Expected to Last More Than 48 Hours

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ACTIONS REQUIRED BY UTILITY FOR OUTAGE LASTING > 48 HOURS	
<i>Within the first 36 hours of the restoration period</i>	
<ul style="list-style-type: none"> • For storms with expected restoration periods five days or less, provide DPS staff a global ETR. • Establish regional/county ETRs for areas expected to be restored in five days, even if the restoration period for the total company is expected to be more than five days. • Identify any heavily damaged areas where large numbers of customers are expected to remain without service for more than five days. • Completion of the first scheduled municipal conference call. • Make ETR information available to the public via customer representatives, IVR systems, and web sites. 	
<i>Within the first 48 hours of the restoration period</i>	
<ul style="list-style-type: none"> • For storms with expected restoration periods five days or less, provide DPS staff with ETRs by municipality. • Provide DPS staff with a global ETR (as stated above, when outages are expected to less than five days, this is required within 36 hours). • Provide regional/county ETRs for heavily damaged areas where large numbers of customers are expected to remain without service for five or more days. • Make ETR information available to the public via customer representatives, IVR systems, and web sites. 	
<i>Beyond the first 48 hours of the restoration period</i>	
<ul style="list-style-type: none"> • For storms with expected restoration periods more than five days, provide estimated restoration times for each locality affected and make the information available via customer representatives, IVR systems, and web sites. 	
<i>Reporting requirements during the event</i>	
<ul style="list-style-type: none"> • Provide restoration information updates four times daily to DPS staff (7AM, 11AM, 3PM, and 7PM), which shall continue until otherwise directed by staff. • Notify DPS staff when all storm related interruptions have been restored. 	

Figure 9.11 (continued) – DPS Guidelines for an Event Expected to Last More Than 48 Hours

10. OPERATIONS PROTOCOLS

This section of the Emergency Restoration Plan details comprehensive tactics for restoration operations that are implemented by PSEG Long Island, in response to a severe storm or system-wide emergency impacting Long Island and the Rockaways. These tactics may also be implemented during storms of intermediate intensity, such as a severe thunderstorm or strong windstorm. The responsibilities and supporting activities of two specific branches of the Operations Section, the Survey and Operations Control Branch and the Crew Control Branch, each of which significantly contribute to the overall restoration effort, are also addressed in this section.

10.1 Overall Approach and General Strategies

During emergencies, the Operations Section is responsible for safely and efficiently assessing the damage to the T&D Electric infrastructure and restoring electric service. To accomplish this mission, the Operations Section has been structured into two Branches with their supporting staff. The Survey and Operations Control Branch performs damage assessment and coordinates restoration activities. The Crew Control Branch mobilizes and manages the repair crews, including PSEG Long Island, Contractor and Foreign Utility Crews, and directs the overall repairs. The activities of these branches occur at the System Headquarters, Division Headquarters, and Substation Areas depending on the level of decentralization for the particular event.

In any storm situation, three vital pieces of information must be gathered to enable an effective restoration plan:

- Number of electric customers out of service
- Amount of damage to the T&D Electric System
- Manpower available (along with timing of availability) to repair damage

Once this information has been collected, efficient restoration plans can be implemented.

10.1.1 Restoration Protocols

After a major event, PSEG Long Island utilizes a process to repair damage and restore power that is recognized as an industry standard. Restoration protocols are designed to safely restore power to the largest number of customers, in the shortest amount of time. The safety of the public and the crews making repairs and restoring power are PSEG Long Island's first priority. This can mean that sometimes a storm must pass

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before damage assessment personnel and repair crews are able to begin to assess and repair damage. Field damage assessments and repairs may commence when:

- 1) Field personnel are able to be deployed without unacceptable safety risks from continued severe weather conditions (where adverse weather conditions are applicable)
- 2) The potential additional damage to the electric system from the storm is low in proportion to the expected level of damage already sustained

The order in which repairs are made is aligned with the path that electricity follows from the power plants to the customer. PSEG Long Island crews begin with T&D circuits that affect large numbers of customers. Repair crews then restore primary branch-line distribution lines that can affect multiple customers, progressing down to secondary distribution lines that affect fewer customers. Finally, service lines to individual customer businesses and residences are restored.

Jobs with more than one type of damage at a location are prioritized and arranged by the highest priority work at the location. In such cases, all of this work is considered ONE JOB, and is assigned as such. The objective is to proceed so that each hour of work will return the maximum number of customers to service as possible.

Concurrently, PSEG Long Island attempts to restore service to Critical Facilities, such as hospitals, police departments, firehouses, and other public health and safety facilities on a priority basis, as warranted. The designation of customers as Critical Facilities, LSE customers, or SN customers does not however guarantee or provide for priority restoration after a major storm or event.

As priority restoration cannot be guaranteed, PSEG Long Island implements specific outreach programs to Critical Facilities, LSE customers, and other SN customers to alert them to properly prepare for potential prolonged power outages and to provide information and updates on PSEG Long Island's storm preparation and restoration activities. These programs provide an expanded level of communication to these customers that includes pre-event notifications (for forecasted events) and daily outreach to those that experience outages during PSEG Long Island's response and restoration to assist them with their continuity planning. Please see Section 11 for additional details.

PSEG Long Island crews are initially assigned to high priority transmission work while Foreign Crews are just arriving or still in transit. During such time periods, divisions and substations that are staffed continue to perform damage assessment, and once Foreign Crews become available, they are allocated to divisions or substations.

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Overall, at both the division and substation level during emergencies, all work for restoring electrical service on the T&D system is assigned and repairs are performed and service restored, in accordance with the following set of general priorities:

Eliminate Unsafe Conditions

The elimination of hazards to the public takes precedence during emergencies. Available personnel are divided into the minimum size crews, as required to cut and clear or repair the primary and secondary hazards. Special crews consisting of non-line personnel may be established to respond to municipal reports of downed wires, as required and as possible.

Additionally, at the initial stages of the restoration process, PSEG Long Island crews may be directly assigned to municipalities to work with their Department of Public Works (DPW) crews to “make safe” downed wires so that trees and other debris may be removed from major roadways. Wires are cleared so that service can be restored up to the break. Response to emergency calls is prioritized based on the severity of risk for areas such as schools, playgrounds, and high pedestrian areas, providing response as soon as possible. Please refer to Section 10.1.3 of the Emergency Restoration Plan for features on this activity.

Transmission Circuits

Transmission line restoration is prioritized by the Transmission Operations Manager. Damage assessment and repairs of transmission lines are directed by the designated Division Supervisor. Support personnel are assigned so as to permit restoration of transmission service to substations by the time load can be served from the substation. Bulk power circuits, not directly affecting substations, are assigned priority depending on the importance of the circuit and the effect of its loss on the bulk power system. The Chief Transmission System Operator, in coordination with the applicable Division Control Center, determines the need for bulk power circuits.

Substations

Substation repairs are directed by the Substation Maintenance Field Manager who consults with the Chief Transmission System Operator and the Division Control Center to determine the order of restoration.

Primary Distribution Circuits and Branch Lines

Main portions of 3-Phase primary distribution circuits that are “locked-out” are restored either by cutting faulted sections clear or by opening sectionalizing devices. Damages are then repaired, restoring all 3-Phase primary distribution circuits. Repair crews then begin restoration of all primary distribution branch lines affecting multiple customers. Repair crews are directed to complete all the work on a primary distribution branch line, even if this includes secondary distribution lines and services. It is the responsibility of the repair crew to perform a final assessment of damage in the area and repair any additional damage found.

Secondary Distribution Lines and Services

Areas where there is only damage to secondary distribution lines and services are restored simultaneously. Again, repair crews are directed to complete all the work on one visit to the area. It is the responsibility of the repair crew to perform a final assessment of damage in the area and repair any additional damage found. In addition, if the customer's equipment requires repair, the repair crew will notify the customer and restore the service wires, and if possible, make temporary repairs, provided that the customer has authorized such, via a temporary service agreement.

Critical Facilities

Where possible, priority for electric service restoration is given to those facilities from which essential services, functions for the continuation of public health and safety, and disaster recovery are performed or provided, such as hospitals, water-pumping stations, sewage treatment plants, police and fire stations, etc., as practicable.

LSE Customers

Efforts are taken to restore service to LSE customers as quickly as conditions warrant. Again, priority restoration is not guaranteed or provided for in such cases.

Permanent Repairs

After all electric service has been restored, permanent repairs are made to any remaining temporary field conditions. During restoration of service, if practical, permanent repairs are made to avoid hazardous conditions and eliminate duplication of effort. To simplify the completion of permanent repairs, a log of temporary repairs is maintained within the OMS during the restoration process at these locations.

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10.1.2 Damage Assessment/Survey Protocols

A key component of the Emergency Restoration Plan is damage assessment. This capability ranges from mobilization of select individuals performing damage survey for minor events to the mobilization and staffing of Divisional Operation Centers and selected substations during more widespread events. Damage assessments can be a very detailed and, depending on the severity of the damage, lengthy process. Therefore, alternate methods of calculating preliminary impacts are employed at the outset of major events.

When a major storm initially strikes, the first estimate of the number of customers affected is made from the Long Island Control Area (LICA) Report, which is used to compare the current level of electric demand on the system with the historical demand, at a similar time of year, during non-storm conditions. No highly reliable prediction of restoration duration can be made at this point, due to the lack of damage information.

Prior to the initial damage assessment being conducted, the “Lockout Information Center” is mobilized. This group assists the Transmission System Operations District Operators with the dissemination of T&D lockout data to the four Distribution System Operations Divisions. This group produces a Lockout Report from information obtained via SCADA, along with preliminary reports from field personnel. This is the first quantitative indicator of the amount of actual damage to the system.

Employing charts that provide predictions based on lockout counts of the number of customers out-of-service and the amount of damage, the first estimates of the duration of the restoration effort can be made as soon as the number of crews committed can be determined or at least estimated. Two matrices have been developed, based on historical data. The first postulates the estimated number of customers out-of-service based on the number of lockouts. The second provides an estimated forecast of the number of primary and secondary damage locations based on the same data. Then, by means of an algorithm relating the number of anticipated crews to the number of estimated primary and secondary damage locations, an initial system level or global restoration duration, in days, can be approximated.

For those severe emergencies when field damage assessments are required, the 3-Phase mainline of locked out distribution circuits that are most heavily impacted (based on SCADA readings and/or OMS predictions, as well as locked out circuits serving critical infrastructure) are patrolled. This is done in order to obtain damage information, as soon as possible, for the initial repair crews to generate a preliminary prediction of global restoration duration. A prerequisite for this action is a completed Lockout Report.

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The Operations Section Chief will determine if field damage assessment is warranted, based on the number/severity of incidents reported in OMS and the number of operating divisions affected. In response to storm devastation, the Survey and Operations Control Branch is tasked with performing damage assessment from the four operating divisions (*Divisional Survey*) and from designated substations (*Substation Survey*). These Damage assessment teams are mobilized and deployed, and record and report their findings in a manner that allows for the development of work packages and ETRs.

The methodology that is utilized for an individual event is dependent on the amount and concentration of damage, and both approaches may be implemented simultaneously within the service territory, if conditions warrant. A comparison of the two different approaches to damage assessment is displayed in Figure 10.1.

	OPERATING LOCATION	PERSONNEL	AREA OF RESPONSIBILITY
DIVISIONAL SURVEY	Centralized Division Survey Console	PSEG Long Island Employees Contractor and Mutual Assist	Areas not in SDA or SLC
SUBSTATION SURVEY	Decentralized Substation Area	Contractor and Mutual Assist	Substations in SDA or SLC

Figure 10.1 – Damage Assessment Methodology Comparison

As part of the Emergency Restoration Plan, Divisional Survey personnel are managed through a centralized Survey Console, while Substation Survey personnel are managed by leadership at a decentralized substation. Divisional Survey personnel are pre-identified and trained to conduct wide spread damage assessments. Staffing plans are developed to address anticipated needs, through the execution of pre-existing contracts and mutual assistance requests.

The survey (damage assessment) involves “two-person” teams physically inspecting, either by car or on foot, all reported overhead primary and secondary damage locations associated with each locked out circuit. This ensures that all damage locations are physically verified, as opposed to relying solely on customer-generated damage reports. After assessing the damage, Survey personnel identify the material and equipment requirements necessary to effect repairs.

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Damage information is collected and then entered into the OMS. For additional information on specific Damage Assessment/Survey protocols followed by PSEG Long Island during restoration activations at the Division and Substation level, see Sections 10.3.3 and 10.4.3 of the Emergency Restoration Plan.

Within 24 hours, PSEG Long Island will target to survey:

- 1) 75% of all locked out transmission circuits causing a Loss of Supply
- 2) 40% of the 3-Phase mainline and unfused branch line of all locked out distribution circuits

These broad scale preliminary assessments of the nature and extent of system damage are based on rapid surveys of damaged areas (mainline circuits considered to be heavily impacted based on SCADA readings and/or OMS predictions, as well as circuits serving critical infrastructure known to be without commercial power). From these preliminary assessments, an initial damage assessment can be made based on the total number of damage locations, and augmented with input from other data sources (i.e., system load, lock-out algorithm, etc.). This initial assessment is implemented to support initial global ETRs.

Within 48 hours, PSEG Long Island will target to survey:

- 1) 100% of all locked out transmission circuits causing a Loss of Supply
- 2) 75% of all locked out transmission circuits not causing a Loss of Supply
- 3) 90% of the 3-Phase mainline and unfused branch line of all locked out distribution circuits
- 4) 30% of the fused branch line of all distribution circuits

These more detailed assessments of system damage are based on systematic field surveys. From these more detailed assessments, a more comprehensive damage report can be made on the total number of damage locations surveyed. This comprehensive assessment is implemented to further support decision making in resource acquisition and deployment.

Once the Divisional and Substation surveys are essentially complete, more accurate damage reports and refined restoration predictions can be made. As the restoration process continues, and both field survey data and crew availability is known, ETR estimates will continue to be refined, starting from the system level and progressing down to a regional, local, and ultimately, individual job level restoration estimate.

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10.1.3 Wire Down Protocols

During a large-scale storm event, the safety of the public is a primary concern of PSEG Long Island. The elimination of hazards to the public takes precedence during emergencies that include plans to promptly address downed wires within 36 hours of notification of the location of such downed wires from a municipal emergency official. Response to down wires involves the dispatch of trained and qualified employees or contractors to investigate reports of downed wires, fix, make safe, and, if needed, arrange for standby personnel to protect the public.

Non-outage emergency calls reports are received from customers, police/fire dispatchers, 911 center representatives, or field personnel. Incidents are created within the OMS system with one of the following conditions marked:

- WIRES DOWN - POLE-TO-POLE or WIRES DOWN - POLE-TO-BUILDING
- WIRES DOWN AND BURNING
- SPARKING WIRES

Qualified individuals are dispatched to reported wire down locations to determine whether the incident involves PSEG Long Island equipment. If the crew is capable of making a permanent or temporary repair to a down conductor that may be energized, they will clear the hazard. If the crew is not qualified to perform the corrective action, they will contact their respective dispatcher who may assign either a wire guard to replace them and “standby” the hazard until made safe or a qualified crew to make safe or clear the hazard.

Should prioritization delay a qualified crew from responding, the crew at the location of the down conductor will safeguard the public from encroaching upon the hazard by either coning off the immediate area or applying caution tape and, if necessary, remaining on-site and standing by the incident to protect the public. At no time should downed/low-hanging conductors be considered de-energized (only correctly installed grounds allow for downed/low-hanging conductors to be considered de-energized). Therefore, at all times, Survey Teams and Wire Watchers shall continue to maintain safe approach distances, and at no time, shall any conductors be moved.

The objectives of PSEG Long Island’s Wire Down Protocols include heightened tracking of wire down incidents, accurate reporting of the response time to wire down locations, and full documentation of the actions taken.

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Response to downed wires is under the direction of both the Survey and Operations Control Branch Director, for performing the initial investigation, and the Crew Control Branch Director, for clearing the hazard. Dispatchers within the Survey and Operations Control and Crew Control Branches will prioritize and sort reports for assignment. Dispatchers will determine the appropriate resources to be assigned to either evaluate and guard downed wires or make the incident safe. When assigning/dispatching and responding/assessing wire down reports, the NYS DPS Wire Down Priority and Severity levels are utilized as a guideline. Reports of downed wires with the highest risk to public safety, based on comments, are assigned first.

In addition to performing damage assessment, Divisional and Substation Survey teams also respond to non-outage emergency jobs during restoration activations at the division and substation level. These calls include wire downs, burning/sparking wire, pole damage, and miscellaneous emergency calls. These Survey teams are frequently able to close out trouble calls that do not involve PSEG Long Island facilities (i.e., telephone, cable, etc.), or arrange for Wire Watchers to stand by lower priority downed wires, thereby enabling them to continue performing damage assessment and for Repair Crews to focus on higher priority work.

Responders are dispatched from the division or substation, within the OMS, to assess and/or safeguard downed wire incidents in priority order. Upon arrival at the location of a wire down report and initial assessment of the situation, the severity of the situation will be determined and the responder will either, if necessary, make the situation safe so that wire is not a risk to general public in the area or standby the location until relieved or until the situation is made safe by a qualified crew.

Notification of a wire down by a 911 agency that involves a hazard, such as a fire or situation where people are trapped by a downed wire, will typically result in the dispatch of an Overhead Line Crew to the incident. Remaining wire down reports are then assigned, according to the wire down PRIORITY, as referenced below (highest to lowest):

Priority:

Priority 1 – (HIGHEST) Wire down reports where it is indicated that the wire is burning, arcing/sparking, or an immediate hazard

Priority 2 – Relief of fire departments, police departments, or other municipal agencies that are standing-by downed wires

Priority 3* – Report of electric wire down from an emergency organization:

- Reported to be affecting traffic flow on a major public highway
- Reported to be blocking/near a pedestrian walkway or driveway
- Reported to be primary conductor
- Reported to be secondary conductor

Priority 4 – Report of electric wire down from other sources:

- Primary conductor is indicated
- Secondary conductor is indicated

Priority 5 – (LOWEST) Report of wire down where type of wire is not indicated and it appears the wire is not likely an electric conductor

* Priority 3 includes reports from members of the 911 call center, police, fire, Office of Emergency Management (OEM) (including EOC personnel), and municipal emergency managers.

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Responders that are specifically dispatched to safeguard downed wire situations will drive to the location of the wire down report. After assessing the situation, they will determine the SEVERITY of the situation. SEVERITY is determined based on the following guidelines (highest to lowest):

Severity:

- Severity 1 – (HIGHEST) – Wire down conductor that poses a high risk to public safety, due to its location on a road or pedestrian-accessible area. These situations will require the responder to remain on-site and guard the wire until they can be relieved. The responder may leave after a qualified employee or contractor has made the wire safe.
- Severity 2 – Wire down is a primary conductor, but is not on a main road or other easily accessible location. These situations will also require the responder to remain on-site until the conductor can be verified de-energized by a qualified employee or contractor. Once the wire is known to be de-energized, the responder will barricade the area and then can move on to their next location.
- Severity 3 – Wire down is a secondary conductor. Responder will attempt to notify nearby customers and will barricade/tape off the area. If the wire is either open wire secondary or triplex service cable that has an exposed end (wire is broken), responder will remain on-site until a qualified employee or contractor has verified that the wire is not energized.
- Severity 4 – (LOWEST) Wire down is not an electric conductor and is not in contact with an electrical conductor, but is instead phone, cable, or other communications property. If the situation is safe, responder will inform the coordinator of this, and move on to the next order. The coordinator will provide this information to the appropriate company or Liaison for communication to the appropriate company.

The Wire Down Response/Standby Strike Teams, within the Survey and Operations Control Branch, will assign Wire Watchers to replace Divisional and Substation Survey Teams, when appropriate, so that these Survey Teams are able to proceed to their next assignment. The Wire Down Response/Standby Strike Teams will also keep track of where Wire Watchers are standing by and will provide relief, as needed.

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All personnel called upon to standby downed wires during Condition I “Red” will be trained in these Wire Down Protocols. Personnel working with energized conductors in making the area safe or completing service restoration will also have received proper electrical training prior to the event. Those not trained and qualified shall not work with energized equipment or attempt to do any work outside of their qualifications and level of training.

It is recognized that during hurricanes/tropical storms, severe ice storms, heavy wet snow storms, or prolonged high wind events, the number of resources that are trained and readily available (both internal and external) is limited and could greatly exceed those necessary. In these situations, PSEG Long Island anticipates the need for significantly more wire watch personnel, depending on the impact of the storm. Therefore, it is critical to address the reporting of down wires in the priority outlined in this protocol and to efficiently utilize the available Survey Teams and Wire Watchers.

10.2 System Headquarters Procedures

10.2.1 Key Actions and Responsibilities

The System Headquarters section encompasses those actions that are undertaken at the PSEG Long Island Corporate Operating Headquarters, in anticipation of and following, the declaration of Condition I “Red”. Once Condition I “Red” has been declared, the PSEG Long Island T&D Operations VP, assuming the position of Incident Commander, and the T&D System Operations Senior Manager, assuming the position of Operations Section Chief, are responsible for command and control. The Incident Commander sets the incident objectives, strategies, and priorities and has overall responsibility for the incident. The Operations Section Chief establishes the tactics to achieve the incident objectives and directs all operational resources.

Simultaneously, the Distribution System Operations Manager assumes the position of Survey and Operations Control Branch Director and the OH/UG Lines Senior Manager takes on the position of Crew Control Branch Director. Both Branch Directors implement the operational tactics necessary to achieve the incident objectives.

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10.2.2 Mobilization of Personnel

10.2.2.1 Local Resources

The Incident Commander has overall responsibility for notifying the Command Staff segment of the Restoration Organization, including the PIO, the Liaison Officer, the SHE Officer, and the Legal Officer. The Incident Commander may also activate other positions necessary to serve the response based on incident developments. Upon notification, the Command Staff Officers subsequently notify and mobilize the personnel from their respective elements and direct them to initiate their Emergency Restoration callouts.

The Operations Section Chief is responsible for notifying the remaining General Staff segment of the Restoration Organization, including the Planning Section Chief, Logistics Section Chief, and the Finance/Administration Section Chief, in addition to providing notifications to the Survey and Operations Control and Crew Control Branch Directors. Upon notification, the General Staff Section Chiefs subsequently notify and mobilize the personnel from their respective sections and direct them to initiate their Emergency Restoration callouts.

The Survey and Operations Control Branch Director has responsibility for notifications to the Survey and Operations Control Branch portion of the Restoration Organization. The Survey and Operations Control Division Supervisors (Distribution Operations Division Managers) are responsible for notifications to and mobilization of division personnel required for survey and operations control, commensurate with the size, scale, and complexity of the emergency.

The Crew Control Branch Director has responsibility for notifications to the Crew Control Branch portion of the Restoration Organization. The Crew Control Division Supervisors (OH/UG Lines Division Managers) are responsible for notifications to and mobilization of division personnel required for crew control, commensurate with the size, scale, and complexity of the emergency.

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10.2.2.2 Foreign Crews

The mustering and assignment of crews is a vital part of the restoration process. PSEG Long Island can call on several sources of manpower to perform restoration work depending on the severity of the storm including:

- PSEG Long Island
 - Electric Servicemen (One-Person Crews)
 - High Voltage Overhead Line Crews
 - High Voltage Underground Splicing Crews
 - Low Voltage Two-Man Makeup Crews (Various departments)
 - Contractor – High and Low Voltage Crews
 - Contractor Tree Crews
 - Damage Assessment Teams
- Foreign Utility
 - High and Low Voltage Crews
 - Damage Assessment Teams
- Contractor
 - High and Low Voltage Crews
 - Tree Crews
 - Damage Assessment Teams
 - Wire Watcher Teams

The T&D Operations Department and the OH/UG Lines Department are normally engaged on a continuing basis in the type of work necessary to restore electric service. Traditional lines of communication exist between these two departments that facilitate, to whatever degree necessary, the coordination of PSEG Long Island and regular Contractor work forces in all conditions of readiness. T&D Operations and OH/UG Lines management personnel are located adjacent to each other, both at the Departmental and at the Divisional level, thereby enhancing direction of the restoration effort.

While all storms require the use of PSEG Long Island crews, and routinely PSEG Long Island Contractor Crews for restoration activities, only Condition I “Red” events require supplemental help by Foreign Utility and Foreign Contractor Crews. PSEG Long Island is highly dependent on help from other utilities and contractors to address and respond to massive damage caused by hurricanes and major ice storms. Restoration events in adjacent service territories or other parts of the country may influence the

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availability of line workers, tree trim resources, and other support personnel, as well as accessibility to our logistics support contractors.

Mutual assistance is an essential part of the electric power industry's service restoration process and contingency planning. Created decades ago, the current mutual assistance process works well following regional outage events during which individual utilities or Regional Mutual Assistance Groups (RMAGs) play a key role in enabling a successful response. Foreign Utility Crews and Contractor Crews are utilized via the Edison Electric Institute (EEI) Mutual Assistance Agreement to augment PSEG Long Island repair forces under the Emergency Restoration Plan.

1) PSE&G New Jersey Coordination

As part of this process, PSEG Long Island also coordinates with PSE&G New Jersey regarding the mobilization and sharing of available operations, communications, and logistics resources to support restoration efforts on Long Island and in the Rockaways. A formal process to provide assistance between the two companies in the form of personnel, equipment, material, and other key resources has been developed. Resource needs have been pre-identified, quantified, and categorized for storm events of various scales. Availability of resources is contingent upon the scope of the storm and the area(s) impacted.

2) Mutual Assistance Requests

a) Guidelines

When preliminary damage assessment indicates that the restoration effort will exceed 48 hours using only PSEG Long Island crews, consideration is given to obtaining Foreign Crew support. The PSEG Long Island President and Chief Operating Officer (COO), or their designee, is responsible for making the decision to request outside Line and/or Tree Crew assistance. An immediate commitment to proceed with obtaining personnel is often required to allow for the securitization of resources in a resource-constrained and high demand environment.

Depending upon the number of crews requested, and the number of utilities seeking assistance, the Operations Section Chief may direct the Foreign Crew Management (FCM) Unit to prepare for the arrival of outside Line and Tree Crew assistance. This unit is responsible for the processing of Foreign Crews at a Foreign Crew processing site.

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b) Agreements

i) North Atlantic Mutual Assistance Group (NAMAG) Coordination

PSEG Long Island requests outside assistance from Foreign Utility, Contractor Line, Tree Crews, damage assessors, and wire watchers through participation in the NAMAG. Please refer to Appendix G for the full NAMAG Agreement. As warranted, the Incident Commander may initiate actions to secure additional support available through municipal utilities.

ii) National Response Event (NRE)

Given the increasing severity of storms in the United States and competition for resources, the electric power industry has recognized the value of enhancing the mutual assistance process to scale it to a national level. During a significant outage event, a more efficient resource allocation will further improve public safety, accelerate restoration, and reduce potential economic consequences. This enhanced coordination also provides a more equitable allocation of resources aligned with damage experienced.

An industry-wide NRE is a natural or man-made event that is forecasted to cause or that causes widespread power outages impacting a significant population or several regions across the U.S. and requires resources from multiple RMAGs.

A requesting utility's Chief Executive Officer (CEO), or a designated officer, from an EEI member utility, may initiate the NRE process if and/or when multiple RMAGs cannot adequately support the resource requirements of the requesting utilities.

NRE Activation Criteria:

The request for activating the NRE should meet any of the following criteria regarding the actual/forecasted event:

- The event is expected to, or has impacted, two or more RMAGs
- The resource requirements are greater than what the impacted RMAGs can offer
- There are multiple events that create a resource constraint or competition between RMAGs

NRE Resource Allocation:

When an NRE is declared, all available emergency restoration resources (including contractors) will be pooled and allocated to participating utilities in a safe, efficient, transparent, and equitable manner, without regard to RMAG affiliation. Resource allocation in regional events will continue to be managed through the existing RMAG processes.

During a declared NRE event, resources will be allocated to requesting utilities based on the following criteria:

- Pre-event – Allocation is proportional to the utility request for pre-staging and involves the “initial wave” of resources unless broader mobilization is required per National Mutual Assistance Resource Team (NMART) and National Response Executive Committee (NREC)
- Intra-event – Weighted average of customer outages and damage locations relative to all requesting utilities:
 - 60% portion of customer outages relative to all requesting utilities
 - 40% portion of trouble spots relative to all requesting utilities

The same breakdown is used to allocate Line Crews, Tree Crews, Damage Assessment Teams, and other types of storm support resources.

c) Call-up Thresholds (Resource Matrices)

The number of crews required and the approximate duration of their need shall be determined jointly by the PSEG Long Island Incident Commander and the Operations Section Chief.

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Condition I “Red” Resource Matrix:

PSEG Long Island has developed a Condition I “Red” Resource Matrix, Appendix J, an example of which is illustrated in Figure 10.2, which aids the Incident Commander and the Operations Section Chief in making the determination of the appropriate number of Foreign Utility and Contractor Crews. The matrix provides time-measured decision points, commencing at 96 hours prior to the anticipated impact of the storm in Long Island and the Rockaways’ T&D Service Territory for the initiation of commitment to crewing and the initiation of contracted third party vendor assistance for staging areas.

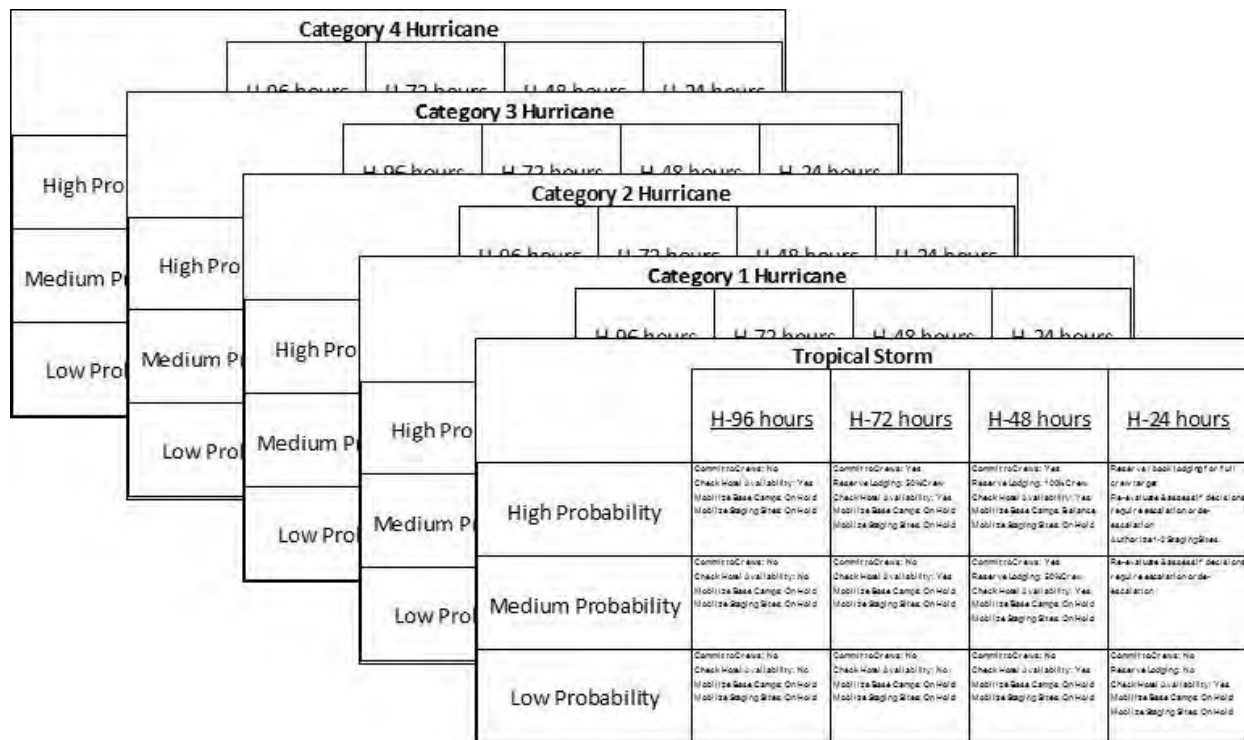


Figure 10.2 – Condition I “Red” Resource Matrix

The matrix spans events from Tropical Storms through Category 4 Hurricanes and takes into account, not only the probability of the centerline of the error-swath cone passing over or within specified parameters from Long Island and the Rockaways, but also the probability of those intensities of sustained wind speeds being experienced within all or a portion of the service territory.

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As wind speed forecasts and probabilities increase, and approach the next level, consideration is given to escalating to the next level of the matrix. Long duration wind events may also prompt escalation to the next level of the matrix.

The initial number of Foreign Crews requested is based on the appropriate matrix and adjusted to account for other factors such as weather duration, wind speed, accumulation of ice, etc. The number of crews will be modified resulting from the extent of damage suggested by the lockout information and as field damage assessment proceeds and additional intelligence is gathered.

d) Action Plan

As Foreign Crews begin to arrive, they are first received at a Foreign Crew Reception Center. Here, they are processed by the FCM organization, which includes verification of crew members and vehicles, participation in a safety briefing, dissemination of information specific to the Long Island and Rockaways T&D system and restoration process, and distribution of restoration material kits and the assignment of lodging. Processing Foreign Crews in this orderly manner is efficient. It also minimizes the number of issues that may occur during the duration of their stay, as well as when reconciling utility and contractor invoicing, post-event.

Once Foreign Crews are processed, they are allocated to divisions in “area” control and subsequently to substations in “local” control as appropriate. The assignment to divisions and/or substations is based on the severity of the damage sustained in the locality and the effect on Critical Facilities. Please refer to Section 10.3.4 of the Emergency Restoration Plan for additional information regarding this activity.

10.2.2.3 Company Retirees

When the skills and knowledge of retirees are necessary to provide support in such areas as Operations, Planning, Logistics, Finance, etc., they are engaged as contractors, via a third party vendor, and compensated at a flat hourly rate for all hours worked, commensurate with their skill level. Retirees are also reimbursed for reasonable out-of-pocket expenses associated with mileage and other incidentals.

Once the need for retiree assistance has been determined, the Planning Section Chief is contacted, in advance of obtaining retirees, to discuss their specific requirements. The Planning Section Chief will notify the Resource Coordination Unit Leader that retirees are being engaged. The Resource Coordination Unit Leader will utilize the Human Resources Manager for assistance in contacting retirees and handling the administrative details of their employment arrangements.

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10.2.2.4 National Guard

The NYS National Guard Support Program provides for power restoration support from National Guard personnel when a catastrophic event occurs and the customary sources of supplemental personnel, such as mutual assistance, contractors, or internal staff cannot provide adequate personnel to address needs.

In order for the NYS National Guard to be available for deployment, the Governor of the State of New York must declare a “State of Emergency.” The request and deployment process could take days before support arrives. In addition, total deployment time (including deployment and demobilization time) should be less than ten to fourteen days.

As warranted and available, the Incident Commander may initiate actions to secure additional support available through the National Guard.

National Guard Capabilities and Power Restoration Roles:

NYS National Guard forces can provide surge logistics, transportation, communication assistance, and general purpose capability to areas identified by the NYS OEM to supplement company emergency response to expedite power restoration during the initial response to an incident. If National Guard resources are deemed necessary, the following is a summary of roles that they could fulfill:

- 1) Public Safety
 - a) Wire guarding for down wires
 - b) Flagging for traffic control
- 2) Logistics Support
 - a) Points of Distribution – including transportation and distribution of dry ice, wet ice, or water to citizens without power
 - b) Fueling – delivery of fuel to vehicles and equipment engaged in power restoration work
 - c) Lighting – delivery and operation of portable light towers to support restoration crews (The National Guard has only a limited number of portable light towers that they can bring with them, but they can operate, transport, and refuel any light towers provided to them by the company, Mutual Assistance Crews, contractors, or equipment rental companies).

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- 3) Emergency Transportation
 - a) Short-haul transport of cargo or materials from staging areas to point-of-repair locations
 - b) High-axle transport of damage assessment teams or restoration crews
 - c) Aerial assessments (only as “lift of opportunity,” when combined with an existing National Guard mission); should National Guard assets be utilized for aerial patrols, National Guard pilots will be required to attend PSEG Long Island training to ensure compliance with internal safety requirements
- 4) Communications Support
 - a) Provide assistance with temporary communications in critical areas

Tree and debris clearance, while a high priority towards power restoration operations, is an activity that crosses multiple response efforts and is not work that National Guard personnel will perform.

Requesting National Guard Support

The Incident Commander will determine whether it is necessary to request National Guard support. If PSEG Long Island determines that it is necessary, the request shall be submitted to the NYS DPS Emergency Manager by the Planning Section Chief, utilizing the National Guard Request Form (see Appendix I). Requests submitted in this manner ensure that all required information associated with the request has been considered and provided, including where possible, pre-scripted mission sets.

Requests from all NYS electric utilities are then coordinated and forwarded to the NYS Power Restoration Working Group for processing. The NYS Power Restoration Working Group will determine what resources are available for deployment. If the group determines that requests exceed available resources, they may request support from the National Guard from other states.

Deployment and On-boarding

All NYS National Guard personnel are deployed with general rules of engagement for civilian population. NYS National Guard personnel are self-sufficient with regard to food, water, and lodging. However, PSEG Long Island will provide National Guard personnel with any Personal Protective Equipment (PPE) required to perform a particular job that is not part of National Guard “standard-issue” PPE.

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In addition, National Guard personnel upon assignment, will be provided training that will include a job briefing, and, if necessary, on-the-job training. Once National Guard personnel arrive on property, PSEG Long Island will provide “Just-In-Time” training to perform all requested mission sets. Training for National Guard personnel performing wire guarding, flagging, or other work needing such training may be performed at the jobsite, at a staging area or base camp, or at a training facility.

PSEG Long Island will coordinate with National Guard local leadership to create job aids, which will be provided to National Guard personnel. These job aids may contain information such as safety instructions, job instructions, contact names, phone numbers and addresses, etc.

10.2.3 Coordination with Department of Public Service (DPS)

10.2.3.1 Guidelines

The Planning Section maintains liaison with the NYS DPS during emergencies. The Emergency Preparedness Manager, or their designee, assuming the position of Planning Section Chief, contacts the NYS DPS Operations Section, advises them of PSEG Long Island’s storm anticipation plans and/or status as appropriate, verifies and establishes points of contact for delivery of reports, and maintains ongoing communication with NYS DPS staff to respond promptly to requests for information. Concurrently, similar notifications are made to senior officials at LIPA.

10.2.3.2 Activation Plan

At the request of the NYS DPS, the NYS DPS Electric Outage Reporting System (EORS) Report shall be furnished via e-mail or fax, four times daily at 7:00AM, 11:00AM, 3:00PM and 7:00PM unless otherwise specified.

Per Commission guidelines, the reports will include, at a minimum:

- Summary of outages
- Crewing information on site and en-route
- Planned crew relocation and mutual assistance activity
- Discussion of major damage
- Estimated restoration times
- Summaries of work plans for restoring customers
- Listing of critical and LSE customers affected
- Summary of dry ice/bottled water distribution activities
- Listing of any additional supplies or services being provided at Community Outreach sites

Report submissions may qualify as a notification to DPS Staff (provided they contain the required information within the appropriate timeframe). Other notifications to DPS staff may need to be made in addition to the reports submitted early in an event to satisfy the guidelines.

10.2.3.3 Emergency Outage Reporting to NYS DPS/NYS OEM

The EORS data sheet has been developed by DPS staff to communicate electric outage data in a timely and consistent format. Information compiled in the reporting system is used by DPS to monitor utility progress and to inform other agencies, including the NYS OEM, of response status. Submission of data is required by all New York utilities whenever NYS OEM activates the NYS EOC, or as requested by the DPS Staff. The two main components of the EORS are:

- Outage Data (Outage Report)
- Crew Assignment Data (Crew Report)

During any type of event, Outage Data and Crew Assignment Data are to be submitted, as requested by DPS staff (usually at 7AM, 11AM, 3PM, and 7PM). Templates provided by DPS staff will be used to report information. Outage data includes a breakdown of customers interrupted by geographic area, along with ETRs. This information is typically provided automatically, periodically during an event through an automatic data file transfer.

Crew Assignment Data includes a breakdown of Company and Foreign (non-Company) Crew Lines, as well as Tree and Service Crews are utilized for response efforts by the company operating division. This EORS information will be transmitted

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according to the most recent instructions from DPS staff. A sample EORS form has been provided in Appendix M.

In addition, PSEG Long Island, together with other New York utilities, participates in an automated process that provides outage information to DPS staff every 30 minutes on an ongoing basis.

10.2.4 Coordination with Municipalities/Emergency Response Agencies

10.2.4.1 Guidelines

The Planning Section maintains coordination with local government offices for Emergency Preparedness during emergencies. The Emergency Preparedness Manager, or their designee, assuming the position of Planning Section Chief, contacts the local, county, and state OEMs and advises them of PSEG Long Island's Storm Anticipation Plans and/or status, as appropriate.

10.2.4.2 Activation Plan

Prior to the onset of an event likely to impact Long Island's T&D system, PSEG Long Island Emergency Planning contacts or is contacted by the NYS Regional OEM, for the purpose of sharing information regarding the activation of NYS, NYC, Nassau County and Suffolk County EOCs, and requests for PSEG Long Island representatives to staff the respective EOCs.

When requested, PSEG Long Island EOC Liaisons respond and staff the EOCs and serve as a conduit for updated PSEG Long Island situation status reports. Additionally, EOC Liaisons will work closely with the EOCs to coordinate any requests/issues that require coordination back to the utility. Section 11 provides additional detail on the roles and responsibilities. PSEG Long Island will also deploy Municipal Liaisons into town and village EOCs, when conditions warrant. Both EOC Liaisons and Municipal Liaisons will also forward on-site situational status reports and priority needs and/or concerns back to PSEG Long Island's command staff.

PSEG Long Island EOC Liaisons continue to staff the state, county, and city EOCs, until the respective municipality advises that they no longer need a PSEG Long Island representative to be present or the corresponding EOC/OEM is demobilized by the local jurisdiction.

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10.2.5 Coordination with Other Utilities

10.2.5.1 Guidelines

Working arrangements have been established between PSEG Long Island and other utilities (telecommunication, cable television, and natural gas companies) that operate within Long Island and the Rockaways to facilitate a coordinated response during major storms or other system emergencies. The objective of these arrangements is to enable a safe and efficient coordinated response to the benefit of the customers served by each utility. Efforts include the sharing of information and resources to enable the betterment of each individual utility's emergency response plan.

At a minimum, PSEG Long Island conducts bi-annual meetings with these companies to update procedures and review working arrangements between the two organizations during emergency restoration efforts. These meetings also discuss the placement of their respective coordinators in PSEG Long Island Divisional Operations Headquarters.

There is no formal joint operational restoration arrangement between PSEG Long Island and wireless telecommunication providers. All coordination with wireless telecommunication providers, both before and during major events, is performed by the Major Accounts group of the Communications Organization, and is outlined in Section 11.

10.2.5.2 Activation Plan

The above utilities provide a list of critical facilities to PSEG Long Island annually (see Appendix D). Likewise, PSEG Long Island supplies the utilities with a list of their Critical Facilities. The lists of locations are reviewed by the companies, with the purpose of agreeing on restoration priorities, prior to implementation for a declared emergency event.

The PSEG Long Island Operations Section Chief notifies the appropriate TelCo, CATVCo, and/or GasCo executive that PSEG Long Island has declared Condition I "Red" and that the Joint Restoration procedure is being implemented. The Operations Section Chief also requests that a TelCo, CATVCo, and/or GasCo representative report to its Hicksville Operations Center to review coordination at both the division and substation levels.

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Restoration information is openly shared at the system, division, and substation level through the co-location of TelCo, CATVCo, and GasCo representatives at PSEG Long Island operational centers. This information can include:

- Distribution lockout status
- Areas restored
- Completed outage jobs
- Locations where PSEG Long Island facilities are interfering with TelCo or CATVCo restoration
- Locations where TelCo or CATVCo facilities are interfering with PSEG Long Island restoration
- PSEG Long Island facilities that are impacted due to a loss of telecommunication
- TelCo, CATVCo, or GasCo facilities that are impacted due to a loss of power
- Locations of TelCo/CATVCo generators

Joint work with telephone company line crews (i.e., TelCo assistance to set new poles) is coordinated between the PSEG Long Island Crew Control Division Supervisors, or their designee, and the TelCo representative, co-located at the PSEG Long Island Division Operating Headquarters. If warranted, the representative may also assist in cases of failure of supervisory and voice telephone circuits leased by PSEG Long Island.

10.2.6 Reporting

Integrated with OMS, via real time database connectivity, is a SAS reporting tool that provides both actionable real time operational feedback and historical reporting. Reporting functionality currently in production includes multiple delivery mechanisms, such as web, text, email, File Transfer Protocol (FTP), VA self-service Graphical User Interface (GUI), and iPad Mobile Application. This reporting infrastructure provides direct support across all components of the restoration organization, including Operations, Planning, Logistics, Finance and Communications, as well as external agencies. These efforts include but are not limited to:

- ETR tracking
- Real-time job progression
- Field report generation
- Crew management/reporting
- Non-outage job tracking
- Storm tracking
- Reliability statistics based reporting
- County/town/village outage tracking
- Regulatory reporting

10.3 Division Headquarters Procedures

10.3.1 Key Actions and Responsibilities

The Division Headquarters Section details those actions that are undertaken at the four Division Operating Headquarters, in anticipation of and following the declaration of Condition I “Red”. Prior to the impact of a major storm, the Distribution Operations Division Managers are responsible for initiating a Pre-Storm Checklist. The Pre-Storm Checklist has been developed to assist the organization to check all items that will be important should a storm effect the service territory.

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Once Condition I “Red” has been declared, the Distribution Operations Division Managers assume the role of Survey and Operations Control Division Supervisors and notifies the OH/UG Lines Division Managers, who assume the role of Crew Control Division Supervisors, that the OH/UG Lines Console Operation and mobilization of the Two-Man Makeup Crew organization may be required to support the restoration effort.

Following the declaration of Condition I “Red,” the Survey and Operations Control Division Supervisors and the Crew Control Division Supervisors are responsible for notifying and mobilizing their restoration organization, at the local division level and below, and directing them to initiate their Emergency Restoration callouts.

10.3.2 Transmission Circuit Protocols

The first restoration priority in a storm is the transmission system. Following Condition I “Red” events, it is essential that the transmission system be returned to normal as rapidly as possible, particularly those circuits that are causing substations to remain out of service. PSEG Long Island crews are assigned this task immediately.

Following the passing of a severe storm, an initial survey of the transmission system is accomplished by Transmission Survey Teams patrolling in vehicles, on foot, and/or by helicopter. Post-storm weather conditions may delay the dispatch of helicopters for use in patrolling the transmission system and, therefore, a sufficient number of teams are readily available to perform a ground patrol. At the direction of the Transmission System Operator, affected transmission circuits are patrolled, repaired, and reenergized.

10.3.3 Damage Assessment/Survey Protocols

Divisional damage assessment is performed in areas where substation control has not been activated to conduct this function. The current model establishes 260 Two-Person Survey Teams, system wide. The teams are resourced from trained PSEG Long Island personnel and supplemented by contracted damage assessment personnel, as necessary.

A Survey Team consists of a minimum of two survey people, one who acts as a driver, whose primary responsibility is to operate the vehicle safely, while the second individual surveys the lines and equipment. Survey Teams complete an Electric Damage Patrol/Repair Order (Storm) (RP-5), a record of all damage found at a specific location that provides documentation of damage for assigning Repair Crews.

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When sufficient damage affecting the distribution facilities of several substations has occurred or is anticipated, the division implements Rapid Survey protocols. Rapid Survey is defined as a patrol of the main line 3-Phase distribution facilities that are locked out while control of the system is maintained by the T&D System Operations Department. This is performed to provide an eyewitness report of damage to the T&D Operations Department, which directs all restoration efforts. Rapid Survey is not 100% complete until all damage to facilities on locked-out distribution circuit 3-Phase mainlines and all unfused branch lines have been assessed.

Following the completion of Rapid Survey, a complete patrol of the remaining portions of the locked-out circuit (all fused branch line primary, secondary, and service facilities) is initiated.

10.3.4 Area Control Protocols

The PSEG Long Island Emergency Restoration Plan is both flexible and scalable based on the severity of the event. Under the current model, dispatch authority and configuration authority can be maintained at the divisional level or decentralized down to the substation level, in whole or in part. This hybrid approach allows for centralized operations at the divisional level, while supplementing efforts at the more localized area or substation level.

In the case of the latter, decentralized operation allows for closer alignment of resources to areas impacted by the most severe damage, in addition to providing flexibility and efficiency in damage assessment and the dispatch of Repair Crews. Local control out of select substations is generally limited to areas where damage conditions are so extensive that outage analysis and crew control from the centralized division headquarters is no longer practical.

If damage to the distribution facilities of one or more substations is severe and warrants the assignment of Foreign Crew resources, the substation(s) may be granted SDA or Configuration Authority (a.k.a. "Local Control") by the division. For further details on this aspect of restoration, see Section 10.4.2.

The designation of, staffing for, and operation within, a remote (non-centralized) OH/UG Lines storm console is identified as an "Area Dispatch Authority (ADA)". ADA is the process by which divisional dispatch consoles are supported through local color console dispatch and is implemented when off-island resources exceed dispatch capability of the existing OH/UG divisional consoles.

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Locations utilized for the execution of ADA are generally established in existing operating facilities (satellite yards and substations) near damage sites. Other locations may be used provided that the IT, radio, cell phone, and mobilization areas are adequate.

ADA is intended to be utilized to support significant Condition II “Blue” and isolated Condition I “Red” events where decentralization down to the substation level and the placement of substations into SDA or SLC is not deemed necessary. Operation and management of ADA is identical to that of storm console operation and management at the centralized storm consoles.

Decision to Decentralize:

Following the passing of the storm, the Survey and Operations Control Division Supervisors assess system outage status. This initial status, obtained from substation loss-of-supply and lockout information, will determine the substations that may require deployment of a Substation Task Force, consisting of a SAC, ASAC, and Substation PC Operator (SPCO), reinforced by damage assessment and repair crew personnel.

The Local Control Analysis report, a sample of which is illustrated in Figure 10.3, is used by the Survey and Operations Control Division Supervisors for determining which substations should be placed in SDA or SLC. Additionally, substations from which the largest proportion of customer calls have been received and the physical facility of the substation to support decentralization, can be considered when determining which substations should be placed in SDA or SLC.

-----DIV=1-----														
SUBSTATION	STAT	NO.OF CKTS.	CKTS L.O.	PRIM DAMG	% SVY RAPID	% SVY DETAIL	FOR HV	FOR LV	LIL HV	LIL LV	CON HV	CON LV	SVC MEN	TREE CREW
BALDWIN	LCTRL	8	5	22	40	10	6	-	-	-	-	-	-	1
BARRETT	LCTRL	9	4	15	45	0	4	-	-	-	-	-	-	1
HEWLETT-PROSP	LCTRL	13	5	12	50	0	5	-	-	-	-	-	-	1
BDWY-CEDHURST	SDA	10	3	14	55	0	3	-	-	-	-	-	-	1
FAR ROCK-ARVE	SURV	13	4	12	60	0	-	-	-	-	-	-	-	-
RCKBCH-NEPNST	SURV	14	4	8	60	0	-	-	-	-	-	-	-	-
VL STR-LYN-MA	SURV	16	2	7	65	0	-	-	-	-	-	-	-	-
COR AV-CNT AV	SURV	12	1	6	70	0	-	-	-	-	-	-	-	-
DIV		95	28	96			18	0	0	0	0	0	0	4
DEPT		95	28	96			18	0	0	0	0	0	0	4

Figure 10.3 – Local Control Analysis Report

Once the substations are active for one operational period, the Local Control Analysis report provides a quick ranking of the amount of damage being reported by the substations. The report details for each substation the number of circuits, number of circuit lockouts, number of primary damage locations reported, percent survey completed, and initial crewing, if allocated to the substation. From this information, decisions can be made on where additional available crews should be deployed and, therefore, which substations should be placed in, remain in, or be removed from SDA or SLC.

Along with the Division Chief Group Coordinator, the Survey and Operations Control Division Supervisors assign and brief the Substation Task Forces. Concurrently, the Division Chief Group Coordinator briefs their Console Operations staff and provides them a list of the substations that will be activated along with the names of the assigned SAC, ASAC, and SPCO. Substation Task Forces obtain their restoration computer and stationery kits for their assigned location, and when weather conditions are safe, proceed to their assigned substation.

10.4 Substation Procedures

10.4.1 Key Actions and Responsibilities

The Substation Section of the Emergency Restoration Plan identifies those procedures and actions that are undertaken by Substation Task Forces, consisting of a SAC, ASAC, and SPCO, reinforced by damage assessment and repair crews, who report to a substation, following the declaration of Condition I “Red”.

Processes are implemented for damage assessment activities, processing and tracking damage information, and operating as a decentralized dispatching unit and configuration authority, by directing Restoration Crews, tracking repairs, and performing emergency switching on the distribution system.

Under the guidance of their Group Coordinator, the SAC and ASAC are responsible for activating the substation and directing damage assessment and repair crews, when their substation is placed in SDA or SLC. Additionally, the SAC and ASAC are responsible for assuming control for the operation of distribution sectionalizing devices and the distribution feeder breakers.

The SPCO, at the direction of the SAC, is responsible for ensuring the operation of the substation PC and all associated data entry related to that substation, including manpower, circuit lockouts, survey results, OMS inputs, personnel attendance, survey team assignments, and damage locations.

In summary, SACs and ASACs operate under their respective Division Headquarters and report their restoration activities performed at the substation level to their respective Group Coordinator at Division Headquarters.

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10.4.2 Protocols for Decentralization

When outage analysis and crew control from the centralized division headquarters is no longer practical, or when off-island resources exceed the dispatch capability of the existing OH/UG Lines divisional consoles or remote, non-centralized OH/UG Lines storm consoles (otherwise known as ADA), the decision will be made by the Operations Section Chief to decentralize further by activating substations. These levels of decentralization are displayed in Figure 10.4.

	FIELD SURVEY	CREW DISPATCHING AUTHORITY	SYSTEM CONFIGURATION AUTHORITY	EMERGENCY SWITCHING
SUBSTATION DISPATCH AUTHORITY (SDA)	Rapid Survey	Yes	No	No (Branch line fuses <u>only</u>)
SUBSTATION LOCAL CONTROL (SLC)	Restoration Survey	Yes	Yes	Yes

Figure 10.4 – Substation Decentralization Comparison

Substations granted either Dispatch Authority or Configuration Authority serve as compact geographic areas that are utilized as reporting locations for Foreign Crews. Foreign Crews are only assigned to those substations that are under SDA or SLC. However, substations are not placed under SDA or SLC until repair crews are available. PSEG Long Island crews may also be assigned to substations in SDA or SLC.

10.4.2.1 Substation Dispatch Authority (SDA) Protocols

SDA is the process where decentralized dispatching is supported through local substation dispatch. SDA is implemented when off-island resources exceed dispatch capability of the existing OH/UG divisional or area consoles. SDA is established in existing substations near damage locations. The key to the success of SDA is establishing a “ring fence” around the substation(s) for the dispatch operation to ensure multiple parties are not dispatching crews into the same area.

10.4.2.2 Substation Local Control (SLC) Protocols

Local Control of the restoration effort at the substation level is desirable when extensive damage is experienced in an area or when outside Utility Crews or outside Contractor Crews are brought in to assist. The Survey and Operations Control Division Supervisor assigns the SAC Local Control to expedite repairs and restore service, as rapidly as possible.

When a SAC is granted Local Control, they assume command of the substation, including operation of distribution line sectionalizing devices and feeder breakers. In addition, the SAC must return control to the Electric System Operator (ESO) at the end of each operational period, or when the substation is demobilized.

10.4.2.3 Notification to Substation to Assume Dispatch Authority or Local Control

The Survey and Operations Control Branch Director notifies the Survey and Operations Control Division Supervisors for Hewlett, Hicksville, Brentwood, and Riverhead as to which substations in their respective Divisions are to be placed into SDA or SLC, as well as the number of crews to be assigned to each substation. In turn, the Survey and Operations Control Division Supervisors notify the Group Coordinators for each color console area and advise them as to which of their substations are going to be placed into SDA or SLC.

Finally, each Group Coordinator then notifies their SACs to assume SDA or SLC and conveys to them the number of crews their substation will be receiving and the expected arrival time of these resources. If the substation has been placed in SLC, the SAC contacts the ESO and requests permission to take control of the substation distribution feeder breakers.

10.4.3 Damage Assessment/Survey Protocols

Substation damage assessment is performed in areas where a substation has been activated to conduct this function. The current model establishes 260 Two-Person Survey Teams, system wide. The teams are resourced from contracted survey companies.

A Survey Team consists of a minimum of two survey people, one who acts as a driver, whose primary responsibility is to operate the vehicle safely, while the second individual surveys the lines and equipment. Survey Teams complete an Electric Damage Patrol/Repair Order (Storm) (RP-5), a record of all damage found at a specific location that provides documentation of damage for assigning Repair Crews.

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Restoration Survey is implemented to provide the SAC the ability to restore a feeder on a “piece by piece” basis. Restoration Survey is defined as a patrol of all distribution facilities, from sectionalizing device to sectionalizing device, so that all damage can be identified and systematic repairs made to energize sections of circuits. After a substation is placed in SLC, Restoration Survey provides an eyewitness report of all damage to the SAC, who directs all Restoration/Repair Crews.

The survey is designed to rapidly locate the first fault on a locked out feeder so as to provide Repair Crews with an initial assignment. Faults may be located that allow switching to be performed to restore portions of circuits. Restoration Survey is not 100% complete until all damage to facilities on locked-out distribution circuit 3-Phase mainlines and all unfused branch lines has been identified, followed by a complete patrol of the remaining portions of the locked-out circuit (all fused branch line primary, secondary, and service facilities). This enables the Repair Crews assigned to the substation to safely perform all repairs.

10.4.4 Emergency Switching

Under SLC only, the SAC/ASAC is granted configuration authority, which includes the authority to operate distribution system equipment/devices, consisting of substation distribution feeder breakers and distribution line sectionalizing switches, so that restoration of service to as many customers as possible can be rapidly accomplished, in a safe and effective manner.

The SAC is expected to sectionalize the circuits under their control to restore service safely and expeditiously. While operating under SLC, the only tag that a SAC is authorized to use is the blue “EMERGENCY RESTORATION OPERATION/DO NOT CLOSE” tag. These tags are placed and locks installed (where applicable) on all switches, controls, and disconnecting devices that have been opened, and provide for the granting of permission-to-work to Foreign Utility, Contractor, and PSEG Long Island Line and Tree crews.

The SAC must receive the appropriate “return of permission-to-work” from any workers who were granted permission-to-work. Under no circumstances can a SAC energize a section of line without clearing all Foreign Utility, Contractor, and PSEG Long Island Line and Tree Crews off of the line first. This is received at the end of the shift or when all associated field work has been completed.

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10.5 Emergency De-energization and Re-energization Protocols Due to Flooding

10.5.1 De-energization and Re-energization of Local Areas

The actions and strategies described in this section apply to emergencies or electrical outages affecting multiple structures/areas, and are applicable to situations wider in scope than single-building emergencies, such as house fires, which are addressed under separate protocols. De-energization of an area may occur, if deemed necessary, by PSEG Long Island or by request from a municipality or local jurisdiction. Smaller scale localized incidents are responded to on an individualized basis and done so in coordination with the assistance of the affected local jurisdiction.

During major storm events, PSEG Long Island will determine if substations and/or areas need to be proactively de-energized, as a means to safeguard electric transmission, substation, or distribution system equipment, mitigating the impact of predicted or experienced storm surge and flooding. In such cases, PSEG Long Island will notify the municipalities affected by the de-energization and the reasons for the action (i.e., area flooding). Notifications will be made via a PSEG Long Island EOC Representative or by a member of the PSEG Long Island External Affairs staff. PSEG Long Island will re-energize substations and/or areas once deemed that conditions exist where the substations and/or areas can be safely re-energized. As part of the process, the affected municipalities will be alerted prior to re-energization.

Requests may also be made by municipalities/local jurisdictions to de-energize electric service to an area(s) in response to a mandatory evacuation order to ensure public safety in advance of a major storm. In such cases, requests can be made, in writing, to PSEG Long Island, via fax or e-mail, and should include marked maps of areas requested to be de-energized (see Figure 10.5). In addition, requests to de-energize an area can be made through the PSEG Long Island representative at an activated EOC, via the Municipal Hot Line at the Customer Contact Center or through PSEG Long Island External Affairs staff. In all cases, the aforementioned request form must be completed.

MUNICIPAL REQUEST TO DE-ENERGIZE A PORTION OF THE LIPA ELECTRIC DISTRIBUTION SYSTEM					
DATE:		CONTACT INFORMATION			
Municipality:		OFFICE:		CELL:	
Municipal Representative:		EMAIL:			
BORDER		TYPE		CRITICAL FACILITIES	
NORTH	SOUTH			Yes	No
		Hospital			
		Police			
		Fire			
EAST	WEST			Yes	No
		Water Supply			
		Water Treatment			
		Sewerage pump sta			
		Other Medical Fac.			
		School			
MAP ATTACHED?		YES:		NO:	
COMMENTS:					

Figure 10.5 – Sample Municipal Area De-Energization Request Form

PSEG Long Island shall, to the extent reasonably feasible under the circumstances, provide advance notice to those customers whose service will be interrupted, as a result of emergency steps to de-energize substations and/or areas. If advanced notification is not possible, PSEG Long Island will disconnect electrical service in accordance with NYS Public Service Law (PSL) 16 NYCRR § 13.13, “Disconnection without Notice”.

10.5.2 De-energization and Re-energization of Homes and Businesses Affected by Flooding

Large-scale storms are capable of producing flooding that can cause power disruptions to homes and businesses, create conditions that make it unsafe to re-energize electric service, and at times, produce unsafe conditions that may require electrical power to be de-energized at a customer’s premises. In advance of a major storm that is predicted to cause significant flooding, PSEG Long Island will closely monitor predicted flood conditions and proactively communicate with customers regarding steps required to re-energize homes/buildings, if such structures become de-energized due to flooding or if disconnected by PSEG Long Island due to safety concerns given the field or equipment conditions observed. Such communications are paramount to ensuring customers and key stakeholders are fully aware of the de-energization/re-energization requirements and will help to avoid any undue confusion and allowing for the safe and efficient provision of electric service. Information regarding the process and required forms will be made available, year round, through the PSEG Long Island Storm Center web page. PSEG Long Island will also post lists and/or links to lists of licensed electricians to assist customers in locating these resources.

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To facilitate the process, PSEG Long Island has created a Flood Assessment Command Center whose sole purpose is to coordinate all activities associated with flood assessment, disconnection, and reconnection of electrical service due to severe widespread flooding (see Figure 10.6).

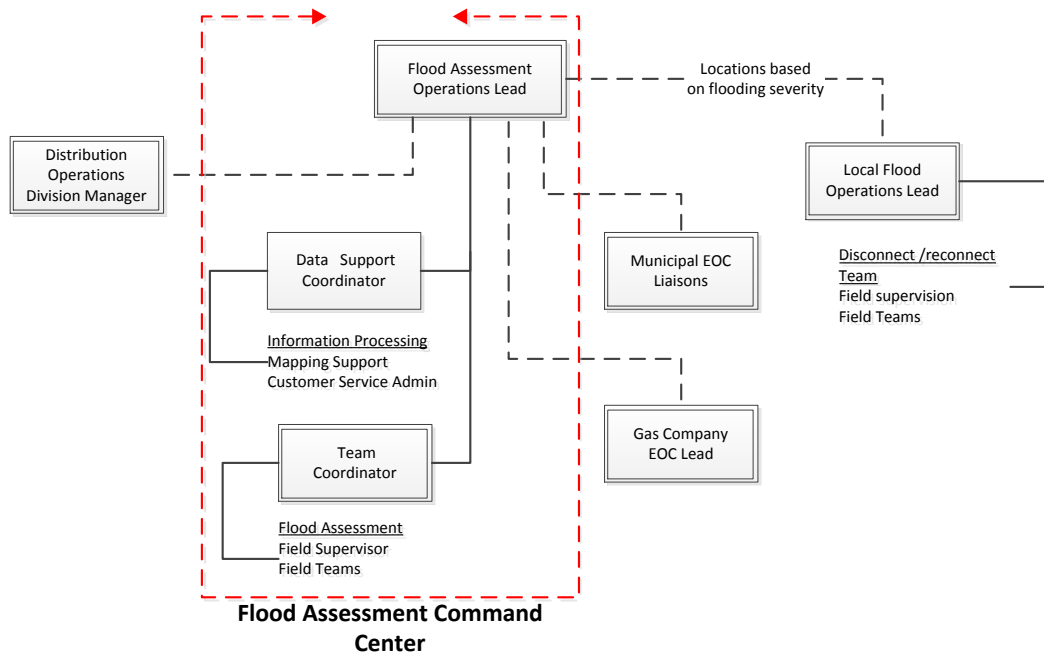


Figure 10.6 – Flood Assessment Operations Organizational Chart

In advance of the anticipated weather event, PSEG Long Island will review flood prediction maps prepared by PSEG Long Island's Engineering Department, weather services, and/or other available data sources to ascertain areas likely to flood, and in turn, communicate and share this data with customers, municipal leaders, county, and town EOCs and other key stakeholders.

Once the storm has passed and it is safe to deploy resources to the field, PSEG Long Island will make the appropriate resources available in areas suspected of flooding to perform a rapid assessment to collect information that will be utilized to make decisions regarding whether the home or business can be safely re-energized. These assessments will be performed from outside the customer's home or business to quickly assess whether flooding may have adversely affected the meter, electrical panel, or intruded into the premises, thereby potentially damaging the electrical system within the structure and making it unsafe to re-energize.

Figure 10.7 is a sample rapid assessment data collection form and illustrative of the specific flood related information to be collected to allow for the proper determination of whether the premises is safe to re-energize. In the course of conducting these assessments, or when isolating meters from the system during the restoration process, should obvious unsafe conditions caused by flooding be observed in a home or business that remained energized (i.e., water in electric meter), the affected home or business may then be pro-actively de-energized for safety reasons.

ATC-45 Rapid Evaluation Safety Assessment Form

Inspection
Inspector ID: _____ Inspection date: _____
Affiliation: _____ Inspection time: _____ ☐ AM ☐ PM
Areas inspected: ☐ Exterior only ☐ Exterior and interior

Building Description
Building name: _____
Address: _____
Building contact/phone: _____
Number of stories: _____
"Footprint area" (square feet): _____
Number of residential units: _____

Type of Building
☐ Mid-rise or high-rise ☐ Pre-fabricated
☐ Low-rise multi-family ☐ One- or two-family dwelling
☐ Low-rise commercial

Primary Occupancy
☐ Dwelling ☐ Commercial ☐ Government
☐ Other residential ☐ Offices ☐ Historic
☐ Public assembly ☐ Industrial ☐ School
☐ Emergency services ☐ Other: _____

Evaluation
Investigate the building for the conditions below and check the appropriate column.

Observed Conditions:	Minor/None	Moderate	Severe	Estimated Building Damage (excluding contents)
Collapse, partial collapse, or building off foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> None
Building significantly out of plumb or in danger	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> > 0 to < 1%
Damage to primary structural members, racking of walls	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1 to < 10%
Falling hazard due to nonstructural damage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 10 to < 30%
Geotechnical hazard, scour, erosion, slope failure, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 30 to < 70%
Electrical lines / fixtures submerged / leaning trees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 70 to < 100%
Other (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 100%

☐ See back of form for further comments.

Posting
Choose a posting based on the evaluation and team judgment. Severe conditions endangering the overall building are grounds for an Unsafe posting. Localized Severe and overall Moderate conditions may allow a Restricted Use posting.
☐ INSPECTED (Green placard) ☐ RESTRICTED USE (Yellow placard) ☐ UNSAFE (Red placard)
Record any use and entry restrictions exactly as written on placard: _____
Number of residential units vacated: _____

Further Actions Check the boxes below only if further actions are needed.
☐ Barricades needed in the following areas: _____
☐ Detailed Evaluation recommended: ☐ Structural ☐ Geotechnical ☐ Other: _____
☐ Substantial Damage determination recommended
☐ Other recommendations: _____
☐ See back of form for further comments.

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Figure 10.7 – Sample Rapid Evaluation Safety Assessment Form

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Figure 10.8 displays the PSEG Long Island flow chart that outlines the decision making process associated with determining whether a structure is safe to re-energize. Data collected through the assessment process will be utilized by PSEG Long Island to determine whether the affected home or business is safe to re-energize. In cases where PSEG Long Island determines that the structure is “unsafe”, PSEG Long Island field personnel will isolate the affected premises from the electrical system by disconnecting the home or building’s electrical meter or service wires. Unsafe conditions include, but are not limited to, water intrusion to electrical meter, electrical panel, or electrical outlets/wiring. This isolation process will allow PSEG Long Island to restore electrical service to any neighboring homes or businesses that may have not been adversely affected by flooding, as well as those made safe to re-energize without any unnecessary delay.

Customers occupying a home or business deemed “unsafe to re-energize”, will be informed via a pamphlet (door hanger) that will be left at the premises by the PSEG Long Island resource deployed to the site to isolate the affected meter from the T&D system. This pamphlet will explain the potential reasons for de-energization, detail the process of restoring electric service, and explain the steps required for re-energization.

Additionally, PSEG Long Island will communicate information regarding required forms, as well as avenues to identify licensed electricians and electrical contractors. In such cases, prior to re-energization by PSEG Long Island, customers will be required to engage a licensed electrician to certify that the customer-owned electrical equipment has been inspected, tested, and/or repaired and can be safely energized and operated. In instances where the local jurisdiction or municipality may impose additional requirements for re-energization, beyond those outlined by PSEG Long Island, PSEG Long Island will abide by any such local codes and/or ordinances. PSEG Long Island will work with the local municipalities to create awareness of any such additional requirements.

Decision Matrix for Flood Homes/Buildings

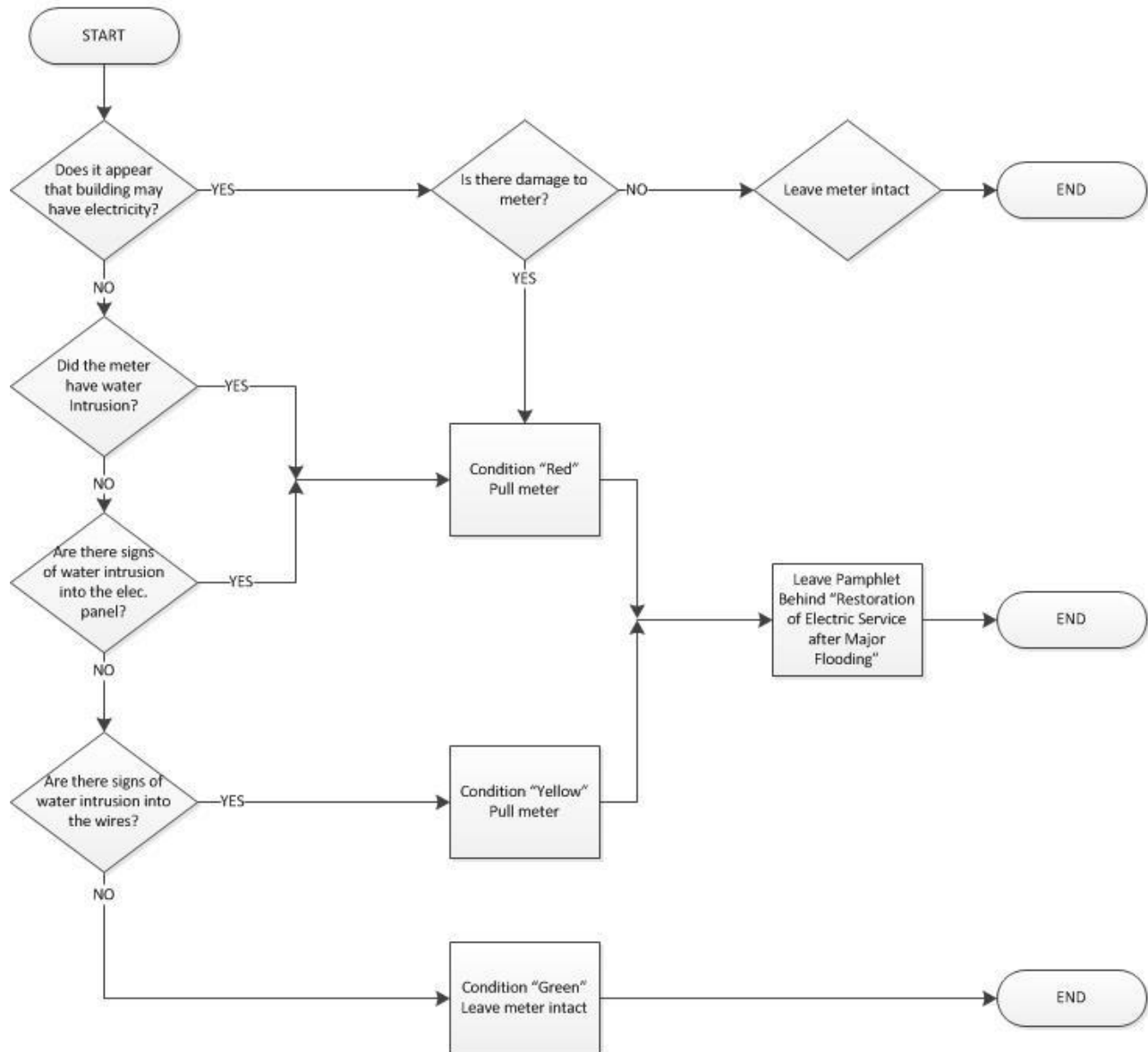


Figure 10.8 – Decision Matrix for Flooded Homes/Buildings

In cases where an electrical inspection by a licensed electrician will be required before electric service can safely be restored, all inspections and/or repairs, including cost, are the property owner's responsibility. Licensed electricians/inspectors or customers will need to submit a completed "Licensed Electrician Inspection Form" to PSEG Long Island, prior to the restoration of electric service. Electrical Inspection Forms (see Figure 10.9) can be accessed on PSEG Long Island's web site and other means identified by PSEG Long Island (i.e., local town hall, Mobile Customer Outreach Post, and PSEG Long Island Customer Office, etc.). Completed Electrical Inspection forms can be e-mailed, faxed, or hand-delivered to any PSEG Long Island Customer Office or PSEG Long Island Mobile Customer Outreach Posts that are established to facilitate the restoration process in hardest hit flood areas. Once customers submit the required form, PSEG Long Island will work directly with customers to reconnect electric service in a safe and timely manner.



PSEG LONG ISLAND
PSEG LI Licensed Electrician Inspection Form

Name of Electrician Inspecting Location: _____
 Business Name: _____
 Business Email Address: _____
 Master/Special Electrician License No.: _____
 Electrician Cell Phone #: _____

Warning: Electric service will not be energized until after the customer's internal electrical service box and associated electrical equipment has been verified safe by a Licensed Electrician.

I certify that, at the customer's request, I inspected and tested the customer's owned electrical breaker box and cable (wiring) which included a review of the electric meter(s) at the address(es) referenced below on the date(s) indicated. I certify that they are free of electrical defects and that the main service disconnect was exercised and is fully operational and may be energized at this time.

Address: _____ Date(s): _____

Licensed Electrician Signature and License Seal:
 Print Name: _____ Signature: _____
 Seal: _____

Was the electric system found in safe condition for re-energization? Yes No If NO, description of problem or work to be done: _____

Were electric repairs made? Yes No If yes, date when repairs made: _____ Elect. Initials: _____

Customer/Owner Gas System Acknowledgement (to be completed for homes/businesses with gas service):
☐ Check box if address also has GAS service.
 I am fully aware and acknowledge potential safety concerns relative to the structural integrity of the gas plumbing/gas piping systems at the above-referenced address on the date(s) indicated above, and accept full responsibility for ensuring the interior piping is structurally sound. I further acknowledge my responsibility to seek the advice of a licensed gas plumbing contractor if I have concerns regarding the integrity of the interior gas system.

Customer/Owner (Print Name): _____ Signature: _____
 Customer/Owner Phone/Cell #: _____
 Customer/Owner email: _____

Note: Electric inspection may be required by your local village after re-energization

Figure 10.9 – Sample PSEG Long Island Licensed Electrician Inspection Form

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NYS Code Enforcement Disaster Assistance Response (CEDAR) Teams

In the spirit of efficiency, where conditions permit, PSEG Long Island will work with locally deployed NYS CEDAR teams to perform the aforementioned rapid assessments, leveraging a skilled resource that has been deployed to perform similar, but more comprehensive, assessments in these flooded areas. CEDAR resources are essentially mutual assistance building inspectors and code enforcement professionals from across NYS that are requested by local towns and villages through the Nassau and Suffolk EOCs to assist with damage assessment in their storm ravaged areas.

In cases of such requests, county EOCs submit requests received from the various jurisdictions to the NYS OEM, who will then request the CEDAR resources to be activated and deployed to the local towns and villages requesting their assistance. Upon assignment, the local towns and villages assume responsibility for deploying the CEDAR resources to the local flooded areas to perform the desired assessments.

Recognizing that it is common practice for local towns/jurisdictions to request these resources, where appropriate, PSEG Long Island will closely coordinate with these deployed teams of code enforcement personnel to leverage information collected by these CEDAR resources, as a means to assist with the process of determining whether the premises or area is safe to re-energize. PSEG Long Island will coordinate with NYS CEDAR teams to obtain a copy of their completed assessment forms, which will be facilitated through the Nassau and Suffolk County EOCs, providing access to valuable data that will be utilized by PSEG Long Island to make the ultimate determination as to whether a structure is safe to re-energize. PSEG Long Island will maintain responsibility for determining what is safe or unsafe to re-energize, disconnect, or reconnect individual electric service to homes/buildings, as previously described.

10.6 De-escalation Protocols

At the conclusion of major restoration efforts and when the T&D Electric system is returned to “system normal” status, a comprehensive, territory-wide survey of the T&D system is conducted. Efforts can range from a survey of the most severely damaged circuits to a complete survey of the 3-Phase mainline or a complete re-survey of the entire system. The purpose of such efforts is to identify and record any remaining substandard conditions so that appropriate corrective actions can be initiated.

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Identified substandard conditions often include such equipment issues as broken insulators, slack in primary/secondary lines, broken cross arms, wire off insulators, as well as areas requiring tree trim work or the removal of tree limbs resting on power lines that have not caused an interruption in electric service. Identified locations are prioritized and assigned for field correction. Efforts are also made to identify and rectify temporary repairs performed during restoration operations.

As a result of these proactive efforts, the T&D system is reinforced and returned to its pre-storm configuration, helping to curtail post-storm interruptions that could have subsequently occurred as a result of existing damage or substandard conditions on the system.

10.7 De-mobilization Protocols

At the conclusion of major restoration endeavors, the orderly transition from an intense focused restoration effort to a reduced level of restoration and preparedness is necessary. The Survey and Operations Control Division Supervisors and Crew Control Division Supervisors evaluate the need for continuing to work restoration crews to make permanent repairs and to act as ready teams in the event of isolated outages, due to weakened plant facilities. This information is provided to the Operations Section Chief, the Planning Section Chief, and Demobilization Unit Leader, who co-jointly determine the continuing level of crew involvement after all customers are restored based on the following conditions:

- Extent of damage repaired and quantity of temporary repairs made during the storm
- Forecast weather conditions for the next 48 to 72 hours
- Availability of personnel for continuing operations

The Operations Section Chief will notify the Incident Commander and the remaining Command and General Staff personnel, as well as the Survey and Operations Control and Crew Control Branch Directors, when and to what degree, demobilization will occur. The Survey and Operations Control and Crew Control Branch Directors will initiate the transition of staff to normal operations by informing the Survey and Operations Control Division Supervisors and Crew Control Division Supervisors in each of the operating divisions and the FCM Coordinator.

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The Survey and Operations Control Division Supervisors and Crew Control Division Supervisors will commence the transition to normal operations by:

- Determining which sites, if any, require continued coverage as the transition to normal operation commences and providing for such coverage
- Notifying all areas for which the function interacts, that the function is commencing with demobilization plans
- Demobilizing of on duty personnel, as appropriate, and advising personnel scheduled for subsequent shifts that they will not be required and that they should report to their regular work assignment for the following operational period
- Ensuring the return of all restoration equipment used and unused material

The restoration workforce deployed during a major storm may consist of division, non-PSEG Long Island represented and non-PSEG Long Island non-represented Repair and Construction Crews, Tree Crews, Damage Assessors, Wire Watchers, Crew Guides, and other personnel. Demobilization of external resources is planned to deactivate resources as they complete their defined storm role in restoration. This is done in coordination with the NAMAG agreements.

The Survey and Operations Control Division Supervisors and Crew Control Division Supervisors are responsible for the coordination and communication of a timetable for the orderly transition and release of restoration personnel and services. Restoration personnel should be released in the following order, but will ultimately be determined by conditions specific to the given event:

- 1) Non-represented, non-PSEG Long Island personnel
- 2) Represented, non-PSEG Long Island personnel
- 3) PSEG Long Island non-division, represented personnel
- 4) PSEG Long Island division personnel

At the conclusion of demobilization, all Command and General Staff checklists are to be submitted to the Planning Section Chief.

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11. COMMUNICATIONS PROTOCOLS

11.1 Overall Approach and General Strategies

The Communications Protocols section is designed as a communications guide for users who will be responding to dynamic and often unpredictable circumstances and situations, before and during storms, or other events that negatively impact electric service to customers across Long Island and the Rockaways. In recent years, customer expectations have continued to evolve with respect to access to information, regarding storm response and associated restoration activities. Accordingly, it has become increasingly important that thorough and comprehensive communications protocols be in place to meet the expectations of customers, elected officials, regulators, employees, local emergency response organizations, and other key stakeholder groups.

PSEG Long Island's communications plans ensure that its customers and key stakeholders receive the storm preparation and restoration information necessary to prepare in advance of storms, weather an event, and coordinate local emergency response to recover from an emergency safely, quickly, and with minimal disruption. Numerous communication vehicles are deployed across various channels in advance of and during storm events and other system emergencies, as a means to provide timely, accurate, and relevant information. In addition, PSEG Long Island utilizes bill inserts, the website, periodic mailings, e-mail, and the Community Partnership Program to educate and better prepare customers and key stakeholders for potential power outages, area flooding, and evacuation throughout the year, as a means of providing critical ongoing education and information.

Prior to an approaching storm, PSEG Long Island conducts communication outreach to municipal leaders, emergency planning organizations, residential and commercial customers, and the public. With input from the Operations team, the PIO and Communications team consider the expected impacts of an approaching storm and tailor outbound messages based on the types and degree of damage that may occur. The members of the team will utilize all communication channels to encourage stakeholders to prepare for the storm, evacuate when required, mitigate the impacts of power outages, and return to normal conditions as quickly and safely as possible.

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During a storm, the Communications team actively monitors storm conditions, potential and actual damage, road closures, and evacuation orders. They also manage EOC requests and updates, track outages that directly affect LSE, Municipality, Critical Facility, Critical Infrastructure, and Large Customer accounts. Assigned teams reach out to affected customers to confirm their safety and to develop and share damage assessments and set expectations relative to predicted outage durations and restoration times.

Following a damaging event that causes extended power outages, it is important that consistent and useful information be provided as widely as possible to overcome any local communication limitations related to the emergency (Cellular or Internet Outages, for example). Current protocols ensure that consistent, accurate, and timely information will be shared across a broad range of platforms and communication channels, whether through press releases, e-mails, text messages, phone calls, and/or on social media and websites. The Communications Team maintains contact with customers and the general public, human service agencies, the media, the DPS, the State Emergency Management Office, and other state agencies, county and local governments, public and private emergency response services, law enforcement agencies, and LIPA officials. PSEG Long Island's communications plans meet the stringent guidelines and targets of the NYS DPS.

11.2 Plan Methodology and Activation Descriptions

The Communications Protocols offers key activity and role level details to be adhered to throughout Long Island and the Rockaways' Service Territory in the event of a large-scale electric service interruption. To be effective, it is vital that all elements of the plan be thoroughly understood by participating employees. This is accomplished through proper training and regularly scheduled review sessions and is validated via scenario-based drills and exercises (see Section 4.3.3 for additional details on training activities).

The Communications outreach effort is scalable and customizable based on conditions experienced. The Communications Team, led by the PIO, continuously evaluates the status of the electric grid, outages and downed wires, blocked or restricted roadways, and other data and information that will be valuable to employees, the general public, municipal leaders, elected officials, public service, and emergency response teams. Efforts are focused on ensuring access to the most up-to-date and complete information available with a key goal being consistency in messaging and information provided.

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Safety is a primary focus for the public and everyone working across the service territory to restore power, clear roadways, and re-establish normal operation and activities for all residents, businesses, government offices, critical facilities, and critical infrastructure. Accordingly, safety messaging is a key component of PSEG Long Island's storm communications.

PSEG Long Island utilizes a state-of-the-art OMS to quickly and efficiently record, identify, and categorize general outages and affected customers and facilities. The new OMS, deployed in 2014, provides better visibility to job status, ETR, and real-time updates of status changes (i.e., "dispatched", "en-route", "on site", "ETR", etc.) Outages may affect residences, businesses, critical facilities, critical infrastructure, LSE, Impaired or SN customers. The OMS also records notifications of downed wires, blocked roads, and other situations.

When the OMS records an outage, surveys are completed and available crews are assigned to the highest priority tasks. ETRs are created in the OMS based on the level of damage identified and available Restoration Crews. The Operations team formally shares outage details, crew assignments, and ETRs during periodic scheduled conference calls daily to provide the best possible status information to all constituents, as the restoration process unfolds.

Figure 11.1 illustrates the Communications team sub-agenda for Storm Calls and cross references to the associated section of this chapter covering Communications. The agenda and corresponding protocol sections ensure that the Communications team manages the interrelationships of the various internal and external stakeholder groups and communication channels utilized.

STORM CALL	CHAPTER 11 – COMMUNICATIONS PROTOCOL	SECTION
Customer Communications	Overall Approach and General Strategies, Plan Methodology	11.1, 11.2
Storm Messaging Coordination	Messaging Coordination	11.4
Critical Customer Care	Customer Care and Community Outreach	11.5
Escalation Hotline	Escalation and Municipal Hotline	11.5.1
Life Support Customers	Life Support Equipment (LSE) and Special Needs Customers	11.5.2
Customer Offices/Outreach	Community Outreach Centers	11.5.3
Customer Contact	Contact Center	11.6
Large Customers/Customer Relations	Large Customer and Customer Relations	11.7
Customer Relations	NYS Department of Public Service	11.7.1
Large Customers/Critical Facilities	Major Accounts and Critical Facilities	11.7.2
Escalation Prioritization	Escalation Prioritization	11.8
Corporate Communications	Corporate Communications	11.9
Employees	Employees	11.9.1
General Public	General Public	11.9.2
Media	Media Coordination	11.9.3
Website and Social Media	Website and Social Media	11.9.4
State Government Affairs	Regional Public Affairs	11.10
Emergency Management	Emergency Management/ERP Electric Service Liaison	11.11

Figure 11.1 – Communications Coordination Matrix

Prior to, during, and after large-scale storms or system emergencies, PSEG Long Island holds periodic conference calls to gather information about the conditions and status of all departments so that information and messaging can be refined and standardized for consistent and prompt distribution to all employees and key stakeholders.

Figure 11.2 shows a diagram of the standard process flow for holding conference calls, preparing summaries, and disseminating information.

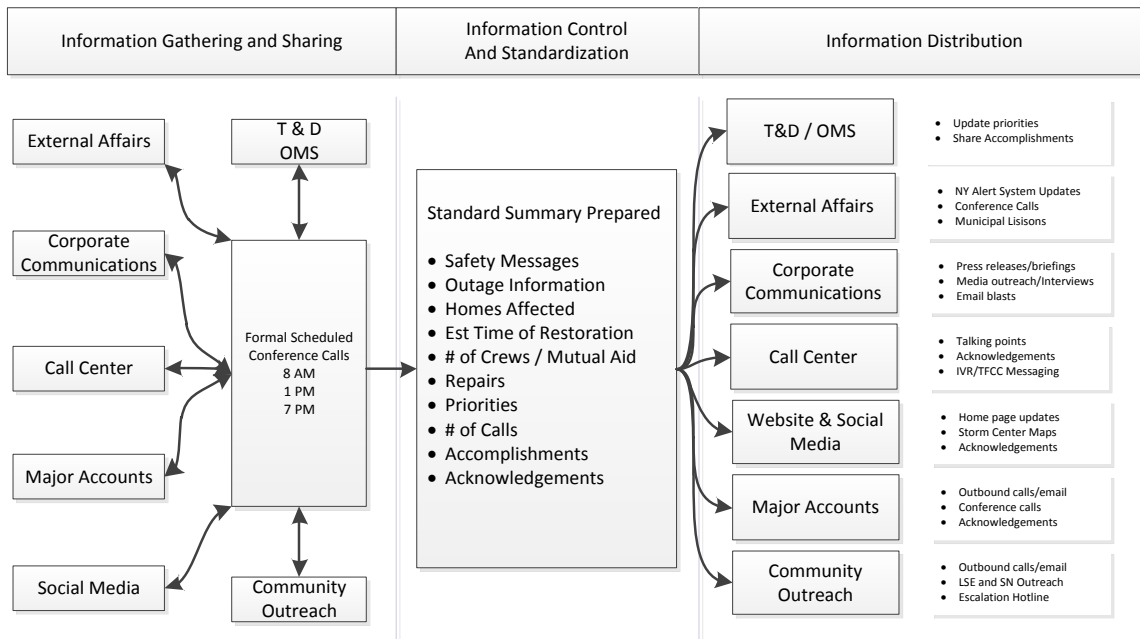


Figure 11.2 – Information Gathering, Documentation, and Distribution Process

11.2.1 Messaging Coordination

The Messaging and Coordination function is the linchpin of the Communications process, responsible for handling the Information Control and Standardization function shown in Figure 11.2 above. The function ensures prompt documentation and distribution of standardized and accurate reports on the overall status of PSEG Long Island during an emergency.

11.2.2 Employees

Information and updates flow to PSEG Long Island employees for distribution to all outreach channels and to ensure all have accurate, clear, and consistent information to answer questions from the general public, LSE, SN, residential and commercial customers, municipalities, and elected officials. Employee briefings and updates are prepared through the Corporate Communications team and distributed by e-mail and the internal intranet site.

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Communications with employees also include tips and reminders to prepare their families and their homes prior to an event so that the employees will be fully available for the extended shifts and demanding assignments that come with a severe storm or other emergency.

It is the goal of every manager and supervisor across T&D Operations, Communications, Logistics, and other business support areas to ensure that their assigned employees have received and understood the updates distributed by Corporate Communications. Section 4.3.3 lists the exercise and drill schedule for the upcoming year.

11.2.3 General Public, Media, Website, and Social Media Coordination

The primary responsibility for distributing information and updates to the General Public and Media outlets resides with the Corporate Communications team. Prior to a storm or predictable emergency situation, messaging is focused on alerting customers and the general public of the approaching threat so they are aware that electrical outages may occur and to allow them as much advance warning as possible to prepare. Safety tips, information, updates, restoration priorities, crew availability, and general and local ETRs flow out quickly and consistently to the General Public and customers through press releases, press briefings, website updates, e-mail blasts, and social media updates on Facebook, Twitter, and YouTube.

The Contact Center also plays a primary role as the central point of contact for inbound calls coming from the public, all types of customers, police, fire and other public safety teams, and municipal and elected officials. The Contact Center team ensures that the IVR system and HVCA are updated throughout each day with the most current and accurate information. They also support the outbound dialer messaging for outreach to LSE, SN, Major Accounts, and Critical Facilities customers.

11.2.4 Life Support Equipment (LSE) and Special Needs (SN) Customers

Special procedures are in place to reach out to LSE and SN customers before, during, and after an emergency. Messages encourage customers to make plans in advance, prepare for potential power outages, and possible evacuation when conditions may be life threatening. Procedures call for PSEG Long Island to alert emergency services personnel when we are unable to contact a LSE customer that may be at risk.

The Customer Care and Community Outreach team uses the outbound dialer to reach LSE and SN customers and may also use e-mail, text, and other social media platforms when appropriate to reach this segment of the customer base.

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11.2.5 Major Accounts and Critical Facilities

Municipal facilities, government offices, critical infrastructure, health care, water treatment, fuel distribution, and other key commercial, government, and public safety facilities also require accurate and timely updates on outages and restoration. In advance of potentially damaging storms, the Major Accounts and Critical Facilities team proactively sends e-mail to all Managed Critical Facilities to offer safety tips and reminders on how best to prepare for the forecasted conditions and potential outages. E-mail messages provide the toll-free number to report outages and a direct number to reach the Account Manager assigned to the facility. In addition, as a storm approaches, outreach calls are made by an automated system and augmented by Account Executive calls to other non-managed Critical Facilities. Messages provide a toll free phone number available on a 24x7 basis to report outages.

After an event occurs and service outages are reported, the Major Accounts and Critical Facilities team members run reports throughout each day to identify any affected critical facility. When a critical facility location is identified through the OMS system, Account Executives reach out to the designated point of contact for the facility to assist in mitigation of the outage and to advocate for restoration prioritization based on available damage assessments, local conditions, and the Critical Facilities' Tier level of the affected facility. Account Executives, Contact Center agents, and other Major Accounts support staff are available to provide assistance 24x7 during an emergency until all customers are restored.

11.2.6 Elected Officials and Municipalities

The External Affairs team maintains close relationships with elected officials, municipal leaders, and public safety officials throughout the year in order to better prepare them for interacting with PSEG Long Island during storms and other emergencies. When storms or other threats are approaching the Long Island and the Rockaways' Service Territory, the External Affairs team and support staff proactively reach out to public officials at all levels by phone, e-mail, text, and the NY Alert system. They coordinate group conference calls and make arrangements to provide onsite and remote support and two-way communications before, during, and after the event. The External Affairs team establishes mechanisms to accept inbound notifications and inquiries from officials and their support staff, as well as to provide outbound updates that allow the officials to provide valuable and important information to their local communities and constituents.

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11.2.7 New York State Department of Public Service (NYS DPS)

The Emergency Management team contacts representatives of the NYS DPS prior to any approaching threat to establish a communication plan based on the severity of the threat and the expected impact on the electric system and customers across the Long Island and the Rockaways' Service Territory. Contact channels include phone, e-mail, text, and conference calls. NYS DPS representatives are invited to join and actively participate in storm planning and restoration conference calls. Summaries are provided to the NYS DPS following each storm call. Electric Operations maintain ongoing contact with the DPS on operational related issues, including four intraday EORS reports to the DPS.

In addition, the Customer Relations team also has a primary responsibility for contacting the NYS DPS to coordinate coverage for the same contact center hours of operation. Customer Relations staff are assigned and empowered to assist with any issues forwarded by the staff of the NYS DPS.

11.2.8 Communications Team Planning and Coordination

With the guidance of, and in coordination with the Incident Commander, the PIO convenes a meeting of the leaders of the Communications Teams to brief them on the current situation and potential threats to the system. The team establishes a strategy for handling the current situation and forecasted risks of damage. Assignments are made and documented on a Storm Communications Matrix which is updated, revised, and augmented as an event progresses from the early warning stages through arrival and then afterward until all customers have been restored.

The communication planning process is repeated and revised daily or more frequently, beginning up to 96 hours ahead of an approaching storm and throughout the event to provide prompt, consistent, and useful updates and information to all constituencies across all channels noted above. Figure 11.3 below shows an example of a typical Pre-Storm Communications Planning Matrix.

COMMUNICATION CHANNEL	MEDIUM	MESSAGE OWNER	MESSAGE/NOTES/ETC.
MEDIA / PRESS			
Media e-mail (aka e-Blast)	e-Blast to targeted media Posted on PSEGLINY.com	Corp. Comms. Dir.	Preparedness
Press Release	Posted on PSEGLINY.com Issued through PR News	Corp. Comms. Dir.	Preparedness. Just e-mail.
Media Relations Outreach	Teleconference and/or In-person Interview	Corp. Comms. Dir.	Upon Request
SOCIAL MEDIA			
Twitter - @PSEGLI	Twitter - @PSEGLI	Corp. Comms. Dir.	7PM today preparedness video 8AM tomorrow restoration video
Facebook facebook.com/psegli	Facebook.com/PSEGLI	Corp. Comms. Dir.	7PM today preparedness video 8AM tomorrow restoration video
EMPLOYEE			
Outlook Online	Outlook Online – e-Blast to Employees	Corp. Comms. Dir.	Sent 10:50AM
REGULATORY			
NYS DPS	e-mail Teleconference	ERP Mgr./Comms. Messaging Coord.	Notification
LEGISLATIVE/MUNICIPAL			
NYS OEM	Conversation with DPS	ERP Mgr.	Notification
County EOC	Conf. Call - Nassau & Suffolk	ERP Mgr.	Notification
NYC OEM	Conference Call - NYC	ERP Mgr.	Notification
District Manager/Liaison Calls to Government Officials	Personal/Individual Call	External Affairs Dir.	Prepared to make calls, sent to District Managers
Island-wide Government Official Pre-Landfall Storm Call	Conference Call	External Affairs Dir.	Preparing for potential call
Regional Government Official Post-Landfall Storm Call	Conference Call	External Affairs Dir.	Preparing for potential call
Debris Removal - Municipalities	Teleconference	Debris Clearance Mgr.	Notification

Figure 11.3 – Example of Pre-Storm Communications Planning Matrix

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COMMUNICATION CHANNEL	MEDIUM	MESSAGE OWNER	MESSAGE/NOTES/ETC.
CUSTOMER			
IVR Storm Messaging	PSEG Long Island IVR	Contact Center Dir.	Meet 4PM. Standby list. Workforce Management alerted.
LSE & SN Customers (10,696)	Outbound Dialer	Cust. Care and Community Outreach Coord.	Can prep Pre-Storm message for tomorrow
Managed Critical Facilities (Hospitals, Police, Fire, Water Treatment Facilities, Water Pumping Stations, etc.) (267)	Outbound e-mail	Large Cust. and Cust. Relations Coord.	Sending an e-mail message out tomorrow
Non Managed Critical Facilities - (Nursing homes, assistance living) (640)	Outbound Dialer	Large Cust. and Cust. Relations Coord.	Outbound calls to non-managed accounts
Managed Accounts w/Dedicated Account Reps (418)	Outbound e-mail	Large Cust. and Cust. Relations Coord.	Sending an e-mail message out tomorrow
PSEG Long Island Customer e-mail (500,000)	Automated e-mail Vendor	Large Cust. and Cust. Relations Coord.	Modified version of the Press Release

Figure 11.3 (continued) – Example of Pre-Storm Communications Planning Matrix

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11.3 Key Actions and Responsibilities

The PIO has the overall responsibility for coordinating all internal and external communications across all channels. The primary objective is to provide clear, timely, and consistent information to employees, customers, partners, and stakeholders irrespective of the channel or platform for communication.

The PIO coordinates the activities of eight key areas with managers and coordinators assigned to handle the responsibilities of each critical function and sub-function. Figure 11.4 below illustrates the basic organization of the Communications team.

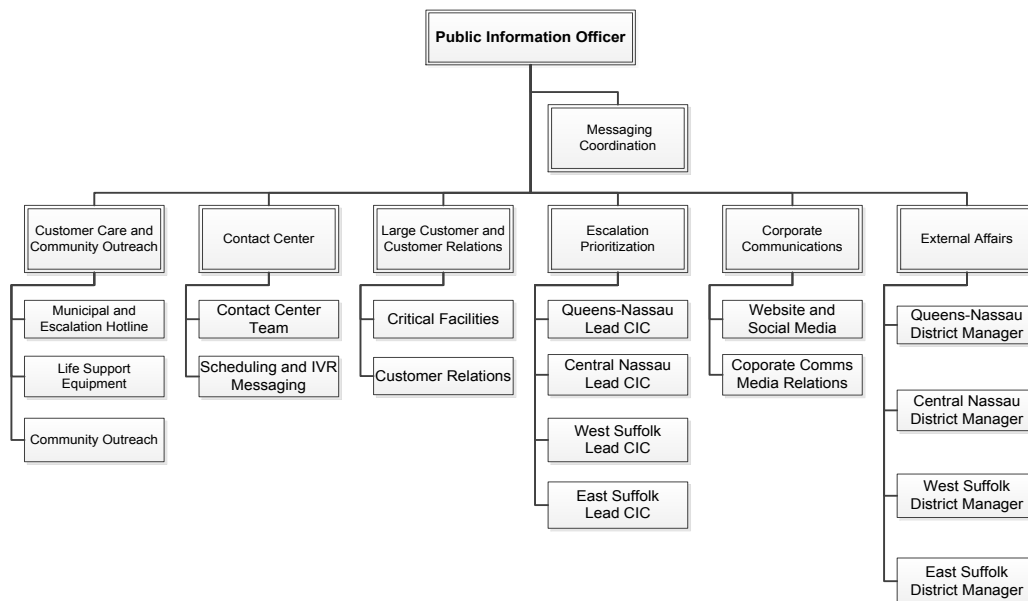


Figure 11.4– Communications Team Structure

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The outline below details the key functions of the Communications team and lists the corresponding Section of this Chapter for each.

- 1) **Messaging Coordination (Section 11.4)**
 - a) Checklist Distribution and Collection (Section 11.4.1)
 - b) Enterprise Messaging Coordination (Section 11.4.2)
- 2) **Customer Care and Community Outreach (Section 11.5)**
 - a) Municipal and Escalation Hotline (Section 11.5.1)
 - b) LSE Customers (Section 11.5.2)
 - c) Community Outreach (Section 11.5.3)
- 3) **Contact Center (Section 11.6)**
 - a) Contact Center Staffing and HVCA Methodology (Section 11.6.1)
 - b) HVCA Utilization Parameters (Section 11.6.2)
 - c) Contact Center Team (Section 11.6.3)
 - d) Scheduling and IVR Messaging (Section 11.6.4)
- 4) **Large Customer and Customer Relations (Section 11.7)**
 - a) DPS Contact Center Coordination (Section 11.7.1)
 - b) Major Accounts and Critical Facilities (Section 11.7.2)
- 5) **Escalation Prioritization (Section 11.8)**
 - a) Lead Console Information Coordinator (LCIC) (Section 11.8.1)
 - b) ERET (Section 11.8.2)
- 6) **Corporate Communications (Section 11.9)**
 - a) Employees (Section 11.9.1)
 - b) General Public (Section 11.9.2)
 - c) Media Communication (Section 11.9.3)
 - d) Website and Social Media (Section 11.9.4)
- 7) **External Affairs (Section 11.10)**
 - a) Elected Officials and Municipalities (Section 11.10.1)
 - b) Municipal Update Calls (Section 11.10.2)
 - c) District Managers, Municipal Liaisons and EOC Liaisons (Section 11.10.3)
- 8) **Emergency Management / Emergency Response Planning (ERP) (Section 11.11)**
 - a) EOCs and OEM (Section 11.11.1)

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11.4 Messaging Coordination

The Communications Messaging Coordinator (CMC) supports and engages with all Communications Team Leads to ensure they have access to their assigned checklists and key contact information (see Appendices D through F). Prior to, during, and following an event, the CMC actively coordinates the collection of information, completed Communications checklists, and departmental updates to track the progress of PSEG Long Island's storm response.

11.4.1 Checklist Distribution and Collection

Checklists for each key role are kept in a central library and are updated periodically, as required, to match current operational processes. Depending on the projected or actual severity of the event, the PIO will determine the appropriate starting point of checklist distribution.

The portfolio of checklists covers the timeframes for 96, 72, 48, and 24 hours in advance of a storm, the actual event, and then daily for the period after a storm. Communications team checklists are distributed by e-mail and are collected at the end of each day when we are impacted by a significant electrical emergency.

11.4.2 Enterprise Messaging Coordination

The CMC convenes a team of analysts and support staff in advance of each storm call and collects documentation from each operational and communications team leader, prior to and during the conference calls. The data and information collected, as well as a report, is compiled for submission to the DPS, LIPA, and all internal participants on the call. This ensures that information is shared in a timely, accurate, and consistent manner across the organization and with key regulatory agencies.

11.5 Customer Care and Community Outreach

The Customer Care and Community Outreach Coordinator is responsible for assuring the effective communication with LSE and SN customers, maintaining 24x7 coverage for the Municipal and Escalation Hotline, as well as planning for the needs of affected communities and opening Community Outreach centers.

11.5.1 Escalation and Municipal Hotline

The Municipal and Escalation Hotline Team, led by the Escalations Manager, establishes and maintains a centralized point of contact to provide immediate access to agents prior to, during, and after storms or events to ensure prompt logging of critical issues. The team collects and addresses escalations and appeals from municipal officials, PSEG Long Island Municipal Liaisons, District Managers, Major Accounts Representatives, or other employees and executives who have received outage notifications or uniquely urgent requests. These requests involve high priority outages conveyed by government offices, Critical Facilities, critical infrastructure, or road debris clearance support.

Escalation and Municipal Hotline Objectives:

- Maintain 24x7 availability by phone for Municipal officials and internal staff to input issues into the ERET and the OMS

Requests may come from any of the following:

- Government officials
- Municipal/Community leaders
- District Managers and Municipal Liaisons
- Major account executives
- EOC Liaisons

The Escalations Team utilizes the ERET system to track and manage calls and referrals and to follow-up with the original point of contact, as we update the status of an issue (Received, Dispatched, Completed, or Withdrawn).

The ERET system utilizes a SharePoint database that can be accessed simultaneously by over 100 users to track and record issues reported by Municipal officials and to ensure prompt and effective communication. The system is designed to store data in any or all of the following fields:

- | | | |
|------------------------------|---|---------------------------------|
| • Storm Name | • Customer Name | • OMS Job Number |
| • FormType | • Service Address | • Emergency Personnel Onsite |
| • County | • Customer Phone | • Modified |
| • Township/City | • Customer Account # | • Status |
| • Village | • Point of Contact | • Assigned To |
| • Division | • Point of Contact e-mail | • From ESTS |
| • Description | • Back Up Generator | • ESTS Created By |
| • Priority Category | • Street and Cross Street | • Send POC Status Update Emails |
| • Town Priority | • initStatus | • Circuit# |
| • Number Impacted | • Comments | • Point of Contact Phone Number |
| • Expected Completion (Hrs.) | • Known outages associated with this damage location? | |

11.5.2 Life Support Equipment (LSE) and Special Needs (SN) Customers

The LSE Manager assures that outbound calls are made to LSE and SN customers, in advance of potential storms, to remind customers of the risk of electrical outages and offering tips and suggestions for preparing to weather a storm or to evacuate to a safe area. Prior to a storm, the focus is on providing proactive early warning of potential prolonged outages so LSE and SN customers can prepare in advance. In addition, the team follows up on LSE and SN customers that are affected by electric outages to confirm their safety or to refer the customer to an appropriate emergency response agency, when a customer expresses a need for emergency assistance related to their health or safety.

The processes, procedures, and reports described in this section are designed to comply with all requirements of 16 NYCRR Part 105.

PSEG Long Island assigns status codes (ECRI for LSE Customers, IMP for Impaired Customers and SN for Senior Households) to each account in the Customer Relationship Management System (CRMS) for residences and customers that have notified the utility of one or more of the following conditions:

- LSE is in use
- Household includes an impaired individual (deaf, blind, visually impaired, or disabled)
- All members of the household are over 62 or under 18

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LSE and SN Objectives:

- Establish and maintain contact with LSE and SN customers both prior to, during, and after an event to ensure that they are apprised of the most current restoration information regarding their area
- Ensure that other available communication channels are utilized to augment outreach to SN (including Seniors, Impaired, and Emergency Medical Condition) customers:
 - Outbound calls and voice messages
 - Broadcast and print for the hard of hearing (including closed captioning)
 - When appropriate, social media, website, and text messaging
- Ensure that automated outbound campaigns to contact LSE and SN customers are scheduled and completed within 24 hours of the expected start of any forecasted electrical emergency
- Ensure that staffing, automation, and operating procedures are in effect to contact 80% of the affected LSE and SN customers within 12 hours from the start of the event and track whether 100% of the affected LSE and SN customers were contacted or referred to an emergency service agency within 24 hours
- Ensure that at least one additional attempt is made within the same 12 hour period to contact any LSE and SN customer who was not contacted on the first attempt
- Ensure that within 24 hours of the start of the event, LSE customers that have lost power must have been either,
 - directly contacted by the utility
 - referred to an emergency services agency (e.g., police or fire department) for emergency assistance or other human services agency for further direct contact attempts

At a minimum, PSEG Long Island will reach out to LSE and SN customers annually to advise them of the potential for power outages and to remind them of their options for preparing, in advance, and for contacting emergency services, if necessary.

LSE and SN customer lists are pulled from the CRMS customer billing system based on coding on each account. The CRMS system allows PSEG Long Island to maintain the most current and updated information possible throughout the year and sample lists are pulled and reviewed, at least semi-annually, to verify accuracy and completeness.

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PSEG Long Island's advance notifications follow the policy that any customer who will face a life-threatening crisis, if they lose their electric, will be advised to contact the local police and fire authorities, in advance, if they will be forced to remain in their homes. To the greatest extent possible, such customers should make alternative housing arrangements or constant companionship until the incident is over or the extent of localized damage is known.

Customers are reminded that use of LSE is not regarded or considered as a restoration priority and service will be restored as quickly and safely as possible, following normal prioritization and safety guidelines.

When a member of a customer household is affected by an Emergency Medical Condition, PSEG Long Island will accept a notification by hard copy at a walk-in location, a fax, or scanned copy by e-mail. The statement may come from a medical doctor, physicians' assistant, nurse practitioner, or qualified official of the local board of health regarding a Medical Emergency. When provided with a written statement that a resident of a customer's residence suffers from a serious illness or a medical condition, that severely affects their well-being, PSEG Long Island will expedite the process to code the account as "IMP" for Impaired. The normal process for periodic verification will then be followed to confirm the ongoing medical need, or to remove the code, when the medical condition no longer applies. Customers with an "IMP" code that are affected by power outages during major events will be contacted daily unless they request we stop the process or until power is restored.

In advance of an approaching storm or other threat to the electric system, reports are generated to allow for outreach to LSE, Impaired, and Senior Households. These reports allow PSEG Long Island to use the most current and accurate information available at the time of the event.

When reports are generated (see Figure 11.5), the following fields are included in the output:

- Account
- Customer Name
- CAS Address
- CAS Premise
- CAS Town, State
- CAS Zip
- Customer Phone - Service Location Area Code
- Customer Phone - Service Location Phone
- Electric Rate Code
- Restoration Code (Critical Facility Code)
- Mail Address
- Mail Address - Misc.
- Mail Address - Town, State, ZIP
- Account Circuit
- Electric Meter ID
- Account Grid
- Customer Phone - Contact Area Code
- Customer Phone - Contact Phone

Account	Customer Name	CAS Address	CAS Premise	CAS Town, State	CAS Zip	Customer Phone - Service Location Area Code	Customer Phone - Service Location Phone	Electric Rate Code	Restoration Code (Critical Facility Code)	Mail Address	Mail Address - Misc.	Mail Address - Town, State, ZIP	Account Circuit	Electric Meter ID	Account Grid	Customer Phone - Contact Area Code	Customer Phone - Contact Phone
██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████
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Figure 11.5 – Example of Life Support Equipment (LSE) and Special Needs (SN) Report Output

While an event is occurring, and in the recovery period following a storm or other event, the OMS provides detailed reports about which LSE customers have been affected. The LSE team contacts customers to confirm they are safe or have arranged for any assistance they require to stay in their homes or to evacuate and to provide accurate and up-to-date estimated restoration times. The OMS Critical Facilities Report includes all affected LSE customers and provides an area overview and details, down to the individual account, and street location for coded accounts. Users can filter the report to focus on a specific geographic area or a particular segment of critical customers. Utilizing the advanced sorting and filtering features of the system allows the LSE team to quickly identify affected LSE customers and to reach out to them quickly during and after a storm.

Outbound calls to LSE customers begin after their account appears on the OMS Critical Facilities Report. PSEG Long Island makes a minimum of two attempts to reach LSE customers, within the first 12 hours, after appearing on the report. If initial attempts to reach the customer are unsuccessful, additional contact methods may be utilized, including text messaging and e-mail.

PSEG Long Island provides a list of affected LSE customers, that have not been reached within 24 hours, to emergency services agencies through EOC Liaisons and EOC Leads working with the EOCs in NYC, Nassau, and Suffolk.

11.5.3 Community Outreach Centers

The Community Outreach Manager is responsible for overseeing any outreach centers opened to provide direct support and relief to the public, based on the conditions of the electrical emergency. When an approaching storm threatens to create significant outages that may last 72 hours or longer, PSEG Long Island will determine if Community Outreach Centers will be opened and the types of support to be provided depending upon the time of year and expected conditions. This decision may also be made following an actual storm event.

Community Outreach Center Objectives:

- Establish and maintain community outreach locations at Walk-In Centers or other locations established near communities in need, following a storm or event
- Provide charging stations, water, provisions, ice, and dry ice to customers who have lost electric service during an event
- Accept and transmit outage information and other customer feedback to appropriate areas
- Provide regular updates to the Website Manager and the Social Media Manager on staffed locations, hours of operation, and available services
- Provide periodic updates to the Customer Care and Community Outreach Coordinator on outreach status, supplies distributed, and current inventories
- When directed by the PIO and/or the Customer Care and Community Outreach Coordinator, develop a forecast for dry ice and bottled water distribution for each outreach location

The Community Outreach Manager will create a preliminary forecast for dry ice and bottled water delivery for each outreach location. Needs will be projected for at least 3 days after the date the center(s) open. The Customer Outreach Center Manager will give the supporting vendor 24 hours notice of the need to set up Customer Outreach Centers. Plans will include the number of centers, locations, and forecasted need for dry ice and bottled water.

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The supporting vendor will provide the following types of materials for distribution to customers:

- Dry ice with clear safety instructions regarding use and handling, in English and Spanish (based on forecasted need)
- Cases of water (when deemed appropriate for the event and needs of the community)
- Wet ice (when deemed appropriate for the event and needs of the community)
- Other supplies, as required based on event

Once in operation, the Community Outreach Manager will provide a detailed report to the External Affairs Director, to be shared with municipal officials and leaders, during Municipal Update Calls. In addition, the Corporate Communications Director will distribute the information to the public through press releases, website updates, social media, IVR messages, and e-mail blasts. On a daily basis, the forecast for dry ice and bottled water will be updated and estimates provided to supporting vendors to ensure adequate supplies based on customers out, weather conditions, and estimated restoration.

11.6 Contact Center

The Contact Center Director has overall responsibility for ensuring the efficient Contact Center operations during emergency conditions.

During a PSEG Long Island response to an emergency event, the normal 24 hour staffing in the Contact Center may need to be augmented. When this becomes necessary, the Contact Center will maintain sufficient staff, in order to answer the maximum number of emergency electric calls in an efficient, courteous, and responsible manner, throughout the course of the restoration efforts. Staff will be augmented through a variety of means using both live agents and automated systems, with internal and external resources.

Contact Center personnel will take electric emergency calls as their primary responsibility. The Contact Center maintains and staffs dedicated lines for police and fire departments, major accounts and large customers, and for municipalities to reach an agent 24x7 during an emergency.

The Scheduling and IVR Messaging team ensures adequate staffing levels in the Contact Center, and the Contact Center team oversees the operation of the Contact Center under storm or electric emergency conditions.

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The decision to augment the Contact Center staff and/or to activate the Contact Center Command Center staff is made by the PIO, and will be based on any of the following:

- Storm conditions
- Number of lost customer calls at the Contact Center
- Number of governmental calls being received at the Contact Center
- Number of service calls being received from hospitals and/or other major accounts
- Any major event affecting PSEG Long Island facilities or equipment that requires communications between PSEG Long Island, their customers, and/or government officials

Contact Center Objectives:

- Organize and achieve the efficient operation of the Contact Center staff to achieve an answer rate of over 80 percent of calls within 90 seconds
- Ensure that all staff, IVR, and automated outbound messaging on telephone lines is updated within two hours following communication releases

11.6.1 Contact Center Staffing and High Volume Call Application (HVCA) Methodology

When Long Island and the Rockaways' Service Territory is affected by a forecasted or non-forecasted event, the Contact Center may be inundated with increased call volume. In order to capture all available customer outage details and to provide the highest possible levels of customer service, the Contact Center has established processes and applications that can be implemented, at the discretion of management, to augment staffing. Commonly, we will extend shifts, recruit or mandate overtime, cancel vacations and time off, utilize cross-department support to increase the staffing complement, as well as activate the HVCA to maintain contact center performance and integrity. The following key objectives and the matrices shown in Figures 11.6 and 11.7 are used to support proper decision-making:

- 1) Achieve Service Level (SVL) of 90% answered within 90 seconds
- 2) Achieve Average Speed of Answer (ASA) of less than 70 seconds
- 3) Achieve Abandonment Rate of less than 5.00%
- 4) Utilize less than 75% of trunk capacity

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EVENT TYPE	EVENT PARAMETERS	STAFFING	HVCA
Minor	< 5,000 outages in a division OR < 20,000 outages companywide	<ul style="list-style-type: none"> Normal staffing complement Overtime 	Aligned with HVCA Utilization Parameters
Moderate	20,000 – 100,000 outages companywide	<ul style="list-style-type: none"> Normal staffing complement Extended shifts Overtime Vacation and Time Off Cancellation Cross-department support 	Aligned with HVCA Utilization Parameters
Heavy	>100,000 outages companywide	<ul style="list-style-type: none"> Increased staffing complement from other departments Extended shifts Overtime Vacation and Time Off Cancellation Cross-department support 	Aligned with HVCA Utilization Parameters

Figure 11.6 – Contact Center Event Evaluation Matrix

EVENT MATRIX FOR INCREASES TO STAFFING COMPLEMENT				
SHIFT	TYPICAL STAFFING*	MINOR EVENT	MODERATE EVENT	HEAVY EVENT
12:00AM – 8:00AM	3 - 4	> 5	> 15	> 20
8:00AM – 4:00PM	100 – 120	> 120	> 150	> 200
4:00PM – 12:00AM	25 – 50	> 60	> 150	> 200

* Note: The staffing levels represent average weekday staffing levels for the period shown.

Figure 11.7 – Contact Center Staffing Levels by Shift

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11.6.2 High Volume Call Application (HVCA) Utilization Parameters

The HVCA allows PSEG Long Island to control call volume subject to conditions within the following three areas: Staffing, Performance, and Outage Volume.

The following is a non-exhaustive list of situations that can lead to the activation of the HVCA:

1) Trunk Capacity*

It is necessary to maintain a certain level of free capacity to take emergency calls in the Contact Center. If trunk capacity reaches levels viewed by management as a threat to the Contact Center's ability to answer emergency calls, the HVCA can be activated to free trunk space until said space is at a controllable level, relative to call volume.

2) Wait Time (ASA)

Extended wait times correlate parabolically with abandoned calls, meaning that the majority of those abandoned calls happen within the earlier stages of the waiting period. It is essential that we minimize wait times as much as possible. If wait times are exceeding a level deemed to put the Contact Center's service performance at risk at the amount of call volume we are receiving, management can activate the HVCA to move calls to self-service application or provide critical messaging to customers. The HVCA allows us to mitigate the possibility of customers receiving busy signals.

3) HVCA Readiness for Forecasted and Non-Forecasted Outages

When any outages occur, the Contact Center expects call volume to rapidly increase. Dependent upon the outage volume and staffing complement, there may be a need to initiate the HVCA to maintain contact center integrity and performance standards. The initiation of the HVCA allows for flexibility in handling calls, should there be a spike in call volume at particular points in time.

**Note: Trunk capacity is 500 for inbound and outbound calls combined*

11.6.3 Contact Center Team

The Lead Operations Manager is directly responsible for overseeing the activities of supporting teams and coordinating activities of other Contact Center and supporting managers. The Contact Center managers and supervisors ensure optimal staffing to answer the high volume of calls expected during an emergency. In addition, the team distributes all communication updates quickly and effectively, and ensures consistent messaging for all phone agents.

11.6.4 Scheduling and IVR Messaging

The Scheduling and IVR Messaging Team have the following responsibilities:

- Assign staff schedules to cover expected inbound calls
- Maintain and update IVR Messaging based on conditions and restoration activities
- Maintain and update HVCA Messaging to ensure consistency with IVR Messaging

The recorded message providing callers with outage information is updated every two hours during normal business hours and every six hours outside normal business hours, and is conveyed via IVR and other systems. Message will contain, at a minimum:

- Geographic area(s) affected
- Estimated number of customers affected
- Estimated time of restoration per operational guidelines

11.7 Large Customer and Customer Relations

The Large Customer and Customer Relations Coordinator establishes clear communication channels for the Customer Relations team to support the DPS inbound contact center and for the Major Accounts team to reach out to, and respond to, Large Commercial Customers, Major Accounts, and Critical Facilities across all business segments.

11.7.1 Department of Public Service (DPS) Contact Center Coordination

As noted in Section 11.11, the Emergency Management/ERP Electric Service Liaison will establish contact with NYS DPS leadership to ensure that they receive regular updates on conditions, outages, damage estimates, crewing and key resources, restoration projections, critical facilities, LSE customers, and dry ice distribution activities.

In addition, in support of the contact center managed by the NYS DPS, the Customer Relations team will contact the DPS as soon as an event occurs or if potential storm damage is predicted.

The Customer Relations objectives are as follows:

- Coordinate staffing and hours of operation to match DPS contact center and staff
- Provide phone and e-mail support for DPS calls or complaints prior to and throughout an electrical emergency

Representatives from the DPS are invited to participate in the daily storm calls and will receive written summaries following each call.

11.7.2 Major Accounts and Critical Facilities

The Major Accounts Manager assures that the leadership and assigned points of contact for Major Accounts and Critical Facilities receive timely and accurate updates prior to, during, and after storms or other electrical emergencies.

The Major Accounts and Critical Facilities objectives are as follows:

- Notify and maintain ongoing contact with major electric accounts prior to and during a PSEG Long Island emergency
- Coordinate with the Escalation Prioritization team to ensure the prompt restoration of critical facilities
- Determine the status of electric service to critical facilities (LIRR, Communications companies, hospitals, nursing homes, local and county governments, water-pumping/sewage treatment, fuel storage and distribution, and schools)
- Upon restoration of critical facilities, determine the status and ETR of electric service for remaining managed customers (remaining schools and government, universities, developers, manufacturers, retail, business services, and telecommunications)

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The Major Accounts and Critical Facilities team maintains a complete list of key contacts and alternate contacts for all hospitals, nursing homes, and other managed Critical Facilities served across the Rockaways and Long Island. Large Customers, hospitals, and managed Critical Facility customer lists are maintained through a CRMS, based on critical facility coding in the customer billing system. CRMS allows PSEG Long Island to maintain the most current and updated information possible throughout the year and sample lists are pulled and reviewed, at least semi-annually, to verify accuracy and completeness.

Throughout the year, the Account Executives work closely with managed and non-managed Critical Facilities customers to assist them in planning for potential emergencies and electrical outages.

- **Tier 1 – Public Health and Safety** – LSE in use (hospitals, critical care facilities, etc.).
- **Tier 2 – Significant Public Services** – Impaired or Senior Services, critical government functions, prisons, and correctional facilities
- **Tier 3 – Other Public Services** – high rise buildings, limited egress facilities, food storage, distribution, key products, large employer, schools, government buildings, etc.

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The Major Accounts and Critical Facilities team will send annual notifications, by e-mail, to accounts with critical facilities. The notification will outline the key points used to assess critical facilities and set expectations and recommendations for action by Tier. Figure 11.8 shows a summary of the types of actions suggested to customers to assist them in planning.

TIER	CUSTOMER RECOMMENDATIONS
Tier 1 - Public Health and Safety Refineries, LSE in use (Hospitals, Critical Care Facilities)	<ul style="list-style-type: none"> • Backup generation or four hour access to rental equipment • Business continuity plan if applicable
Tier 2 – Significant Public Services Impaired or Senior Services, Critical Government Functions, Prisons/Correctional Facilities	<ul style="list-style-type: none"> • Backup generation/list of generator rental companies • Plan for being without power up to 14 days • Formal evacuation plan (people staying overnight, etc.)
Tier 3 – Other Public Services High Rise Buildings, Limited Egress Facilities, Food Storage, Distribution, Key Products, Large Employer, Schools, Government Buildings	<ul style="list-style-type: none"> • Backup generation (taking geographic locations, reliability issues into account, etc.) • Plan for being without power up to 14 days • Business continuity plan if applicable (e.g., moving food to cold storage/dry ice, etc.)

Figure 11.8 – Recommendations for Critical Facilities Advance Planning

When a storm or other potential threat to the electric system is approaching, the Major Accounts and Critical Facilities team utilizes the standardized summaries, provided by the Communications Messaging Team, along with press briefings and talking points provided by the Corporate Communications team, to prepare outbound e-mails and phone scripts. Messages are tailored for the situation to assist large customers, managed Critical Facilities, and other managed accounts to prepare as far as possible in advance for potential damage and electrical outages.

Messages may include safety tips, checklists for advance planning, and options for reporting outages or dangerous situations. An example of an e-mail is shown in Figure 11.9. In the sample e-mail, the Major Accounts and Critical Facilities team advised customers of the approaching storm and expected impacts from the weather. It included descriptions of the preparations being made, hours of coverage, and resources being recruited. In addition, this sample provides tips for assessing possible causes of an outage in the customer's area and gives several options for contacting PSEG Long Island, including the toll-free number, texting, the website at www.psegliny.com/stormcenter, and a direct mobile phone number for the Account Executive assigned to the facility.

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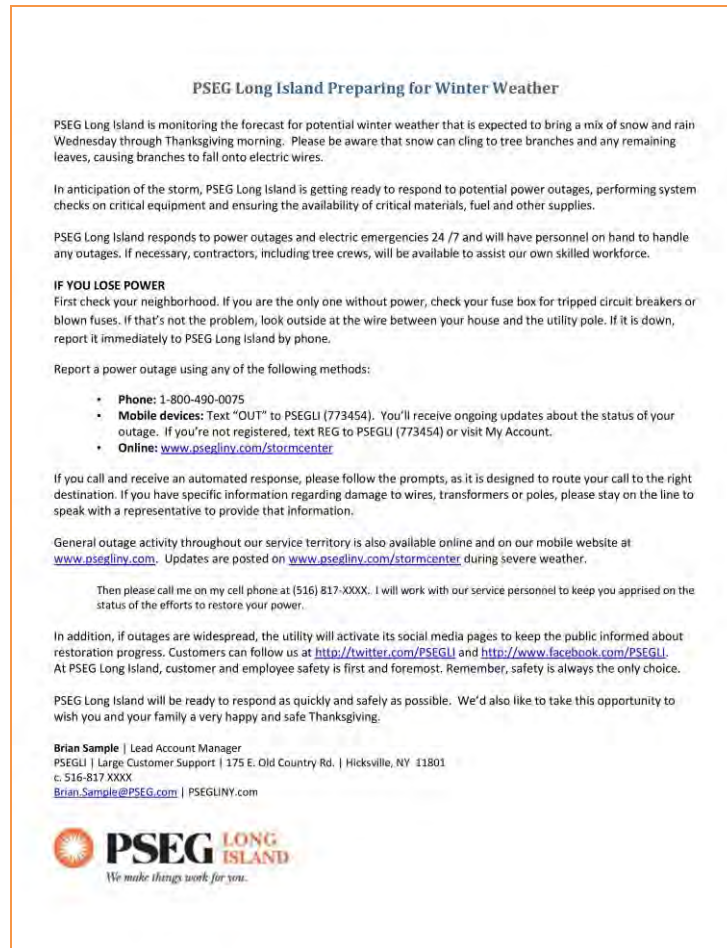


Figure 11.9 – Critical Facility Pre-Storm E-Mail Message Sample

For Critical Facilities that are not part of the “managed account” process, outbound phone messages are developed. A sample outbound phone message is shown in Figure 11.10. This example includes an introduction and a description of the weather expected. It also includes brief tips on preparing the customer’s facility far in advance of the storm’s arrival. A toll-free number is also provided. When phone calls are made, the outbound dialing system tracks and reports on the customers that it successfully reaches and also records the customers that do not answer. After making attempts with the outbound dialing system, Account Executives make follow-up calls to reach the remaining customers to provide them with the same information.

Critical Customer Outbound Storm Messaging

Telephone Script for Critical Facilities Calls

Hi, my name is _____ and I work for PSEG Long Island.

Winter storm Patrick is here now as we speak and can produce snow accumulation on Long Island. This storm has the potential to cause power outages. PSEG Long Island is ready to respond and we are executing our storm response plan.

If you have not started already, we encourage you to make your storm preparations for your facility, including testing any backup generation for your critical activities, ensuring that you have adequate sources of fuel, that you have provisions for fuel tank refills. In the event of a power outage to your facility, please understand that we will make every effort to restore your power as quickly as possible.

If you lose power, please call 1-800-490-0075 to create an outage ticket. This will ensure the quickest service response.

We will continue to update you as necessary.

Figure 11.10 – Critical Facility Pre-Storm Outbound Phone Message Sample

As an event occurs, and in the recovery period following a storm, the OMS provides detailed reports on which Critical Facilities have been affected. The Account Executives can then reach out to the appropriate points of contact for each account, in order to assist in mitigating the impacts of the outage and to provide accurate and up-to-date estimated restoration times.

As shown in Figure 11.11, the OMS Critical Facilities Report provides an area overview and details, down to the individual account and street location, for coded accounts. Users can filter the report to focus on a specific geographic area or a particular segment of critical customers. Utilizing the advanced sorting and filtering features of the system allows the Account Executives to quickly identify affected facilities, assess their level of damage, ETR from information in the system, reach out to customers to discuss the status, and share all available information about the restoration process.

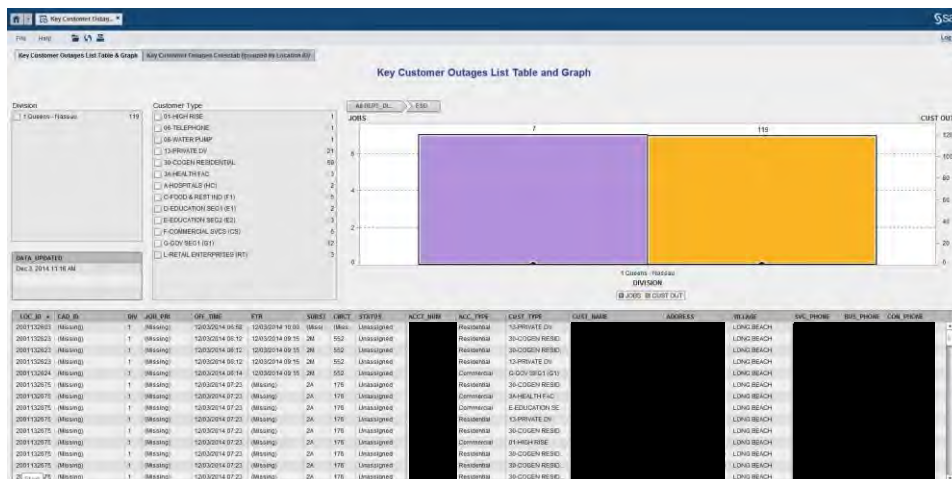


Figure 11.11 – OMS Critical Facilities Report Sample

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11.8 Escalation Prioritization

The Escalation Prioritization Coordinator oversees the process of utilizing the information available in the OMS and the ERET to coordinate, track, and communicate the highest restoration priorities by color console area, township, division, and county.

The Escalation Prioritization objectives are as follows:

- Support District Managers, Municipal Liaisons, EOC Liaisons, Major Accounts Representatives, and other key stakeholders with identifying, prioritizing, tracking, and reporting the status

11.8.1 Lead Console Information Coordination (LCIC)

The LCIC works with the Division Manager, District Manager, and ETR Coordinator of an area to ensure that the work of the Operations Teams are captured, documented, and promptly communicated to other areas of the Communications organization. Each LCIC is supported by a team of CIC who are assigned to focus on one or more color console areas. They also track and document the local outages, ETRs, and crew assignments, with special attention to critical facilities, critical infrastructure, DPW road debris clearance support, and high priority restoration efforts, related to the unique storm and damage conditions of the event.

The LCIC plays a critical role in the overall storm communications process, helping to consolidate all key restoration data and information for the operational division to which they are assigned. The divisional LCIC is responsible for providing a daily comprehensive overview of restoration activities, within the division, which become a basis for information communicated to municipal officials and other key stakeholders. This includes an emphasis on providing more geographically specific detail, restoration information on high priority critical facilities and infrastructure, and enhanced visibility to valuable information from field (i.e., substation level).

Figure 11.12 below shows the key relationships and contact points of the LCIC. During an event, the LCIC is a focal point for reviewing priorities, coordinating crew assignments with the Division Manager, researching and sharing ETRs, and identifying and escalating emergent issues and situations, as issues are reported and damage surveys are completed. When activating local control in substations, the LCIC and CIC teams reach out to assigned substations to solicit, collect, and package outage and restoration related information.

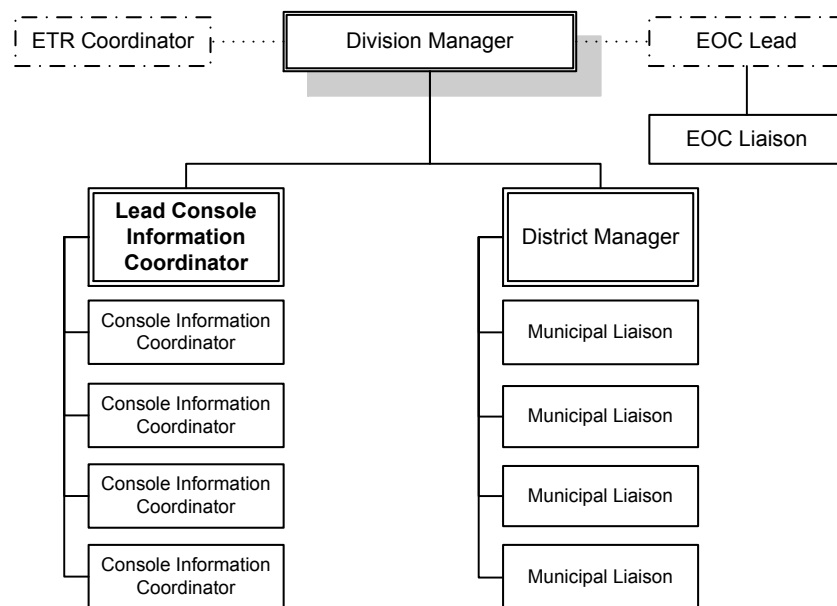


Figure 11.12 – Console Information Coordination Team Overview

11.8.2 Emergency Response Escalation Tracker (ERET)

The OMS is the primary system for capturing and storing data and information about outages and the condition of the electric system. The OMS governs outage identification, the dispatching of crews, and the management of the restoration response.

Power outages and storm damage are disruptive to leaders and organizations in the public and private sectors. Many individuals contact PSEG Long Island requesting status updates on large outages, Critical Facilities, critical infrastructure and road debris clearance support, following severe storms. An internal escalation tracking system has been developed to capture, record, track, and respond to escalated issues and priorities, reported by municipalities through the municipal liaisons, the municipal hotline, or the large customer account teams. In addition, a web portal has been established to allow designated municipal staff members to input issues directly into the ERET.

The ERET was created as a tool to provide clear and timely information to government officials during PSEG Long Island's response to a major storm or other electrical emergency. Information input to the tool will help PSEG Long Island prioritize work in an effective and expeditious manner. Figure 11.13 below depicts the Home screen of the ERET.

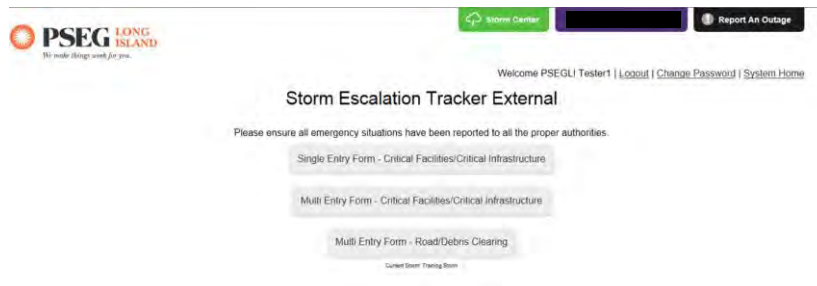


Figure 11.13 – PSEG Long Island ERET Portal

The ERET objectives are as follows:

- Provide centralized data storage and format consistency across all internal and external users
- Provide government officials with an additional means of reporting outages and alert them for the need of assistance to make an area safe for road debris removal
- Enhance communications between PSEG Long Island and external stakeholders and government officials

The Tracker is designed to record and log the following types of issues:

- Outages at critical facilities, including, but not limited to:
 - Healthcare facilities (hospitals and senior care centers)
 - First responder (police and fire) stations
 - Mass transit facilities
 - Data centers and telecommunication providers
 - Wastewater treatment plants
 - Schools (when schools are used for shelters or emergency response efforts)
- Outages affecting large blocks of customers
- Road debris with utility poles that are damaged and blocking roads on routes that are deemed vital to a municipality
- Utility poles or trees blocking access to critical facilities
- Downed power lines blocking access to road debris, or trees and limbs entangled with wires, making transportation impossible and/or creating a safety hazard
- Locations where police, fire department or other emergency personnel are on the scene and require PSEG Long Island support to make the area safe

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11.9 Corporate Communications

The Corporate Communications Director is responsible for developing and distributing communication materials, sharing status updates and providing information, key talking points, and external messaging for and to employees, the general public, media outlets, PSEG Long Island's website and its social media channels. Figure 11.14 illustrates a typical communications timeline for one day.

Time	Activities
3:30 – 4:00AM	<ul style="list-style-type: none"> Corporate Communications e-mails outage and restoration update
4:00 – 4:30AM	<ul style="list-style-type: none"> Communication to media on outage numbers Update Twitter and Facebook with new outage statistics Provide Communications Command Center (CCC) team with press briefing update
6:00 – 6:30AM	<ul style="list-style-type: none"> CCC day staff arrives and accepts hand-off from overnight team
7:00 – 7:30AM	<ul style="list-style-type: none"> All teams' submit info to CCC CMC
8:00 – 8:30AM	<ul style="list-style-type: none"> Storm Call to review status and confirm information in Matrix
8:30 – 9:00AM	<ul style="list-style-type: none"> Storm summary and Matrix updated. Storm summary distributed to all Communication Team Leads Corporate Communications e-mails outage and restoration update
9:00 – 9:30AM	<ul style="list-style-type: none"> Communications Teams produce tailored documents and begin outreach Communication to media on outage numbers and other update
9:30 – 10:00AM	<ul style="list-style-type: none"> General Island-wide Municipal Call (pre-event) Municipal Call by District (post-event)
10:30 – 11:00AM	<ul style="list-style-type: none"> Major Accounts Conference Call PSEG Long Island President and/or VPs conduct news media conference call, as needed
11:30 – 12:00PM	<ul style="list-style-type: none"> Corporate Communications e-mails outage and restoration update
12:30 – 1:00PM	<ul style="list-style-type: none"> Communications and Electric Division populate Standard Outage and Feedback Matrix
1:00 – 1:30PM	<ul style="list-style-type: none"> Storm Call to review status and confirm information in Matrix
1:30 – 2:00PM	<ul style="list-style-type: none"> Storm summary and Matrix updated. Storm summary distributed to all Communication Team Leads
2:00 – 2:30PM	<ul style="list-style-type: none"> Communications Teams produce tailored docs and begin outreach Communication to media on outage numbers and other update
4:30 – 5:00PM	<ul style="list-style-type: none"> Corporate Communications e-mails outage and restoration update
6:30 – 7:00PM	<ul style="list-style-type: none"> Communications and Electric Division populate Standard Outage and Feedback Matrix
7:00 – 7:30PM	<ul style="list-style-type: none"> Storm Call to review status and confirm information in Matrix
7:30 – 8:00PM	<ul style="list-style-type: none"> Storm summary and Matrix updated. Storm summary distributed to all Communication Team Leads Corporate Communications e-mails outage and restoration update
8:00 – 8:30PM	<ul style="list-style-type: none"> Communications Teams produce tailored docs and begin outreach Communication to media on outage numbers and other update
9:30 – 10:00PM	<ul style="list-style-type: none"> Corporate Communications e-mails outage and restoration update

Figure 11.14 – PSEG Long Island Typical Storm Communication Timeline

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The Corporate Communications objectives are as follows:

- Deliver clear, timely, and consistent messages appropriate to the circumstances, including pre-event, during a storm, during restoration, or as part of post-event follow-up
- Utilize all available means to reach employees, the general public, media outlets, the PSEG Long Island website & storm center and social media outlets

11.9.1 Employees

Internal communications are prepared and distributed periodically throughout each day of an event to ensure that all employees have an understanding of the damages and impacts of the event and the nature and scope of PSEG Long Island's restoration response.

Messages include the same information released to the General Public, as well as additional safety tips and reminders focused on the specific types of issues and dangers associated with working in, and traveling through, conditions associated with the current storm.

Notices to employees also include tips and reminders to prepare their families and their homes, prior to an event, so that the employees will be available for the demanding assignments and extended shifts that come with a severe storm or other emergency.

11.9.2 General Public


Press releases, briefings, Storm Center updates, text messages, and/or e-mails will be issued daily. Messages will contain the following types of information appropriate to the time and circumstances when issued:

- Safety tips
- Type and anticipated severity of storm
- Geographic areas likely to be impacted
- Preparedness messages for LSE and SN customers
- Public service messages and pre- and post-event warnings that allow for all constituents to be prepared for potential power outages and to handle them in the safest manner possible
- Number of crews activated or anticipated
- How to report an outage and check for outage status
- Notifications of dangerous situations identified in the course of restoration operations
- Notification of special circumstances impacting restoration efforts, including dangerous situations, flooding, travel restrictions, evacuation orders, etc.
- Updates on crew assignments, mutual aid support, and other resources allocated or requested to ensure safe and prompt restoration
- Other key information that may be valuable to the public for planning purposes

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An example of a pre-storm e-mail to customers is shown in Figure 11.15 below.



PSEG Long Island Preparing for Weekend Storm

PSEG Long Island is monitoring the forecast for a weekend storm that is expected to bring rain and strong winds Saturday into Sunday evening. High winds have the potential to cause tree damage, which can affect electric wires.

In anticipation of the storm, PSEG Long Island is getting ready to respond to any resulting power outages, performing system checks on critical equipment and ensuring the availability of critical materials, fuel and other supplies.

PSEG Long Island responds to power outages and electric emergencies 24/7 and will have personnel on hand throughout the weekend to handle any outages. If necessary, contractors, including tree crews, will be available to assist our own skilled workforce.

DOWNED WIRES
STAY AWAY FROM ANY DOWNED WIRE. Assume that any downed wire is a live electric wire. Do not approach or drive over a downed wire. If a wire falls on a vehicle, occupants should stay in the vehicle until help arrives. Additionally, parents are urged to check for downed wires in areas where their children might play. To report a downed wire, call 1-800-490-0075 anytime and let us know the nearest cross street.

IF YOU LOSE POWER
First check your neighborhood. If you are the only one without power, check your fuse box for tripped circuit breakers or blown fuses. If that's not the problem, look outside at the wire between your house and the utility pole. If it is down, report it immediately to PSEG Long Island by phone.

Report a power outage using any of the following methods:

- **Phone:** 1-800-490-0075
- **Mobile devices:** Text "OUT" to PSEGLI (773454). You'll receive ongoing updates about the status of your outage. If you're not registered, text REG to PSEGLI (773454) or visit [My Account](#).
- **Online:** www.psegliny.com/stormcenter

If you call and receive an automated response, please follow the prompts, as it is designed to route your call to the right destination. If you have specific information regarding damage to wires, transformers or poles, please stay on the line to speak with a representative to provide that information.

General outage activity throughout our service territory is also available from your computer or mobile device at www.psegliny.com/stormcenter, where we also post updates during severe weather.

In addition, if outages are widespread, the utility will activate its social media pages to keep the public informed about restoration progress. Customers can follow us at <http://twitter.com/PSEGLI> and <http://www.facebook.com/PSEGLI>.

At PSEG Long Island, employee and customer safety is first and foremost. Remember, safety is always the only choice.

CUSTOMERS WITH LIFE-SUSTAINING EQUIPMENT
Individuals who rely on electricity to operate life-sustaining electronic equipment, such as a respirator or dialysis machine, should notify PSEG Long Island at 1-800-490-0025. They should also inform their rescue squads and fire departments of their needs, in case of emergency. Customers with life-sustaining equipment should also have emergency back-up equipment on hand, since immediate power restoration cannot be guaranteed.

DRIVING NEAR OUR WORKSITES OR VEHICLES
Please slow down and be alert when driving past a PSEG Long Island worksite. Driving too fast can endanger you and our employees and hamper their ability to perform important work. PSEG Long Island crews use work area protection — traffic cones, utility work signs and flaggers — to allow them to do their jobs safely. Follow safe driving techniques to prevent fender-benders or more serious collisions that could delay our service technicians as they respond to customer calls or emergencies.

GENERAL STORM PREPAREDNESS TIPS
Mother Nature can be unpredictable. It's wise to have an emergency kit on hand year-round. Things to include:

- A battery powered radio
- A corded telephone (Cordless phones will not work if the power is out)
- Flashlights and extra fresh batteries
- Car charger for mobile devices
- A first-aid kit
- Bottled water and an adequate supply of non-perishable food
- A non-electric can opener
- Matches and candles with holders
- Extra blankets and sleeping bags
- A list of emergency phone numbers, including PSEG Long Island's 24/7 Electric Emergency line: 1-800-490-0075. Call this number to report power outages or downed wires.

Figure 11.15 – Sample E-Mail to Customers Prior to Storm

11.9.3 Media Coordination

The Corporate Communications team is responsible for communicating with a full range of broadcast, news, and online and print media outlets to ensure timely and clear communication of all key messaging, based on the situation, circumstances, and timeframe of an event. The Corporate Communications team formulates press releases and coordinates appropriate interviews and provides periodic status updates throughout an event and afterward. In addition, the team maintains focus on storm related threats, including flooding, and shares all available safety and restoration information, including recommendations for preparing for flooding or evacuation, safety precautions, and suggested steps to arrange for re-energization (if a home or area has been de-energized due to flooding or other conditions). When appropriate, the team may share in-field videos and pictures to support damage characterizations and demonstrate restoration procedures and activities under way.

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The Corporate Communications team maintains a complete list of key contacts and alternate contacts for all media outlets across the service region territory, including newspapers, periodicals, radio and television broadcasters, and internet news services. The Media Contact list is utilized and updated throughout the year to maintain a current list of reporters and contacts at each media outlet. The list is reviewed at least semi-annually for accuracy and completeness. The current list of media contacts is included in Appendix E.

11.9.4 Website and Social Media Coordination

The Website and Social Media Manager will maintain around-the-clock availability of the website during an electrical emergency and will coordinate frequent periodic updates to the site, including safety tips, press releases and updates, storm center updates, and procedural guidance when the service territory is impacted by flooding, mandatory evacuations, or other special circumstances.

The Website and Social Media Manager will utilize all available internet and social media channels to share current and consistent messaging, in order to reach the broadest possible range of internet protocol connected devices.

Examples of the splash page for the Storm Center and an Outage Map are shown in Figure 11.16.

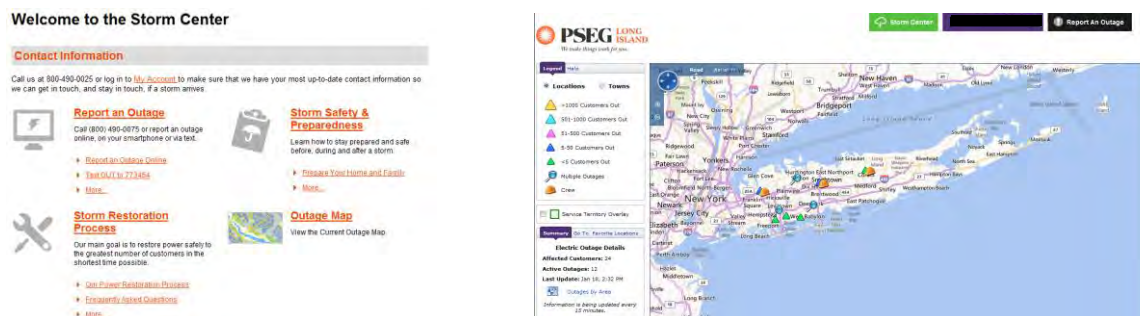


Figure 11.16 – Storm Center Home Page (left) and Sample Outage Map (right)

In addition, PSEG Long Island maintains a portfolio of informative educational videos on the website www.PSEGLINY.com and YouTube channel at www.youtube.com/PSEGLI. Examples of the videos are shown in Figure 11.17 through Figure 11.20 below.

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PSEG Long Island uploaded a video 5 months ago



Our Storm Restoration Process

by PSEG Long Island • 5 months ago • 445 views

Figure 11.17 – The Storm Restoration Process



PSEG Long Island uploaded a video 7 months ago



Evacuating

by PSEG Long Island • 7 months ago • 214 views

Figure 11.18 – Preparing for Evacuation



PSEG Long Island uploaded a video 7 months ago



Prepare Your Home and Family

by PSEG Long Island • 7 months ago • 316 views

Figure 11.19 – Preparing for An Approaching Storm

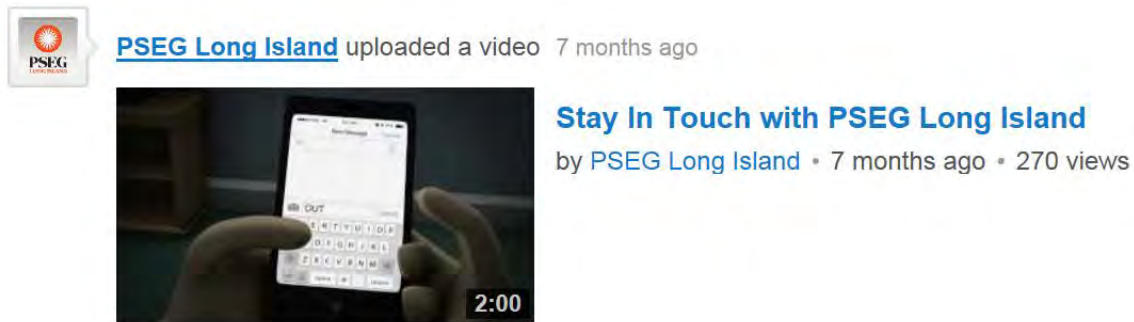


Figure 11.20 – Staying in Touch with PSEG Long Island

11.10 External Affairs

The External Affairs Director is responsible for communicating the status of PSEG Long Island's storm preparation and/or emergency response efforts with external government, public service, and public safety stakeholders. In addition, the External Affairs Director coordinates the efforts of the District Managers and the Municipal Liaisons to meet the dynamic and shifting needs of government officials across the service territory.

The Municipal Outreach objectives are as follows:

- Communicate and coordinate with municipal and government participants through regular pre- and post-event conference calls or personal calls
- Ensure that municipalities have relevant emergency preparedness and recovery information
- Provide information related to storm anticipatory actions, as well as system storm damage and assessment progress, restoration status updates, manpower assignments, and ETRs
- Coordinate issues escalated by municipal officials or elected leaders

11.10.1 Elected Officials and Municipalities

A team of four District Managers, along with approximately twenty Municipal Liaisons, supports elected officials and municipalities. District Managers are assigned on a divisional basis while Municipal Liaisons are strategically assigned to village and town EOCs. Municipal Liaisons also support and coordinate the efforts of PSEG Long Island personnel assigned to county, state, and NYC OEMs.

The External Affairs team maintains a complete list of key contacts and alternate contacts for all elected officials for local, county, and state authorities across the service region. In addition, the External Affairs team also maintains a list of key contacts for Human Services Agencies with which PSEG Long Island maintains a relationship throughout the year. The elected officials and Human Services Agency lists are utilized and updated throughout the year, and both are reviewed at least semi-annually for accuracy and completeness. Please refer to Appendix F for examples of current lists.

11.10.2 Municipal Update Calls

Conference calls are held for municipal and government officials and their emergency and/or operation leads once a day, at a minimum, to provide appropriate information related to incidents that impact the electric system within Long Island and the Rockaways' Service Territory. This may include updates on damage sustained, key actions and priorities, next steps in the restoration process, outage summaries, and outages affecting Critical Facilities or critical infrastructure.

The focus is on providing information to assist and prepare elected officials to interact with constituents, by providing ever-increasing levels of geographically specific information. Participants are notified of the calls through the New York Alert system, and participant lists are updated periodically throughout the year.

In addition, District Managers and Municipal Liaisons will reach out across other channels (e-mail, phone, and text), based on preferences expressed by municipal leaders and elected officials.

Municipal Update Calls focus on the following objectives:

- Prior to an event, ensure that municipalities have relevant emergency preparedness information related to storm anticipatory actions
- Communicate key localized and area-wide outage information and coordinate with affected municipal and government participants
- During and following an event, ensure that municipal leaders and elected officials have relevant recovery information to educate their constituents and respond to their inquiries
- Provide information on system storm damage and assessment progress, restoration status updates, manpower assignments, and ETRs at global and localized levels

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During the advanced planning period before an event, conference calls will include government officials from across the service area (Rockaways, Nassau, and Suffolk). As the event or storm occurs and passes, localized damage is surveyed and identified. At that stage, conference calls will be held for the four Divisions (Queens-Nassau, Central Nassau, Western Suffolk, and Eastern Suffolk) in order to provide more focused and meaningful local updates to officials.

11.10.3 District Managers, Municipal Liaisons, and EOC Liaisons

Elected officials and municipal leaders play a vital role in assessing the damage from severe storms or emergency events and setting priorities for recovery and restoration efforts. PSEG Long Island recognizes the vital role of the electric utility when working with the elected officials, municipal leaders, and their staff and their constituencies, both before, during, and after an event.

A District Manager is assigned for each of the four Divisions and they work closely with the officials, leaders, and their staffs to educate them on the restoration process. They also plan for and deliver support for public works and highway departments, in order to make areas safe for debris removal, following a storm. District Managers coordinate the two-way communications between PSEG Long Island and elected officials and municipal leaders to ensure the delivery of prompt, accurate, consistent, and clear messages, reports, and updates.

To support the District Managers and foster direct localized communication, PSEG Long Island deploys a team of Municipal Liaisons to local town halls and government facilities across the island to provide face-to-face access and support for municipal leaders during major emergency events. Please refer to Figure 11.21 for a summary of assignments.

MUNICIPAL LIAISON/ EOC LIAISON	TOWN/VILLAGE ASSIGNMENT	DIVISION/CONSOLE	DISTRICT MANAGER INITIALS
EOC Liaisons	Nassau County	Nassau	CC/CM
Municipal Liaison 1	Town and Villages of Hempstead	Queens - Nassau Red/Yellow	CC
Municipal Liaison 2	City of Long Beach, Village of Atlantic Beach and Island Park	Queens - Nassau Green	CC
Municipal Liaison 3	Villages of Hempstead	Queens - Nassau Multiple	CC
Municipal Liaison 4	Town and Villages of North Hempstead	Central Nassau Multiple	CM
Municipal Liaison 5	Villages of North Hempstead	Central Nassau Grey/Yellow	CM
Municipal Liaison 6	Village of North Hempstead	Central Nassau Yellow	CM
Municipal Liaison 7	Villages of North Hempstead	Central Nassau Grey/Yellow	CM
Municipal Liaison 8	Town and Villages of Oyster Bay	Central Nassau Multiple	CM
Municipal Liaison 9	City of Glen Cove and Villages of Oyster Bay	Central Nassau Green	CM
Municipal Liaison 10	Villages of North Hempstead	Central Nassau Green	CM
Municipal Liaison 11	NYC and Rockaways	Queens - Nassau Green	CC
EOC Liaisons	Suffolk County	Suffolk	KKS/VF
Municipal Liaison 12	Town and Villages of Babylon	Western Suffolk Red/Yellow	KKS
Municipal Liaison 13	Town and Villages of Brookhaven	Eastern Suffolk Multiple	VF
Municipal Liaison 14	Villages of Brookhaven	Eastern Suffolk Red/Yellow	VF
Municipal Liaison 15	Towns and Villages of East Hampton and Southampton	Eastern Suffolk - Green	VF
Municipal Liaison 16	Town and Villages of Huntington	Western Suffolk Red	KKS
Municipal Liaison 17	Town and Villages of Islip	Western Suffolk Multiple	KKS
Municipal Liaison 18	Towns of Riverhead, Shelter Island, Southold Village of Dering Harbor	Eastern Suffolk - Blue	VF
Municipal Liaison 19	Town and Villages of Smithtown	Western Suffolk Multiple	KKS

Figure 11.21 – Municipal Liaison Assignments and Division/Console Cross-Reference Table

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Depending upon the severity of an event and the needs of the various municipalities across the service territory, Municipal Liaisons are deployed directly to town or village halls, and EOC Liaisons to local EOCs or other designated sites. The Municipal and EOC Liaisons work side-by-side with municipal officials to provide on-site support and local access to outage information, crew assignments, restoration prioritization, and estimated restoration times for each locality.

Municipal Liaisons, District Managers, and External Affairs support staff have access to the OMS system and the ERET through portable computers and mobile devices.

Accessing the OMS Map Display, shown in Figure 11.22, allows a Municipal Liaison or EOC Liaison to assess and research the impacts of a storm, at the local level and the enterprise level, and to convey crucial status and planning information to local officials within town or village halls or EOCs.

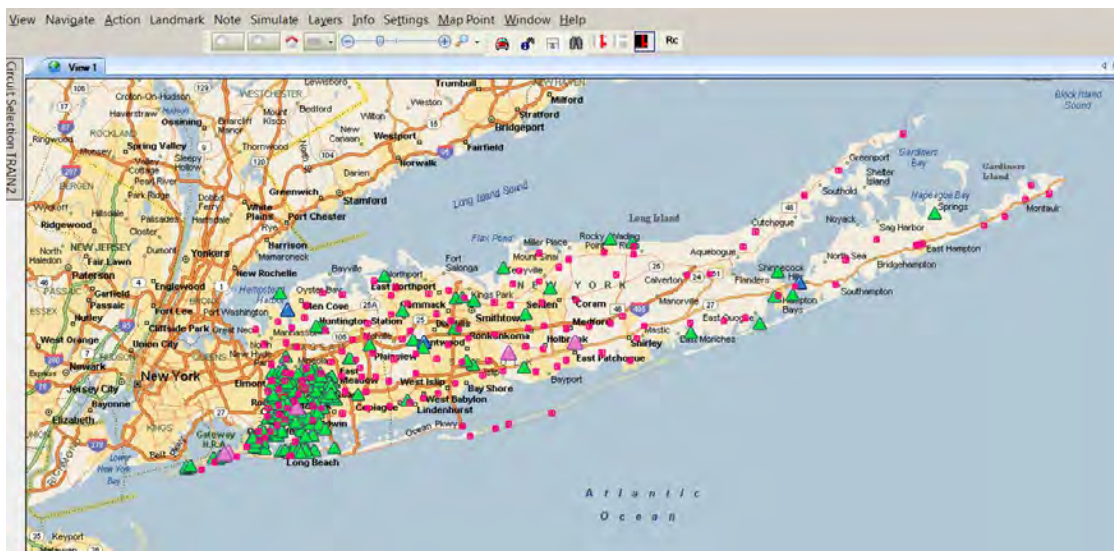


Figure 11.22 – OMS Map Display

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The OMS tabular display, shown in Figure 11.23, provides the ability to drill down and research individual jobs and outages at the local level.

Figure 11.23 – OMS Tabular Display of Jobs by Area and Status

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The ERET internal reporting functions, illustrated in Figure 11.24, are available to Municipal Liaisons, EOC Liaisons, District Managers, External Affairs support staff, CIC, Critical Facility Account Executives, and Municipal/Escalation Hotline Representatives. All team members can work within the system simultaneously to review, assess, prioritize, and escalate jobs based on local and regional conditions, and to provide periodic intraday updates to government officials at the village, town, city, county, or state level.

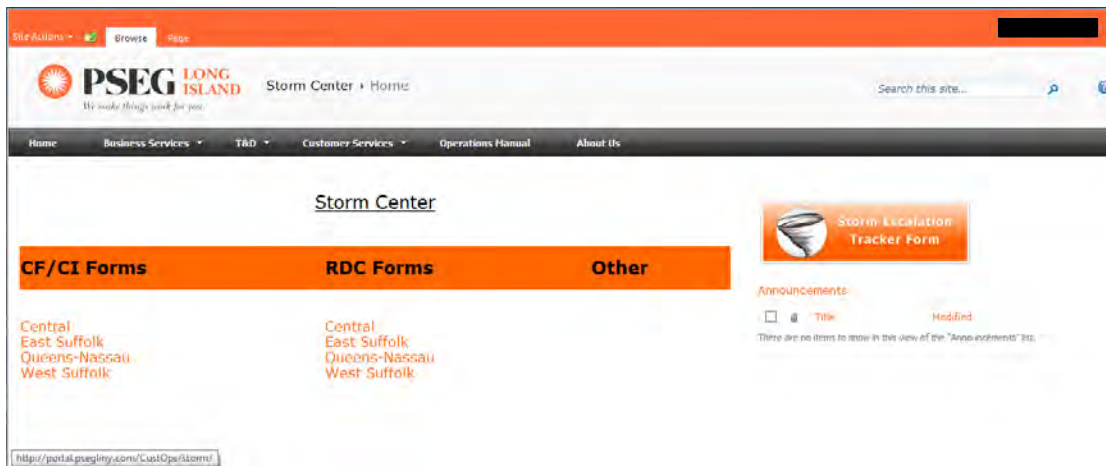


Figure 11.24 – Emergency Response Escalation Tracker (ERET) Sample Data Display

In partnership with the External Affairs District Managers, Municipal Liaisons and EOC Liaisons will meet routinely with government officials, throughout the year, to develop strong working relationships and to establish a clear understanding of local needs and priorities.

In addition, all members of the External Affairs team and the support staff have access to a comprehensive list of elected officials, maintained by External Affairs. Full lists are included in Appendix F – Key Contacts. An example of one list for elected Federal Officials is shown in Figure 11.25 below. All lists of elected officials are updated regularly and are reviewed for accuracy and completeness at least semi-annually. Lists include the following:

Figure F.3 Federal Officials

Figure F.4 State Officials

Figure F.5 County Officials

Figure F.6 Town Officials

Figure F.7 Village Officials

Figure F.8 Human Service Agencies

FIRST NAME	LAST NAME	TITLE	DISTRICT	COUNTY	WORK PHONE
Kirsten	Gillibrand	Senator	--	--	631-XXX-XXXX
Charles	Schumer	Senator	--	--	631-XXX-XXXX
Timothy	Bishop	Congressman	1	Suffolk	631-XXX-XXXX
Peter	King	Congressman	2	Nassau/Suffolk	516- XXX-XXXX
Steve	Israel	Congressman	3	Queens/Nassau/Suffolk	631-XXX-XXXX
Carolyn	McCarthy	Congresswoman	4	Nassau	516-XXX-XXXX
Gregory	Meeks	Congressman	5	Queens/Nassau	347-XXX-XXXX

Figure 11.25 – Sample List of Federal Officials (as seen in Appendix F.3)

11.11 Emergency Management/Emergency Response Planning

The Emergency Management/Emergency Response Planning Electric Service Liaison oversees and coordinates the activities of the Emergency Management Leads and the EOC Liaisons that are working directly with EOC officials. Together, they coordinate safe, prompt, efficient, and effective responses to all requests and inquiries. The local EOCs and city and state OEMs require support from well trained, experienced liaisons, provided by PSEG Long Island, who can quickly interpret requests and act upon them to ensure the safety of the public and first responders.

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The Emergency Planning objectives are as follows:

- Assign coverage of the EOC Liaisons reporting to the civil preparedness offices, county EOCs, police offices, etc.
- Establish and maintain contact with liaisons in the NYC OEM, the liaisons in the Nassau and Suffolk County EOCs, and any other liaisons sent out into the field at the request of governmental agencies or localities
- Accept and address event-related questions, problems, requests, and offers for help from the NYC OEM Liaison, Nassau and Suffolk County EOC liaisons, and other field liaisons
- Provide periodic, accurate, and timely reports and outage submissions to LIPA

11.11.1 Emergency Operations Centers (EOCs) and Office of Emergency Management

11.11.1.1 Emergency Management Leads

Emergency Management Leads work in the CCC and provide a conduit for all EOC Liaisons working in the field. The Leads accept questions, outage notifications and requests, and quickly and effectively coordinate responses with the assistance of the communications team, the OMS, Division Managers, and staff in Electric Operations.

11.11.1.2 Emergency Operations Center (EOC) Liaisons

The EOC Liaison acts as the interface between local, county, city, or state EOCs, the OEM, and PSEG Long Island fostering two-way communication and providing status updates and situational awareness to the company and the respective representatives and officials in each office. EOC Liaisons coordinate all PSEG Long Island requests for assistance, resources, and/or missions with the appropriate agency liaison assigned to the EOC (i.e., NYS Division of Military and Naval Affairs (DMNA)/National Guard/Air Guard, NYS OEM, NYS Department of Transportation (DOT), county police departments, county DPWs, county fire rescue emergency services, etc.).

EOC Liaisons are responsible for requesting and coordinating responses related to the following issues, and any other unique requests:

- Escalation of downed wires
- Escalation of critical facilities or LSE customer emergencies
- Road debris clearance support to make areas safe for DPW or Highway Crews
- Support for first responders to make areas safe or to de-energize areas due to flooding or other circumstances

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12. LOGISTICS PROTOCOLS

12.1 Overall Approach and Strategy

The Logistics Support Organization (LSO) plays a vital role in the support of the PSEG Long Island storm restoration effort. The LSO's mission is to facilitate and to ensure that all required Inventory Management, Fleet Services, Procurement, Lodging, Facilities Management, Voice/Data, Safety, Security, Health Services, Environmental, and other related support activities are provided in an effective and timely manner, throughout the duration of the restoration effort. The goal of the LSO is to provide the T&D Electric and the Customer/Communications organizations with the logistics-related support services required to restore power in a safe, efficient, and effective manner.

The Logistics Section Emergency Plan provides for a coordinated response in supporting logistics requirements in any type of corporate-wide emergency, including electric restoration, oil spill response, facility evacuation, etc., and provides the communication mechanism for mobilizing key personnel involved in logistics support throughout the service territory. Specifically, the Logistics Section Emergency Plan facilitates the logistics activities for the following functional areas:

- 1) Materials
- 2) Purchasing
- 3) Fleet Services
- 4) Real Estate
- 5) Facilities
- 6) Food Services
- 7) General Shops
- 8) IT/Communications
- 9) Health Services
- 10) Safety
- 11) Environmental
- 12) Lodging
- 13) Busing Services
- 14) Staging Sites
- 15) Security

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12.2 Plan Methodology and Activation Descriptions

The Logistics Section Emergency Plan offers key activity and role level details to be adhered to throughout the Long Island and the Rockaways' Service Territory in the event of a large-scale electric service interruption. To be effective, it is vital that all elements of the plan be thoroughly understood by participating employees. This is accomplished through proper training and regularly scheduled review sessions and is validated via scenario-based drills and exercises. The annual LSC drill simulates emergency response activities, includes a comprehensive review and execution of the individual functional unit leader and coordinator roles, and details the required coordination with Logistics field and staging site personnel.

The Logistics Section Emergency Plan allows for different levels of logistics organization response based on the severity of the emergency. The LSO is scalable as to the extent to which it is mobilized. The areas for which they provide support during an emergency will be determined based on the needs of the emergency response organization. The LSO continuously evaluates the number of personnel and the level of resources (i.e., materials, equipment, assets, fuel, etc.) required to successfully carry out its mission.

The Emergency Classification Logistics Response Guidelines (see Figure 12.1) provide a reference to initiate any type of response action requiring logistics support. These guidelines provide the mechanism for rapidly assessing and evaluating the extent of mobilization required. The Emergency Classification Guidelines also give direction on when to activate personnel.

EMERGENCY EVENT	EMERGENCY CLASSIFICATION LOGISTICS' RESPONSE LEVEL		
	Stage I Logistics Support Organization Alert and Notification <ul style="list-style-type: none"> Alert and Notification of Key LSO Personnel Activation of the LSC is not required 	Stage II Partial Logistics Support Organization Activation <ul style="list-style-type: none"> Possible Activation of LSC Partial Mobilization of Personnel 	Stage III Full Logistics Support Organization Activation <ul style="list-style-type: none"> Full Activation of LSC Full Mobilization of Personnel
Electric Restoration	Storm Anticipation Class I, II, III	Condition Blue/Red Storm	Condition Red Storm
Oil Spill Response	Class I - IV Spill	Class IV Spill	Class IV Spill
Emergency Evacuation/ Business Continuation (Corporate Facility)	Partial Loss of Facility	Partial Loss of Facility	Total Loss of Facility
Other Types of Emergencies	Situation Dependent	Situation Dependent	Situation Dependent

Figure 12.1 – Emergency Classification Logistics Response Guidelines

The T&D Electric Services Director, who serves as the Logistics Section Chief, makes the decision on the extent of activation of the LSO. The Logistics Section Chief will then initiate the setup of the LSC (see Figure 12.2) and direct the personnel assigned to the LSO Branch Director and Unit Leader roles (see Figure 2.8 in Section 2.2) to begin the notification process, per the LSO Notification Scheme (see Figure 12.3). Upon declaring the LSC activated, the Logistics Section Chief will notify the Incident Commander that the LSO has commenced operations.

The LSC is critical in facilitating effective communications and coordination among all of the key Logistics roles. With all of the Logistics function unit leaders positioned inside the LSC, information sharing is achieved on a real-time basis, and the ability of the functional unit leaders to have instant face-to-face interactions allows for more rapid decision making, thereby creating a more efficient and comprehensive response structure.

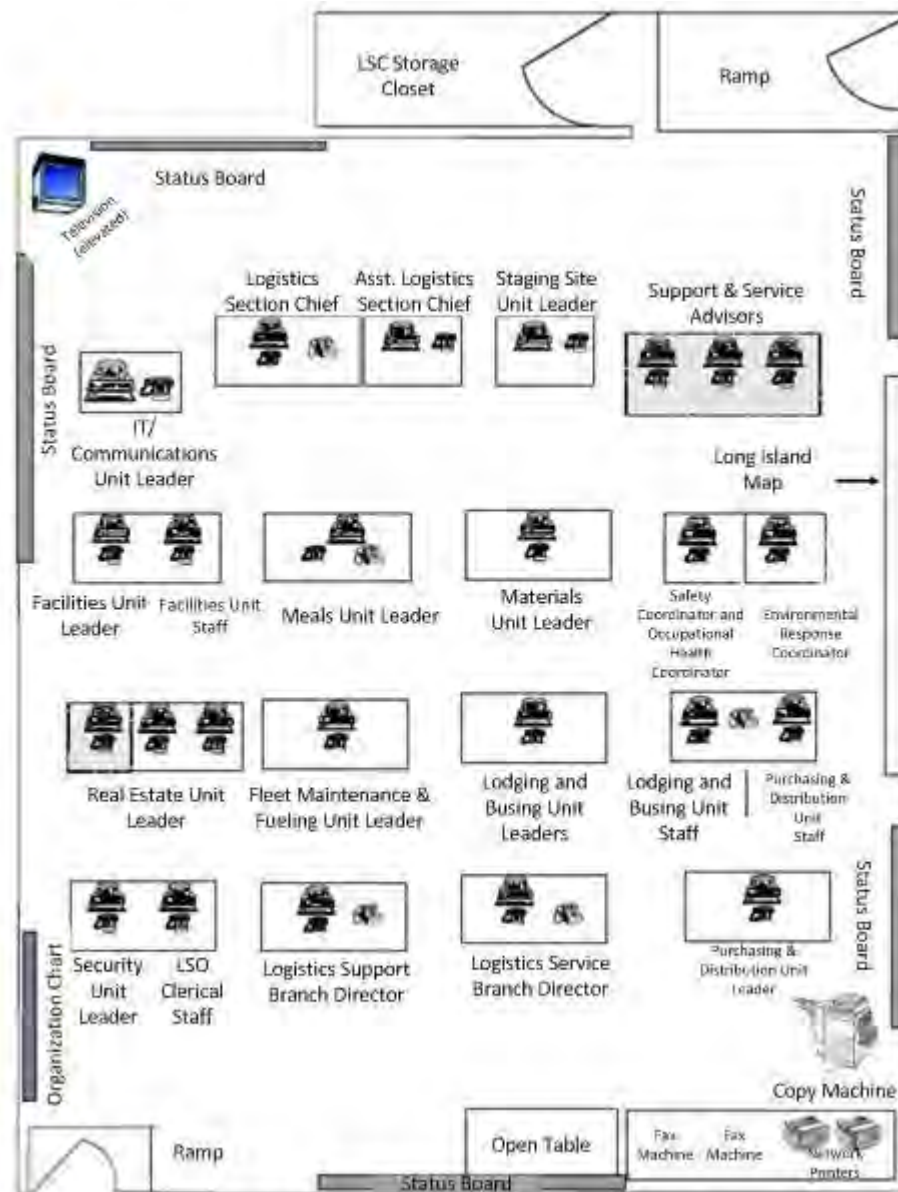


Figure 12.2 – Logistics Support Center (LSC) Facility Layout

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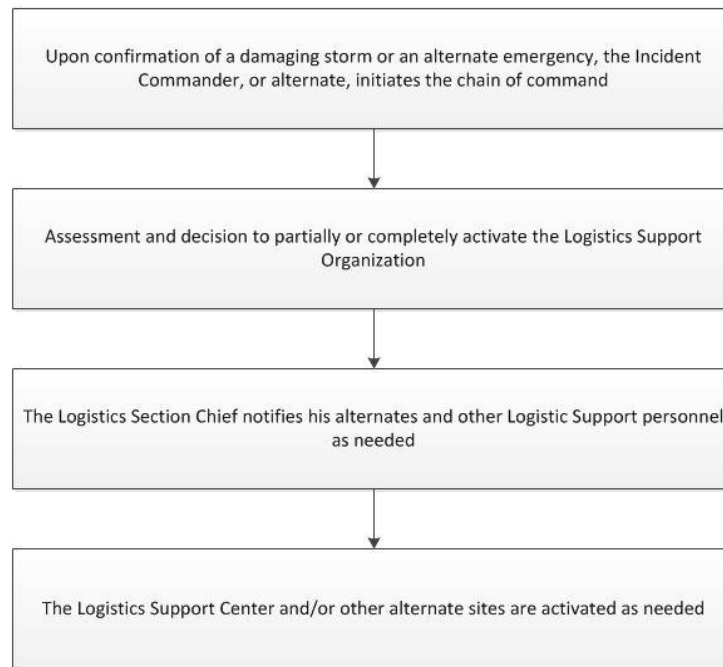


Figure 12.3 – Logistics Support Organization (LSO) Notification Scheme

12.3 Key Actions and Responsibilities

12.3.1 Logistics Section Chief

Upon being notified of an emergency affecting the electric system, the environment, or a corporate facility, the PSEG Long Island T&D Electric Services Director assumes the role of Logistics Section Chief. If the T&D Electric Services Director is not available, the Manager of Fleet Assets or the Director of Procurement will fill this role.

The role of the Logistics Section Chief is to lead the LSC. Throughout the event, the Logistics Section Chief will keep the Incident Commander informed of the LSO's status, issues, and needs.

Key activities and responsibilities for the Logistics Section Chief include the following:

- Leads the LSO and all logistics related field operations and activities
- Sets tactical goals to be achieved in short run/long run
- Participates in all PSEG Long Island Storm Meetings during the restoration effort and provides Logistics updates to the PSEG Long Island Senior Leadership Storm Team

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- Conducts daily meetings/calls with the Logistics Support Branch Director, Service Branch Director, and Staging Site Unit Leader to ensure that all Inventory Management, Fleet, Procurement, Lodging, Facilities, Voice & Data, etc. required services are being provided as needed, to address any issues and to ensure that “next steps” are being clearly communicated to all
- Leads daily meetings/calls with the Staging Site Unit Leader and all base camp staging area managers, discussing the status of each site and any issues or concerns that have arisen and need to be addressed
- Coordinates with the Foreign Crew Processing Team (FCPT) throughout the restoration effort
- Updates Security Unit Leader with the address locations and the numbers of crews and trucks at each hotel, material lay down and truck staging area, alternative housing site, and base camps being utilized in order for Security to arrange appropriate security patrols
- Works with all other affected teams to continuously appraise the event’s current situation, resolve issues, and provide communication and direction to the LSO on a regular basis
- If conditions warrant, coordinates logistics resource sharing with PSE&G New Jersey

12.3.1.1 National Guard Assistance

Under extreme conditions, the Logistics Section Chief will implement the emergency procedure, requesting support from the NYS National Guard. The NYS National Guard Support Program provides for power restoration support from National Guard personnel when a catastrophic event occurs and the customary sources of supplemental logistics personnel cannot provide the adequate number of personnel to address the outstanding needs.

In order for the NYS National Guard to be deployed, the Governor of the State of New York must declare a state of emergency. PSEG Long Island will provide National Guard personnel with any PPE required to perform a particular job that is not part of the standard-issue PPE. Upon assignment, National Guard personnel will receive a job briefing and on-the-job training, if necessary. The training may be conducted at the specific worksite, at a staging area, at a base camp, etc.

The National Guard can assist in providing logistics support, resources, equipment, transportation of cargo and materials, fuel delivery, communications support, public safety support, etc. NYS National Guard personnel are self-sufficient as it relates to food, water, and lodging.

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12.3.1.2 Demobilization

Upon the direction of the Logistics Section Chief, the LSO will begin demobilization of the LSC and/or staging site(s) as required. This could be in anticipation of the event coming to a conclusion or a change required during the course of an event. When appropriate demobilization activities are completed, the Logistics Section Chief will notify the Incident Commander of the completion of those activities, who will then confer the order to stand down.

12.3.2 Logistics Support Organization (LSO) Unit Leaders

Upon being notified by the Logistics Section Chief of an emergency that requires the activation of the LSO, the Support Branch Director, Service Branch Director, and Staging Site Unit Leader will initiate the appropriate notifications by contacting their respective Unit Leaders and support, service, and field advisors (Figure 2.8 in Section 2.2) assigned to the LSC. The LSO Unit Leaders will direct the efforts of their respective staffs in support of the event.

During an event, the LSO Unit Leaders will obtain and allocate resources as required to meet the demands of the event. The LSO Unit Leaders will report all issues of significance to the Logistics Section Chief and use the information gained from the LSC to direct the efforts of their respective functional organizations.

LSO Unit Leader roles include:

- Materials Management
- Purchasing
- Fleet Services
- Real Estate
- Facilities Management
- Meals
- General Shops
- IT/Communications
- Health Services
- Safety
- Environmental
- Lodging

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- Busing
- Staging Sites
- Security

12.4 Inventory Management

The role of the Materials Unit Leader within the LSO is to continuously assess the event for material needs. The Materials Unit Leader will obtain and allocate resources as required to meet the demands of the event. The Materials Unit Leader will report all issues of significance to the Logistics Section Chief and use the information gained to direct Materials Management efforts.

Key actions and responsibilities for the Materials Unit Leader and staff include the following:

- Operate all storeroom facilities on a 24 hour basis throughout the duration of the event
- Staff all material lay down staging areas
- Coordinate any need for additional material handlers, via mutual aid, through the Logistics Section Chief
- Ensure inventory is taken of existing material stockpiles (i.e., transformers, poles, cables, etc.)
- Ensure the on-hand material inventory levels meet their respective storm target quantity levels and expedite material deliveries, if any deficiencies exist
- Position copper and aluminum storm restoration kits consisting of primary, secondary, and service cables, clamps, connectors, splices, fuses, insulators, line hardware, etc. for deployment and issuance to Foreign Utility and Contractor Crews for their use in restoring the electric distribution system
- Coordinate the delivery of storm kits to designated staging site and distribute the kits to the arriving Foreign Crews
- Contact critical vendors to put them on notice of an impending action and anticipated needs/support
- Contact suppliers with established agreements to ship all PSEG Long Island authorized vendor stock in their possession in order to increase storm restoration stock levels and to be available for additional emergency deliveries; key material vendors who stockpile supplies for us off site include our cable, transformer, pole, and line hardware suppliers
- Ensure sufficient vendors are available for services utilized in removing transformers from staging sites, warehouse locations, and any remote locations where transformers may be staged for pick-up

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- Assignment of a Purchasing Buyer(s) to the Hicksville Material Distribution Center (MDC) and/or other satellite storeroom locations (as needed) in order to issue/expedite purchase orders and to increase the Total Authorized Value (TAV) of existing purchase orders, if necessary
- Stock mobile storerooms and deploy to the staging areas or other central locations, as directed by the Logistics Support Branch Director; units will contain required material for use by repair crews
- Accommodate the increased volume of deliveries and make arrangements with Fleet Services to have ready access to additional vehicles, including rentals, if necessary
- Deliver and replenish materials at operating yards, staging areas, job sites, substations, etc.
- Conduct daily review of inventory and red flag “fast movers” to schedule additional vendor and field deliveries
- Coordinate with all of the other NYS Utilities under the NYS Utilities Material Sharing Program to draw on the group’s stockpile of key materials and equipment (i.e., transformers, poles, cross arms, cables, wire, insulators, fuses, etc.) during restoration, if required
- Pick-up unused materials at staging sites and all field locations and return to storerooms at the end of the event
- Maintain records and a summary of material and equipment issued during the event
- Following the completion of restoration activities, work to replenish material stockpiles that were depleted during the restoration

If material or equipment mutual assistance is required, the Logistics Support Branch Director will request the Materials Unit Leader to participate in the NYS Utilities Material Sharing Group’s conference calls and initiate the NYS Utilities Materials Sharing Group protocol to prepare to draw on the Group’s stockpile of key materials and equipment. The NYS Utilities Material Sharing Group was established in accordance with the New York PSC’s “Order Instituting a Process for the Sharing of Critical Equipment” in Case 13-M-0047 (Issued November 19, 2013) to provide a system, whereby participating companies may receive and provide assistance in the form of materials and equipment to aid in restoring and/or maintaining electric utility service. This would only occur when such service has been disrupted by acts of the elements, equipment malfunctions, sabotage, or any other occurrence for which emergency assistance is deemed necessary or advisable.

Participating companies have agreed to establish a warehouse network in order to stockpile key materials and equipment to share, as outlined by the Group’s governing principles and procedures.

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12.5 Purchasing

The Procurement & Distribution Unit Leader will direct the efforts of the Procurement and Accounts Payable Departments in support of the event.

The Procurement & Distribution Unit Leader is required, on a semi-annual basis, to validate and update, as necessary, their list of contact information (names, phone numbers, e-mail addresses, fax numbers, etc.) for all logistics-related vendors and contractors on file. The Procurement & Distribution Unit Leader will contact their list of logistics vendors and contractors, via telephone or e-mail, to confirm/update each vendor/contractor's subject contact information.

The role of the Procurement & Distribution Unit leader in the LSO is to continuously assess the event for materials, equipment, and services-related needs, vendor management, supply sources, accounts payable issues, and inbound logistics.

Key actions and responsibilities for the Procurement & Distribution Unit Leader and staff include the following:

- Contact critical vendors to put them on notice of impending action
- Check on status of open orders of critical storm supplies
- Rapidly process the commercial review of storm contractor orders
- Purchase and expedite all material, equipment, and service requests to support field operations
- Ensure the proper and rapid acquisition of non-stock materials, equipment, and services
- Pre-arrange third party logistics contract services
- Secure rental equipment (i.e., portable light towers, office trailers, portable generators, traffic flow arrow boards, signage, portable rest rooms, refuse dumpsters, etc.) for build out of material lay down and/or truck staging sites
- Expedite storm cards and invoice processing by Accounts Payable

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12.6 Fleet Services

The role of the Fleet Maintenance & Fueling Unit leader in the LSO is to continuously assess the event for vehicle and fuel related logistical needs and to obtain and allocate resources, as required, to meet the demands of the event.

Key actions and responsibilities for the Fleet Maintenance & Fueling Unit Leader and staff include the following:

- Operate all Fleet garages on a 24 hour basis throughout the duration of the event
- Secure additional rental vehicles, line trucks, tall bucket trucks, etc.
- Vehicle repair and maintenance
- Provide emergency road service/towing services
- Ensure that adequate quantities of engine oil, hydraulic oil, and other lubricants are available
- Ensure that gasoline and diesel vendors top off fuel tanks, system-wide
- Utilize in-house gas/diesel fuel tankers, multiple mobile wet-hose fuel tankers, and operators from fuel contractors to ensure continuous fuel deliveries and maintain sufficient fuel quantities throughout the restoration event
- Coordinate and perform overnight refueling of all PSEG Long Island, off-Island crew trucks, and vehicles staged at hotel sites, base camps, alternative housing sites, and truck staging sites
- Coordinate and perform fueling of PSEG Long Island units stationed in operating yards, employee vehicles (during fuel shortages at gas stations), and portable generators set up at various locations
- Staging site setup, operation, and demobilization
- Special transportation needs
- Liaison with the NYS DOT to handle any issues that arise

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12.7 Real Estate Services

The Real Estate Unit Leader is required, on a semi-annual basis, to validate and update, as necessary, their list of contact information (names, phone numbers, e-mail addresses, fax numbers, etc.) for all staging areas (i.e., buildings, parks, airports, universities, dormitories, firehouses, etc.) on file. The Real Estate Unit Leader will contact their list of staging area property owners/representatives, via telephone or e-mail, to confirm/update each staging site's subject contact information.

The role of the Real Estate Unit leader in the LSO is to continuously assess the event for Real Estate needs, including staging site areas and special land use permits.

Key actions and responsibilities for the Real Estate Unit leader and staff include the following:

- Communicate with the property owners (buildings/parks/airports/universities) who have pre-arranged site agreements with PSEG Long Island to utilize their property parcels as established emergency staging areas
 - PSEG Long Island has nineteen pre-arranged site agreements (nine in Nassau County and ten in Suffolk County) in place and has secured access to over thirty different properties in past storm events. The nineteen secured sites are as follows:

Nassau County

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Suffolk County

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

- Verify that local staging sites are available and in pre-planned operational condition
- Determine if there are any local events competing for food and lodging resources
- If necessary, contact landlords of vacant land and/or usable facilities for short term lease; ensure lease agreements are prepared, signed, and notarized
- Coordinate with the Environmental organization to contact the appropriate state agencies for permits required to work in wetlands or other environmentally sensitive areas under their jurisdiction and when assistance of the Army Corps of Engineers is required
- Secure permits for any mobile offices and parking areas for field personnel and for moving oversize/overweight equipment through areas having restrictions
- Contact state, city, county, town, and/or village police departments if an oversized/overweight load must be transported on local roadways, or if a road must be cordoned off to permit electric repairs
- Upon deactivation of the LSC, the Real Estate Unit Leader will coordinate payment to landlord(s) for utilization of property during emergency restoration and ensure that post utilization lease agreements are signed and notarized

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12.8 Facilities Management

Key actions and responsibilities for the Facilities Unit leader and staff include the following:

- Facility Operations
- Maintenance and repair of company facilities and equipment during an event
- Maintain Incident Command Center in good working order
- Maintain LSC in good working order
- Set up office furniture and equipment, as needed
- Contact critical vendors to put them on notice of impending need
- Operation of Heating, Venting, and Air Conditioning (HVAC) and mechanical equipment
- Maintain the integrity of back-up power systems (i.e., emergency generators/Uninterrupted Power Source (UPS))
- Install sump pumps/sandbags (buildings)
- Housekeeping
- Mail, duplicating, and messenger services
- Perform ground maintenance at company properties
- Snow removal of company operating centers, facilities, roadways, and staging areas as needed
- Support set-up of staging sites as required
- Janitorial services/refuse pickups at substations

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12.9 Food Services

The Meals Unit Leader is required, on a semi-annual basis, to validate and update, as necessary, their list of contact information (names, phone numbers, e-mail addresses, fax numbers, etc.) for all food/eatery establishments (delicatessens, restaurants, caterers, etc.) on file. The Meals Unit Leader will contact their list of food/eatery establishments, via telephone or e-mail, to confirm/update each establishment's subject contact information.

Key actions and responsibilities for the Meals Unit Leader and staff include the following:

- Receive and process daily meal requests from the operating yards, office facilities, storm consoles, material and truck staging areas, Foreign Crew processing sites, alternative housing sites, etc.
- Coordinate meal deliveries for Foreign Crews at staging sites and alternative lodging locations (i.e., sleep cot set-ups within facilities, universities, firehouses, etc.) across Long Island and the Rockaways
- Arrange for daily deliveries of bottled water, sodas, and snacks to the Bethpage State Park reception processing site for the arriving Foreign Crews
- Arrange for 24x7 operation of the Hicksville and Melville Call Center dining facilities

12.10 General Shops

The PSEG Long Island General Shops division's daily function is to perform acceptance testing of delivered 1-Phase and 3-Phase distribution transformers, as well as to perform equipment repairs, as needed.

Key actions and responsibilities for the General Shops staff in the LSO include the following:

- Secure rental equipment required to build out staging sites including:
 - Office trailers
 - Storage trailers
 - Chemical toilets
 - Portable generators
 - Portable light towers/units
 - Arrow signs

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- Provide assistance to Substation Maintenance for:
 - Repairs to equipment and structures
 - Snow removal
 - Ground maintenance

12.11 Information Technology (IT)

The role of the IT/Communications Unit Leader in the LSO is to continuously assess the event for voice and data systems-related logistical needs and to obtain and allocate resources, as required to meet the demands of the event.

Key actions and responsibilities for the IT/Communications Unit Leader and staff include the following:

- Ensure Incident Command Center voice and data systems are in good working order
- Ensure LSC voice and data systems are in good working order
- Contact critical communications vendors to put them on notice of an impending action and any special requirements
- Ensure company provided two-way radio communication equipment is operational
- Ensure all staging site voice and data communications and supporting infrastructure is operational
- Ensure faxes and printers are available and operational
- Ensure all IT services required by the Logistics Team are operational and performing correctly

12.12 Health and Safety/Environmental

The health and safety of the public, PSEG Long Island employees, and contractors is of paramount importance. During major events, the Safety Manager and the Health Services Manager serve as Safety Coordinator and Occupational Health Coordinator, respectively.

The company's safety response team includes seven full time safety professionals and three full time safety advocates. In addition to the company's internal safety resource, the Safety response includes the safety resources of responding Contractors and Mutual Assistance Crews and is further supported by other internal and external resources. The company's health services response includes three full time health professionals, as well as contract nurse practitioners. We may also supplement our resources with PSE&G New Jersey personnel.

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12.12.1 Health And Safety

The health and safety response includes support and guidance, safety communications, incident reporting and tracking, and continuous monitoring and enforcement to ensure safe work practices at work locations, as well as at operations centers, staging areas, alternative housing facilities, fueling locations, Foreign Crew receiving sites, and base camps. A Safety Officer and an appropriate number of Safety resources are assigned to each division, as well as to the LSC and at Foreign Crew receiving and housing sites (see Section 3.1, detailing company's safety response). A nurse is assigned to every crew housing facility and base camp to administer first aid and/or address personnel health issues, as necessary.

Safety communications begin pre-event and continue throughout the response effort with safety related communications catered to address safety concerns appropriate for that stage and the event, incident trends, as well as public safety concerns. Arriving crews receive safety briefings by one of our safety professionals and are provided with a Foreign Crew guide and other information, as appropriate to the response.

Key actions and responsibilities for the Safety Coordinator and Occupational Health Coordinator and staffs include the following:

- Develop and recommend measures for safety and health of all personnel
- Visit all staging sites to ensure site safety, including safe traffic patterns, adequate lighting, etc.
- Provide safety briefings for PSEG Long Island and Foreign Crew restoration resources
- Assess or anticipate hazardous, unsafe, or unhealthy situations or conditions
- Investigate accidents and/or injuries that have occurred within an incident area
- Investigate and address any reported health issues or concerns within an incident area (i.e., PSEG Long Island facilities, hotels, staging areas, alternative housing sites, base camps/tent cities, etc.)
- Ensure that a nurse or medical professional is on-site at Foreign Crew lodging sites (i.e., universities, base camps/tent cities, etc. every evening (6:00PM – 8:00AM) for the duration of time that the crews are at the site, in case there is a medical emergency
- Ensure that all lodging sites and staging areas are equipped with first aid kits, fire extinguishers, etc.

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12.12.2 Environmental

The Environmental Response Coordinator manages environmental exposure and environmental health safety risks in the event of natural or man-made disasters (i.e., storms and associated oil spills, discharges, and related clean-up).

Key actions and responsibilities for the Environmental Response Coordinator and staff include the following:

- Determine if additional Environmental Leads are required for the specific incident, using the Resource Matrix as a guide, and communicate those assignments
- Ensure environmental briefings for outside resources
- Provide environmental communications briefing material or talking points to necessary Team Leaders
- Monitor and ensure adequate environmental services (i.e., spill response, clean-up, material handling, waste disposal, etc.) are being provided and are in compliance
- Recommend measures to improve environmental conditions
- Report environmental violations or hazards immediately to the SHE Officer
- Monitor and track compliance with environmental regulations
- Maintain environmental activity logs
- Ensure environmental regulatory reporting compliance
- Directly interface with dispatching for container management/needs at staging areas
- Coordinate transformer scheduling and disposition with vendors

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12.13 Lodging and Busing

Upon being notified by the Logistics Service Branch Director and Support Branch Director of an emergency that requires the activation of the LSO, Procurement buyers assume the roles of Lodging Unit Leader and Busing Unit Leader, respectively.

The Lodging Unit Leader is required to semi-annually update the contact information (names, addresses, phone numbers, e-mail addresses, fax numbers, etc.) of their Nassau County, Suffolk County, and Queens County hotel/motel lists. The Lodging Unit Leader will contact, via phone or e-mail, each hotel/motel and verify/update the respective hotel/motel's subject contact information.

Key actions and responsibilities for the Lodging and Busing Unit Leaders and their staffs include the following:

- Maintain and update the Foreign Crew Tracking & Hotel System (Google Docs/Resources On Demand (ROD)) with preloaded hotel information and keep the purchase orders current
- Ensure adequate lodging for Foreign Crews and PSEG Long Island's Foreign Crew guides during restoration
- Verify each hotel/motel's food service capabilities, restaurant accommodations, parking capabilities, emergency generator availability/run duration, etc.).
- Reserve rooms at the twenty-eight hotels that Lodging has established contracts in place with pre-set pricing; these hotels will be utilized first as lodging accommodations for Foreign Crews
- Contact hotels across Nassau, Suffolk, and Queens Counties and make reservations until all lodging requirements are met
- In the event that lodging at hotels/motels is not feasible or the supply has been exhausted, provide alternative housing arrangements (i.e., universities, firehouses, government facilities, etc.) and procure the necessary bedding and hygiene supplies
- Provide bus/shuttle services from staging areas, operating centers, and places of lodging for Utility Crews/Contractor Crews/PSEG Long Island personnel, as required
- Implement existing contract with third party logistics contractors to establish and operate base camp staging sites to be used for lodging Foreign Crews, contractor personnel, and PSEG Long Island personnel, if required

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12.14 Staging Sites

Upon being notified by the Logistics Section Chief of an emergency that requires the activation of one or more Staging Sites, the Logistics Section Chief will confer with the Real Estate Unit Leader to confirm the locations and acreage of available Staging Sites. The Staging Site Unit Leader in the LSC will coordinate with the assigned Staging Area Managers and oversee the progress, activities, and needs of each activated site. The Staging Area Manager will direct the efforts at their assigned staging site in support of the event. Field Advisors are deployed at each staging site to serve as single points of contact, communicating requests/needs of the site to the LSC.

If a storm event requires Foreign Crews to support the PSEG Long Island restoration effort, Bethpage State Park is built-out, per established site drawings, to serve as the main reception staging area for accepting the arriving Foreign Crews. At the site, the incoming Foreign Crews' vehicles/trucks are re-fueled, the crews receive the safety and information briefings, and are issued the required restoration storm kits. Refreshments are also provided for the arriving crews at this reception staging area.

Material laydown and truck re-fueling staging sites are established across the service territory for the Foreign Crews to pick up materials (poles, cross arms, transformers, cable, wire, line hardware, etc.) and to fuel their trucks. These staging sites are strategically located in areas throughout the service territory to be utilized by crews working on jobs in the immediate area, thereby reducing the drive time to get to the nearest company operating yard.

If a storm event causes significant damage to the T&D Electric Systems, a large Foreign Crew workforce may be required to support the PSEG Long Island restoration effort. If the Foreign Crew personnel numbers exceed the capacity of what the available Long Island and Queens County hotels can accommodate, then alternative housing arrangements will be implemented. These measures include setting up sleep cots at available universities, large vacant buildings/complexes, and fire houses across Long Island to bed the Foreign Crews.

Finally, base camp staging sites will be established, as needed. Base camps are self-contained and self-sustained cities consisting of on-site sleep bunk trailers/sleep tents with cots, portable restrooms, hand wash stations, mobile shower facilities, laundry units, refrigerated food trucks, on-site full service catering units for meal preparation (i.e., breakfast, box lunches, dinners, snacks and refreshments, etc.), catering prep tents, dining tents, tables, chairs, command trailers, portable generators, portable light towers, fire extinguishers, first aid stations, refuse dumpsters, trash receptacles, etc.

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PSEG Long Island will utilize third party logistics contractors to build out these base camps in order to house, feed, and fully accommodate the needs of the Foreign Crews. The photos (see Figures 12.4, 12.5, and 12.6) depict three base camps constructed during Superstorm Sandy to support the restoration effort. The Logistics Contractor provides personnel to fully operate the base camp and perform all required services. PSEG Long Island personnel will serve in operational and financial oversight roles at the base camps. The Restoration Staging Area Organizational Chart (see Figure 12.7) reflects the PSEG Long Island roles at the base camps with the Staging Area Manager overseeing all site operations and serving as the key liaison with the Logistics Contractor's Site Manager. The Staging Area Manager will report all issues of significance to the Staging Site Unit Leader in the LSC and use the information and direction gained from the LSC to direct the efforts at the Staging Area.

These base camps also enable the Foreign Crews to be concentrated in locations closer to their work assignments. The desired base camp staging area is a site of ten acres or more with most of the area being paved or consisting of a hard surface (i.e., crushed stone). Proximity to major roads and a number of entrance/exits into the area is preferred. If the site is open (no fence), the contractor will place temporary fencing to establish a perimeter for site security.

The base camps will continue to operate in this manner until the decision is made by PSEG Long Island to demobilize. The Logistics Contractor will then be directed to break down the site and remove all of their equipment and assets from the site.



Figure 12.4 - [REDACTED]



Figure 12.5 - [REDACTED]

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Figure 12.6 – [REDACTED] (Top: Aerial View; Bottom: Sleep Tent)

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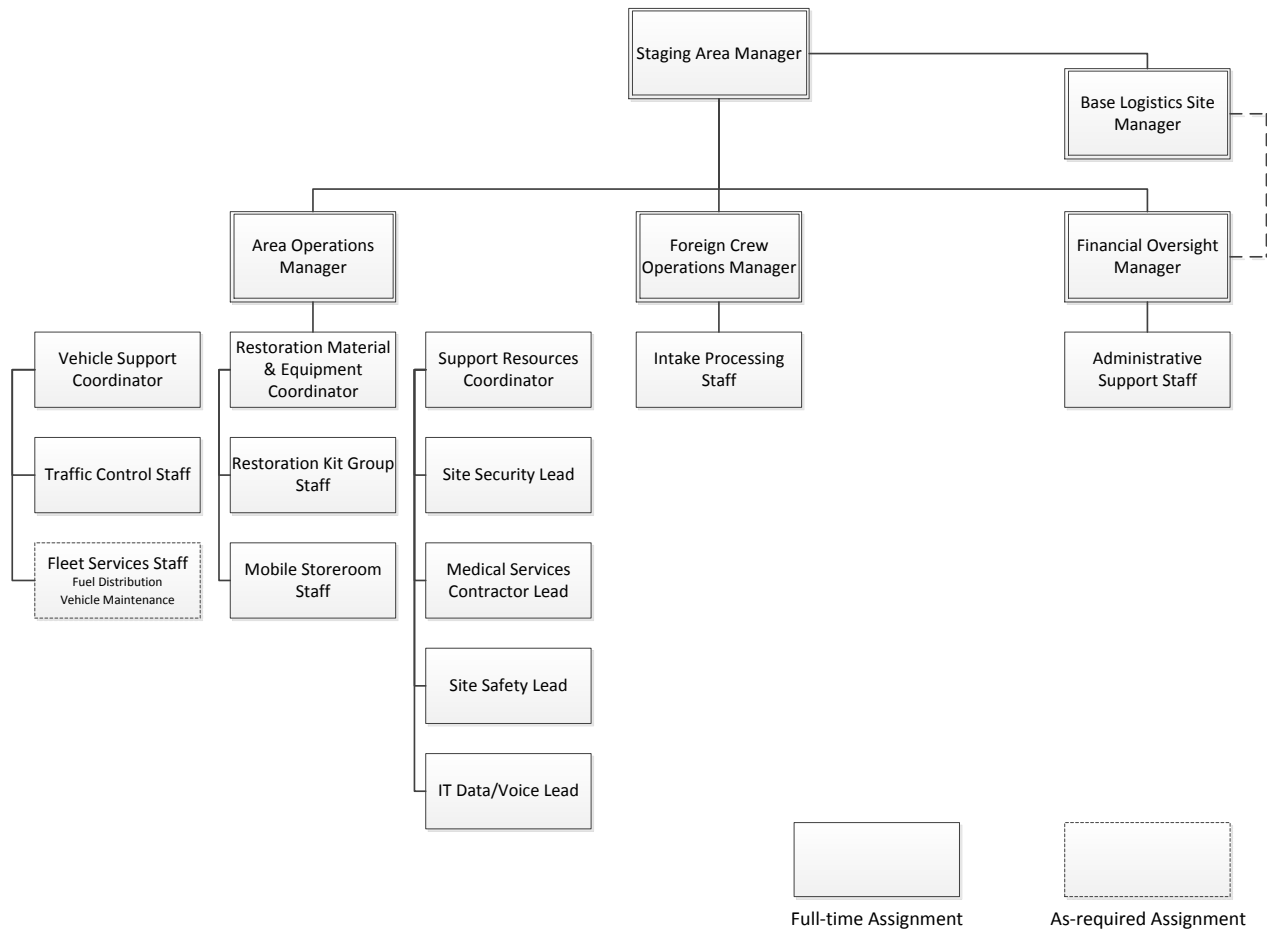


Figure 12.7 – Restoration Staging Area: Organizational Chart

12.15 Security

PSEG Long Island Security coordinates the strategy and tactics to ensure the security of company employees, locations, and assets (Section 3.2).

Key actions and responsibilities for the Security Unit Leader and staff in the LSO include the following:

- Deploy in-house security staff and/or contract guards at every activated staging site on a 24x7 coverage basis and patrols at all sleep sites (i.e., hotels, universities, firehouses, etc.) until the restoration is complete and the site has been completely demobilized
- Assign a contract security staff to maintain overall site security at all activated base camp staging sites. All personnel, including delivery personnel, will be cleared and credentialed prior to entering the Staging Area.
- Maintain a visible presence at all times and will periodically patrol the perimeter
- Coordinate with local law enforcement

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13. DEPARTMENT OF PUBLIC SERVICE (DPS) SCORECARD PROTOCOLS

13.1 Emergency Response Performance Measurement Guide

The scorecard was developed by the NYS DPS to measure the ability of utilities across NYS to restore power to customers after an outage event three days or greater in length. The scorecard is intended to hold utilities accountable to standards and expectations that can help assure that they have the ability, capacity, and mindset to act quickly and effectively during outages. While outage events can never be eliminated, these metrics establish minimum performance levels to assess utilities' restoration activities after significant outages.

This scorecard is to be applied to any event during which the outage duration, as defined below, lasts more than three days. The "Start of Event" is triggered when more than 5,000 customers are interrupted within a division for more than 30 minutes, or more than 20,000 customers are interrupted companywide for more than 30 minutes. If the event affects less than the customer counts listed, the start time shall be the earlier of the peak level of interruptions or start of utility restoration.

PSEG Long Island will be required to provide data with which the scorecard can be completed, on a per event basis, within 30 days of the completion of customer restoration. DPS staff will use the information provided by the utility in its review and determine a score for each event for every utility. Electric companies will continue to be required to file a Part 105 report within 60 days as set forth in the NYCRR¹.

13.2 Scorecard Categories

The scorecard assigns metrics and points across three categories: Preparation (150 points), Operational Response (550 points) and Communications (300 points). The three categories are intended to capture the key activities associated with preparing for and responding to a major storm event.

¹ 16 NYCRR §105.4(c) Within 60 days following completion of service restoration in an emergency where the restoration period exceeds three days, each electric corporation shall submit to the Secretary of the Public Service Commission a review of all aspects of its preparation and system restoration performance.

13.2.1 Preparation

The Preparation metric is intended to score utility performance with respect to activities and communications performed prior to forecast storms and in response to alerts from the NWS or a utility's private weather service.

13.2.2 Operational Response

The Operational Response metrics are intended to score performance with respect to the utility's response and ability to effectively mobilize personnel. Accurate and timely ETRs continue to be an area in which the utilities need to improve. ETRs furnished by utilities should be appropriate to the distribution of the communication vehicle (ETRs in press releases should reflect the area where press releases are distributed, ETRs on municipal calls should be appropriate to the area where municipal call is held, etc.).

13.2.3 Communication

The Communications metrics are intended to score performance with respect to the utility's ability to receive and disseminate information related to the impact of the storm/outage and restoration activities. The need for communicating with customers, general public, news media, and local officials is very important during emergency conditions, such as storms. Therefore, the sharing of information will be measured with respect to several communication vehicles (calls, press releases, social media, etc.).

13.3 Scorecard Metrics Owners Responsibility

Metrics were assigned to the appropriate stakeholders throughout the PSEG Long Island organization. Accordingly, each stakeholder will be responsible for providing the appropriate information that will be collected and provided to the NYS DPS to demonstrate performance against the corresponding measurement criteria included in the scorecard. As a means to ensure visibility to and ownership of, the DPS storm response scorecard is shown in Figure 13.1 through Figure 13.3, along with identification of the assigned organizational metric owner.

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NYS Storm Performance Scorecard Metrics

PREPARATION (10% of total – 150 points)		
Area of interest	Metric	Owner
Event Anticipation	Complete steps to provide timely and accurate emergency event preparation in response to the NWS or the company's private weather service, in accordance with the company's PSC approved Electric Emergency Plan, for an event expected to impact the company's service territory	OH/UG Senior Manager, Corporate Communications Director, External Affairs Director, Revenue Operations Director, Account Management Manager, Emergency Planning Manager, T&D Services Director

Figure 13.1 – Draft Emergency Response Performance Measures: Preparation

OPERATIONAL RESPONSE (60% of total – 550 points)		
Area of interest	Metric	Owner
Down wire	Response to downed wires reported by Municipal emergency Official	Operations Senior Manager
Preliminary Damage Assessment	Completion of preliminary damage assessment	Operations Senior Manager
Crewing	80% of the forecast crewing committed to the utility	OH/UG Senior Manager
ETR (Made available by utility on web, IVR, etc.)	Publication of global ETR in accordance with ETR protocol.	Corporate Communications Director
	Publication of Regional/County ETRs in accordance with ETR protocol.	
	Publication of Local/Municipal ETRs in accordance with ETR protocol	

Figure 13.2 – Draft Emergency Response Performance Measures: Operational Procedure

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OPERATIONAL RESPONSE (60% of total – 550 points)		
Area of interest	Metric	Owner
ETR Accuracy	Global ETR accuracy as published in accordance with ETR requirement time	Operations Senior Manager
	Regional ETR accuracy as published in accordance with ETR requirement time	
	Local ETR accuracy as published in accordance with ETR requirement time	
Municipality Coordination	Coordination with Municipalities regarding hazards or electric utility equipment impending road clearing, down wires, critical facilities, etc.	External Affairs Director
County EOC Coordination	Coordination with County EOCs	Emergency Planning Manager
Utility Coordination	Electric utility coordination with other utilities (Electric, gas, communications, water)	Operations Senior Manager
Safety	Measure of any employee or contractor serious injury doing hazard work during storm/outage and restoration	T&D Services Director
Mutual Assistance	Crew requests made through all sources of mutual assistance	OH/UG Senior Manager
Restoration Times	Time it takes utility to restore power to 90% of customers affected	TBD

Figure 13.2 (continued) – Draft Emergency Response Performance Measures: Operational Procedure

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COMMUNICATION (30% of total – 300 points)		
Area of interest	Metric	Owner
Call answer rates	Customer calls answered by properly staffing call centers	Customer Contact and Billing Director
Municipal Calls	Municipal call must be properly managed and provide, at minimum, baseline information, updates on road clearing activities, and allow for questions and answers	External Affairs Director
Web availability	Company's web site must be available around the clock, and must be updated at least hourly, until restoration is complete	Corporate Communications Director
LSE Customers	LSE customer contact	Revenue Operations Director
PSC Reporting	Provide storm event information to PSC in accordance with EORS guideline requirements	Emergency Planning Manager
Customer Communications	Press releases/text messaging/e-mail/social media to customers	Corporate Communications Director
Outgoing message on telephone line	Recorded messages providing callers with outage information is updated within one hour of communication releases	Customer Contact and Billing Director
PSC complaints	Number of storm/outage related PSC complaints received	Customer Experience and Utility Marketing Director

Figure 13.3 – Draft Emergency Response Performance Measures: Communication

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14. REVIEWS AND AFTER-ACTION REPORTING

Comprehensive performance assessments are a critical component to continuous improvement and PSEG Long Island is committed to conducting such reviews in the aftermath of a large-scale storm or other system emergencies. As a practice, PSEG Long Island conducts AARs to identify learning opportunities and to introduce changes to enhance the overall process going forward. PSEG Long Island also collects invaluable feedback through a variety of information gathering and reporting mechanisms, as illustrated below.

This approach provides the means to conduct a complete, thorough, and timely evaluation of our performance and protocols and leads to overall process improvements. PSEG Long Island continuously solicits input from external stakeholder groups and aims to build upon its knowledge base for the purpose of process improvement, as shown below. The following practices are routinely utilized for the purposes of Performance Reviews and After-Action Reporting:

1) After-Action Reviews (AARs)

Performance Reviews and After-Action Reporting is a formal and thorough process with well-documented and comprehensive reports being generated for the purpose of memorializing performance during an event and providing opportunities for education, training, and continuous improvement. Immediately following a major storm event, PSEG Long Island will launch a formal After-Action Review of its performance.

Teams of Subject Matter Experts (SMEs) from across the organization are pulled together to lead efforts to solicit feedback on what worked well and to identify opportunities for improvement. Feedback is proactively solicited from both internal and external stakeholder groups. Feedback and talk is analyzed and captured in thorough and comprehensive reports detailing the subject event opportunities for improvement. This information is then summarized, categorized, prioritized, and assigned to appropriate groups and individuals for development and implementation.

Detailed tracking reports are developed which summarize key initiatives, responsible parties, and targeted due dates. PSEG Long Island Emergency Preparedness maintains and monitors the action plan to ensure that all initiatives are tracked to completion. Efforts are also undertaken to properly communicate any changes, ensure appropriate training is provided, and document changes within the Emergency Restoration Plan, as appropriate.

2) Continuous Analysis/Improvements

PSEG Long Island reviews restoration efforts on an ongoing basis to determine what worked well and to identify opportunities for improvement. Opportunities are ultimately identified, prioritized, assigned, and tracked to completion.

This document shall be revised every **1** year or incrementally as significant changes occur.

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3) Consultation with PSE&G New Jersey

Close coordination and the sharing of best practices with PSE&G New Jersey provides additional insight to effective practices and emergency response protocols. PSEG Long Island continues to consult and confer with our PSE&G counterparts to enable an effective dialog and sharing of institutional knowledge.

4) Consultation with SMEs

PSEG Long Island gathers information on best practices and efficiency improvements from SMEs across the electric utility industry. These individuals help to provide real life experience and knowledge, beneficial to process identifying improvements going forward.

5) Consultation with External Stakeholders

PSEG Long Island solicits information on an ongoing basis from external stakeholders, including first response organizations, municipalities, government agencies, and others. These sources provide local insight that can greatly benefit PSEG Long Island's preparation and response efforts during restoration events. Such input is of great value as PSEG Long Island works to ensure a timely and efficient restoration response.

6) Consultation with NYS DPS

Long Island aims for continuous improvement through formal meetings and briefings with NYS DPS. PSEG Long Island will continue to solicit feedback and utilize NYS DPS's Utility Scorecard as a guidance document and assessment tool for large-scale outages. PSEG Long Island will continue to seek feedback and integrate the recommendations, as a means to continuously improve its performance.

7) Participation in External Events

PSEG Long Island actively participates and takes a leadership role in many industry groups and organizations. Additionally, PSEG Long Island representatives routinely attend conferences and workshops in areas of emergency management and electrical transmission and distribution. These outlets provide access to cutting edge information and insight into processes being put into place by others. These meetings and groups also contribute to improving relationships and coordination during large-scale restoration efforts. PSEG Long Island representatives participate in numerous forums and industry groups including, but not limited to:

- EEI
- Energy Council of the Northeast (ECNE)
- NAMAG
- Emergency Managers' Forum
- Participation in various municipal and local workshops and exercises

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- Long Island/NYC Emergency Management Conference
 - PSEG Long Island continues to sponsor the annual two day Long Island-NYC Emergency Management Conference, hosting hundreds of emergency management professionals from the New York Tri-State area to discuss cross-functional preparedness and other current key issues facing emergency response professionals.
 - This conference also serves as an exceptional venue to further cultivate partnerships with those professionals committed to emergency preparedness, coordination, and response.

In sum, PSEG Long Island continuously looks for areas of improvement and opportunities for change. Internal analysis and feedback from employees and various stakeholder groups proves invaluable to future enhancements. Performance reviews, After-Action Reporting, and participation in external events continue to be major focus areas of PSEG Long Island's restoration efforts going forward.

This document shall be revised every 1 year or incrementally as significant changes occur.

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15. APPENDICES

Appendix A – Cross Reference Spreadsheet with Public Service Law NYCRR 105

PART 105 SECTION	SECTION TEXT	WHERE ADDRESSED IN PSEG LI PLAN
§ 105.1	Preamble. These electric utility emergency plans are primarily intended to ensure adequate utility response for storm and storm- like emergencies; however, some aspects of the plans will have application to virtually all electric emergencies (e.g., customer contacts, communication with the media and government officials) and should be used accordingly.	Section 1.2
§ 105.2	Definitions. For the purposes of this Part, the following definition shall apply:	N/A
§ 105.2 (a)	Storm drill. A storm drill is a training exercise held by an electric utility to test the adequacy and effectiveness of its regularly assigned personnel and personnel performing job functions outside of their normal areas of responsibility in implementing the utility's service restoration procedures in the wake of a storm classified at the highest or next highest level of severity by the utility. Drills shall simulate the involvement of a majority of a utility's customers served by overhead transmission and distribution facilities or individual operating areas on a sequential basis. The purposes of the drill can be achieved through the mobilization of utility personnel with specific storm response, service restoration assignments under simulated storm conditions or through the actual preparation for an advancing storm, which may or may not damage the overhead T&D system. However, in either case, to qualify as a drill, the participants must have carried out all of their storm response assignments under either an impending storm scenario or a simulated storm scenario. Also the drill must involve contacts with outside agencies, local governments and others who would normally be included in service restoration responses. For actual preparations, in lieu of a drill, the company shall certify in section 105.3 of this Part that all requirements of this definition were met.	Section 4.3.2
§ 105.3	Submission of electric emergency plans. Each electric corporation shall file, in accordance with the requirements of section 3.5 of this Title, with the Commission an electric emergency plan that addresses storms, as well as other causes of electrical emergencies with storm-like characteristics, and that complies with the requirements of section 105.4 of this Part. On or before April 1 st of each year or on such other date as the Commission may prescribe, each electric corporation shall file such amendments to its emergency plan as it deems necessary, or as the Commission may require, to maintain a high level of preparedness, or a statement that no amendments are contemplated. In any event, by April 1 st of each year, each electric corporation shall certify in a report filed with the Secretary that within the past 12 months, it has taken the following actions:	Emergency Restoration Plan
§ 105.3 (a)	periodically verified telephone contacts with and updated its lists of names of internal and external contact persons identified in section 105.4(b)(5) of this Part; and	Appendix D, E, F, and L
§ 105.3 (b)	conducted at least one storm drill or emergency exercise involving key company personnel assigned service restoration responsibilities. Submissions made under this section shall be sent to the Director of the Office of Electric, Gas, and Water. Each electric corporation shall make available for public inspection its currently effective system-wide electric emergency plan at its principal corporate headquarters. Those corporations that have developed customized plans for individual operating areas shall make a currently effective customized plan available for public inspection at the principal offices of each operating area.	Section 4.3.2
§ 105.4	Content of electric emergency plans.	N/A

Figure A.1 – Cross Reference Spreadsheet with Public Service Law NYCRR 105

PART 105 SECTION	SECTION TEXT	WHERE ADDRESSED IN PSEG LI PLAN
§ 105.4 (a)	(a) Each electric corporation's electric emergency plan shall be compiled in a loose-leaf manual to facilitate updating. The manual shall provide a current, detailed description of each corporation's service restoration plan and, to the extent practicable, shall contain the information set forth in subdivision (b) of this section.	Emergency Restoration Plan
§ 105.4 (b)	Each electric corporation's emergency plan shall include the following information:	N/A
§ 105.4 (b) (1)	Table of Contents.	Table of Contents
§ 105.4 (b) (2)	Introduction. A statement of the purpose, policies and objectives of the plan.	Section 1 Section 1.2
§ 105.4 (b) (3)	Emergency classifications. Specify the criteria or guidelines used for determining the severity of electric emergencies and their classification. The guidelines should include, but need not be limited to, the geographical scope of the emergency, the estimated time required to restore general service, the type of expected damage to the electric system, i.e., from a storm or other storm-like emergency, and an indication of whether company personnel alone or company and supplementary, non-company personnel will be needed to repair system damage.	Section 6
§ 105.4 (b) (4)	Emergency response training program. State the corporation's program to provide emergency response training for those personnel assigned service restoration responsibilities that are different from their normal duties. Identify person(s) responsible for managing and evaluating the effectiveness of the program. Include procedures for conducting a minimum of one annual storm drill simulating a response to either a storm, or other storm-like electric emergency that would be classified at the highest or next highest level of severity. State the extent to which any personnel outside the company may be involved in a storm drill. Include as well, provisions for critiquing the drill procedures and for giving staff a minimum of two weeks' advance notice of a scheduled drill.	Section 2.3 Section 4.3.3 Section 4.4.2
§ 105.4 (b) (5)	Advance planning and preparation. Specify the on-going actions that the corporation expects to take throughout each year to plan and prepare for an electrical emergency. State the corporation's procedures to update at least semiannually its lists of contact persons, with titles, addresses, phone numbers and other pertinent data for the following:	Section 4 Section 2.3 Appendix L
§ 105.4 (b) (5) (i)	all utility personnel assigned service restoration responsibilities;	Section 2.3
§ 105.4 (b) (5) (ii)	mutual aid companies and contractors;	Section 10.2.2 Appendix G
§ 105.4 (b) (5) (iii)	all life support and other special needs customers;	Section 4.4.3 Section 11.2.4
§ 105.4 (b) (5) (iv)	human services agencies;	Section 11.2.4 Section 11.5.3 Appendix F.8
§ 105.4 (b) (5) (v)	print and broadcast media;	Section 11.9 Section 11.9.3 Appendix E
§ 105.4 (b) (5) (vi)	operators/managers of motels, restaurants and dormitories, etc.;	Section 12.13 Section 12.14
§ 105.4 (b) (5) (vii)	state, county and local elected officials, law enforcement officials, and emergency management and response personnel;	Section 11.10.1 Appendix F
§ 105.4 (b) (5) (ix)	medical facilities; and	Section 11.7.2 Appendix D

Figure A.1 (continued) – Cross Reference Spreadsheet with Public Service Law NYCRR 105

PART 105 SECTION	SECTION TEXT	WHERE ADDRESSED IN PSEG LI PLAN
§ 105.4 (b) (5) (x)	vendors.	Section 12.5
§ 105.4	At least annually, the corporation shall verify that all of the preceding data are current. At least semiannually, the corporation shall issue updated lists of known changes to its employees that have plan implementation responsibilities. The procedures should include the corporation's plans to stockpile emergency restoration tools and supplies in loose or kit form. State also, provisions for the preparation and distribution of literature or other forms of communication with information on customer storm preparations. Such information should address storm survival without electric power and safety precautions regarding electrical hazards such as downed wires and the use of portable generators.	Section 2.3 Section 11.9.4 Section 12.4
§ 105.4 (b) (6)	Emergency anticipation. Identify the preparatory measures corporate management would implement in anticipation of a potential system emergency expected to affect the service territory within hours or days. Identify the criteria under which key personnel with service restoration responsibilities would either be notified of an impending emergency or deployed to assigned areas, and any special precautions that would be taken.	Section 2.3 Section 5 Section 6
§ 105.4 (b) (7)	Service restoration procedures. Provide the corporation's procedures for mobilizing its personnel, materials and equipment in order to survey system damage and implement measures to ensure timely, efficient and safe restoration of service to customers in areas damaged by a storm or other storm-like electric emergency. The procedures need to identify restoration priorities to ensure that restoration time is minimized, while ensuring critical customers' needs are met. Include a listing of the priorities for service restoration among customer groups in these procedures. Identify criteria for determining when centralized versus decentralized control is appropriate. For those severe emergencies when field damage assessments are needed, describe the methods for making, within 24 hours, broad scale preliminary assessments of the nature and extent of system damage based on rapid surveys of damaged areas and other data sources, and for making, within 48 hours, more detailed estimates of system damage based on systematic field surveys. Describe how field reports of system damage will be integrated with damage reports or indicators from other sources, such as customer call-ins, in order to make a reasonably accurate assessment of system damage and reliable projections of the personnel, equipment, materials and time that will be needed to rapidly and safely achieve service restoration goals in all damaged areas. Provide the procedures for deploying company and mutual aid crews to work assignment areas, monitoring crew activity, reassigning crews as necessary and releasing crews, under both centralized and decentralized command modes. Describe the methods and means that will be used to communicate with damage survey crews and service restoration crews. Identify the procedures for coordinating company restoration procedures with those of other utilities' restoration efforts and with state and local emergency management and public works agency efforts.	Section 7 Section 8 Section 9 Section 10
§ 105.4 (b) (8)	Personnel responsibilities. Provide a narrative and chart of the organization and operational assignments of personnel to be mobilized for each emergency classification identified. State the areas of management and supervisory responsibility and functions to be performed at each emergency classification level. Include the procedures for contacting and managing all personnel assigned duties under the emergency restoration plan at both the corporate and operating division level.	Section 2 Section 6 Section 7

Figure A.1 (continued) – Cross Reference Spreadsheet with Public Service Law NYCRR 105

PART 105 SECTION	SECTION TEXT	WHERE ADDRESSED IN PSEG LI PLAN
§ 105.4 (b) (9)	Customer contacts. Provide the corporation's procedures and facilities for handling the extraordinary volume of customer calls that are normally placed during emergency events. Include a description of the type of messages that may be given to call-in customers regarding projections for service restoration or other pertinent information. State the overall corporate goals for answering customer calls during electric emergencies including, but not limited to, plans for staffing levels, number of positions activated, use of pre-recorded messages, means of providing updated information to customer service representatives, and the means of monitoring calls received and answered at the utility's office and, to the extent possible, at telephone company switching offices serving the utility's office. State the procedures for contacting within 24 hours, and policies for responding to the needs of, life support customers (those who require electrically operated machinery to sustain basic life functions) during an electrical emergency. State the procedures for contacting other special needs customers such as the elderly, the vision-impaired, the hearing and speech-impaired, the mobility-impaired and human service agencies representing these customers, along with policies for handling inquiries and requests for assistance from them. Describe the corporation's method for estimating dry ice needs during an emergency period projected to last more than 48 hours and arrangements for obtaining and distributing dry ice to designated customer groups. State also the means of making out-of-service customers aware of the availability and the location, dates, hours and amounts of dry ice to be distributed.	Section 11.5.3 Section 11.6 Section 11.6.1
§ 105.4 (b) (10)	Communications. Provide the corporation's procedures and facilities for establishing and maintaining external communications exchanges regarding damage and restoration progress with customers in general, human service agencies, the media, the Department of Public Service, the State Emergency Management Office and other state agencies, county and local governments, emergency response services, and law enforcement agencies, etc. Include the identification of any dedicated phone lines, the designation of any special company representative to act as liaison with government entities, and any special provisions that may be required for dealing with critical facilities. State the corporation's planned frequency of communication updates to the media.	Section 11.6 Section 11.7.2 Section 11.10 Section 11.10.3 Section 11.11 Appendix F
§ 105.4 (b) (11)	Outside aid. State corporate policy and criteria governing conditions under which requests for service restoration aid from other utilities, contractors, government agencies or others would be made and the procedures to be followed in obtaining outside aid.	Section 6 Section 10.2.2 Appendix G
§ 105.4 (b) (12)	Support services. Describe the actions that will be taken, and who will be responsible for implementing them to sustain and support restoration crew activities. These shall include vehicle management; foreign crew accommodations, e.g., housing, food and transportation; and distribution of warehouse supplies, e.g., materials, tools, parts and equipment needed in the restoration process.	Section 12
§ 105.4 (c)	Within 60 days following completion of service restoration in an emergency where the restoration period exceeds three days, each electric corporation shall submit to the Secretary of the Public Service Commission a review of all aspects of its preparation and system restoration performance.	Section 13.1
§ 105.4 (d)	Each electric corporation may submit such additional information and plans as it believes necessary or desirable to fulfill the purposes of this Part.	-----
§ 105.4 (e) (1)	Each electric corporation may delete the names and phone numbers of its employees and outside contact persons from the copies of plans filed with the commission and available for public inspection at its corporate headquarters. Such deleted information shall be subject to inspection by the commission or Department of Public Service employees.	PSEG Long Island will provide DPS a redacted copy of the Emergency Restoration Plan for public viewing

Figure A.1 (continued) – Cross Reference Spreadsheet with Public Service Law NYCRR 105

PART 105 SECTION	SECTION TEXT	WHERE ADDRESSED IN PSEG LI PLAN
§ 105.4 (e) (2)	Any electric corporation may request that the commission designate as confidential any information required to be submitted in emergency plans. Confidential information may include, for example, internal security matters. Such requests shall identify the specific information requested to be treated as confidential and shall explain why confidentiality is sought. Unless the commission directs otherwise, such information shall not be included in the plans available for public inspection.	-----
§ 105.5	Commission review and approval. Upon receipt and review of emergency plans or amendments filed by an electric corporation under this Part, the commission may require any such corporation to modify such plans or amendments or otherwise prescribe conditions for approval. Approval will be based on compliance with the requirements of this Part.	-----
§ 105.6	Compliance with electric emergency plans	-----
§ 105.6 (a)	Each electric corporation shall comply with the guidelines and practices set forth in its effective emergency plans. Each electric corporation shall comply with any additional electric emergency plan requirements that may be imposed by the commission.	-----
§ 105.6 (b)	Under emergency conditions, an electric corporation may modify its response from that in the filed electric emergency plan to the extent required to restore service in a safe and efficient manner. However, modifications and the circumstances that caused them shall be reported in writing to the secretary of the commission within 60 days from restoration of full service. Minor changes such as telephone numbers, personnel changes, etc., need not be reported, but as soon as practicable should be made to the plans.	-----

Figure A.1 (continued) – Cross Reference Spreadsheet with Public Service Law NYCRR 105

Appendix B – ERIIP Titles and Descriptions

TITLE	DESCRIPTION
ERIP 1.1.1.100 – Summaries	This document is a brief summary of the procedures in ERIP 1.1.
ERIP 1.1.1.200 – Table of Contents	This document is the Table of Contents for ERIP 1.1.
ERIP 1.1.1 – Storm Anticipation – System	This procedure describes the actions that are taken prior to the impact of a storm. It provides a checklist for senior management to implement at given intervals prior to impact of the storm on Long Island and the Rockaways' Service Territory.
ERIP 1.1.1.1	Vice President, T&D – Storm Anticipation Checklist
ERIP 1.1.1.2	Senior Manager T&D Operations – Storm Anticipation Checklist
ERIP 1.1.1.3	Director, Transmission Operations – Storm Anticipation Checklist
ERIP 1.1.1.3.1	Director, Substation Protection and Telecommunications – Storm Anticipation Checklist
ERIP 1.1.1.4	Director, Overhead & Underground Lines Department – Storm Anticipation Checklist
ERIP 1.1.1.5	Vice President, Operations Support (Inventory Management) – Storm Anticipation Checklist
ERIP 1.1.1.6	Vice President, US Procurement (Lodgings) – Storm Anticipation Checklist
ERIP 1.1.1.7	Fleet Services – Storm Anticipation Checklist
ERIP 1.1.1.8	Vice President, Customer Services – Storm Anticipation Checklist
ERIP 1.1.1.9	Deleted
ERIP 1.1.1.10	Deleted
ERIP 1.1.1.11	Manager, Power Asset Management (PAM) – Storm Anticipation Checklist
ERIP 1.1.1.12	PSEG LI President & COO – Storm Anticipation Checklist
ERIP 1.1.1.13	Storm Anticipation Callout List
ERIP 1.1.1.14	Storm Anticipation Meeting Agenda
ERIP 1.1.1.15	Local Government Emergency Preparedness Contacts
ERIP 1.1.1.16	Manager, Emergency Restoration Preparedness (ERP) – Storm Anticipation Checklist
ERIP 1.1.2 – Mobilization of Personnel	This procedure identifies the personnel responsible and the actions necessary for notifying the Operations Organization of the declaration of Condition I "Red".
ERIP 1.1.3 – Obtaining Foreign Crew Support	This procedure specifies how to obtain outside assistance via the latest "Mutual Assistance Roster" issued by the T&D Committee of the Edison Electric Institute (EEI) and from qualified contractors.
ERIP 1.1.3.1	Condition Red Resource Matrix Guide
ERIP 1.1.4 – Command and Control – System Headquarters	This procedure describes the actions to be taken by the Chief Operations Coordinator and the PSEG LI Vice President Transmission & Distribution in the declaration of Condition I "Red".
ERIP 1.1.5 – Lockout Information Coordination	The purpose of this procedure is to provide the means for a timely analysis of distribution lockout information, to provide the Transmission & Distribution Operations Department with the necessary data to assess damage to the distribution system and to assist in determining corrective measures.
ERIP 1.1.6 – Placing Substations into Local Control	The purpose of this procedure is to describe the various steps necessary to establish which substations should be placed into local control and in what order.
ERIP 1.1.7 – Reports to System Headquarters	The purpose of this procedure is to provide for a series of reports from the substation to System Headquarters through Division Headquarters.
ERIP 1.1.8 – Estimating Storm Damage and Restoration Time	This procedure provides a methodology for making early estimates of the number of customers out of service and the number of primary and secondary damage locations. These estimates are based on transmission and distribution lockouts.
ERIP 1.1.9 – Information Reporting to Communications Organization and NYS DPS	This procedure describes the coordinated collection of restoration data to be periodically shared between the Communications Coordination Center (CCC) and the NYS DPS.
ERIP 1.1.10 – Crew Guide Instructions	The purpose of this procedure is to provide information and instructions to the personnel performing as Crew Guides to Foreign Utility and Contractor Crews.
ERIP 1.1.11 – Information Manual for Foreign Utility Crews	This manual is designed to provide general information regarding PSEG Long Island's electric system and PSEG LI's storm restoration objectives to Foreign Crews called to assist in a restoration effort.
ERIP 1.1.12 – Outfitting Foreign Utility and Contractor Crews (LOGISTICS)	This procedure provides instructions for issuing materials and kits to the Foreign Utility and Contractor Crews as they arrive.
ERIP 1.1.13 – Housing for Foreign Utility and PSEG LI Crews (LOGISTICS)	This procedure details the actions necessary to secure lodging for Foreign Utility and PSEG LI Crews.
ERIP 1.1.14 – Staging of Foreign Utility Crew Equipment (LOGISTICS)	This procedure details the actions needed to secure staging facilities for Foreign Utility Crew equipment, if this equipment cannot be accommodated in close proximity to their work locations.

Figure B.1 – ERIIP Titles and Descriptions

TITLE	DESCRIPTION
ERIP 1.1.15 – Manning Substations without Supervisory Control	This procedure provides instructions for dispatching personnel to substations that are not centrally monitored.
ERIP 1.1.16 – Maintaining Substation Stationery Kits	This procedure provides specific information regarding the maintenance of the substation stationery kits.
ERIP 1.1.17 – Computer and Communications Support during Storms or other Electric System Emergencies	This procedure defines those actions to be taken to provide the computer and communications resources required for the effective operations of Corporate Computer Systems in direct support of the restoration of electric service during storms or other system emergencies.
ERIP 1.1.18	Deleted
ERIP 1.1.19 – Dispatching and Restoring Parallel Generation with Independent Power Producers	This procedure describes those steps necessary to maintain safe operating conditions between PSEG Long Island and the Independent Power Producers, before, during and after the passage of a severe storm.
ERIP 1.1.20 – Foreign Utility Crew Coordination	This procedure provides information and instructions to the personnel performing the responsibilities and actions of Foreign Crew Coordination.
ERIP 1.1.21	Deleted
ERIP 1.1.22 – Municipal Road Clearance Coordination	This procedure provides the guidelines for establishing Road Clearance Teams to respond to municipal requests to PSEG Long Island for assistance in the clearing of priority/critical roads.
ERIP 1.1.23 – Wire Watcher Instructions	This procedure describes the mobilization and dispatch operation of Wire Watchers from various departments within PSEG Long Island and outside contractors during minor and major storm events and outlines the responsibilities and actions required of Wire Watchers when assigned to stand by downed electric wires.
ERIP 1.1.24 – National Guard Assistance	This procedure provides for power restoration support from National Guard personnel when a catastrophic event occurs and the customary sources of supplemental personnel, such as mutual assistance, contractors, or internal staff, cannot provide adequate personnel to address needs.
ERIP 1.1.24.1	National Guard Assistance Request Form
ERIP 1.1.25 – Drills and Training	The purpose of this procedure is to ensure PSEG LI personnel have received emergency response training for those personnel assigned service restoration responsibilities that are different from their normal duties.
ERIP 1.1.26 – ETR Instructions	This procedure details the development of Estimated Time of Restoration (ETRs) by PSEG LI Distribution Operations which is used in customer and stakeholder outage communications, the responsibilities of the various organizations tasked with informing and updating customers of electrical outages, This procedure also outlines the communication/messaging process to customers during major events, the departments responsible for initiating these communications and the methods of communications. In addition, this procedure discusses the NYS DPS ETR metrics approved by the NYS Public Service Commission.
ERIP 1.2.1.100 – Summaries	This document is a brief summary of the procedures in ERIP 1.2.
ERIP 1.2.1.200 – Table of Contents	This document is the Table of Contents for ERIP 1.2.
ERIP 1.2.1 – Storm Anticipation – Division	This procedure describes the actions that are taken at a Division level prior to the impact of a storm. It provides a checklist of actions to implement at Division Headquarters.
ERIP 1.2.2 – Command and Control – Division Headquarters	The purpose of this procedure is to describe the actions to be taken by the Division Operations Coordinators in response to a declaration of Storm Condition of Readiness I “Red”.
ERIP 1.2.3 – Division Reports to System Headquarters	This procedure provides a system of status reports from the field to System Headquarters through the Division Headquarters.
ERIP 1.2.4 – Patrol and Restoration of Transmission Circuits	The purpose of this procedure is to provide a method by which adequate transmission sources can be reestablished and maintained.
ERIP 1.2.5 – Wire Down Survey	The purpose of this procedure is to define the steps necessary to screen and survey “Green Ticket” or “Wire Down” calls.
ERIP 1.2.6 – Processing of Rapid Survey – Division	This procedure provides instructions for processing information obtained from the Rapid Survey.
ERIP 1.2.7 – Damage and Repair Tracking – Division (Storm Console Operation Instructions)	This procedure describes the method of tracking repair jobs at the Division Headquarters Console using both the CARES Computer System and manual methods.
ERIP 1.2.8 – Assigning Repair Jobs by Priority – Division	The purpose of this procedure is to establish a method for assigning repair work with priorities in order to create an orderly and efficient system for restoring customers.
ERIP 1.2.9 – Mobilization and Dispatch of Electric Line Crews	The purpose of this procedure is to describe the process of dispatching high voltage crews in the Electric Design & Construction Department.

Figure B.1 (continued) – ERIP Titles and Descriptions

TITLE	DESCRIPTION
ERIP 1.2.10 – Mobilization and Dispatch of Two-Man Makeup Crews	The purpose of this procedure is to provide instructions for activating and dispatching Two-Man Makeup Crews.
ERIP 1.2.11 – Material Delivery Instructions (LOGISTICS)	This procedure provides the Materials Management Department and Operations personnel with instructions for obtaining and delivering materials to the substations and job sites.
ERIP 1.2.12 – Division Support Instructions	This procedure details the actions taken by the Division Support Coordinator.
ERIP 1.2.13 – Telco – PSEG LI Joint Restoration Agreement	This procedure provides the working arrangements between PSEG LI and Verizon.
ERIP 1.2.14 – Hand Light and Battery Delivery Instructions	This procedure describes the issue and delivery of hand lights and batteries to substations.
ERIP 1.2.15 – Messenger Service Instructions	The purpose of this procedure is to provide the routes and schedule for road messenger service between Division Headquarters, substations and District Offices.
ERIP 1.2.16 – Local Control Analysis Guide	This procedure describes the manual use and preparation of the Division Crew Assignment Guide.
ERIP 1.2.17	Deleted
ERIP 1.2.18	Deleted
ERIP 1.2.19	Deleted
ERIP 1.2.20 – Substation Restoration Personal Computer Kits	The purpose of this procedure is to define the responsibilities and actions to be taken to distribute, collect and inventory Substation Restoration Personal Computer kits.
ERIP 1.2.21	Deleted
ERIP 1.2.22 – Mobilization and Dispatch of Survey Crews During “Condition Blue” Events	The purpose of this procedure is to describe the operations and actions used to mobilize and dispatch Survey Crews from various departments.
ERIP 1.2.23 – Division Communications Liaison Instructions	The purpose of this procedure is to describe the coordinated actions taken to assure PSEG Long Island customers and stakeholders are provided appropriate information related to incidents that impact the electric system within the Long Island and the Rockaways’ Service Territory.
ERIP 1.2.24 – Emergency De-energization / Re-energization Instructions	The purpose of this procedure is to describe the necessary actions to be taken by PSEG Long Island (PSEG Long Island) when PSEG LI determines post-incident flood assessments are required and implements specific actions in areas where structures at customer premises may have sustained water damage and/or water intrusion to the electrical equipment, when PSEG LI determines that substations/areas need to be de-energized to safeguard the electric system equipment and mitigate the impact of storm surge and flooding and when requests are received from Municipalities/Local jurisdictions to de-energize electric service to an area(s) in response to mandatory evacuation(s) to ensure public safety in preparation for a major storm.
ERIP 1.2.25 – CATV – PSEG LI Joint Restoration Agreement	This procedure provides the working arrangements between PSEG LI and Cablevision, Time-Warner Cable and Verizon FiOS.
ERIP 1.2.26 – GasCo – PSEG LI Joint Restoration Agreement	This procedure provides the working arrangements between PSEG LI and National Grid (DNY) Gas.
ERIP 1.3.0.100 – Summaries	This document is a brief summary of the procedures in ERIP 1.3.
ERIP 1.3.0.200 – Table of Contents	This document is the Table of Contents for ERIP 1.3.
ERIP 1.3.1 – Activation and Preparations for Survey, Substation Dispatch Authority and Local Control	This procedure identifies the actions necessary to activate the substation in preparation for Rapid Survey, Substation Dispatch Authority (SDA), Local Control (LC), Emergency Restoration Survey and Repairs.
ERIP 1.3.1.1 – Survey Safety Supplement	Survey personnel shall use this supplement as a guideline while performing their assigned storm restoration duties on the PSEG Long Island system as a result of storm damage
ERIP 1.3.1.2 – Survey Manual Supplements	This document is the Hand-out given to Surveyors.
ERIP 1.3.2 – Conduct of Rapid Survey – Substation	This procedure describes what actions take place at the substation while conducting Rapid Survey.
ERIP 1.3.3 – Assumption of Local Control	This procedure describes the actions of the Substation Area Coordinator (SAC) to assume control of the substation and to direct repair operations.
ERIP 1.3.4 – Conduct of Emergency Restoration Survey	This procedure describes what actions take place at the substation while conducting Emergency Restoration Survey.
ERIP 1.3.5 – Damage and Repair Tracking – Miniconsole	This procedure describes the mapping and tracking of damage jobs on the substation mini-console.
ERIP 1.3.6 – Assigning Repair Jobs by Priority – Substation	This procedure instructs the SAC on the correct method of assigning crews to repair jobs based on priority.
ERIP 1.3.7 – Emergency Switching – Distribution System	This procedure provides for the safe emergency operation of distribution feeder breakers and line sectionalizing devices on radial distribution feeders.

Figure B.1 (continued) – ERIP Titles and Descriptions

TITLE	DESCRIPTION
ERIP 1.3.8 – Survey Team Instructions	This procedure describes two types of field damage survey: Rapid Survey and Restoration Survey.
ERIP 1.3.9 – Handlight and Battery Instructions	This procedure instructs the SAC in the issuance of handlights & batteries to Survey Team personnel.
ERIP 1.3.10 – Reporting and Documentation – Forms	This procedure defines the records the SAC is required to keep for their substation.
ERIP 1.3.11 – Use of Personal Vehicles	This procedure describes the method used to lease a personal vehicle from an employee.
ERIP 1.3.12 – Grid Coordinate System Instructions	This procedure defines the correct method of using the Grid Coordinate System for accurately describing any location in the Long Island and the Rockaways' Service Territory.
ERIP 1.3.13 – Substation Reports to Division Headquarters	This procedure describes the reports required from each substation in local control to Division Headquarters.
ERIP 1.3.14 – Instructions on Completing Electric Damage Patrol / Repair Order (Storm) (RP-5)	This procedure describes the proper completion of the Electric Damage Patrol / Repair Order (Storm) (RP-5).
ERIP 1.3.15 – Restoration, Substation and Telephone Directory	This procedure is a directory of all distribution substations. It contains the substation address and grid number, as well as the CCC and ERP telephone numbers.
ERIP 1.3.16 – PC Operator Instructions	This procedure describes the initial actions that the PC Operator employs to prepare the substation laptop for restoration activities.
ERIP 1.3.16.1 – Restoration Software Installation Instructions	This procedure is the instructions for installing software.
ERIP 1.3.17 – Instructions for Utilizing SR01	This procedure provides instructions to the PC Operator and/or other personnel in how to access and the use of SR01.
ERIP 1.3.18 – Instructions for Utilizing PragmaCAD	This procedure provides instructions to the PC Operator and/or other personnel in how to access and the use of PragmaCAD.
ERIP 1.3.19	Deleted
ERIP 1.3.20 – Instructions for Recording Attendance & Survey Team Information on the Infonet	This procedure instructs the PC Operator on how to record daily attendance and Survey Team assignments on the Infonet based EOER System.
ERIP 2.1.1 – Communications Team Assignments	This procedure defines the Emergency Communications Coordination Organization by assignment and the job functions of each position.
ERIP 2.2.1 – Information Officer (VP Customer Services)	This procedure provides the Vice President of Customer Services with pre- and post-emergency implementing actions checklists. These checklists will ensure the implementation of Communications Organization and CCC activities.
ERIP 2.2.3 – Activation and Deactivation of Communications Command	This procedure describes the method to be used in the activation and deactivation of Communications Command Center.
ERIP 2.2.4 – Regional Public Affairs in the Communications Command Center	This procedure directs the user to those procedures that will aid in the activation of the Regional Public Affairs teams. It also delineates the procedures to be followed: pre- and post-event notifications to government officials; when questions or problems are called into the Regional Public Affairs staff; and when questions or problems are called into the Emergency Management Liaison.
ERIP 2.2.5 – Contact Center Operations during Emergency Conditions	This procedure is to ensure adequate staffing levels in the Contact Center and to describe the operation of the Contact Center under storm or electric emergency conditions.
ERIP 2.2.7 – Activation and Deactivation of Alternate CCC Facilities	This procedure describes the method to be used in the activation and deactivation of Brentwood rooms B-8 and B-10 in the event Hicksville CCC becomes unusable or uninhabitable.
ERIP 2.2.8 – Communications Messaging Coordinator	This procedure provides the Communications Messaging Coordinator with pre- and post-emergency implementing actions checklists and contact lists. These checklists will ensure the implementation of Communication activities.
ERIP 2.2.9 – Customer Outreach Centers	This procedure provides the Customer Care and Community Outreach Coordinator and the Customer Outreach Manager with pre- and post-emergency implementing actions guidelines.
ERIP 2.3.1 – Communications	This procedure describes the coordinated actions taken to assure PSEG Long Island customers and stakeholders are provided appropriate information related to incidents that impact the electric system within Long Island and the Rockaways' Service Territory.
ERIP 2.3.2 – Activation and Operation of Coordinated Municipal Conference Calls	The purpose of this procedure is to describe the actions implemented to establish a series of conference calls with various levels of officials, emergency and/or operational leads. The Municipal Conference Calls provide a consistent and regular platform for the dissemination of relevant incident information and coordination of efforts between PSEG Long Island and the municipalities.

Figure B.1 (continued) – ERIP Titles and Descriptions

TITLE	DESCRIPTION
ERIP 2.3.3 – Support Staff in the Communications Command Center	This procedure provides the CCC Support Staff with guidelines. The guidelines and process will assist the CCC Support Staff in providing overall support to the CCC leads.
ERIP 2.3.4 – Emergency Communications to Major Electric Accounts and Critical Facilities	This procedure outlines the pre- and post-emergency notifications to the Major Accounts/Critical Facilities and when questions or problems are received.
ERIP 2.3.6 – Communications with Life Support Equipment Customers	This procedure defines the role of the Contact Center personnel in notifying and maintaining communications with Life Support Equipment (LSE) and Special Needs customers during storm or power related emergencies.
ERIP 2.3.9 – Protocol Management of Special Requests in the CCC	This procedure outlines the process of handing special requests from elected officials received through the Municipal Hotline during an event.
ERIP 2.3.10 – Emergency Operation Center Liaison Operations Guidelines	This procedure provides guidance and direction for those assigned to serve as Liaisons to the EOCs of Nassau County, New York City, Suffolk County and New York State.
ERIP 2.4.1 – Communications and Mitigation Implementation Team (COMMIT) Activation and Actions Procedure	This procedure describes the actions which will be taken in anticipation of events that could result in a shortage of electric supply or as a result of an immediate electric system emergency that could adversely impact PSEG Long Island customers. As a result, the procedure is intended to identify the actions and communications necessary to inform, and/or respond to critical issues raised by government entities, media, and customers.

Figure B.1 (continued) – ERIP Titles and Descriptions

Appendix C – LSEP Titles and Descriptions

TITLE	DESCRIPTION
LSEP 1.0 – Logistics Section Emergency Plan	This procedure provides a coordinated response in supporting logistics requirements in any type of corporate emergency.
LSEP 1.1 – Logistics Organization Notification	This procedure provides the instructions to notify Logistics Support Organization (LSO) personnel during emergencies.
LSEP 1.2 – Lodging for Outside Utility and PSEG Long Island Crews	This procedure details the actions to be taken by the Lodging Coordinator during an electric and business continuation emergency restoration.
LSEP 1.3 – Bus Coordinator Procedure	This procedure details the actions to be taken by the Bus Coordinator and establishes the guidelines for the coordination and dispatching of buses between various locations during emergency conditions.
LSEP 1.4 – Staging Area Coordination	This procedure provides for the coordinated activation of staging areas for PSEG LI and/or foreign utility and tree trim workers and their equipment.
LSEP 1.4.1	Staging Area Operations Manager Checklist
LSEP 1.4.2	Staging Area Foreign Crew Operations Manager Checklist
LSEP 1.4.3	Staging Area Financial Oversight Manager Checklist
LSEP 1.4.4	Staging Area Manager Checklist
LSEP 2.1 – Logistics Support Center Activation	This procedure describes the steps involved in setting up Logistics Conference Rooms 1 & 2 as the Logistics Support Center in response to a corporate emergency. This procedure also describes the steps necessary to return the facility to normal operation.

Figure C.1 – LSEP Titles and Descriptions

Appendix D – Critical Facilities

The Major Accounts and Critical Facilities team is divided by segments and the contact information for each Segment and Account Executive is shown in Figure D.1

[illegible]

Figure D.1 – Account Executive Assignments by Segment

Figure D.2 on the following pages shows a list of all Critical Facilities for Tiers 1, 2 and 3. The table is summarized and includes the Segment, Primary Parent Company (when applicable), Customer Name, Account Number and Address. This summary table is pulled from a comprehensive internal list that includes all of the following fields:

- Market Segment
- Primary Parent Customer
- Customer Name
- Electric Rate
- Restoration Code (Critical Facility Code)
- Level
- Account Grid
- Account
- Circuit ID
- Electric Meter ID
- Address
- Town, State
- Electric Service Division

[illegible]

Appendix E – Corporate Communications Media Contact List

[illegible]

[illegible]

[illegible]

[illegible]

Appendix F – Key Contacts

PSEG Long Island maintains multiple lists of key external contacts for daily operations and more importantly, restoration purposes. PSEG Long Island continues to update these lists semi-annually or when required due to personnel changes and/or updates.

Emergency Management Organizations:

PSEG Long Island will assign Emergency Operations Center (EOC) Liaisons to New York State, New York City, Nassau and Suffolk County Offices of Emergency Management when they are activated and electric utility representation is requested. In addition, Municipal Liaisons will be dispatched to Municipal Offices of Emergency Management (for localized events) when the need arises. The list of such agencies (see Figure F.1) is shown below.

AGENCY	ADDRESS	PHONE NUMBER
[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED]
[REDACTED]		
[REDACTED] [REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED]
[REDACTED]		
[REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED] [REDACTED]
[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED] [REDACTED]

Figure F.1 – Emergency Management Organizations

Utility Contacts:

PSEG Long Island continues to coordinate restoration efforts with our utility partners in the areas of telecommunications, cable television and natural gas. The listing of our utility partners is seen below in Figure F.2.

Verizon Emergency Contacts
As of December 5, 2014

<u>Verizon Emergency Contact</u>			<u>Engineering Control Center: 501 N. Ocean Av. Patchogue</u>		
Regional President					
Consumer &					

<u>Verizon Emergency Contacts</u>		<u>OFFICE</u>	<u>MOBILE</u>

<u>Verizon Long Island Construction Control Center</u>		<u>OFFICE</u>	<u>FAX</u>	<u>MOBILE</u>

<u>Verizon Long Island Installation and Repair Dispatch Resource Center (DRC)</u>		<u>OFFICE</u>	<u>MOBILE</u>

Note: Verizon FiOS emergency contacts are the same as Verizon Telephone emergency contacts.

Figure F.2 – Local Utility Contacts

Cablevision Emergency Contacts

As of December 8, 2014

Response	Percentage
Yes, the current government is responsible	45%
No, the current government is not responsible	55%

Figure F.2 (con't) – Local Utility Contacts

Time Warner Cable Emergency Contacts
As of December 8, 2014

[REDACTED]		I	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]					

Figure F.2 (con't) – Local Utility Contacts

National Grid (Gas) Emergency Contacts
As of December 5, 2014

[REDACTED]			[REDACTED]	[REDACTED]		
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]			[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

National Grid DNY Emergency Planning:

	<u>OFFICE</u>	<u>CELL</u>	<u>EMAIL</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

NYC
Emergency Operations Center
 NYC *National Grid Liaison*

OFFICE FAX

Nassau County
Emergency Operations Center
 NC *National Grid Liaison*

OFFICE FAX

Suffolk County
Emergency Operations Center
 SC *National Grid Liaison*

OFFICE FAX

Figure F.2 (con't) – Local Utility Contacts

Elected officials, Municipal Contacts, Human Services Agencies:

PSEG Long Island's External Affairs team maintains an updated list of key contacts for Elected Officials, Municipal Contacts and Human Services Agencies. These lists are detailed in Figures F.3 to F.8.

FIRST NAME	LAST NAME	TITLE	DISTRICT	COUNTY	WORK PHONE
████	████	████	█	████	████████
████	████	████	█	████	████████
████	████	████████	█	████	████████
████	██	████████	█	████████	████████
████	████	████████	█	████████████	████████
████	████████	████████████	█	████	████████
████	████	████████	█	████████	████████

Figure F.3 – Federal Officials

[illegible]

FIRST NAME	LAST NAME	TITLE	DISTRICT	COUNTY	WORK PHONE
████	████	████	████████	██	██████
████	████	████	██████████	██	██████
██	████	████	██████████	██	██████
██████	████	████	██████████	██	██████
██	████	████	██████████	██	██████
██	██	████	████	██	██████
██	████	████	██████████	██	██████
██	████	████	██████████	██	██████
██	████	████	██████████	██	██████
██	████	████	██████████	██	██████
██	████	████	██████████	██	██████
████	████	████	██████████	██	██████
██	██████	████	██████████	██	██████
████	██	████	██████████	██	██████
██	████	██	██████████	██	██████
██	████	██████	██████████	██	██████

Figure F.6 – Town Officials

[illegible]

[illegible][illegible]

Appendix G – NAMAG Agreement

1. MISSION

1.1 The Mission of the North Atlantic Mutual Assistance Group is:

- 1.1.1** To provide a forum to ensure safe, effective and coordinated mutual assistance, regional response and service restoration for customers of member utilities.
- 1.1.2** To provide an enhanced line of communications between member companies to share best practices and plan for other significant events such as a work stoppage, civic unrest, or political events, and ensure that all members are communicating a unified message to both internal and external stakeholders.
- 1.1.3** To minimize risk to all parties by agreeing to provide assistance (personnel and equipment) on a not-for-profit basis, and agreeing that Requesting Companies will reimburse Responding Companies for all expenses incurred in providing the assistance.
- 1.1.4** To adhere to and operate in accordance with the procedures contained in this document (the North Atlantic Mutual Assistance Group Guidelines).
- 1.1.5** To interact with other Regional Mutual Assistance Groups and the Edison Electric Institute Mutual Assistance Committee

2. COMPANY INFORMATION

2.1 Member Company Information

- 2.1.1** Each Holding Company listed below is entitled to one (1) vote
- 2.1.2** Individual Operating Companies may be listed separately on the Joint Mobilization Conference Call spreadsheet

North American Company Name	States	Electric Customers	Gas Customers	EEI Signatory
Central Hudson Gas & Electric	NY	300,000	75,000	Yes
Consolidated Edison	NY, NJ, PA	3,600,000	1,200,000	Yes
Duquesne Light *	PA	580,000		Yes
Emera – (Bangor Hydro, Nova Scotia Power)	ME, NS	680,000		No
Exelon – (BGE, PECO) **	MD, PA	2,986,500	1,136,000	Yes
First Energy *,**	OH, NJ, PA, MD, WV, NY	6,000,000		Yes
Green Mountain Power	VT	256,000		Yes
Hydro-Quebec	ON	1,300,000		Yes
Hydro-Quebec	QC	4,107,400		No
Iberdrola – (Central Maine Power, NYSEG)	ME, NY	596,000, 871,000	256,000	Yes
National Grid (NY, NE, LIPA)	MA, NY, RI	4,515,000	3,500,000	Yes
New Brunswick Power (Energie NB Power)	NB	380,000		No
New Hampshire Electric Cooperative	NH	78,750		No
Northeast Utilities	CT, MA, NH	3,090,000	484,000	Yes
Pepco Holdings, Inc. (PHI) **	DC, DE, MD, NJ,	1,960,000	123,000	Yes
PPL Electric Utilities **	PA	1,400,000		Yes
Public Service Electric & Gas (PSE&G)	NJ	2,200,000	1,800,000	Yes
South Norwalk Electric & Water	CT	14,000		No
UGI Utilities, Inc	PA	62,000	568,000	Yes
United Illuminating	CT	325,000		Yes
Unitil Corp	MA, ME, NH	104,400	70,000	Yes
TOTAL – 21 Companies	13 states, 4 provinces, 1 district	35,406,050	9,212,000	

Footnote:

* indicates member of GLMA

**indicates member of SEE

3. GENERAL GUIDELINES

3.1 Personnel Safety

- 3.1.1** Whether providing or receiving assistance, personnel safety will be the preeminent objective and responsibility of all participants.
- 3.1.2** The Requesting Company agrees to make every effort to avoid moving Responding Company personnel into harm's way during the initial, first- wave mobilization.
- 3.1.3** Responding Company will follow its own safety rules, except as noted in paragraphs 3.1.6 and 3.1.7 below.
- 3.1.4** Responding Company is responsible for following its own personal protective grounding practices.
- 3.1.5** Responding Company will immediately report any and all accidents to Requesting Company (both incidence and injury).
- 3.1.6** Switching procedures will be handled as the Requesting Company designates, provided that the procedures do not violate the safety rules of the Responding Company.
- 3.1.7** Requesting Company will provide information on their switching and tagging rules. Requesting Company switching/blocking tags will be used.
- 3.1.8** Security personnel requirements shall be discussed and mutually agreed upon by the Requesting and Responding Companies prior to deployment of armed security personnel.
- 3.1.9** Any deployment of "Security Personnel" – armed or otherwise – must comply with Federal, Provincial, State, Local and Tribal regulations.

3.2 Maintenance of Contact Roster

- 3.2.1** In order to facilitate efficient communication and response, North Atlantic member utilities will share the following information:
 - The names, contact numbers (work phone, home phone, cellular phone, and pager), and e-mail addresses for three (3) individuals authorized to participate in Joint Mobilization Conference Calls.
 - If available, the telephone number for the 24-hour operations / dispatch center for the member company.
 - If available, a satellite telephone number for the 24-hour storm or operations / dispatch center.
 - If available, a corporate storm / emergency center 24-hour telephone number, if different from the 24-hour operations / dispatch telephone number.

- 3.2.2** The North Atlantic Group Secretary will be responsible for maintaining and updating the Member Company Contact Roster at least every three months.

3.3 Code of Conduct

- 3.3.1** Whether providing or receiving assistance, all personnel will be expected to conduct themselves in a professional and responsible manner.

3.4 Confidentiality Statement

- 3.4.1** Members understand and agree that participation on Joint Mobilization Conference Calls is restricted to employees of member companies of the North Atlantic Mutual Assistance Group, unless otherwise agreed to by members of the North Atlantic Group.
- 3.4.2** Members understand that conversations between member utilities during Joint Mobilization Conference Calls are confidential and proprietary. Therefore, with the exception of general deployment data / information, members agree not to share or release any information shared between member utilities during Joint Mobilization Conference Calls unless mutually agreed.

3.5 Communication With Contractors

- 3.5.1** Members understand the need for clear communication with contractors working on their systems and are encouraged to explain the joint mobilization process discussed in this document.
- 3.5.2** Members agree to follow the Rules of Engagement to secure contractor resources and refrain from accepting contractors directly who are working for an Investor Owned Utility (IOU) or a member company of any Regional Mutual Assistance Group (RMAG).

3.6 Definition of Emergency Assistance Period

- 3.6.1** Members agree that the emergency assistance period shall commence when personnel and/or equipment expenses are initially incurred by the Responding Company in response to the Requesting Company's needs. This includes any request for the Responding Company to prepare employees and/or equipment for travel to the Requesting Company's location but to await further instructions before departing. This preparation time should begin when normal work activities for Responding Company stop and preparations dedicated to supporting the off system effort begin. Except as noted in paragraph 3.6.3, the emergency assistance period shall terminate when such employees and/or equipment have returned to their point of origin and after a reasonable time required preparing the equipment for return to normal activities (e.g. cleaning trucks, restocking minor materials, etc.).
- 3.6.2** The length of stay by Responding Company personnel will be mutually agreed to by both companies. Generally, this period should not exceed 14 consecutive days, including travel time to the work area and return to the point of origin. When mutual assistance assignments go beyond this time frame, North Atlantic members agree that Responding Company personnel will usually be changed out (rotated) rather than take extended reset periods (days off). Responding and Requesting companies may agree upon exceptions to this procedure.

3.6.3 It is understood and agreed that if Responding Company's or its Holding Company's system is threatened during any time after it has mobilized to provide mutual assistance, any part or all of the Responding Company's native and contract workforce may be recalled. In these instances:

- It is understood and agreed that the decision to terminate assistance and recall employees lies solely with the Responding Company.
- If recall of Responding Company's workforce becomes necessary, the Requesting Company will be responsible for all expenses incurred by Responding Company until the Responding Company returns home and vehicles are cleaned and stocked for normal work activities.
- If Responding Company's workforce is recalled to another of the Responding Company's locations other than their original point of origin, the Requesting Company will be responsible for travel costs to the alternate location not to exceed that which would have been incurred had the workforce returned to their original point of origin.

4. RULES OF ENGAGEMENT

4.1 Rules of Engagement Procedures

4.1.1 Members agree to adhere to the procedures contained in Section 4 to request, identify and mobilize emergency mutual assistance resources. These procedures are intended to enhance and in no way hamper the mobilization goals of member companies during emergencies.

4.1.2 When any member company has a need for additional resources, that company will notify all members of the North Atlantic Mutual Assistance Group and schedule a Joint Mobilization Conference Call.

- Because response time is critical in emergency situations, the Joint Mobilization Conference Call provides a mechanism that allows members to quickly request assistance and identify the number and status of all available regional resources.

4.1.3 The Joint Mobilization Conference Call format should:

- Provide members with the opportunity to understand the entire scope of the emergency situation, including the number of companies expecting to be impacted and the potential damage to each.
- Allow members to discuss and evaluate weather forecasts from different sources.
- Result in the most efficient, effective and equitable allocation of available resources while mitigating the financial risk associated with early mobilization of resources.

4.1.4 The permitted exception for securing resources without scheduling a Joint Mobilization Conference Call is when an event impacts a single member utility and the impacted utility anticipates a short restoration time requiring assistance from only neighboring (adjacent) utilities.

- In this instance, the impacted member may contact neighboring utilities directly to arrange assistance.
- The impacted company agrees to notify all members of the North Atlantic Mutual

Assistance Group via email when any resources are obtained without scheduling a Joint Mobilization Conference Call.

- However, because emergency events tend to expand and impact more than one utility over time, members are encouraged to use the Joint Mobilization Conference Call procedures described below for all mutual assistance requests.

4.1.5 Since some companies are members of multiple mutual assistance groups, whenever a North Atlantic member company secures resources from another RMAG, they will notify all members of the North Atlantic Mutual Assistance group via email.

4.2 Initiation of the Joint Mobilization Conference Call

4.2.1 Typically, the member that expects to be impacted first by an event will initiate the process.

4.2.2 Members agree to initiate a conference call anytime they experience or are threatened by an event so significant that they anticipate needing resources beyond the capabilities of their neighboring (adjacent) utilities to restore their system.

4.2.3 Procedure for initiating the Joint Mobilization Conference Call:

- The initiating member will notify the Chair (or other Leadership member) of the North Atlantic Mutual Assistance Group they wish to hold a conference call. The Chair is responsible to notify the company designated to set up the call with the necessary notifications to members including the date, time, and conference call number.
- In the event the North Atlantic Leadership is unavailable, the initiating company can contact the company designated to set up the call directly and assume the Chair responsibilities.
- Conference calls will typically be scheduled for 0730 and 1800 daily or as needed by the initiating member.

4.3 Responsibilities of Company Initiating Conference Call

4.3.1 The Chairman or designee will serve as moderator for the conference call or ask another member to moderate. The moderator will:

- Call the roll of member companies.
- Present the weather forecast for his / her company service territory. At their discretion, the initiating company may have a weather consultant present the current forecast.
- Ask other members for input regarding the weather forecast / predictions.
- Present an estimate of predicted impact / damages and when these are expected to occur. If the event is large enough to impact more than one member's service territory, the moderator will ask other members for their projected damage assessments.
- Present an estimate of resources needed. If the event is large enough to impact more than one member's service territory, the moderator will ask other members for their projected resource needs.
- By roll call, ask all non-impacted members to state the numbers of resources available to assist once their territories are no longer threatened.

- When appropriate, the moderator will lead discussion of staging areas to be used by assisting companies; transportation concerns, such as evacuation orders, fuel availability, DOT exemptions, etc.; and, the availability of non-member resources that may be available to assist impacted members.
- Keep the call moving and minimize the length of the call as much as possible.
- Set the date and time for future conference calls.

4.4 Responsibilities of Non-Initiating Members Participating In Conference Calls

4.4.1 Members agree not to release or dispatch ANY resources (contract or native) unless committed to and confirmed by a Requesting Company. It is understood that Responding Companies' territories must be free from significant threat before resources can be committed and dispatched.

4.4.2 On the first Joint Mobilization Conference Call, non-threatened / non-impacted members will be prepared to specify the numbers of their employee and contractor distribution line, transmission line, vegetation management, and damage assessment personnel available to assist impacted companies, including an estimate of when these resources can be dispatched. If Requesting Companies identify needs in other areas (such as IT, safety, etc.), assisting members will be given time (usually 24 hours) to identify available resources in these additional areas.

4.4.3 To enhance safety and flexibility, upon request non-threatened / non-impacted members will be prepared to identify staging areas available in their territories.

4.4.4 Upon request non-threatened / non-impacted members will assist with DOT exemptions for crews traveling through their service territories.

4.5 Resource Allocation and Mobilization

4.5.1 When more than one company has requested emergency assistance, all members understand and agree that it is the responsibility of the Requesting Companies to agree upon the allocation of available first wave and subsequent member company resources.

4.5.2 Members agree that, in general, resources will be allocated on the basis of severity of need, based on:

- Predicted impact – percentage / degree of system loss and estimated time customers will have been without power.
- Storm timing – which company will be first impacted.
- Travel time.
- Availability of other non-North Atlantic member controlled resources.
- The intent will be to allocate available resources to meet all member company needs in the most efficient and equitable manner possible.

- 4.5.3 Members agree that final dispatch of committed resources is to be coordinated directly between the Requesting Company and the Responding Company (or its contractor(s), where applicable).

4.6 Joint Mobilization Conference Call Documentation

- 4.6.1 The North Atlantic Emergency Call spreadsheet will be used to document each Joint Mobilization Conference Call.
- 4.6.2 The Secretary or a designee will take notes during the Joint Mobilization Conference Call, distribute the Emergency Call spreadsheet to all members after the call, and post the minutes to the Restore Power North Atlantic Workroom.
- 4.6.3 Members acknowledge that the Emergency Call spreadsheet contains confidential information and agree not to share the spreadsheet with any non-member company unless mutually agreed to on the Joint Mobilization Conference Call.

5. REQUESTING COMPANY RESPONSIBILITIES

5.1 Requesting Company – Responsibilities Prior to Mobilization

- 5.1.1 To the extent possible, the Requesting Company is expected to clearly communicate the degree of devastation and working conditions Responding Company personnel should expect to encounter upon arrival at the emergency restoration work area.
- 5.1.2 The Requesting Company is expected to inform the Responding Company if their requirements for the maintenance of receipts differ from the procedures stated in paragraph 6.2.5.
- 5.1.3 To facilitate communications, the Requesting Company may opt to provide a single point of contact (Coordinator) to interact with the Responding Company.
- 5.1.4 The Requesting Company will provide the Responding Company with the name and contact information for their “company contact” as required on the RESPONDING COMPANY INITIAL INFORMATION SHEET before Responding Company personnel leave their point of origin.
- 5.1.5 Requesting Company will coordinate with their state DOT officials concerning emergency exemptions and any other transportation issues that will facilitate the Responding Company’s trip to and from the Requesting Company.
- 5.1.6 The Requesting Company is encouraged to communicate general guidelines with Responding Companies. Items covered may include labor contractual issues, safety issues, contact personnel, vehicle fueling arrangements, typical standard construction, meal and lodging arrangements, and other items that will be of benefit to the responding personnel and their supervision.

5.2 Requesting Company – Responsibilities During Emergency Assistance Period

- 5.2.1 The Requesting Company will establish expectations for work, including start time and duration.

- 5.2.2** The Requesting Company will provide materials unless specifically noted otherwise.
- 5.2.3** When necessary, the Requesting Company will provide a guide with communications capability, portable radios or cellular telephones to assist responding team leaders.
- 5.2.4** The Requesting Company will authorize Responding Company to use cellular phones as a method of communication. Where cellular service is unavailable, it is understood that satellite phones may be used until such time that cellular service is restored in the Requesting Company's area.
- 5.2.5** The Requesting Company will provide vehicle security for parking areas unless specifically agreed otherwise.
- 5.2.6** With the exception of food and lodging during travel to and from the final work site, the Requesting Company will handle all food, lodging and incidental support needed by Responding Company unless both companies agree for Responding Company to handle these logistics.
- 5.2.7** Requesting and Responding companies should agree on the provision of laundry services.
- 5.2.8** Requesting Company will make and communicate provisions for Responding Company personnel to make personal long distance telephone calls during the emergency response period. For example, the Requesting Company may authorize the Responding Company to purchase pre-paid long distance calling cards for responding crew members or authorize the use of company or employee owned cellular phones for an agreed upon maximum number of minutes. As a general rule, Requesting Company agrees to allow and reimburse a maximum of 10-minutes personal long distance telephone charges per employee per day. Any personal cellular phone charges or pre-paid calling card expenses shall be included in the supporting documentation on the company's preliminary invoice, subject to paragraph 6.2.5.
- 5.2.9** Requesting Company shall reimburse the Responding Company for lodging and will not pay for additional hotel-related expenses unless agreed to by the Requesting Company prior to the occurrence. Some examples of additional hotel-related expenses include phone calls made from rooms, room service, in-room movies, mini bar usage, etc.
- 5.3 Requesting Company – Procedures for Releasing Responding Companies**
- 5.3.1** During emergencies impacting more than one member company simultaneously, each Requesting Company will develop a proposed "Release Schedule" 48-hours before releasing any contract or utility (members & non-member) crews. This release schedule will include: Names of utilities and contractors to be released, the numbers and specialty (distribution line, transmission line, vegetation, etc.) of workers from each utility and / or contractor being released, the on-site contact or the coordinator of the crews being released, and the date and approximate time the crews expect to be released.
- 5.3.2** During emergencies when Responding Company contract and / or utility resources are already deployed and working to provide restoration help to one member company and another member company (or companies) is impacted by another emergency, or, in

the case of hurricanes, a second landfall of the storm, the company that obtained help first agrees to:

- NOT retain personnel solely to perform maintenance, street lighting work, or clean up type work and will aggressively work to release personnel.
- Immediately prepare a release schedule which includes details listed in paragraph 5.3.1 above, including projected release dates.
- Provide realistic estimated restoration times and release dates to the second Requesting Company (or companies). Since this could mean the difference in going days away or waiting on resources closer that may become available, it is essential that release dates be as accurate as possible. Note: Should the emergency situation described above develop before a Responding Company personnel arrive at the initial restoration area, these resources will be reallocated to Requesting Companies in accordance with the provisions of Section 4.6 and paragraph 5.4.3 of these procedures and guidelines.

5.3.3 In the emergency situation described in paragraph 5.3.2 above, the initial and secondarily impacted companies agree to:

- Immediately hold an “impacted companies” conference call to negotiate reallocation of the resources on the release schedule developed by the first impacted company as well as any other resources not already committed.
- Regarding personnel released by the first impacted company, secondary Requesting Companies will contact the resources (companies) allocated to them to determine if those persons will agree to re-deploy or be changed out (rotated) in accordance with paragraph 3.6.2.

5.3.4 In all emergency situations, the Requesting Company will make every effort to notify each Responding Company’s mutual assistance contact 24- hours in advance of the anticipated final release of their utility personnel.

5.4 Requesting Company – Responsibility for Reimbursement of Expenses

5.4.1 Members understand and agree that the provision of emergency mutual assistance is a not-for-profit endeavor for Responding Companies. Therefore, the Requesting Company will reimburse all costs and expenses incurred by the Responding Company in the provision of the emergency assistance for the entire emergency assistance period as defined in section 3.6 above.

5.4.2 If Responding Company resources are released after mobilization but before being utilized, the Requesting Company will reimburse Responding Company for all incurred preparation and travel expenses including reasonable time required to prepare the equipment for return to normal activities after returning to their point of origin.

5.4.3 During emergencies impacting more than one member, Responding Company resources may be re-assigned either: en route to the Requesting Company; at an initial staging area before reaching the Requesting Company; or at the Responding Company’s final staging area.

Additionally, resources may be assigned to assist a second Requesting Company after completing work for the initial Requesting Company.

Note: In any of these instances, unless otherwise mutually agreed, the utility that receives the re-assigned Responding Company resources will be responsible for all Responding Company costs from the time of re- assignment.

- 5.4.4** Requesting Company will reimburse members for expenses incurred in the provision and management of interim staging areas (i.e. labor and miscellaneous expenses provided by the host utility to operate the staging area, but not including any Responding Company crew costs). In emergencies involving more than one Requesting Company, staging costs will be shared by Requesting Companies on a prorated basis based on the resources committed to each entering (logged into) the staging site.
- 5.4.5** Provided proper supporting documentation is included, the Requesting Company should pay all (preliminary and final) invoice(s) from Responding Company within 60 calendar days after receipt of invoice(s).

6. RESPONDING COMPANY RESPONSIBILITIES

6.1 Responding Company – Responsibilities Prior to Mobilization

- 6.1.1** To the extent possible, the Responding Company is expected to clearly communicate the degree of devastation and working conditions that their responding employees should expect to encounter upon arrival at the emergency restoration work area.
- 6.1.2** To facilitate communications, the Responding Company may opt to provide a single point of contact (Coordinator) to interact with the Requesting Company.
- 6.1.3** Responding Company will complete and forward the RESPONDING COMPANY INITIAL INFORMATION SHEET before departing their home location.
- 6.1.4** If requested, Responding Company will provide a copy of completed PERSONNEL LISTING FORM as soon as the information becomes available.
- 6.1.5** Responding Company's telecommunications personnel shall contact Requesting Company's telecommunications personnel and local FCC authorities to make any temporary telecommunications arrangements.
- 6.1.6** Prior to traveling, Responding Company will reach agreement with the Requesting Company regarding the provisions for Responding Company personnel to make personal long distance telephone calls during the emergency response period as described in paragraph 5.2.8 above. This agreement should preclude any telephone charges from any lodging facility by the Responding Company personnel, except in case of emergency local 911 calls.
- 6.1.7** Responding Company agrees not to load extra emergency stock on trucks unless specifically requested by the Requesting Company.
- 6.1.8** When Responding Company's available contractor resources have been allocated to a Requesting Company through the Joint Mobilization Conference Call procedures, the Responding Company will:
- Provide Requesting Company with contact information for their on-site contractors.

- Alert their contractors that their assistance has been requested and that they will be contacted by the Requesting Company.
- Give their contractors the Requesting Company contact information.
- Encourage their contractors to respond to the North Atlantic member's request for help with all contract crews being released from the Responding Company's work site.

6.2 Responding Company – Responsibilities During Emergency Assistance Period

- 6.2.1** Responding Company will handle all communication needs within their teams. This could include acquiring additional communications equipment, such as portable repeaters, to ensure continuous communication capabilities.
- 6.2.2** The Responding Company will be responsible for performing normal maintenance on their vehicles and equipment during the emergency assistance period and this work will be covered in their standard hourly/daily rates.
- 6.2.3** Responding Company will maintain daily records of time and expenses for personnel and equipment. This documentation will be provided with their preliminary invoice.
- 6.2.4** When the Requesting Company has provided specific guidance in advance that differs from that in paragraph 6.2.5, the Responding Company will maintain and furnish the requested documentation of expenses with their preliminary invoice.
- 6.2.5** Unless otherwise agreed prior to mobilization, members agree that Responding companies will maintain and furnish upon request receipts for all individual expenses / purchases made during the emergency assistance period in accordance with the IRS requirements in effect at the time assistance is requested.

6.3 Responding Company – Responsibilities End Of Emergency Assistance Period

- 6.3.1** Responding Company should submit their "preliminary invoice" to Requesting Company within 60 calendar days from date released by the Requesting Company. Responding Company will provide supporting documentation at the time the preliminary invoice is mailed. Requesting Utility should receive final invoice within 90 calendar days from invoice date of preliminary invoice.
- 6.3.2** Responding Companies agree to maintain auditable records of billed expenses for emergency mutual assistance sufficient to satisfy the legal / statutory requirements and obligations incumbent upon the Requesting Company.

7. LIABILITY

- 7.1** Due to the compressed time frames associated with the rendering of mutual assistance, Members should ensure that liability, among other issues, be addressed in a timely manner; otherwise, the ability of one Member to respond to another could be impacted adversely, up to and including an inability to render any non-contractor assistance. When rendering mutual

assistance to one another and with specific regard to all liability for loss, damage, cost or expense, Members agree to follow Sections 11 and 12 of the “Suggested Governing Principles Covering Emergency Assistance Arrangements between Edison Electric Institute Member Companies,” or an equivalent agreement executed by both Members prior to the formal start of the rendering mutual assistance.

7.2 EEI Member Companies

- 7.2.1** If both the Requesting and Responding Companies have signed the Edison Electric Institute Mutual Assistance Agreement, the “Suggested Governing Principles Covering Emergency Assistance Arrangements between Edison Electric Institute Member Companies” shall govern liability.

7.3 Non-EEI Member Companies

- 7.3.1** If either the Requesting or Responding Company have not signed the EEI Mutual Assistance Agreement, then the Responding Company may submit to the Requesting Company for execution a copy of the “North Atlantic Mutual Assistance Agreement” (see Appendix A). The terms “Responding Company” and Requesting Company” are used in this agreement in the same manner as in the “Suggested Governing Principles Covering Emergency Assistance Arrangements Between Edison Electric Institute Member Companies).”
- 7.3.2** Return of an executed copy of the “North Atlantic Mutual Assistance Agreement” by the Requesting Company to the Responding Company shall be construed as the formal start of the rendering of mutual assistance by all non-contractor resources. Both Members shall retain copies of the executed agreement for reference.
- 7.3.3** Use of an agreement other than the “North Atlantic Mutual Assistance Agreement” shall include a discussion on liabilities, among other items, and shall be agreed to and executed by both Members prior to the formal start of the rendering mutual assistance by all non-contractor resources. Both Members shall retain copies of the executed agreement for reference.

8. U.S / CANADA BORDER CROSSING

8.1 Purpose

- 8.1.1** As part of the Electric Sector effort to improve response and reduce delays, a procedure for crossing the US/Canada border has been documented.
- 8.1.2** The purpose of this procedure is to make Bi-National assistance during an event as expeditious as possible by preparing utilities workers deployed across the U.S./Canada border. The sharing of resource does not stop at the U.S. boundaries. During major events, U.S. companies need to be able to cross our northern border as effectively while maintaining the security of both Canada and the United States

8.2 Procedure Summary

8.2.1 It's important to have all information needed to cross the border completed in advance such as vehicle manifest, master roster, information from requesting company (letter of invite), and declaration, if one is available.

This is all documented in the procedure. Effective pass through requires advance notice to the specific crossing prior to resources arriving to allow both Canadian and US Border Crossing to prepare.

8.2.2 While the procedure does not specifically state an amount of time in advance, this should be a minimum of 8 hours if not more. A courtesy call to either the US Customs and Border Protection Agency or the Canadian Border Services Agency is recommended to give advance notice and confirm expectations.

8.2.3 To reference the procedure please go to one of the following;

- EEI Website ([h \[REDACTED\]](#)) Select Restore Power under the Resources tab. The Roster and Border Guidance files are located in the Other Documents section.
- All Hazards Consortium website ([\[REDACTED\]](#))
- U.S. Customs (future link)

9. GOVERNANCE

9.1 Membership

- 9.1.1** Membership in the North Atlantic Mutual Assistance Group is comprised of those companies listed in Section 2.1
- 9.1.2** Membership will be open to investor owned utilities (IOU's), electrical cooperatives, and electric municipals provided such participation does not contradict or violate any internal, local, state or federal statutes or regulations.
- 9.1.3** Membership in the North Atlantic Mutual Assistance Group is free and members are not required to pay any dues or fees. The only financial obligation a member has to incur is the costs of hosting the semi-annual (spring or fall) North Atlantic Group meetings and reimburse responding companies for all expenses incurred when providing mutual assistance.
- 9.1.4** Prospective members seeking to join the North Atlantic Mutual Assistance Group must request admittance by contacting an active officer of the North Atlantic group. The prospective member may be asked to supply additional information and give a formal presentation to the group.
- 9.1.5** Prospective members to the North Atlantic Mutual Assistance Group must be approved for membership by a majority vote of the group.
- 9.1.6** All members will be required to sign the North Atlantic Mutual Assistance Group Statement of Understanding and Endorsement letter.

9.2 Officers

- 9.2.1** Officers shall not incur debt or costs on behalf of the committee or the North Atlantic Mutual Assistance Group and are not liable for the actions of committee members or member companies.
- 9.2.2** Member companies are always responsible for requesting mutual assistance to meet their requirements.

ELECTED OFFICERS

- 9.2.3** Chair – The Chair for the North Atlantic Group is responsible for:
- Primary representative for the North Atlantic Group with Edison Electric Institute [EEI], Regional Mutual Assistance Groups [RMAGs] and other groups. Serve as a single point of contact and keep members informed.
 - Conduct semi-annual (spring and fall) or other meetings.
 - Designate special working groups and committees.
 - Provide guidance and direction on North Atlantic Group Guidelines.
 - Serve as a Mentor and Subject Matter Expert for the Group.
 - Serve for a term of one (1) year.
 - Develop spring and fall meeting agendas with the Vice Chair, Secretary, and

designated host company.

9.2.4 Vice Chair – The Vice Chair for North Atlantic Group is responsible for:

- Assisting the North Atlantic Group Chair
- Secondary representative for the North Atlantic Group with Edison Electric Institute [EEI], Regional Mutual Assistance Groups [RMAGs] and other groups
- Leading special working groups or committees
- Develop spring and fall meeting agendas with the Chair, Secretary, and designated host company
- Serve as Mentor and Subject Matter Expert for the Group
- Serve for a term of one (1) year
- Succeed the North Atlantic Group Chair at the end of term.

9.2.5 Secretary – The Secretary for North Atlantic Group is responsible for:

- Maintain North Atlantic Group rosters and directories
- Maintain and distribute semi-annual (spring and fall) meeting minutes
- Maintain and distribute the Emergency Call spreadsheet used during Joint Mobilization Conference calls
- Maintain all North Atlantic Group documents
- Maintain the North Atlantic Group website
- Develop Spring & Fall Meeting Agendas with the Chair, Vice Chair and designated Host Company
- Assist the Chair and Vice Chair as requested or needed
- Serve for a one (1) year term.
- Succeed the North Atlantic Group Vice Chair at the end of term.

9.3 Elections and Voting

9.3.1 The North Atlantic Mutual Assistance group will generally come to agreement by consensus. When consensus is not possible or there is to be an election of officers the following rules shall apply.

- Each member company shall have one (1) vote.
- A simple majority will be sufficient for most actions, with a quorum consisting of one representative from at least one-half of the member companies.
- Any modifications of the North Atlantic Mutual Assistance Guidelines must be approved by $\frac{3}{4}$ of the member companies.
- Nominations for Secretary will be accepted prior to and during the Spring Meeting each year.
- Election of Secretary will occur every year at the Spring Meeting.

- If an officer vacates his/her position before fulfilling their one year term, automatic succession will occur and an election will be conducted at the next scheduled meeting to fill the Secretary position.
- If 2 or more officers vacate their positions before fulfilling their one year term, automatic succession will occur and an election will be conducted at the next scheduled meeting to fill the vacancies.
- Voting will be by voice vote. Secret ballot may be used upon a motion, seconded by a member company.
- Voting by e-mail is permissible. One vote per Member Company shall apply.

9.4 Meetings

9.4.1 The North Atlantic Group shall meet semi-annually in the spring and fall of each year.

9.4.2 Each North Atlantic member will take their turn hosting the semi-annual (spring and fall) meetings and the Host Company will rotate alphabetically.

9.4.3 The Host Company will be responsible for:

- Assist in developing the meeting agenda with the Chair, Vice Chair and Secretary including coordination with speakers and presenters
- Scheduling the dates and time for the meeting
- Coordinate lodging arrangements (i.e. reserve a block of rooms for a set time period) for overnight members
- Provide the networking dinner the night before the meeting
- Provide the meeting room and meals
- Provide audio visual equipment (i.e. laptop, projector, and white boards or equivalent)

9.4.4 At all meetings of the North Atlantic Mutual Assistance Group, “Roberts Rules of Order Newly Revised” shall be considered the authority in deciding all points of order and parliamentary law not defined by this guideline.

10. DOCUMENT REVISION HISTORY

Version	Prepared By	Summary of Changes	Date
1.0	Merger Team	Initial Guidelines created for the merger of MAMA, NEMAG, NYMAG	08/22/2013

North Atlantic Mutual Assistance Group

Statement of Understanding And Endorsement

The member companies of North Atlantic Mutual Assistance Group understand that they will have occasion to either provide or receive assistance in the form of personnel and equipment to aid in restoring electric service when it has been disrupted and cannot be restored in a safe and timely manner by the affected company or companies without assistance. For this reason, the Officers of the North Atlantic Mutual Assistance Group are authorized to develop and maintain operating procedures and guidelines to insure the most effective and efficient response by the entire membership when emergency assistance is requested by one or more member companies. Final acceptance of the North Atlantic Mutual Assistance Group Guidelines, as well as any future modifications, must be approved by $\frac{3}{4}$ of the member companies with each member company having one (1) vote.

Further, as an officer of the North Atlantic Mutual Assistance Group member company noted below, the undersigned hereby endorses the following principles and agreements on behalf of his / her member company:

1. Whether providing or receiving assistance, personnel safety will be the preeminent objective and responsibility of all participants.
2. Member companies agree to adhere to and operate in accordance with the procedures contained in the North Atlantic Mutual Assistance Group Guidelines.
3. Whether providing or receiving assistance, members will work together to minimize risk to all parties. In accordance with North Atlantic guidelines, responding companies will provide assistance (personnel and equipment) on a not-for-profit basis, and requesting companies will reimburse responding companies for all expenses incurred in providing the assistance. In keeping with this principle, North Atlantic members agree to abide by the liability provisions contained in the North Atlantic Mutual Assistance Group Guidelines.

PSEG Long Island
Company Name
[Signature]
Officer Signature

John O'Connell Vice President T+D
Name of Company Officer
1/28/14
Date

Appendix H – Proceeding on Motion of the Commission to Consider Utility Emergency Performance Metrics

STATE OF NEW YORK PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of Albany
on November 14, 2013

COMMISSIONERSPRESENT:

Audrey Zibelman, Chair
Patricia L. Acampora
Garry A. Brown
Gregg C. Sayre
Diane X. Burman

CASE 13–E-0140 - Proceeding on Motion of the Commission to Consider Utility Emergency Performance Metrics.

ORDER APPROVING THE SCORECARD FOR USE
BY THE COMMISSION AS A GUIDANCE DOCUMENT
TO ASSESS ELECTRIC UTILITY RESPONSE
TO SIGNIFICANT OUTAGES
(Issued and Effective December 23, 2013)

BY THE COMMISSION:

INTRODUCTION

The provision of safe and reliable electric energy is critical to the health and safety of New Yorkers and a fundamental responsibility assigned by statute to our utilities.¹ This responsibility is often most challenging during and after a major storm or an extraordinary event has resulted in significant electricity outages in the utility's service territory. Our assessment of the importance of this responsibility was reinforced by our recent experiences with Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy. Each of these extreme weather events resulted in the loss of electric service for hundreds of thousands of customers over extended periods of time. We saw repeatedly the fundamental importance of an

¹. Public Service Law (PSL) § 65.

Informed public and local governmental officials and safe and efficient service restoration for affected communities.

Utility performance before and during these major outage events varied greatly. While additional focus on investments that improve system resiliency are critical, it is also clear that there are a number of areas where improved performance will help reduce the impacts of the storm event and/or increase consumer safety and security. For example, significant aspects of the utility's actions prior to the outage event to prepare and plan in anticipation of its recovery efforts, the utility's operational performance as its recovery efforts proceeded, and the utility's communications with the public and with public officials during and after the storm are operational areas under the control of utilities that can directly impact storm restoration. Operational excellence in these areas will contribute greatly to the utilities' overall efforts to maintain and restore service and to reduce community anxiety when service is yet to be restored. The purpose of this proceeding was to develop a quantitative tool that the utilities and the Commission could apply to assess electric utility performance in restoring electric service during outages which result from a major storm or other outage event. The Scorecard which we adopt in this Order will support this performance based evaluation. It will provide us with a valuable guide to determine best practices during these challenging events, ensure continuous improvement and hold utilities accountable for failing to meet the legitimate requirements of their customers. Through the use of this guidance tool we come closer to our goal of performance based assessment through which deficient utility practices and decision-making can be identified and disincented and excellent utility performance can be recognized and rewarded.

BACKGROUND

In April 2013, we instituted this proceeding to consider the development of a Scorecard to serve as a tool for the quantitative assessment of New York State electric utility performance in restoring power to customers after a significant outage. In our April 24, 2013 Notice Seeking Comments we sought comments on a draft scorecard.

That draft Scorecard began our effort to establish standards that will promote effective emergency response. As we noted at that time:

Holding utilities accountable to such standards can help assure that they have the ability, capacity, and mindset to act quickly and effectively. While outage events can never be entirely eliminated, these

*metrics will establish minimum performance levels against which to assess restoration after significant outages.*²

The Scorecard we adopt with this order will function as an objective tool to assess each utility's outage event response efforts, and to guide us as we seek to hold the utilities accountable for their preparations for outage events, for their actions during an outage event and their recovery programs when the outage event has passed, and for their communications programs in conjunction with the event.

The Scorecard will also provide greater guidance to utilities as to our expectations for their restoration efforts. It will better enable the utilities to assess their own performance and to concentrate resources proactively in areas where improvements are needed. Corporations use key performance indicators (KPIs) to establish performance expectations, measure their achievement and identify areas of focus for improvement. The Scorecard we are introducing today is intended to serve as a critical tool that can be similarly used by utilities and the Commission to measure performance with respect to safe and timely electric service restoration after major outages. Recent experience has shown that it is difficult to perform an assessment of the utility response to major storm events or outages without the capability to define and apply the constituent metrics for preparation prior to the event, operational response during and after the outage event, and utility communications to customers and community leaders as the event and recovery from the event are occurring. The Scorecard is a major step toward creating that capability.

The Scorecard we adopt here has been developed to work with the recent amendments to the Public Service Law (PSL), including the new provisions regarding administrative penalties³. These new provisions, among other things, require electric corporations to file emergency plans annually, specify subject areas to be covered in the emergency plans subject to Commission review and approval. In conjunction with these statutory provisions, the Scorecard will be a guide for assessing the performance of utilities in connection with their outage restoration efforts. Although we intend the Scorecard to apply specifically to major outages, as Staff gains experience with its use, it may make recommendations to the Commission to apply the Scorecard, or to apply a modification of the Scorecard, to other outages or for other action as may be appropriate.

2. April 24, 2013 Notice Soliciting Comments at 2.

3. PSL § 25-a.

Up to now, the two primary metrics upon which we rely to measure reliability are the System Average Interruption Frequency Index (SAIFI) and the Customer Average Interruption Duration Index (CAIDI)⁴. We currently use the SAIFI and CAIDI metrics to establish targets for acceptable performance as part of each utility's Reliability Performance Mechanism (RPM). The utility RPM is a part of the utility's rate plan, and, when used for this purpose, the SAIDI and CAIFI metrics only measure utility performance in providing reliable electric service during normal conditions. They expressly characterize major outage events as abnormal and exclude utility performance during these major outage events. As such they were not intended to, cannot and do not provide any quantitative measurement of utility performance during a major outage event. They do not provide an objective measurement of utility performance during those periods. Finally, the RPMs measure the utility's overall reliability on an annual basis. In contrast, the Scorecard will be used as a tool to specifically measure utility performance (including preparation and communication activities) after each significant major outage.

The Scorecard we adopt today assigns metrics and points into three categories: Preparation (150 points), Operational Response (550 points), and Communications (300 points). The three categories are intended to capture the key activities associated with major storm events. The Preparation metrics focus on utility activities in anticipation of a significant outage event.⁵ The second category, Operational Response, evaluates the utility's performance as a significant outage event is occurring and during the recovery period after the event until normal service is restored.⁶

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4. SAIFI is the average number of times that a customer is interrupted during a year. CAIDI is the average interruption duration time for those customers that experience an interruption during the year. Both of these metrics are common, industry-wide performance measures.
 5. An example of a Preparation metric is Employee/Contractor Planning. This metric assesses the utility efforts to contact employees or contractors before the event occurs to review the roles they may be expected to fill if the outage event occurs. This metric is one of eight in the Preparation category and is assigned 15 points.
 6. An example of an Operational Response metric is Down Wires. This metric measures, for a three to five day event, whether the utility (through utility personnel or contractors) responds to a downed wires report within 18 hours, or, for a greater than 5 day event, within 36 hours. The metric is one of 12 in the Operational Response category and is assigned 60 points.

The third category, Communications, assesses the utility's ability to receive and to disseminate information about the outage event and about the recovery process.⁷ The specific metrics and point assignments under each category are set forth in the Scorecard attached to this order in Appendix A and in the accompanying Emergency Response Performance Measurement Guide (Performance Guide) which is also attached in Appendix A.

The Commission first issued a Notice Soliciting Comments on April 24, 2013 to obtain input on a draft Scorecard. Two parties submitted comments, the City of New York (City) and jointly Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation (Joint Utilities) (together the Parties). Based on the comments received and additional discussions and further consideration of this issue, a second draft Scorecard was developed in August 2013 (August Scorecard). The August Scorecard was released for a second round of public comment on August 19, 2013. In addition to some clarifications to the measures identified and definitions used in the first Scorecard, the August Scorecard also introduced the Performance Guide to be used in conjunction with the Scorecard, and further specified the areas that will be reviewed to assess utility performance. We are considering here the comments from the City and Joint Utilities on the August Scorecard.

7. An example of a Communications metric is Municipal Calls. This metric evaluates whether telephone conference calls are held at least daily and are effective in communicating baseline information, updates on road clearing activities, and allow for two way communications between the utility and municipal officials, including communications concerning downed wires. It also assesses whether the utility has implemented an operator assisted calling system. This metric is one of eight in the Communications category and is assigned up to 40 points.

DISCUSSION AND ANALYSIS OF COMMENTS

Discussion

As noted above, the Scorecard is intended to provide objective standards by which this and future Commissions will be able to gauge utility performance in maintaining electric service following major outage events. We adopt this measure because lack of reliable electric service during and following a major storm imposes great stress and safety risks on local communities. The establishment of these Scorecard metrics is designed to measure objectively how a utility's actions or inactions minimized or aggravated the affected communities' disruption, anxiety and stress. It also provides the further benefit of identifying the areas of storm related actions that a utility should focus on to continue to improve its performance. Moreover, in the event that we find a particular metric is not serving its intended purpose, the Scorecard design can be easily modified on a going forward basis to ensure that the right measurements are being used.

We understand the concerns expressed by some parties that the implementation of the Scorecard may have unintended consequences. For this reason, the Scorecard will be a dynamic and fluid tool subject to periodic review and improvement. Future modifications to the Scorecard may be necessary, as lessons are learned through the evaluation of restoration events, to mirror changes in utility emergency plans, or as changing circumstances warrant. By establishing metrics in the Scorecard, we are setting performance expectations. However, as in any measurement activity, the successful measurement tool is the one which focuses on the right outcome and affords appropriate weight on each measurement.

For this proceeding, Staff developed draft scorecards which could be used to evaluate utility performance, and since the inception of this proceeding we have provided two opportunities for interested parties to comment on the proposed program. Both the City of New York and the Joint Utilities provided general comments regarding the use or nature of the Scorecard and specific comments concerning the April and August Scorecard. We will consider first the parties' general comments.

General Comments

1. Application of the Scorecard to Utility Divisions or to Non-electric Services. The Joint Utilities state that the Scorecard should apply on a Companywide level, rather than to the specific division or portion of the utility service territory affected by the outage event, and they opine that a piecemeal approach does not provide an accurate overall assessment. This utility comment is directed to those instances where the utility service territory is made up of several geographically distinct areas. Because a utility's service territory is broken up in this way, different utility districts may have different storm response experiences, and Scorecards completed for each district could show very different results. The Joint Utility comment seeks to have these Scorecard results aggregated into a single Scorecard which reports the utility's performance as a whole. However, where these geographically distinct areas are separate from each other, the application of the Scorecard to the utility as a whole may mask inadequate utility performance in a specific division. For this reason, the Scorecard measurements will reflect outage and restoration times on a division wide or district basis.

2. Development of Scorecards for Gas and Steam Services. The City recommends that, for those utilities that provide multiple services, the Commission apply the Scorecard to evaluate the performance of utilities in maintaining performance in all service categories, i.e., gas and steam as well as electric. The City observes that Hurricane Sandy demonstrated a need to monitor and measure the utilities' total performance in preparing for and recovering from major storm events, and that gas and steam systems are equally or perhaps more vulnerable to disruption than the electric system. The City further comments that if the Commission utilizes the Scorecard to evaluate utilities' performance, the utilities should not be evaluated based on the totality of their performance, but that each category of the Scorecard should be assessed separately.

The Commission agrees that the concerns about electric utility performance following major storms are applicable to other essential services, including heating and water. However, at this time, we believe it is premature to expand the application of the Scorecard approach to these other services. There are several reasons that we reached this conclusion.

First, the Scorecard is specific to electric utilities because we have seen that the most comprehensive and pressing need and, hence, the greatest benefit to customers and the public is from utility performance in this area. Second, as a practical matter, electric utilities have historically been affected more by storms than other regulated services. By adopting a Scorecard for use in evaluating the outage event response of our electric utilities, the Commission will gain critical experience in determining how best to establish best practices with respect to storm related restorations.

3. Short-term events and Scorecard application. The proposed Scorecard would be applicable to events where the restoration of service requires three days or more. In its comments, however, the City recommends that the Scorecard be applied to all outages 1) lasting 24 hours or more, 2) affecting 2.5% or more of customers within an operating area, regardless of duration, or 3) disrupting service to one percent or more of customers in an operating area for at least 12 hours. The City contends that the significance of an outage should not be determined simply by the length of the outage.

Due to the smaller impact expected to result from shorter duration outages (the first of the City's three parts), and the utility's general ability to mobilize personnel to respond to shorter duration outages, we find that the completion of a Scorecard evaluation for shorter duration events would furnish insufficient additional benefit on a statewide basis.⁸

The second part of the City's proposed three-part approach calls for implementing the Scorecard if service is interrupted to 2.5 percent or more of customers within an operating area, regardless of duration. However, based on those criteria, in some operating areas in upstate New York, the Scorecard would be triggered if fewer than 1,000 customers lost service, regardless of the duration. The final part of the City's approach for an outage affecting one percent of customers for twelve hours or more, could reduce the threshold for Scorecard implementation in certain operating areas to fewer than 500 customers. Modifying the Scorecard to reflect these criteria could result in excessive Scorecard reporting.

8. Our use of the Scorecard data to complete a Scorecard evaluation for less severe outage events is not anticipated at this time. Such use, if undertaken, would be based on our determination at that time and on Staff's recommendation that the particular circumstances associated with that less severe event justified the completion of a Scorecard evaluation.

We understand the City's concern that an outage of shorter duration could have severe effects in New York City based on the unique nature of Con Edison's underground network in the City when compared to the rest of New York State. Because of this, we will apply the Scorecard to network outages in New York City, utilizing the definition of a network outage contained in the Con Edison Reliability Performance Mechanism which defines a network outage in New York City as the "interruption of service to 15 percent or more of the customers in any network for a period of three hours or more."⁹

4. Definition of Time Periods and Alignment with Utility Emergency Plans. The Joint Utilities and the City generally support the concept of using a scorecard to gauge utility performance as they respond to outage events and agree with the three categories contained in the Scorecard: Preparation, Operational Response, and Communication. However, they state that the metrics within these categories must be clearly defined. They also are concerned that there are disparities between the Scorecard and the utilities' emergency plans. Finally, they assert that the use of the Scorecard could have unintended adverse consequences.

9. We understand that application of the Scorecard to Con Edison's network outages means that some of the measures contained in the Scorecard will not apply. For example, there are no downed wires for a network outage because the network cables are located underground. In the Operations category of the Scorecard, however, we expect the utility to issue a local ETR and coordinate with appropriate New York City offices. Furthermore, we will apply the Communication metrics to a network outage.

In response to these comments, the Scorecard is accompanied by a Performance Guide to provide greater clarity and precision to the metrics being used in the Scorecard. Most notably, the Performance Guide now includes definitions for: Start of the Event¹⁰, Customer Restoration¹¹, Outage Duration¹² and Start of Utility Restoration¹³. Further, to ensure clarity in understanding the specific metrics, each of the metrics that incorporate a timing component has been modified to reference one of these time definitions. For example, the Call Answer Rate metric will be measured from the “Start of the Event” to ensure customers can contact the utilities during a storm. Operational metrics, such as the Preliminary Damage Assessment measure will be measured from the Start of Utility Restoration, which corresponds to the time at which the company can dispatch field personnel without unacceptable safety risks. These changes reflect existing emergency plan practices.

The further concern expressed by the Joint Utilities is that the Scorecard does not mirror each utility’s electric emergency plan. However, we find that the proposed Scorecard appropriately reflects statewide restoration expectations for the utilities, and these expectations should be reflected in the emergency plan filings. For example, the metric for Municipal Coordination within the Operational Response category explicitly incorporates the protocols for coordination with municipal officials which are or will be found in the utility’s Commission approved Response Plan. The Scorecard measurements are intended to align with specific portions of the utilities’ electric emergency plans which have been or will be filed with the Commission.

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10. The Performance Guide defines the Start of the Event as the time when more than 5,000 customers are interrupted within a division for more than 30 minutes or when more than 20,000 customers are interrupted companywide for more than 30 minutes. If the event affects less than the customer counts listed, the start time shall be the earlier of the peak level of interruptions or the start of utility restoration.
 11. Customer Restoration is defined in the Performance Guide as complete when for each customer, service has been restored or service is available but would be unsafe to restore due to damage with customer-owned equipment or a compromised structure.
 12. Outage Duration is defined in the Performance Guide as the time period between the start of the event and customer restoration for all customers affected by the storm.
 13. Start of Utility Restoration is defined in the Performance Guide as the point in time when field personnel are able to be dispatched without unacceptable safety risks from continued severe weather conditions (where adverse weather conditions are applicable) and when the potential additional damage to the electric system from the storm would be low in proportion to the expected level of damage already sustained. The start of the restoration period may be different for distinct areas where the effect of a storm limits access to facilities (e.g., severe flooding).

5. Outage Duration and Restoration Time. The Joint Utilities recommend changing the Outage Duration definition so that this period would begin at commencement of utility restoration, rather than, as proposed, at the Start of Event, and end with the completion of customer restoration. Defining Outage Duration to begin at the Start of Event rather than the start of the Utility Restoration, however, is more appropriate because customers experience an outage when they lose power, not when electric utility personnel begin restoration. Therefore, the Scorecard will retain the definition of Outage Duration as the period of time which begins with the start of the storm event. The City comments are in accordance with this definition.

In its comments, the City recommends that the definition of restoration should specify that restoration time is to be measured from when a storm ends. The City favors this measure of restoration time because it would allow the utility to wait to begin restoration until it was safe for workers to be in the field. The City also states that the appropriate pre-emptive shut down of equipment to minimize potential damage should not affect the measurement of restoration times. Our definition of utility restoration in the Performance Guide is consistent with the City's observation.

6. Metrics for Preparation Category. Both the Joint Utilities and the City suggested that the importance of preparation relative to the other two scorecard categories is significantly understated. To correct this imbalance, the Parties recommend increasing the significance of utility preparedness in the Scorecard from 10% (or 100 points, as originally proposed) to 20% (or 200) of the total points. Preparation is an essential element of the utility response to an outage event. In many cases, the public perception of an adequate storm response is based on actions the utility is able to take only because its preparations were comprehensive and timely. We agree with the City and Joint Utilities that more points should be assigned to the Preparation category of the Scorecard, and we will re-allocate 50 points from the Operational Response category for this purpose. However, reducing the Operational Response weighting further or reducing the Communications categories at all would diminish the effectiveness of the measures contained in each of these categories. Moreover, it is clear that successful utility programs for Operational Response and for Communications depend fundamentally on excellent preparation, and, in most cases, inadequate preparation cannot be overcome by excellent Operational Response or Communications. Because of this, preparation is measured in its own category and, indirectly and in part, in each of the other categories as well. Therefore in the Scorecard we adopt, the total of 1000 points will be allocated to each category as follows: Preparation 150 points, Operational Response 550 points and Communication 300 points.

7. Partial Scoring and Points for Exceeding Expectations. In the most recently proposed scorecard, certain metrics were structured to allow a utility, which does not meet the scorecard metric for

the full amount of the points associated with that metric, to win some, but not all, of the available points. In the Joint Utility comments, it is urged that such “partial scores” should be permitted for additional metrics. At the same time, some of the proposed categories allowed the utility to gain additional points under certain metrics through performance that “exceeds expectations”. The Joint Utility comments also objected to these metrics urging that performance that meets expectations should be provided the full number of points available through that metric. We reject each of these comments. The instances of partial scoring as originally proposed should be continued.¹⁴ The metrics using partial scores appropriately divide the points available under that metric to a number of submetrics. This assures that the utility response will be appropriately comprehensive and wide ranging and provides a truer picture of the elements of performance which make up that metric. Similarly, the incremental award of points for performance that exceeds expectations usefully provides a clearer picture of the evaluation which the Commission will make of the Scorecard data for that metric when it is supplied concerning these outage events. This helps the Commission to signal clearly its intent to incent “above expectation” performance under these metrics.

8. Time to Provide Scorecard Data. The Joint Utilities propose that the deadline for Scorecard data be changed from thirty to sixty days as required by Part 105 for post-storm reports. Part 105 post-event reports require data collection, analysis of the data, and the development of lessons learned. The Scorecard, however, requires the utilities to submit only the data for Staff’s analysis within thirty days of customer restoration without the additional requirements of the Part 105 post-storm report. Because the degree of effort to provide data as required pursuant to the Scorecard does not rise to the level of that required for a Part 105 post-storm report, and because of the importance of acquiring the Scorecard data quickly, we will retain the thirty day filing requirement.

9. Linkage with Outage Policy Case. We recently acted in the Outage Policy Case¹⁵ to further define the actions a utility must take to provide credits to customers who lost service when a prolonged electric or gas outage occurs. In its comments, the City and the Joint Utilities assert that there should be no linkage between the Scorecard and the policies and customer benefits being addressed in the Commission’s Outage Policy Case, 13-M-0061 (Outage Policy Case).

14. In the Scorecard, partial points could be attached to three metrics: accuracy of Estimated Time of Restoration (ETR), call answer rates, and Life Support Equipment (LSE) customer contacts. The instances of partial scoring are outlined in the Performance Guide included in Appendix A.

15. Case 13-M-0061, Matter of Customer Outage Credit policies and Other Consumer Protection Policies Relating to Prolonged Electric or Natural Gas Outages.

We agree that the process and remedies provided through our Outage Policy Case would be unrelated to and independent of the Scorecard evaluation we describe here. Indeed, the Scorecard evaluation and the implementation of the Outage Policy Case results will not necessarily occur with respect to the same outage events. In addition, the purpose of the Scorecard is to build a performance measurement tool to guide the utility's and the Commission's evaluation of the utility's performance during outage events. The remedies defined in the Outage Policy Case do not and are not intended to address utility performance or any lack of performance. Further, the provision of benefits to customers under the Outage Policy Case does not depend on utility performance during the outage event.

Comments on Scorecard Categories

The Scorecard we adopt describes metrics in three identified categories – Preparation, Operational Response, and Communication. We address the comments for each of those categories individually below.

1. Preparation. A utility's successful response to outage events begins with planning. Effective emergency plans define roles, responsibilities, standard operating procedures, mutual assistance procedures, communications procedures, and training programs. In preparation for an event that is forecast in advance, an emergency plan provides guidance regarding the pre-event preparation. For an event with less warning, the emergency plan provides for the quick activation of resources once the event's size is established. Training ensures that employees who have responsibilities during the outage response as a secondary responsibility are capable of completing assigned restoration tasks. Training must also take into consideration staffing changes, employee turnover, and competing job priorities.

In the days leading up to storm events, the electric utilities begin implementing the guidelines contained in their emergency plans.¹⁶ The electric utilities closely monitor the forecasts and predictions for the weather events and participate in conference calls hosted by the National Weather Service. Using the weather forecasts, the utilities make determinations about how to pre-stage crews, materials, and equipment for the areas likely to be affected by the storm. The forecasts also enable the utilities to estimate the amount of damage and develop staffing levels based on the predicted severity of the event.

The emergency plans require specific actions to be taken to prepare for a storm. Such tasks include arranging meetings and conference calls between internal company personnel, local municipal officials, Department Staff, contractors, and regional mutual assistance groups. Advance communication of predicted conditions to both internal and external stakeholders aids those involved to make decisions about preparing for the expected emergency and gives customers time to make appropriate plans. Preparation time is especially important for Life Support Equipment (LSE) customers and managers of Critical Facilities. Pre-event safety advice to customers is also important to prevent accidents involving downed wires. Early communication regarding expected weather conditions and potential damage assists local municipalities' efforts to prepare available resources to protect communities, communicate preparatory requirements to citizens, and facilitate restoration efforts.

¹⁶ During this time, the utility closely monitors the forecasts and predictions for the weather events and participates in conference calls hosted by the National Weather Service. Many of the utility's actions in the period before a storm event closely depend on an accurate assessment of the weather information available to it. In many respects, the adequacy of the utility's storm response will depend on the utility's ability to acquire and properly evaluate high quality weather information and forecasts and to use this information to predict system impacts and to tailor its response accordingly.

In their comments with respect to the metrics in the Preparation category, the Joint Utilities expressed concern about the use of the Scorecard for events with little or no warning, like a tornado, and in which there could be inadequate time to satisfy the measures assessed in the Preparation category.¹⁷ We understand the Joint Utilities concern that the response to an unforecasted extreme weather event may not include as comprehensive a preparation as would otherwise be the case. We have adjusted the Scorecard to account for this by recognizing that, for events with limited warning, some of our measures could be impractical to implement. In general, for any metric that Staff deems inapplicable, the points for those measures will be excluded and the overall score of the three categories combined will be prorated.

The Joint Utilities also request that the Training Measure in the Preparation category be removed from the Scorecard because training is an ongoing process that does not occur only when a utility is preparing for a storm. The Utilities indicate that because PSL § 105 requires utilities to perform an annual storm drill, the training required by the Scorecard is duplicative. While, as the Joint Utilities assert, each utility conducts an annual storm drill, those drills would not normally encompass training for each member of the storm response team. The training to which the Scorecard metric refers is, therefore, more comprehensive and reaches more broadly into the organization. During emergency events, many utilities utilize employees in roles outside of their normal day to day activities to aid in the restoration goals, and specific training for those storm roles is essential. Training continues to be an integral part of effective restoration and is appropriately included in the Scorecard metrics.

Finally, in their comments for the metrics in this category, the Joint Utilities state that without further clarification, the measures in the preparation category may drive up storm preparation costs by causing the utilities to “over prepare or pre-stage” in advance of a storm. As a case in point, the Joint Utilities cite Long Island Power Authority’s (LIPA) experience in September 2010 where they indicate the cost of pre-staging crews to respond to a hurricane exceeded \$22 million, but only minimal damage occurred, resulting in the need for fewer crews than anticipated.

¹⁷ There may be sudden unforecasted weather events, like a tornado, for which the time to prepare is very short or is eliminated. However, the instances of such severe weather having impacts over a wide area for three days or more are rare. In such cases, the Commission will be flexible in applying the Scorecard metrics and determining what constitutes best practices on an evolving basis.

The Joint Utilities further assert that the measures in the preparation category may cause utilities to over prepare and drive up storm preparation costs unnecessarily. In this area, as in all others, we are mindful of the possibility that utility expenditures may become uncontrolled and excessive. However, we find that the metrics in the Preparation category are fully in line with our goals for utility preparedness. Based on the weather information available to it, the utility should prepare for the storm which is forecast. If a forecast storm dissipates or changes direction before damages are done to the utility's equipment, the utility's preparation activities are not over preparation. However, were a utility to over-prepare or unnecessarily drive up preparation costs, our normal oversight mechanisms should be able to identify this and to respond appropriately.

In its comments, the City urges the addition of a new metric to the Preparation category of the Scorecard to measure system resilience. The City contends that a resilience measure is a longer term measure of storm preparedness. It also believes the scoring system should be modified to assign additional weight to resiliency and other actions taken to minimize outages.

We agree with the City that system resilience is important in minimizing damage. Because the Scorecard is intended to address the Companies' response to appropriately meet the challenge of restoring service promptly and efficiently, the Scorecard metrics should over time reflect the degree to which a utility has implemented effective resiliency measures. A company with a highly resilient system would be expected to experience less of an outage or be able to restore service more quickly than a less resilient system. We acknowledge the importance of this issue and will consider including other measures of resiliency as the Scorecard continues to be refined in the future. The Scorecard is expected to drive improvements in performance, both with regard to resiliency and to restoration. In the event that the Scorecard does not lead to the desired performance, we will re-examine the metrics.

2. Operational Response. The objective during any storm or emergency restoration effort is to make conditions safe, manage repairs efficiently and safely, and restore customers as quickly as possible. The Operational Response measures are intended to evaluate the utilities' performance toward these objectives. Operational Response measures include management of downed wires, damage assessment, crewing, mutual assistance, estimated restoration times, safety, and coordination with municipalities, emergency operations centers and other utilities. During the initial response to a large event, one of the greatest safety concerns is managing down or low hanging wires. In addition to guarding down wires, the utilities must manage its response to fix these unsafe conditions. Communication and the exchange of information with other utilities and elected and municipal officials is

essential for public safety during the initial response. Damage assessors are also dispatched to survey and document the damage. Accurate damage assessment is a critical function in the early stages of the restoration process because it provides the information that allows the companies to determine how many in-house and mutual assistance crews are needed for the restoration. A good assessment permits the utility to evaluate how much and what type of equipment and material will be needed, and refine its customer outage estimates. Damage assessment information is also used to prioritize crew assignments and to determine the appropriate Estimated Times of Restoration (ETRs).

ETRs are critical for consumers, municipal officials, and emergency support personnel to be able to plan properly for the protection of people and property. ETRs are also important to customers who have lost service so they can plan for their personal welfare. The Scorecard measures three types of ETRs: global, regional, and local (municipal). The electric utilities must refine their ETRs as the restoration progresses using the most up to date information available. By providing ETRs for smaller geographic areas, the companies can increase the accuracy of the information they present to customers. To be informative and useful, the ETRs must be timely, accurate, and made widely available. The utilities must perform well at developing each level of ETRs since they are interrelated, build on each other as the restoration progresses, affect public safety, and could delay other restoration activities.

The publication and accuracy of ETRs is one of the most important components to be evaluated when reviewing utility performance. Currently, protocols regarding the timely development and communication of ETRs are being used by all investor-owned utilities and are the basis for our ETR measures. As part of the recent emergency plan review process, the ETR protocols were modified and now, as modified, must be integrated into utilities' plans.¹⁸ Given the importance of ETRs, the proposed metrics consist of several performance tiers and the methodology rewards utilities for performance that exceeds expectations.¹⁹

¹⁸ Case 13-E-0198, In the Matter of 2013 Electric Emergency Plan Review, Order Approving Electric Emergency Plans (issued August 16, 2013).

¹⁹ While the Joint Utilities hypothesize that a utility might "game" the Scorecard by deliberately delaying storm restoration. However, storm response is too complicated and involves too many actors working in close cooperation for actual "gaming" to the advantage of the utility to be feasible.

The Joint Utilities commented that utilities should be scored only for appropriately responding to emergencies. To encourage utilities to develop and publish ETRs, however, we believe it appropriate to maintain the tiers that reflect a utility's performance in exceeding expectations in accordance with the Scorecard. The accuracy measures, however, have been simplified. Global ETRs are the first ETR issued by a utility post-storm and are based on preliminary damage assessments, system monitoring capabilities, and initial crewing availability, which is why the utilities are only expected to meet an accuracy measure of plus or minus 24 hours. The companies, then, have an additional twelve hours to perform further damage assessments before they are required to issue regional and ultimately, local ETRs. Thus, the expectation of accuracy is more stringent with respect to the accuracy for Regional and Local ETRs because the utilities have more data and information when they issue these ETRs. Both the publication and accuracy measures also reflect different performance expectations depending on the duration of events, which is consistent with the revised ETR protocols provided in Appendix A.

The Joint Utilities' comments state that certain metrics should reflect different expectations for outages where restoration takes three to five days and for those where restoration takes longer than five days. The Joint Utilities believe that by treating these situations separately, thresholds can be set that are more reflective of appropriate response performance. We recognize the benefit of differentiating metric results for events with shorter or longer durations. Our use of the ETRs metrics reflects this and provides additional time for the release of ETRs if there is an outage where restoration takes greater than five days as compared with an outage where restoration takes less time. In response to the comments, we identified additional operational measures, such as Down Wires and Mutual Assistance requests where differentiation in time periods is also appropriate.

The Joint Utilities contend that it is impossible to predict resource requirements before any damage occurs and then to have 100 percent of the necessary crews in place. Additionally, although a utility may request crews through mutual aid, they rarely receive the number requested. The Joint Utilities are concerned that the proposed measure will place additional pressures on already scarce mutual aid resources, resulting in the unavailability of crews for utilities that truly need them. Rather than requiring the presence of all forecasted crews, as proposed in the initial request for comments, the Joint Utilities recommend modifying the crewing metric to be a percentage of forecast crewing "committed" to the restoration available to the utility for restoration. The Joint Utilities further clarify that committed should be defined as: (i) on property; (ii) in route; and/or (iii) committed through the mutual aid process and additional crews obtained after the initial forecast and/or after the start of restoration should not be considered when determining compliance. As part of the second round of

comments, the Joint Utilities did not comment on the specific definition of the crewing metric; however, they did comment that the crewing metric should not apply to large scale outages (e.g. Superstorm Sandy).

Crewing is a dynamic component of outage restoration based on damage predictions, sustained damage levels, and availability of mutual assistance. We recognize that crews can arrive at different times in the restoration process and it is not our intention to create a metric that would act as a disincentive for staffing at proper levels or limit the sharing of available resources. The intent of the measure is to assess whether the utility has secured adequate resources to perform work in the initial stage of restoration. Staff and the Joint Utilities agree that the Crewing metric is best expressed as the commitment of a percentage (80%) of the requested crews being available within forty eight hours from the start of restoration.

We disagree, however, with the Joint Utilities' suggestion to limit the measure of crewing to include only a utility's initial request. The Scorecard will evaluate performance based on responses following requests made within 48 hours from the start of restoration. By doing so, this metric will capture changes to crewing levels based on known sustained damage following completion of primary damage assessment. We believe this measure satisfies our goal while still allowing companies to freely obtain additional resources to assist in the restoration as they are released from other utilities. We disagree with the Joint Utilities recommendation that the Crewing metric not apply to large scale events like Superstorm Sandy, especially given the important lessons learned from recent severe storms. Superstorm Sandy emphasized that utilities need to plan for large scale outages and create the framework for effective restoration for all events, from small snowstorms to Superstorm Sandy level outages.

The Joint Utilities' comments further recommend the elimination of the "idle time" metric from the Operational Response category. They explain that while there are times where it may appear that crews are idle, in actuality, their appearance is fully consistent with the prompt and efficient restoration of service. The Joint Utilities also point out that utilities do not assess or track idle time and doing so would require a great effort and increase costs. In response to this comment, we believe that it is important for utilities to effectively use their resources during storm restoration, and, based on the Joint Utility comment and Staff's recommendation, we are persuaded that it would not be an efficient or effective use of resources to collect this "idle time" data during an event. For this reason, we have removed this metric from the Scorecard. Nonetheless, this is an important issue and we ask Staff,

through its continuing work on electric emergency plans, to devise other measurements to improve performance in this area.

The Joint Utilities also assert that a wire guarding metric should not be measured as initially proposed. Instead it believes the measure should be consistent with the recently amended PSL²⁰, which requires utilities to secure downed wires within 36 hours of notification from a municipal emergency official. The Joint Utilities also expressed concern that the wire guarding performance metric presents a challenge because their current computer systems do not record the length of time between when a downed wire is reported and when a crew arrives on scene to guard the wire.

With regard to wire guarding, because the law is intended to manage the wire guarding process with emergency officials, and because utilities will be interacting with municipalities on this basis, we believe that modifying the current Scorecard metric is appropriate to distinguish between three to five day events and events that last more than five days. We do not, however, find that a 36-hour response is indicative of adequate performance levels for events with three to five day outage durations. Therefore, we have established an 18-hour requirement for such events. Events with outage durations of more than five days will be measured using the 36-hour requirement of the PSL. With regard to the wire guarding record keeping concern expressed by the Joint Utilities, utilities already need to rectify this tracking deficiency in the short term in order to comply with the PSL.

Finally, the Joint Utilities' comments recommend utilizing a Safety metric which, for each utility would "not exceed two times the individual utility's Operations safety performance record from the prior year." However, using a utility's operational safety record from the prior year as the standard for this metric would not drive safety improvements. If, for example, a utility performed poorly in the previous year, it would only have to improve against this low standard in the subsequent year. However, we agree that the goal of the Safety metric is to measure the occurrence of serious injury. To further clarify our use and understanding of this metric, we will define "serious injury" as an injury which results in hospitalization, medical treatment beyond first aid, or death. At this time, we have not established the threshold (serious injury/employees) at which to set the Safety metric. We will, therefore, retain the metric at zero injuries, with the understanding that this metric may change as we gather more information from the utilities in future major restorations.

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PSL § 66(21)(a)(xi).

3. Communication. Efficient and accurate communication is a critical component of emergency management. Important communication aspects of emergency management include informing customers about an impending outage, keeping local authorities informed of damage assessments and estimated restoration times, and informing end users of safety measures and the availability of necessary supplies in a timely manner. Communication delays and misinformation increases confusion for customers. Traditional print and electronic media will continue to serve as a useful means for utilities to communicate with the public. It is critical, however, that utilities also use other available progressive technologies. For example, social media and text messaging will play an increasingly vital role in outage communications.

An important element of effective communication is communication with elected officials and interested members of the public. It is critical that these individuals, as well as customers, receive the timely and accurate information they need in order to reduce confusion, increase confidence in their utility, and for the purpose of taking appropriate action. Elected officials in particular have broad interests in storm related information. Their concerns include public safety, damage assessments, resource availability, and regional and local ETRs, among other things.

The proposed Scorecard includes metrics related to the issuance of press releases, text messages and emails, the conduct of municipal calls and the effectiveness of the calls, the contact with LSE and other Critical Customers which includes hospitals, and police and fire departments, utility call center call answer rates, the publication of ETRs and the availability of information on utility websites and through other communication medias. The proposed Scorecard also provides points for the successful implementation of operator assisted municipal calls.

With regard to communications, we identified several areas where communication measures could be combined and evaluated as a whole rather than separately. For example, among the communication vehicles currently employed by utilities in emergency situations are the presentation of information through press releases, text messaging, emails, and social media. When multiple vehicles are used, utilities need to ensure that a consistent message is being delivered to avoid customer confusion. The Scorecard now consolidates several communication tools, including press releases, text messaging, emails, and use of social media, into a single measure. Utilities will be evaluated on whether messages are provided in a timely manner and whether messages address key components of the restoration, in consideration of the space limitations the Joint Utilities identified.

In their specific comments for the metrics in the Communications category, the Joint Utilities objected to the requirement that an outgoing message on the utility telephone line

contain the same information as the press release. They state that the information that can be included in an outgoing message is limited and messages containing too much detail will be cumbersome and will reduce the amount of time it takes for a customer to reach a service representative. We have modified the Outgoing Messages measure to require that the message be updated within one hour to ensure consistency with other information being released to customers. We believe these changes allow the utilities to customize their messaging to maximize the effectiveness of current and future communications vehicles. We expect utility communication to be up- to-date, clear, and consistent across different media.

The Joint Utilities further propose reducing the Municipal Calls Metric from three to two measurement criteria and removing subjective terms, such as highly effective and effective, from the evaluation of municipal calls. We continue to emphasize, however, the importance of the utility's municipal calls during an outage event. Therefore, Staff will continue to monitor municipal calls, which should be held at least daily, until 90% of the affected customers have been restored. In response to the Joint Utilities' comment that the criteria for measuring the effectiveness of municipal calls is subjective, it is important to note that municipal calls will be measured not only by how effectively the calls are conducted, but also, whether the calls are held at least daily in compliance with the Company's approved electric Emergency Plan. In addition, as set forth in the Scorecard, in order to determine municipal call effectiveness, consideration will be given to: 1) whether the arrangements for the municipal call were correctly communicated to stakeholders; 2) how the call was managed; 3) whether baseline information (such as the type and anticipated severity of storm or other cause of outage, geographic areas impacted, number of customers out of service, number of crews activated, ETRs per operational guidelines, and status of wires down/ road clearing activities) was provided; 4) whether the call allowed sufficient time for questions and answers; and, 5) how the Company responded to questions posed. These descriptions for the metrics to be used to evaluate Municipal Calls are sufficiently objective to provide the utilities with a clear understanding of how their performance will be evaluated.

In their comments, the Joint Utilities propose modifying the Web Availability Metric to require the availability of the website 23 hours per day rather than 24, because increased website traffic during outages will require downtime for maintenance. Further, the Joint Utilities comment that requiring hourly updates to the website is too frequent to provide customer benefits, particularly early in an event. Regarding web availability, during an emergency event, the utilities' websites must be available around the clock. Until restoration is complete, websites should be updated at least

hourly. During an event, there may be instances when no new information is available which can be reported in an update. Nevertheless, the website should indicate the time when the most recent update occurred. In the future, as Outage Management Systems are improved, we expect that the utility's outage mapping capability would enable it to indicate when, prior to the last hourly update, the most recent updating changes to the information provided by the site were made. Web sites may be off-line for short periods of maintenance during off-peak hours.

Regarding the Call Answer Rate metric, the Joint Utilities' comments object to the inclusion of a 30 point bonus for answering 90% of calls within 90 seconds. They propose instead that the metric provide 50 points, rather than 20 points, if 80% of calls are answered in 90 seconds. We will continue to emphasize, however, that the need to take information from customers cannot be understated. Therefore we will continue to base the Call Answered Measure on the utilities ability to answer 80% of calls within 90 seconds while providing additional points to utilities that achieve a call answer rate of over 90% of calls answered in 90 seconds.

The Joint Utilities' comments express concern that in some cases the Scorecard metrics do not align with approved Emergency Plans. Specifically, the LSE Customer Contact measure, according to the Joint Utilities, would require the utilities to respond differently under the Scorecard than under their Emergency Plans. For example, the Scorecard measure requires utilities to contact LSE customers within 12 hours from the start of the event. In contrast, the utilities assert that this 12 hour threshold is not currently reflected in their Emergency Plans.

LSE customers receive a higher level of communication during restoration because of their increased vulnerability during a power outage. Therefore, we will continue to evaluate utilities under the Scorecard on their ability to contact 80% of the affected LSE customers within 12 hours from the start of the event and whether, and within 24 hours of the start of the event, LSE customers were either (a) directly contacted by the utility, or (b) referred to an emergency services agency (e.g., police or fire department) for emergency assistance. While the twelve and twenty-four hour time limits may not currently be reflected in the utilities' Emergency Plans, we expect that these plans will in the future be aligned with the Scorecard on this point as well as others.

In its comments, the City of New York comments that the Communications category should be modified to treat Critical Care Facilities such as hospitals and assisted living centers in a manner similar to the treatment of LSE customers. We understand the City's concern with regard to the importance of Critical Facilities communication. In general, Critical Facilities are facilities from which essential services and functions for the continuation of public health and safety and disaster

recovery are performed or provided (e.g., hospitals, water treatment plants and fire houses). In the Preparation category of the Scorecard, we require utilities to make outbound calls to critical facilities managers prior to the onset of an outage event. Furthermore, in the Operational Response category, utilities are required to coordinate with municipalities and County Emergency Operations Centers with respect to identification of affected critical facilities and with respect to the status of restoration in accordance with approved Electric Emergency Plans. Critical Facilities such as hospitals are generally larger entities that may have personnel dedicated to communication with utilities and emergency agencies and may well have back up generation. We will require each utility's Emergency Plan to consistently define Critical Facilities as well as to maintain utility communication with such customers during an emergency.

CONCLUSION

We have examined the record in this proceeding and find that Staff's recommendations appropriately achieve the goal of developing a Scorecard for our guidance in assessing utility performance in preparation for and response to major outages. Implementation of the Scorecard will also provide greater guidance to our electric utilities as to our expectations for their major emergency response programs. We therefore direct each electric utility to provide the data described in this order and in the attached Appendix A to Staff on a per event basis within thirty days of the completion of customer restoration for that event. Staff will then use that data to determine a score for each outage for each utility. This data requirement is in addition to any reporting or other requirement, including the Part 105 outage reporting requirement that is currently in place.

The Scorecard, as described in this order, reflects, where appropriate, the concerns expressed by the Joint Utilities and the City of New York, and Staff's further consideration of these issues. The Commission adopts, in accordance with Staff's recommendations, the attached Scorecard documents as guidance for the measurement of future utility performance. It is important to note that the Scorecard will be a dynamic document, and will be refined as appropriate. To that end, Staff will monitor the extent to which the Scorecard accurately measures utility performance prior to and during emergency events and report to the Commission, as necessary, with respect to any recommended modification to further define and develop the Scorecard.

The Commission orders:

1. The Commission adopts the Scorecard in Appendix A in accordance with the foregoing Order for use as a guide in assessing each utility's service restoration programs after significant outages, to assist in holding the utilities accountable to certain performance levels, and to guide utilities as to the Commission's expectations for their restoration efforts.

2. Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Niagara Mohawk Power corporation d/b/a National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation shall submit data for the Scorecard within thirty days of the completion of customer restoration after:

- a) any outage which lasts for more than three days,
- b) any outage which is a network interruption as defined in Case 09-E- 0428,

as set forth in this order, or

- c) any other outage for which Staff requests such data.

3. The Secretary in her sole discretion may extend the deadlines set forth in this order, provided that the request for such extension is in writing, includes a justification for the extension, and is filed on a timely basis, which should be on at least one day's notice prior to any affected deadline.

4. This proceeding is continued.

By the Commission,

KATHLEEN H. BURGESS

Secretary

**DRAFT EMERGENCY RESPONSE PERFORMANCE MEASURES
PREPARATION (10% OF TOTAL)**

Area of Interest	Definition of Measure	Measurement Criteria	Points
1. Event Anticipation	Complete steps to provide timely and accurate emergency event preparation in response to the NWS or the company's private weather service, in accordance with the company's PSC approved Electric Emergency Plan, for an event expected to impact the company's service territory.	1.1 Employees/Contractors planning	15
		1.2 Press Releases issued / text messages / emails sent	15
		1.3 Municipal Conference Calls held and highly effective	20
		Municipal Conference Calls held and effective	10
		1.4 LSE customers alerted	15
		1.5 Point of contact for Critical Facilities alerted	15
		1.6 Company compliance with Training Program as specified in Commission Approved Emergency Plan	15
		1.7 Participation in all pre-event mutual assistance group calls	15
		1.8 Verify Materials / Stockpiles level based on forecast. If materials are not on hand, correct situation within 24 hours	40

TOTAL 150

OPERATIONAL RESPONSE (60% OF TOTAL)

Area Of Interest	Definition Of Measure	Measurement Criteria	Points
2. Down Wires	Response to downed wires reported by Municipal Emergency Official	< 18 hours (3-5 day restoration) < 36 hours (> 5 day restoration)	60
3. Preliminary Damage Assessment	Completion of preliminary damage assessment	< 24 hours from start of restoration -	30
4. Crewing	80% of the forecast crewing committed to the utility	< 48 hours from the start of restoration	30
5.Estimated Time of Restoration (Made available by utility on web, IVR, to CSR's, etc.)	Publication of Global ETR in accordance with ETR Protocol	Exceeds expectation: <24 hrs (3-5 day restoration) <36 hrs (> 5 day restoration)	50
		Meets expectation: <36 hrs (3-5 day restoration) <48 hrs (> 5 day restoration)	30
	Publication of Regional/County ETRs in accordance with ETR Protocol	Exceeds expectation: <24 hrs (regions with 3-5 day restoration) <36 hrs (regions with > 5 day restoration)	50
		Meets expectation: <36 hrs (regions with 3-5 day restoration) <48 hrs (regions with > 5 day restoration)	30
	Publication of Local/Municipal ETRs in accordance with ETR Protocol	Exceeds expectation: <36 hrs (3-5 day restoration) <48 hrs (> 5 day restoration)	50
		Meets expectation: <48 hrs (3-5 day restoration) <72 hrs (> 5 day restoration)	30

OPERATIONAL RESPONSE (CONTINUED)

Area of Interest	Definition of Measure	Measurement Criteria	Points
6. ETR Accuracy	Global ETR accuracy as published in accordance with ETR requirement time	Accurate within +/- 24 hours	40
	Regional ETR accuracy as published in accordance with ETR requirement time	Accurate within +/- 12 hours (3-5 day restoration) Accurate within +/- 24 hours (> 5 day restoration)	40
	Local ETR accuracy as published in accordance with ETR requirement time	Accurate within +/- 12 hours	40
7. Municipality Coordination	Coordination w/ Municipalities regarding hazards or electric utility equipment impeding road clearing, down wires, critical facilities, etc.	Execution of Coordination Protocols pursuant to Commission Approved Emergency Plan	20
8. County EOC Coordination	Coordination with County EOCs	Execution of Coordination Protocols pursuant to Commission Approved Emergency Plan	20
9. Utility Coordination	Electric Utility Coordination with other Utilities (Electric, gas, communications, water)	Execution of Coordination Protocols pursuant to Commission Approved Emergency Plan	20
10. Safety	Measure of any employee or contractor serious injury doing hazard work during storm/ outage and restoration.	Zero injuries	80
11. Mutual Assistance	Crew requests made through all sources of mutual assistance	Crew requests made within: 36 hrs (3-5 day restoration) 48 hrs (> 5 day restoration)	20
12. Restoration Times	Time it takes utility to restore power to 90% of customers affected	TBD	---

TOTAL 550

COMMUNICATION (30% OF TOTAL)

Area of Interest	Definition of Measure	Method of Measurement Criteria	Points
13. Call Answer Rates	Customer calls answered by properly staffing call centers	90%+ calls answered within 90 sec.	30
		80% to <90% calls answered within 90 sec.	20
14. Municipal Calls	Municipal call must be properly managed and provide, at minimum, baseline information, updates on road clearing activities, and allow for Q&A.	Municipal calls held and highly effective	30
		Municipal calls held and effective	20
		Successful implementation of an operator assisted calling system	10
15. Web Availability	Company's web site must be available around the clock, and must be updated at least hourly, until restoration is complete.	Websites should include the baseline restoration information, all press releases issued during the event, a complete list of safety tips, an outage location map of affected areas, summaries of outages and ETRs by municipality and county, and the locations and times of dry ice distribution.	40
16. LSE Customers	LSE customer contact	80% affected LSE customers contacted within 12 hours	15
		LSE customers that were unable to be contacted had at least two attempts made within 12 hours	15
		100% affected LSE customers contacted or referred to an emergency services agency within 24 hours	20

COMMUNICATION (continued)

17. PSC Reporting	Provide storm event information to PSC in accordance with Electric Outage Reporting System (EORS) guideline requirements	All reporting on time, including at a minimum information required by existing EORS guidelines	40
18. Customer Communications	Press releases / text messaging / email / social media	Issue daily messages through the stated communications vehicles for each day of the utility restoration which must include information such as outages, ETRs, contact information, etc.)	60
19. Outgoing message on telephone line	Recorded message providing callers with outage information is updated within one hour of communication releases.	Message must be updated within an hour of communication releases that is consistent and coincides with the information contained in news releases	20
20. PSC Complaints	Number of storm/outage related PSC complaints received	≤ 20 per 100,000 customers affected	20
		≤ 40 per 100,000 customers affected	10

TOTAL 300

EMERGENCY RESPONSE PERFORMANCE MEASUREMENT GUIDE

The residents and businesses of New York have become increasingly dependent on electricity in recent decades. When outages occur, customers want to know that the electric utility is working to restore their service and customers are best served if they receive an accurate and timely estimate of when they will have service restored. Staff developed a scorecard that will measure each utility's ability to restore power to customers after an outage.

This scorecard will be applied to any event during which the outage duration, as defined below, lasts more than three days, or to any qualifying network outage in New York City. Staff may require the scorecard to be applied to assess company performance for other outages and make a corresponding recommendation to the Commission for other action as may be appropriate.

The scorecard has been divided into three categories:

- | | |
|-------------------------|------------|
| 1. Preparation | 150 points |
| 2. Operational Response | 550 points |
| 3. Communication | 300 points |

Maximum Available Points	1000
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Each utility will be required to provide data with which the scorecard can be completed on a per event basis within 30 days of the completion of customer restoration. Department of Public Service (DPS) staff (Staff) will use the information provided by the utility in its review and determine a score for each event for each utility. Electric companies will continue to be required to file a Part 105 report within 60 days as set forth in the Rules and Regulations of the State of New York (NYCRR).

For any metric that Staff deems inapplicable, the points for those measures will be excluded and the overall score of the total will be prorated.

COMMON DEFINITIONS:

Qualifying Network Outage – The interruption of service to 15 percent or more of the customers in any Consolidated Edison network for a period of three hours or more.

Start of Event – The time when more than 5,000 customers are interrupted within a division for more than 30 minutes or more than 20,000 customers are interrupted companywide for more than 30 minutes. If the event affects less than the customer counts listed, the start time shall be the earlier of the peak level of interruptions or start of utility restoration.

Customer Restoration – For the purposes of the scorecard, customer restoration will be considered complete when for each customer, service has been restored or service is available but would be unsafe to restore due to damage with customer-owned equipment or a compromised structure (e.g., condemned).

Outage Duration – The time period between the start of the event and customer restoration for all customers affected by the storm.

Start of Utility Restoration – The start of utility restoration will be considered the point in time when field personnel are able to be dispatched without unacceptable safety risks from continued severe weather conditions (where adverse weather conditions are applicable) and when the potential additional damage to the electric system from the storm would be low in proportion to the expected level of damage already sustained. The start of the restoration period may be different for distinct areas where the effect of a storm limits access to facilities (e.g., severe flooding).

Estimated Time of Restoration – The time within which the utility estimates restoration will be completed. The Department's ETR protocols are shown below.

Life Support Equipment Customers (LSE customer) – A customer who had documented their need for essential electricity for medical needs (i.e., a customer or a resident of the customer's premises who suffers from a medical condition requiring utility service to operate a life-sustaining device with certification by a medical doctor or qualified official of a local board of health). Every utility shall maintain a special file on such residential customers and an appropriate identification on the meters of such customers.

Critical Facilities – Facilities from which essential services and functions for continuation of public health and safety, and disaster recovery are performed or provided (i.e., hospitals, water treatment plants and fire houses). Critical Facilities will be consistently defined in the utilities Emergency Plans.

Baseline Information – The following list of information to be included in communications: safety tips associated with downed wires, geographic areas impacted, number of customers out of service, number of crews activated, how to report an outage and check for outage status, estimated times of restoration per operational guidelines, and means available to contact the company (phone, web, e-mail, social media, text messaging, etc.).

Electric Outage Reporting System (EORS) – EORS is a mapping and reporting system that allows DPS Staff to receive, process, analyze, and report outage data quickly and in a uniform format. EORS is used to process data automatically submitted by utility companies and generate a range of maps illustrating the geographical extent of impact and customer outages outage by municipality, county, and company boundaries. The system can also estimate the affected population for each outage level.

PREPARATION

The preparation measures are intended to score utility performance with respect to activities and communications performed prior to forecasted storms and in response to alerts from the National Weather Service or a utility's private weather service. For events with limited warnings, thereby making certain measures impractical to implement, as deemed by DPS, the 150 points for those measures will be excluded and the overall score of the total will be prorated.

EMPLOYEE CONTRACTOR PLANNING

Measure: Appropriate planning for Employees/Contractors

Criterion: Evaluation of compliance will include the review of steps taken to comply with emergency plans and communicate with employees/contractors regarding activation, including storm duty assignments and mobilization requirements.

PRESS RELEASES/TEXT MESSAGING/EMAIL/SOCIAL MEDIA

Measure: Pre-storm communications through Press Releases, Text Messaging, E-Mail, and Social Media

Criterion: Companies are required to issue pre-storm messages through the stated communications vehicles to alert customers of the potential for loss of service. Text messages and/or emails should be issued daily to all customers for whom company has customer addresses on file. Evaluation of compliance will include a review of the information contained in press releases, emails, text messages and the use of Facebook, Twitter, and other means of social media during the restoration. Contents of the communications should include the type and severity of the storm, the affect it may have on the utility, action being taken to prepare for the event, and available methods to contact the company (phone, web, e-mail, social media, text messaging, etc.). It will be acceptable to provide a link to such information on the company's website to manage character limit restrictions.

MUNICIPAL CONFERENCE CALL

Measure: Pre-storm call held and determined to be highly effective or effective

Criterion: Municipal call will be held prior to the storm and provide information relating to the type and anticipated severity of the storm, the affect it may have on the utility and expected level of system damage, activities being taken to prepare for the event, and processes for communicating with companies throughout the event. To determine call effectiveness, consideration will be given to whether the time of the municipal call was communicated to all stakeholders, whether the previously stated information was communicated, how the call was managed, and whether the call allowed for sufficient Q&A and how the Company responded to questions posed.

LSE CUSTOMERS ALERTED

Measure: All LSE customers alerted

Criterion: Utilities must make an outbound call attempt to all customers who the utility knows are LSE customers prior to the expected onset of an outage event. The companies should also use text messages/emails for those customers who have provided contact information.

CRITICAL FACILITIES NOTIFIED

Measure: All critical facilities notified

Criterion: Utilities must make an outbound call attempt with all critical facilities managers prior to the onset of an outage event. The companies should also use text messages/emails for those customers who have provided contact information.

TRAINING

Measure: Compliance with training program as specified in approved emergency plans.

Criterion: All personnel identified for use during the utility restoration must be trained in accordance with the guidelines specified within the Company's emergency plan. Training provided prior to dispatch will qualify provided it meets the normal course curriculum.

MUTUAL ASSISTANCE CALLS

Measure: Participate in all pre-event mutual assistance calls

Criterion: Utilities are required to have at least one employee participate in all pre-event mutual assistance calls.

MATERIALS/STOCKPILES

Measure: Insufficient material levels restocked within 24 hours of assessment or 36 hours of start of restoration.

Criterion: Companies must verify whether storm stocking levels exist based on forecasted level. If materials are not on hand, the company has 24 hours or until the start of customer restoration, if sooner, to correct the situation.

OPERATIONAL RESPONSE

The operational response measures are intended to score utility performance with respect to its response and ability to effectively mobilize personnel. Accurate and timely Estimated Time of Restoration (ETRs) continues to be an area in which the utilities need to improve. ETRs furnished by utilities should be appropriate to the distribution of the communication vehicle; e.g., ETRs in press releases should reflect the area where press release is distributed, ETRs on municipal calls should be appropriate to the area where municipal call is held.

DOWN WIRES

Measure: Response to downed wires that are reported by municipal emergency officials in less than 18 hours for events with 3 to 5 days customer restoration or less or in less than 36 hours for events with customer restoration over 5 days.

Criterion: For the purpose of this measure, municipal emergency officials will be defined as members of the 911 call center, police, fire, and office of emergency management (including Emergency Operations Center personnel). Response time will be measured from when the call is taken by the utility until the time it takes the utility to arrive at the location with the intent to fix, make-safe, or stand by a downed wire. Arrival of a supervisor or other personnel to assess the location and not perform one of the previous tasks does not meet these criteria unless the down wire is identified as a telecommunications, cable, or other non-utility owned equipment. In the event the call is taken before utility restoration has commenced, the start time shall be equivalent to start of the utility restoration.

DAMAGE ASSESSMENT

Measure: Completion of preliminary damage assessment completed within 24 hours of the start of utility restoration.

Criterion: For the purpose of the scorecard, preliminary damage assessment will be an initial assessment of mainline circuits considered to be heavily impacted based on SCADA readings and/or OMS predictions as well as circuits serving critical infrastructure known to be without commercial power. Evaluation will be based on the ability to mobilize and deploy assessors effectively and record findings in a manner that allows for the development of work packages and ETRs.

CREWING

Measure: 80% of the forecast crewing committed to the utility within 48 hours from the start of restoration.

Criterion: For the purpose of this measurement a committed crew will be considered to be a utility, contractor, or mutual assistance crew on property or en route. Utilities will not be penalized for acquiring additional resources to assist the restoration as they are released by other utilities.

PUBLICATION OF ESTIMATED TIMES OF RESTORATION

Measure: Publication of ETRs in accordance with the established protocols.

Criterion: Time periods for evaluation will be measured from the utility restoration start time. Publication of ETRs in advance of guideline expectations will be awarded additional points.

ACCURACY OF ESTIMATED TIMES OF RESTORATION

Measure: Accuracy of ETRs published in accordance with guidelines.

Criterion: Accuracy of ETR will be determined based on the ETRs published closest to the expectation contained in the guidelines. For regional/county ETRs an evaluation will be made for each region/county affected by the event and points will be awarded on a pro-rated basis (e.g. if five ETRs are issued and four are within a timeband, the utility will score 4/5 of the available points).

MUNICIPAL COORDINATION

Measure: Coordinate with municipalities regarding electric hazards or utility equipment impeding road clearing, down wires, critical facilities, etc. in accordance with approved emergency plans. The utilities are not expected to perform debris and/or snow removal activities that do not involve electric facilities.

Criterion: Evaluation of compliance will include the review of steps taken to communicate with municipalities, the use and the effectiveness of liaisons, and the ability to integrate concerns raised into restoration activities.²¹

²¹ Integration of concerns may or may not result in the utility needing reprioritize repairs.

COUNTY EOC COORDINATION

Measure: Coordinate with County EOCs regarding electric hazards or utility equipment impeding road clearing, down wires, critical facilities, etc. in accordance with approved emergency plans. The utilities are not expected to perform debris and/or snow removal activities that do not involve electric facilities.

Criterion: Evaluation of compliance will include the review of steps taken to communicate with county emergency operation centers, the use and the effectiveness of liaisons, and the ability to integrate concerns raised into restoration activities.¹

UTILITY COORDINATION

Measure: Coordinate with other utilities (electric, gas, communications, water) regarding critical infrastructure and efficient restoration in accordance with approved emergency plans.

Criterion: Evaluation of compliance will include the review of steps taken to communicate with other utilities, the use and the effectiveness of liaisons, and the ability to integrate concerns raised into restoration activities.¹

SAFETY

Measure: Avoidance of any employee or contractor serious injury occurring during hazard storm/outage and restoration work.

Criterion: For the scorecard purpose, hazard work is defined as any assignments that are directly related with restoration activities. Serious injuries are defined as injuries occurring while performing hazard work which result in hospitalization, medical treatment beyond first aid, or death.

MUTUAL ASSISTANCE

Measure: Request made through all sources of mutual assistance within 36 hours from the start of utility restoration for 3 to 5 day events and 48 hours from the start of utility restoration for events over 5 days.

Criterion: Evaluation of compliance will include the review of mutual assistance request related to line workers, vegetation workers, damage assessors, wire guards in comparison to peak work levels and emergency plan requirements.

RESTORATION TIMES

Measure: Time it takes utility to restore power to 90% of customers affected

Criterion: Measurement criteria is still being determined

COMMUNICATIONS

The communications measures are intended to score utility performance with respect to its ability to receive and disseminate information related to the impact of the storm/outage and restoration activities. The need for communicating with customers, general public, news media and local officials is very important during emergency conditions, such as storms. Therefore, the sharing of information will be measured with respect to several communication vehicles (calls, press releases, social media, etc.). During an extended power outage, it is important that timely and accurate information be provided as widely as possible. Periodic reports, whether through press releases, e-mails, text messages or on social media websites should be accurate and timely, and avoid misleading the public with optimistic or unrealistic statements.

CALL ANSWER RATES

Measure: Percent of customer calls answered by a live representative within 90 seconds.

Criterion: By properly staffing call centers, utilities should be able to answer over 80 percent of calls within 90 seconds. Additional points will be given if the call answer rate is over 90 percent. The call answer time will be measured on a daily basis from the start of the event through customer restoration. Performance points will be issued on a pro-rated basis.

MUNICIPAL CALLS

Measure: Municipal calls are held at least daily in compliance with the company's approved Electric Emergency Plans and determined to be highly effective or effective.

Criterion: Municipal calls should be held daily until 90% of the affected customers have been restored. An alternative municipal contact method should be in place to respond to questions and issues from officials regarding the remaining scattered single outages once the calls are no longer required. The first municipal call can be held at the utilities discretion but must be held within the first 36 hours from the start of the utility restoration. To determine call effectiveness, consideration will be given to whether the time of the municipal call was communicated to all stakeholders, how the call was managed, if baseline information and status of road clearing activities were provided, whether the call allowed for sufficient Q&A

and how the Company responded to questions posed, and the successful use of an operator assisted calling system to assist in managing the call.

WEB AVAILABILITY

Measure: Websites are accessible and contain appropriate storm related information

Criterion: During a storm event, utilities' websites must be available around the clock, and must be updated at least hourly, until restoration is complete. Consideration will be given for maintenance resulting in individual website applications being unavailable if downtime is reasonably short in duration and is performed during off-peak hours. The websites should include the baseline restoration information, all press releases issued during the event, a complete list of safety tips, an outage location map of affected areas, summaries of outages and ETRs by municipality and county, and the locations and times of dry ice distribution.

LSE CUSTOMERS

Measure: Percent of affected LSE customers contacted within 12 hours, if at least two attempts were made within 12 hours for those unable to be contacted, and whether all of the affected LSE customers were contacted or referred to an emergency service agency within 24 hours.

Criterion: Utilities will be evaluated on their ability to contact 80% of the affected LSE customers within 12 hours from the start of the event and whether 100% of the affected LSE customers contacted or referred to an emergency service agency was done within 24 hours. Utilities must make at least one additional attempt, within the same 12 hour period, to contact any LSE customer who was not contacted on the first attempt. Partial scoring will be awarded for the initial attempt, provided all customers had received at least one phone call. Within 24 hours of the start of the event, LSE customers must have been either (a) directly contacted by the utility, or (b) referred to an emergency services agency (e.g., police or fire department) for emergency assistance. Utilities must maintain records of LSE customer contacts, including any customers who the utility was unable to reach.

PSC REPORTING

Measure: Reports to the PSC are complete and submitted on time.

Criterion: Evaluation will consist of a review and the content of reports provided to staff and outage submissions. Reports are due from each utility to DPS by 7AM, 11AM, 3PM, and 7PM or as defined by Staff.²² Based on the specific conditions of the event and the number of electric customer outages remaining, DPS Staff will notify each utility when reporting is no longer necessary. The reports should include, at a minimum, summary of outages, crewing information on site and en-route, planned crew relocation and mutual assistance activity, discussion of major damage, estimated restoration times, summaries of work plans for restoring customers, listing of critical facilities and LSE customers affected, and a summary of dry ice/bottled water distribution activities.

CUSTOMER COMMUNICATIONS

Measure: Daily communications through Press Releases, Text Messaging, E-Mail, and Social Media

Criterion: Companies are required to issue daily messages through the stated communications vehicles for each day of the utility restoration. Text messages and/or emails should be issued daily to all customers for whom company has customer addresses on file. Evaluation of compliance will include a review of the information contained in press releases, emails, text messages and the use of Facebook, Twitter and other forms of social media as applicable, during the restoration. Contents of the communications should include baseline restoration information whenever possible and the character limitations of some communication vehicles will be taken into account when reviewed for content.

²² The utilities are reminded that Staff may request additional reporting based on the severity of the event.

OUTGOING MESSAGE

Measure: Outgoing messages on telephone line must be updated within two hours following communication releases

Criterion: Evaluation for compliance will be determined based on whether messages were updated within two hours following communication release and the new message coincides with information contained in the releases.

PSC COMPLAINTS

Measure: Number of storm/outage related complaints received by the department's call center per 100,000 customers affected.

Criterion: Data from the Department's call center will be evaluated to determine the number of storm/outage related complaints received. Storm related complaints will also reflect complaint related to improper application of customer protection measures defined under Case 13-M-0061.

ESTIMATED TIME OF RESTORATION PROTOCOL

The following protocol states the Department of Public Service (DPS or the Department) expectations of when information will be available and/or provided in response to storms or storm-like electric emergencies when more than 5,000 customers are interrupted for more than 30 minutes within a division or more than 20,000 customers are interrupted companywide for more than 30 minutes. The tables shown below have been established to clarify the necessary actions to be taken by the involved utilities within the outage period for the specific event. Utility procedures and practices that require actions prior to those identified should continue to be used.

The protocols are considered minimum requirements necessary to ensure the public and the Department are adequately informed. During the course of restoration, utilities are to continuously refine estimated restoration times (ETRs) and update customer representatives, Interactive Voice Response (IVR) systems, and web sites in a timely manner (at least every six hours). The utilities shall provide restoration information (outage counts, ETRs, etc.) to media outlets and public officials in affected areas. Additionally, utilities shall issue at least one press release daily for all events with an expected restoration period longer than 48 hours.

ETRs provided should be applicable to at least 90% of the affected customers in the reported level (global, local, etc.).

The start of the restoration period will be considered the point in time when 1) field personnel are able to be dispatched without unacceptable safety risks from continued severe weather conditions (where adverse weather conditions are applicable) and 2) when the potential additional damage to the electric system from the storm would be low in proportion to the expected level of damage already sustained. The start of the restoration period may be different for specific, local areas where the effect of a storm limits access to facilities (e.g., severe flooding).

Initial notification to the Department should follow the guidelines contained in Appendix B of Case 04-M-0159 (EIRS/telephone). Any additional information which is available at this point in time should be included in this notification even though notification may be required prior to the start of restoration. For widespread events, company-wide outage statistics should also be provided as part of the initial notification.

Reporting is required at 7:00AM, 11:00AM, 3:0 PM, and 7:00PM unless otherwise specified. The reports should include, at a minimum, summary of outages, crewing information on site and en-route, planned crew relocation and mutual assistance activity, discussion of major damage, estimated restoration times, summaries of work plans for restoring customers, listing of critical facilities and LSE customers affected, and a summary of dry ice/bottled water distribution activities. Report submissions may qualify as a notification to DPS Staff (provided they contain the required information within the appropriate timeframe). Utilities, however, may need to make notifications to DPS staff in addition to the reports submitted early in an event to satisfy the guidelines.

EVENT EXPECTED TO LAST 48 HOURS OR LESS²³

Within the first 6 hours of the restoration period
<ul style="list-style-type: none"> • Notify DPS Staff of expectation that the event will last less than 48 hours. The notification to DPS Staff will state what the Company has defined as the start of the restoration period. For events expected to last less than 24 hours, notification may be via Electric Information Reporting System (EIRS). • Provide available information to the public via customer representatives, IVR systems, and web sites. • In certain situations (e.g., nighttime event), only limited information may be available within the initial six hour window. In these situations, the expectation is that the companies will inform Staff of the delay in determining the initial outage duration within six hours and the notification will occur in an expedited manner as information becomes known. Following a nighttime storm, the determination of whether the restoration period will be 48 hours (or less) will be communicated as soon as possible, but no later than noon the following day. Any delay in establishing the initial storm expectations will <u>not</u> affect the time requirements below.
Within the first 12 hours of the restoration period
<ul style="list-style-type: none"> • Provide DPS Staff with a global ETR and any available regional ETRs. • Prepare a statement for the press that includes known ETRs in time for the next upcoming news cycle and communicate with affected municipal and governmental officials (may or may not be by way of a municipal conference call).
Within the first 18 hours of the restoration period
<ul style="list-style-type: none"> • Establish ETRs for each locality affected and make them available to the public via customer representatives, IVR systems, and web sites.
Within the first 24 hours of the restoration period
<ul style="list-style-type: none"> • Consider issuing a press release in time for the upcoming news cycle based on conditions.
Reporting requirements during the event
<ul style="list-style-type: none"> • Provide restoration information updates four times daily to DPS Staff (7 AM, 11 AM, 3 PM, and 7 PM) if notified by Staff. Updates should continue until otherwise directed by Staff. • Notify DPS Staff when all storm related interruptions have been restored.

²³ Note: Although the scorecard refers to events where outages last more than three days, utilities are required to comply with the ETR protocols for events lasting less than 48 hours.

EVENT EXPECTED TO LAST GREATER THAN 48 HOURS

Within the first 6 hours of the restoration period
<ul style="list-style-type: none">• The utility shall indicate that it will be a multi-day event (i.e., greater than 48 hours). Notification shall be made to DPS Staff and will state what the Company has defined as the start of the restoration period.• Provide a public statement indicating the likelihood of extended outages and make this information available via customer representatives, IVR systems, and web sites.• In certain situations (e.g., nighttime event), only limited information may be available within the initial six hour window. In these situations, the expectation is that the companies will inform DPS Staff of the delay in determining the initial outage duration within six hours and the notification will occur in an expedited manner as information becomes known. Following a nighttime storm, the determination of whether the restoration period will be greater than 48 hours will be communicated as soon as possible, but no later than noon the following day. Any delay in establishing the initial storm expectations will <u>not</u> affect the time requirements below.
Within the first 12 hours of the restoration period
<ul style="list-style-type: none">• Prepare a press release for issuance in time for the next upcoming news cycle and communicate with affected municipal and governmental officials (may or may not be by way of a municipal conference call).
Within the first 18 hours of the restoration period
<ul style="list-style-type: none">• Schedule municipal conference call(s), unless an alternative municipal contact method is more appropriate. The first scheduled municipal conference call does not necessarily have to occur within the first 18 hours, but shall take place within the first 36 hours.
Within the first 24 hours of the restoration period
<ul style="list-style-type: none">• Notify DPS Staff of what areas sustained the most damage to the electric system and ETRs, where known, on a general geographic basis.• Issue a press release(s) in time for upcoming news cycles with the information described in previous bullet.

EVENT EXPECTED TO LAST GREATER THAN 48 HOURS (continued)

Within the first 36 hours of the restoration period
<ul style="list-style-type: none">• For storms with expected restoration periods five days or less, provide DPS Staff a global ETR.• Establish regional/county ETRs for areas expected to be restored in five days, even if the restoration period for the total company is expected to be more than five days.• Identify any heavily damaged areas where large numbers of customers are expected to remain without service for more than five days.• Completion of the first scheduled municipal conference call.• Make ETR information available to the public via customer representatives, IVR systems, and web sites.
Within the first 48 hours of the restoration period
<ul style="list-style-type: none">• For storms with expected restoration periods five days or less, provide DPS Staff with ETRs by municipality.• Provide DPS Staff with a global ETR. (as stated above, when outages are expected to less than five days, this is required within 36 hours).• Provide regional/county ETRs for heavily damaged areas where large numbers of customers are expected to remain without service for five or more days.• Make ETR information available to the public via customer representatives, IVR systems, and web sites.
Beyond the first 48 hours of the restoration period
<ul style="list-style-type: none">• For storms with expected restoration periods more than five days, provide estimated restoration times for each locality affected and make the information available via customer representatives, IVR systems, and web sites.
Reporting requirements during the event
<ul style="list-style-type: none">• Provide restoration information updates four times daily to DPS Staff (7 AM, 11 AM, 3 PM, and 7 PM), which shall continue until otherwise directed by Staff.• Notify DPS Staff when all storm related interruptions have been restored.

Appendix I – National Guard Request Form

Request For Resources or Assistance OPS 6-1	
1. Event Name	<input type="text"/>
2. Local Tracking #	<input type="text"/>
3. Date/Time Request Needed	<input type="text"/>
4. Is this request:	
<input type="radio"/> 1. Life Safety	
<input type="radio"/> 2. Priority	
<input type="radio"/> 3. Routine	
5. Person submitting request: (name and number)	<input type="text"/>
6. Requesting Individual (if different from above):	<input type="text"/>
7. Requesting Entity Agency	<input type="text"/>
8. Phone Number(s) they can be reached at	<input type="text"/>
9. County Requesting Resource	<input type="text"/>
10. BRIEF description of problem encountered:	<input type="text"/>
11. Resource Requested	<input type="text"/>
12. Quantity of Resource requested:	<input type="text"/>
13. Current Resources committed to identified tasks / functions	<input type="text"/>
14. Have all local capabilities associated with this resource been exhausted?	
<input type="radio"/> 1. Yes	
<input type="radio"/> 2. No	
15. What sources/vendors has been contacted? Please list	<input type="text"/>

Figure I.1 – National Guard Request Form

16. Potential Substitute (if specific resource not available)

17. Personnel Required to Operate, Support, and Maintain: (Including Shift Rotations) (include quantity and kind)

18. Support Equipment needed (i.e. fuel, water, delivery schedules, etc.)

19. Approximate length of time resource is needed. (hours, days, weeks, etc) Including shift rotations

Delivery Information:

20. Delivery Point:

21. Delivery Contact Name:

22. Delivery Phone:

23. Delivery Notes: (Transportation required, loading / unloading notes, type of hitch):

1. Advise Requestor of receipt of this request and provide the DisasterLAN Ticket Number

2. This request must be submitted with each specific resource form

Figure I.1 (con't) – National Guard Request Form

Appendix J – Condition I “Red” Resource Matrix Guide

INFORMATION FROM TPC		HOURS FROM ARRIVAL OF TROPICAL FORCE WINDS			
HURRICANE SCALE SAFFIR-SIMPSON	PSEG LI'S OPERATIONAL SERVICE TERRITORY - IMPACT PROBABILITY	96	72	48	24
Tropical Storm Wind Conditions: Sustained winds 39-73 MPH (34-63 kn or 63-118 km/hr). Off- system Restoration crewing: Linemen: 250-1000 Tree trim: 200-600 Crew Guides: 70-150 Wire Guards: 50-100 Number of Off- system assistance can vary based on forecasted sustained wind velocities. As wind speed forecasts and probabilities increase, and encroach on the next level, consideration should be given to moving to the next level matrix. Additionally, long duration wind events may prompt escalation to the next level.	High <i>Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory</i> <i>Wind probability >80%</i>	Commit to available crewing: No Check Hotel Rooms availability: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel rooms for 50% of crew target Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camp sleeping arrangements for balance SA Mobilization: On Hold	Reserve / book Hotel rooms for all remaining crew target Re-evaluate and assess if decisions require escalation or de-escalation Authorize 1-2 staging area if required
	Medium <i>Centerline of cone area within 100 miles of PSEG Long Island operational service territory</i> <i>Wind probability 40% - 80%</i>	Commit to available crewing: No Check Hotel Rooms availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: No Check Hotel Rooms availability: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 50% of crew target Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Re-evaluate and assess if decisions require escalation or de-escalation
	Low <i>Centerline of cone within 160 miles of PSEG Long Island operational service territory</i> <i>Wind probability <40%</i>	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources and support timeline for Logistics Contractor, effect of Long Island evacuations on hotel availability.					

Figure J.1 – Condition Red Resource Matrix Guide

INFORMATION FROM TPC		HOURS FROM ARRIVAL OF TROPICAL FORCE WINDS			
HURRICANE SCALE SAFFIR-SIMPSON	PSEG LI'S OPERATIONAL SERVICE TERRITORY - IMPACT PROBABILITY	96	72	48	24
Category One Hurricane: Winds 74-95 MPH (64-82 kn or 119-153 km/hr). Off- system Restoration crewing: Linemen: 1000-3000 Tree trim: 600-2000 Crew Guides: 150-400 Wire Guards: 100-250 If damage from flooding is anticipated, consider acquiring workforce to support substation equipment repairs (technicians, mechanics, etc.) As wind speed forecasts and probabilities increase, and encroach on the next level, consideration should be given to moving to the next level matrix. Additionally, long duration wind events may prompt escalation to the next level.	High <i>Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory</i> <i>Wind probability >80%</i>	Commit to available crewing: Yes Reserve Hotel rooms for 50% of crew target Mobilize base camp sleeping arrangements On Hold SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel rooms for 75% of crew target Mobilize base camp sleeping arrangements for balance** SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camp sleeping arrangements for balance Mobilize 2-3 staging areas total	Reserve / book Hotel rooms for all remaining crew target Re-evaluate and assess if decisions require escalation or de- escalation. Authorize 1-3 staging area if required
	Medium <i>Centerline of cone area within 100 miles of PSEG Long Island operational service territory</i> <i>Wind probability 40% - 80%</i>	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel availability: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 50% of crew target Mobilize base camp sleeping arrangements for balance** SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 75% of crew target Mobilize base camp sleeping arrangements for balance** Mobilize 1-2 staging areas total	Re-evaluate and assess if decisions require escalation or de- escalation
	Low <i>Centerline of cone within 160 miles of PSEG Long Island operational service territory</i> <i>Wind probability <40%</i>	Commit to available crewing: No Reserve Hotel Rooms: No -- Check Hotel Rooms availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to available crewing: No Reserve Hotel Rooms: No -- Check Hotel Rooms availability: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to 250 – 500 crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to 250 – 500 crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources and support timeline for Logistics Contractor, effect of Long Island evacuations on hotel availability.					

Figure J.1 (con't) – Condition Red Resource Matrix Guide

INFORMATION FROM TPC		HOURS FROM ARRIVAL OF TROPICAL FORCE WINDS			
HURRICANE SCALE SAFFIR-SIMPSON	PSEG LI'S OPERATIONAL SERVICE TERRITORY - IMPACT PROBABILITY	96	72	48	24
Category Two Hurricane: Winds 96-110 MPH (83-95 kn or 154-177 km/hr). Off- system Restoration crewing: Linemen: 2500-3500 Tree trim: 1500-2250 Crew Guides: 350-500 Wire Guards: 250-400 If damage from flooding is anticipated, consider acquiring workforce to support substation equipment repairs (technicians, mechanics, etc.) As wind speed forecasts and probabilities increase, and encroach on the next level, consideration should be given to moving to the next level matrix. Additionally, long duration wind events may prompt escalation to the next level.	High <i>Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory</i> <i>Wind probability >80%</i>	Commit to available crewing: Yes Reserve Hotel rooms for 50% of crew target Mobilize base camp staging areas with sleeping arrangements for balance** SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel rooms for 75% of crew target Mobilize base camp staging areas with sleeping arrangements for balance SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camp sleeping arrangements for balance Mobilize 3-5 staging areas total	Reserve / book Hotel rooms for all remaining crew target Re-evaluate and assess if decisions require escalation or de- escalation
	Medium <i>Centerline of cone area within 100 miles of PSEG Long Island operational service territory</i> <i>Wind probability 40% - 80%</i>	Commit to available crewing: Yes Reserve Hotel Rooms for available crews: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 50% available crews Mobilize base camp sleeping arrangements for balance SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camp sleeping arrangements for balance Mobilize 2-3 staging areas total	Re-evaluate and assess if decisions require escalation or de- escalation
	Low <i>Centerline of cone within 160 miles of PSEG Long Island operational service territory</i> <i>Wind probability <40%</i>	Commit to available crewing: No Reserve Hotel Rooms: No Check availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to available crewing: No Reserve Hotel Rooms: No Check availability: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to 250 – 500 crew compliment if available Reserve Hotel Rooms for 100% available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to 250 – 500 crew compliment as available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources and support timeline for Logistics Contractor, effect of Long Island evacuations on hotel availability.					

Figure J.1 (con't) – Condition Red Resource Matrix Guide

INFORMATION FROM TPC		HOURS FROM ARRIVAL OF TROPICAL FORCE WINDS			
HURRICANE SCALE SAFFIR-SIMPSON	PSEG LI'S OPERATIONAL SERVICE TERRITORY - IMPACT PROBABILITY	96	72	48	24
Category Three Hurricane: Winds 111-129 MPH (96-112 kn or 178-208 km/hr). Off- system Restoration crewing: Linemen: 3000-4000 Tree Trim: 2000-2750 Crew Guides: 400 -600 Wire Guards: 350 -500 Aux. Survey: 160-320 If damage from flooding is anticipated, consider acquiring workforce to support substation equipment repairs (technicians, mechanics, etc.) As wind speed forecasts and probabilities increase, and encroach on the next level, consideration should be given to moving to the next level matrix. Additionally, long duration wind events may prompt escalation to the next level.	High <i>Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory</i> <i>Wind probability >80%</i>	Commit to available crewing: Yes Reserve Hotel rooms for 75% of crew target Mobilize base camp sleeping arrangements for balance** SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel rooms for 100% of crew target Mobilize base camp sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camp sleeping arrangements for balance Mobilize 4-6 staging areas total	Book all reserved rooms Re-evaluate and assess if decisions require escalation or de-escalation
	Medium <i>Centerline of cone area within 100 miles of PSEG Long Island operational service territory</i> <i>Wind probability 40% - 80%</i>	Commit to available crewing: Yes Reserve Hotel Rooms for 50% available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel rooms for 75% of crew target Mobilize base camp sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camp sleeping arrangements for balance Mobilize 3-5 staging areas total	Re-evaluate and assess if decisions require escalation or de-escalation
	Low <i>Centerline of cone within 160 miles of PSEG Long Island operational service territory</i> <i>Wind probability <40%</i>	Commit to available crewing: No Reserve Hotel Rooms: No Check availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: No Reserve Hotel Rooms: No- Check availability: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to 250 – 500 crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to 250 – 500 crew compliment as available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources and support timeline for Logistics Contractor, effect of Long Island evacuations on hotel availability.					

Figure J.1 (con't) – Condition Red Resource Matrix Guide

INFORMATION FROM TPC		HOURS FROM ARRIVAL OF TROPICAL FORCE WINDS			
HURRICANE SCALE SAFFIR-SIMPSON	PSEG LI'S OPERATIONAL SERVICE TERRITORY - IMPACT PROBABILITY	96	72	48	24
Category Four Hurricane: (and above) Catastrophic damage will occur Sustained winds 130- 156 MPH (113-136 kn, or 209-251 km/hr). Off- system restoration crewing: Linemen: 3500-4500 Tree trim: 2250-3000 Crew Guides: 500-700 Wire Guards: 400-600 Aux. Survey: 320-480 Acquire workforce to support substation equipment repairs (technicians, mechanics, etc.)	High <i>Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory</i> <i>Wind probability >80%</i>	Commit to available crewing: Yes Reserve Hotel rooms for 75% of crew target Mobilize base camp sleeping arrangements for balance** SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel rooms for 100% of crew target Mobilize base camp sleeping arrangements for balance SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel rooms for 100% of available crews Mobilize base camp sleeping arrangements for balance Mobilize 6-8 staging areas	Re-evaluate and assess if decisions require escalation or de- escalation
	Medium <i>Centerline of cone area within 100 miles of PSEG Long Island operational service territory</i> <i>Wind probability 40% - 80%</i>	Commit to available crewing: Yes Reserve Hotel Rooms for 50% available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 75% of crew target. Mobilize base camp sleeping arrangements for balance SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel rooms for 100% of available crews Mobilize base camp sleeping arrangements for balance Mobilize 5-7 staging areas total	Re-evaluate and assess if decisions require escalation or de- escalation
	Low <i>Centerline of cone within 160 miles of PSEG Long Island operational service territory</i> <i>Wind probability <40%</i>	Commit to available crewing: No Reserve Hotel Rooms: No Check availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 50% available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: Hold	Commit to 250 – 500 crews if available Reserve Hotel Rooms for 100% available crews Mobilize base camp sleeping arrangements for balance SA Mobilization: Hold	Commit to 250 – 500 crew compliment as available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements for balance** SA Mobilization: Hold
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources and support timeline for Logistics Contractor, effect of Long Island evacuations on hotel availability.					

Figure J.1 (con't) – Condition Red Resource Matrix Guide

Appendix K – Acronyms and Abbreviations

ACRONYM/ABBREVIATION	DEFINITION
AAR(s)	After-Action Review(s)
ACC	Alternate Control Center
ACR	Automatic Circuit Reclosers
ADA	Area Dispatch Authority
Alt	Alternate
ASA	Average Speed of Answer
ASAC(s)	Alternate Substation Area Coordinator(s)
ASU	Automatic Sectionalizing Units
BI	Business Intelligence
CAIDI	Customer Average Interruption Duration Index
CAS	Customer Accounting System
CATVCo	Cable Television Company
CCC	Communications Command Center
CCTV	Closed Circuit Television
CEDAR	Code Enforcement Disaster Assistance Response
CEO	Chief Executive Officer
CGI	Independent Information Technology And Business Process Services Firm
CIC	Console Information Coordinators
CMC	Communications Messaging Coordinator
Comms	Communications
Conf.	Conference
COO	Chief Operating Officer
Coord(s)	Coordinator(s)
Corp.	Corporate
COTS	Commercial Off The Shelf
CRMS	Customer Relationship Management System
CSR(s)	Customer Service Representative(s)
Cust.	Customer
DHSES	Division of Homeland Security and Emergency Services
Dir.	Director
DMNA	Division of Military and Naval Affairs
DOT	Department of Transportation
DPS	Department of Public Service
DPW	Department of Public Works
DTN	Data Transmission Network

ACRONYM/ABBREVIATION	DEFINITION
ECNE	Energy Council of the Northeast
EEl	Edison Electric Institute
EIRS	Electric Information Reporting System
EOC(s)	Emergency Operations Center(s)
EORS	Electric Outage Reporting System
ERET	Emergency Response Escalation Tracker
ERIP(s)	Emergency Response Implementation Procedure(s)
ERP	Emergency Restoration Preparedness
ESB	Enterprise Service Bus
ESO	Electric System Operator
ESRI	Supplier of Geographic Information System (GIS) software
ETR(s)	Estimated Time(s) of Restoration
FAQ(s)	Frequently Asked Question(s)
FCM	Foreign Crew Management
FCPT	Foreign Crew Processing Team
FEMA	Federal Emergency Management Agency
FTP	File Transfer Protocol
GasCo	Gas Company
GIS	Geographic Information System
Gov't	Government
GPS	Global Positioning System
GUI	Graphical User Interface
Hrs.	Hours
HSEEP	Homeland Security Exercise and Evaluation Program
HVAC	Heating, Venting, and Air Conditioning
HVCA	High Volume Call Application
IAP	Incident Action Plan
ICS	Incident Command System
IMP	Impaired
IT	Information Technology
IVR	Interactive Voice Response
LCIC	Lead Console Information Coordination
LI	Long Island
LICA	Long Island Control Area
LIPA	Long Island Power Authority
LIRR	Long Island Rail Road

ACRONYM/ABBREVIATION	DEFINITION
LO	Lockout
LSE	Life Support Equipment
LSEP(s)	Logistic Support Emergency Procedure(s)
LSC	Logistics Support Center
LSO	Logistics Support Organization
MDC	Material Distribution Center
MDT(s)	Mobile Data Terminal(s)
Mgr.	Manager
Mgmt.	Management
MPH	Miles Per Hour
Muni	Municipal
NAMAG	North Atlantic Mutual Assistance Group
NIMS	National Incident Management System
NMART	National Mutual Assistance Resource Team
NRE	National Response Event
NREC	National Response Executive Committee
NWS	National Weather Service
NYC	New York City
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
OEM(s)	Office(s) of Emergency Management
OH	Outage Historian
OH/UG	Overhead/Underground
OMS	Outage Management System
Ops	Operations
PC	Personal Computer
PDF	Portable Document Format
PI	Process Intelligence
PIO	Public Information Officer
PPE	Personal Protective Equipment
PSC	Public Service Commission
PSE&G	Public Service Electric & Gas
PSEG	Public Service Enterprise Group
PSL	Public Service Law
RMAG(s)	Regional Mutual Assistance Group(s)
ROD	Resources On Demand

ACRONYM/ABBREVIATION	DEFINITION
SAC(s)	Substation Area Coordinator(s)
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SAP	SAP Corporation
SAS	Business Analytics Software Company
SCADA	Supervisory Control and Data Acquisition
SDA	Substation Dispatch Authority
SHE	Safety, Health and Environmental
SLC	Substation Local Control
SME(s)	Subject Matter Expert(s)
SN	Special Needs
SPCO	Substation Personal Computer Operator
Sub	Substation
SVL	Service Level
T&D	Transmission & Distribution
TAV	Total Authorized Value
TelCo	Telephone Company
TV	Television
UPS	Uninterruptable Power Source
VA	Visual Analytics
VP(s)	Vice President(s)

Figure K.1 – Acronyms and Abbreviations

Appendix L – Supplemental ERP Contact Sheet

INCIDENT COMMAND, COMMAND STAFF, AND GENERAL STAFF (COMMUNICATIONS, OPERATIONS, PLANNING, LOGISTICS, AND FINANCE/ADMINISTRATION)				
ROLE	CATEGORY	RESPONSIBILITY	E-MAIL ADDRESS	PHONE NUMBER
President and COO	Command			
Incident Commander	Command			
Legal Officer	Command			
SHE Officer	Command			
Liaison Officer	Command			
Public Information Officer	Communications			
Communications Messaging Officer	Communications			
Customer Care and Community Outreach Coordinator	Communications			
Director, Contact Center	Communications			
Large Customer and Customer Relations Coordinator	Communications			
Escalation Prioritization Coordinator	Communications			
Director, Corporate Communications	Communications			
Director, External Affairs	Communications			
Operations Section Chief	Operations			
Crew Control Branch Director	Operations			
Survey & Operations Control Branch Director	Operations			
Planning Section Chief	Planning			
Situation Status Unit Leader	Planning			
Resource Coordination Unit Leader	Planning			
Documentation Unit Leader	Planning			
Demobilization Unit Leader	Planning			
Logistics Section Chief	Logistics			

Figure L.1 – Supplemental ERP Contact Sheet

INCIDENT COMMAND, COMMAND STAFF, AND GENERAL STAFF (OPERATIONS, PLANNING, LOGISTICS, AND FINANCE/ADMIN)				
ROLE	CATEGORY	RESPONSIBILITY	E-MAIL ADDRESS	PHONE NUMBER
Support Branch Director	Logistics			
Service Branch Director	Logistics			
Staging Site Unit Leader	Logistics			
Finance Section Chief	Finance/ Administration			
Time/Cost Unit Leader	Finance/ Administration			
FEMA Reimbursement Technical Specialist	Finance/ Administration			
Compensation/Claims Unit Leader	Finance/ Administration			

Figure L.1 (con't) – Supplemental ERP Contact Sheet

Appendix M – NYS DPS Electric Utility’s Emergency Outage Reporting System (EORS) Data

SUBMISSION BY LOCALITY UTILITY CODE:

Choose an item.

Report Date

Utility Name **PSEG Long Island**

Report Time

OUTAGE INFORMATION

Outage information is also available through 30-min data feed by all utilities to State-Wide Outage Map

Company Division	Total Customers in the Division	Current Outages	Customers Restored to Date *(Note-1)	Customers Impacted Overall *(Note-2)
Division – 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Division – 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Division – 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Division – 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

*customize table to reflect your Company Divisions / Area / Etc.

Note 1 - Customers that have been interrupted and restored more than one time during the period are counted for each time they have been interrupted and restored. This amount is an estimate based on data from the outage management system and is subject to change.

Note 2 - Customers Impacted Overall is the total of Current Outages and Customers Restored to Date. Based on Note 1, this number may exceed the Total Customers in the Division Customize the Company Division to represent the Utilities geographic area

SYNOPSIS

Summary / Discussion of Major Damage and Plans for Restoration

ETRs

Follow / Report on ETRs consistent with protocol as detailed by NYS DPS

Company Resource Summary

Crewing Information

Communication

Liaison Activity

LISTING – AFFECTED CUSTOMERS

CRITICAL FACILITY CUSTOMERS	Division 1	Division 2	Division 3	Division 4
Critical Facilities				
Company Total				

LSE CUSTOMERS	Division 1	Division 2	Division 3	Division 4
LSE Affected				
LSE Unable to Contact				

LSE CUSTOMERS –				
LSE Affected - Company Total				
LSE Unable to Contact – Company Total				

The PSEG Long Island Company Storm Room is: Choose an item.

The next report is scheduled for: Click here to enter a date.
Choose an item.

**Providing a telephone number for a System Storm Room is Optional*

Attached to E-Mail for this EORS submission are the Following Documents *(check those that apply)*

☐ Critical Facility Report / Spreadsheets

☐ NY-PSC Resource Summary Spreadsheet

☐ Life Support Equipment Customer Spreadsheet sent under separate cover / E-Mail

Figure M.1 - NYS DPS Electric Utility's Emergency Outage Reporting System (EORS) Data

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