PSEG Long Island 2025 Emergency Restoration Plan

REVISION HISTORY				
Controlled electronic copies of all revisions will be retained with the PSEG Long Island Operations Manual				
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PSEG LONG ISLAND	LIPA
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This document shall be revised every **1** year or incrementally as significant changes occur.

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I. Introduction

1. PREFACE

It is essential that there be a continual effort to harden the company's infrastructure and improve the resiliency of the electric system on Long Island and on the Rockaway Peninsula to anticipate, prevent, and withstand interruptions to our customers' electric service. The PSEG Long Island (PSEG LI) Emergency Restoration Plan (ERP) is designed to mitigate consequences when, in spite of such vigilance, electric service interruptions do occur during storms or other system incidents/events/emergencies. The intent of this ERP is to enable an efficient and well-coordinated restoration effort, with a commitment to continuously improving electric utility response to storms or other system incidents/events/emergencies as well as cyber-related events that could cause electric outages.

This plan provides an overview of the organization, policies, and approaches utilized to prepare for and restore service to our customers following interruptions caused by severe storms or other catastrophic system incidents/events/emergencies. It outlines the scope of operations, logistics, and communications activities. It also details the strategies, processes, and assignments necessary for an efficient, well-coordinated restoration effort.

The plan is scalable and maintains flexibility to provide for readiness and action as applied to events of moderate, significant, or severe scope and varied weather conditions. In addition, the plan details how the company informs customers, regulators, state, county, municipal agencies and the media on impacts and restoration plans and progress.

The plan complies with all the rules and regulations of the Public Service Commission (PSC) at 16 New York Codes, Rules, and Regulation (NYCRR) Part 105 – Electric Utility Emergency Plans, as shown in Appendix A.

PSEG Long Island reviews all relevant guidelines, protocols, and checklists relating to emergency restoration and revises them, as necessary, to comply with 16 NYCRR Part 105 on Electric Utility plans. PSEG Long Island prepares and maintains the plan in consultation with the Long Island Power Authority (LIPA); PSEG Long Island subsequently submits the plan to NYS DPS Staff for its review and recommendations. Based on the second Amended and Restated Operations Services Agreement between LIPA and PSEG Long Island, on or before August 15 of each year, PSEG Long Island will submit to LIPA a revised ERP for review. By December 1, of each year LIPA will submit to PSEG Long Island a written approval of the ERP. On or before December 15 of each year, PSEG LI will submit the ERP, developed in consultation with LIPA, to the NYS DPS.

Responsible organizations and individuals with restoration responsibilities review, revise, and/or update their key contact lists at least semi-annually. Moreover, at least semi-annually, responsible organizations with restoration responsibilities issue updated list of known changes to its employees that have plan implementation responsibilities. Owners of these lists are encouraged to maintain a printed back-up copy as well as offline copy in case they are unable to access the data online.

1.1 2025 Emergency Restoration Plan Updates

PSEG Long Island in collaboration with Long Island Power Authority (LIPA) will be focusing on the following enhancements in PSEG Long Island's 2025 Emergency Restoration Plan (ERP).

1.1.1 PSEG LI/LIPA ERP Revamp

In conjunction with LIPA, PSEG Long Island underwent an extensive review and revamp of the Emergency Restoration Plan. During this process, the document was reformatted to enhance readability and usability. As a result, the ERP is more streamlined and can be used more effectively in restoration response. PSEG LI and LIPA will continue to routinely collaborate to address both existing LIPA key actions, and new actions as identified, to strengthen readiness in areas crucial to response strategies.

1.1.2 Addition of Concept of Operations

A new chapter, Concept of Operations, was added to this update of the ERP. This addition provides an outline for PSEG Long Island personnel to effectively respond using the Incident Command System (ICS) and National Incident Management System (NIMS).

1.1.3 Appendices Update & Removal of Critical Facilities Listing

The appendices of this document were enhanced to include references from the body of the ERP. As a result of the PSEG LI/LIPA Revamp, some sections were moved to the appendices to improve usability of the plan. One specific appendix change was the removal of Critical Facilities listing. Critical Facilities will be available upon request from PSEG LI's Emergency Preparedness Department.

1.2 Purpose, Policies, and Objectives

This ERP was developed with input from all groups having direct responsibilities within the organization during an emergency response event. This includes input from PSEG Long Island employees, lessons learned from past storm events, best practices from PSE&G and other electric utilities/industry associations, as well as feedback from Long Island Power Authority (LIPA) and New York State (NYS) Department of Public Service (DPS) and other key stakeholder groups.

The ERP and associated protocols are appropriately activated in response to three scenarios:

- Mobilization to prepare for a major storm when a weather advisory has been issued by the National Weather Service (NWS), indicating that a major storm may impact Long Island and the Rockaways' Service Territory, within the next three (3) to five (5) days. Other credible weather prediction services may also project major storm events for the service territory.
- 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
- Mobilization to system incidents/events/emergencies/cyber-related events that could cause electric outages and due to other causes where extensive outages have occurred

The ERP is enacted, either partially or in totality, whenever a large-scale interruption of electric service occurs, or is anticipated, as it 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 measures to be implemented in response to the projected event.

In the event of an interruption of electric service, PSEG Long Island's crews work around the clock to restore power to customers. The primary focus 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 "critical facility'' 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, PSEG Long Island restores power to homes and businesses, beginning with substation and transmission facilities, and then moves to three-phase main line and eventually to local neighborhoods, systematically addressing the circuits serving the largest number of customers first.

PSEG Long Island treats communications as a key element in the overall restoration effort, striving to provide timely and accurate information to its customers and stakeholders prior to, during, and following the impact of an event. Among other mediums, the Company utilizes localized conference calls with elected officials and municipalities, executive level outreach, press conferences and media briefings, as well as other traditional and social media channels to deliver effective communications.

1.3 Structure of Plan

The ERP is presented as a top down, blueprint of operations that incorporates an all-hazard approach which details key strategies and guidelines that are used by PSEG Long Island during all phases of an emergency. It is structured to follow the chronological order of preparing for, and responding to, an emergency, focusing on the efforts performed by the primary functional areas, including Operations, Logistics, and Communications.

The ERP is supported by internal, proprietary documents, including our Emergency Response Implementation Procedures (ERIPs), which provide the tactical details (i.e., procedures and plans) associated with the storm response. These ERIPs offer activity and role specific details to be followed in the event of large-scale electric service interruptions (see Appendix B for a listing of associated ERIPs).

Restoration checklists have also been created for key positions in the restoration process. These checklists detail high-level action items performed pre-impact, and include approximate time frames for completion. The checklists provide consistency from event-to-event and work in conjunction with PSEG Long Island's ERP and ERIP documents. A full listing of restoration checklists can be found in Appendix C.

The aforementioned procedures are developed with input from all groups having direct responsibilities for implementation. They provide the framework for establishing uniform readiness and guidelines for prompt, standardized action. They offer detailed procedures to be utilized with respect to the mobilization of mutual assistance and instructions for communication and logistical support, to be followed throughout Long Island and Rockaways' Service Territory whenever large-scale interruptions of electric service occur.

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

1.3.1 Layout

The ERP is organized in a chronological perspective, starting with pertinent company and service territory information. The plan then includes all restoration organizational charts and descriptions of key roles and responsibilities. Next, the plan focuses on PSEG Long Island's pre-storm initiatives and key guidelines/systems that are utilized during an emergency. The ERP then describes the protocols of our major functional areas during activation. All emergency actions and responsibilities have been coordinated under Incident Command System (ICS) units for organizational and accountability purposes. The breakdown is as follows:

- Information Technology (IT)
- Safety, Health and Environmental (SHE)
- Legal
- Liaison
- Communications
- Operations
- Planning
- Logistics
- Finance

Finally, the ERP details post-event performance review initiatives, and includes 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 (ERIPs) and checklist documents, key contacts, and emergency agreements. Critical Facilities will be available upon request from PSEG LI's Emergency Preparedness Department.

1.3.2 Incident Command System (ICS)

PSEG Long Island continues to utilize, refine, and implement components of the Federal Emergency Management Agency's (FEMA) National Incident Management System (NIMS) in its storm response process. NIMS provides a guideline for all levels of government, including the private sector, to work together to prevent, protect, mitigate, respond, and recover from emergencies and/or incidents. NIMS provides a comprehensive approach when coordinating incidents and defines key operational systems including ICS, Emergency Operations Center (EOC) structures, and coordination between agencies and organizations.

ICS has been successfully utilized, for more than 40 years, in both emergency and non-emergency applications. All levels of government are encouraged to incorporate differing levels of ICS. Private sector organizations, including many electric utilities, now regularly use 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 continues to incorporate ICS training among its employees in accordance with ICS competencies and goals. PSEG Long Island has created an internal ICS training presentation that is assigned to all employees on an annual basis. This training course includes key ICS principals and specific details on PSEG Long Island's ICS structure during restoration events. PSEG Long Island also assigns the following FEMA classes to all Command and General Staff and other restoration leads to further enhance their awareness to key ICS principals. Assigned training classes include:

- ICS 100 – Introduction to the Incident Command System
- ICS 200 – Basic Incident Command System for Initial Response
- ICS 700 – National Incident Management System (NIMS)
- ICS 800 – National Response Framework, An Introduction

PSEG Long Island utilizes our internal Learning Management System (LMS) to assign and track the completions of assigned FEMA training detailed above. Additional ICS training courses are also available for employees to further their incident knowledge, skills, and capabilities when coordinating with external agencies. Senior Leadership and key personnel are encouraged to participate in more advanced and/or position specific training (e.g., ICS for executives, Logistics Section Chief training), when appropriate. As PSEG Long Island enhances its use of ICS for incident response, the ERP is 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 ERP also incorporates the Emergency Management Cycle into its current methodology, structure, and planning initiatives. The Emergency Management Cycle is broken down into four (4) revolving phases: Mitigation, Preparedness, Response, and Recovery (see Figure 1.1).

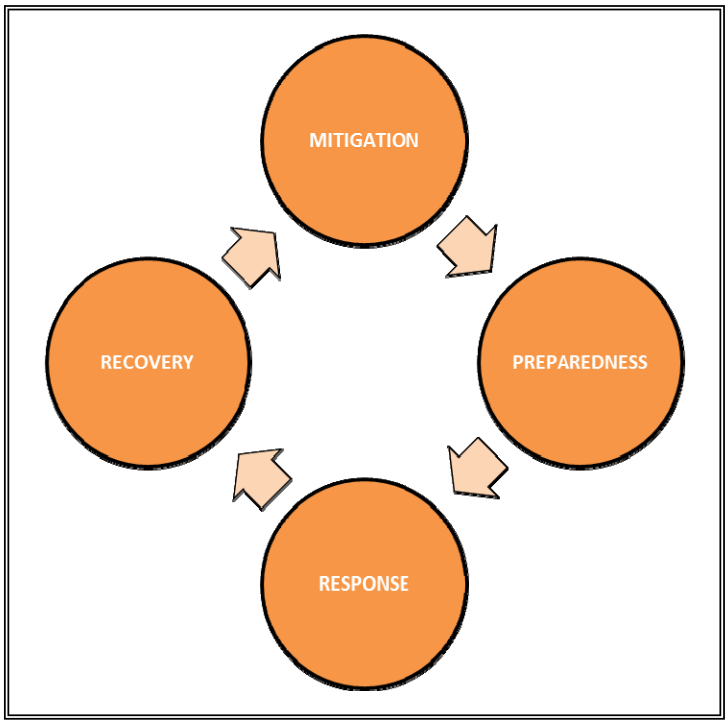


Figure 1.1 – Emergency Management Cycle

The following briefly describes the phases within the Emergency Management Cycle:

a) Mitigation – This phase includes actions taken to prevent or reduce the cause, impact, and consequences of disasters.

b) Preparedness – This phase includes planning, training, and educational activities in preparation for anticipated events.

c) Response – This phase includes the operational activities performed, post-impact, due to the event.

d) Recovery – This phase includes the efforts taken to return operations to normal conditions.

By effectively aligning its emergency response activities with this cycle, PSEG Long Island plans, processes, procedures, and personnel are well positioned to provide a safe and efficient response. This includes restoration of electric power, as well as timely and accurate communications to customers and other key stakeholder groups. 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 ERP 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, utilizing a thorough and comprehensive After-Action Review (AAR) process

Incorporating the Emergency Management Cycle into PSEG Long Island's ERP 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 an impact on another segment at a later stage.

PSEG Long Island's ERP is a continuously 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 System

PSEG Long Island provides electric service to approximately 1.2 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 (3) municipally owned utilities, within the service territory, whose customers are not directly served by PSEG Long Island. These municipalities include Freeport, Rockville Centre, and Greenport. For operational purposes, the Long Island and Rockaways' Service Territory is divided into two (2) branches (West and East) and four (4) divisions (Queens/Nassau, Central, Western Suffolk, and Eastern Suffolk). Divisions are then divided into sixteen (16) consoles, which span the entire service territory. Each branch, division, and console encompasses a number of municipalities, villages, and/or towns (see Figure 1.2).

Totaling 1,377 square miles of land area, Long Island is divided into four (4) counties: Kings (Brooklyn), Queens, Nassau, and Suffolk. Suffolk is the easternmost county and by far the largest of the four (4), 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.

The topography of the region is 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 wire run through customer backyards).

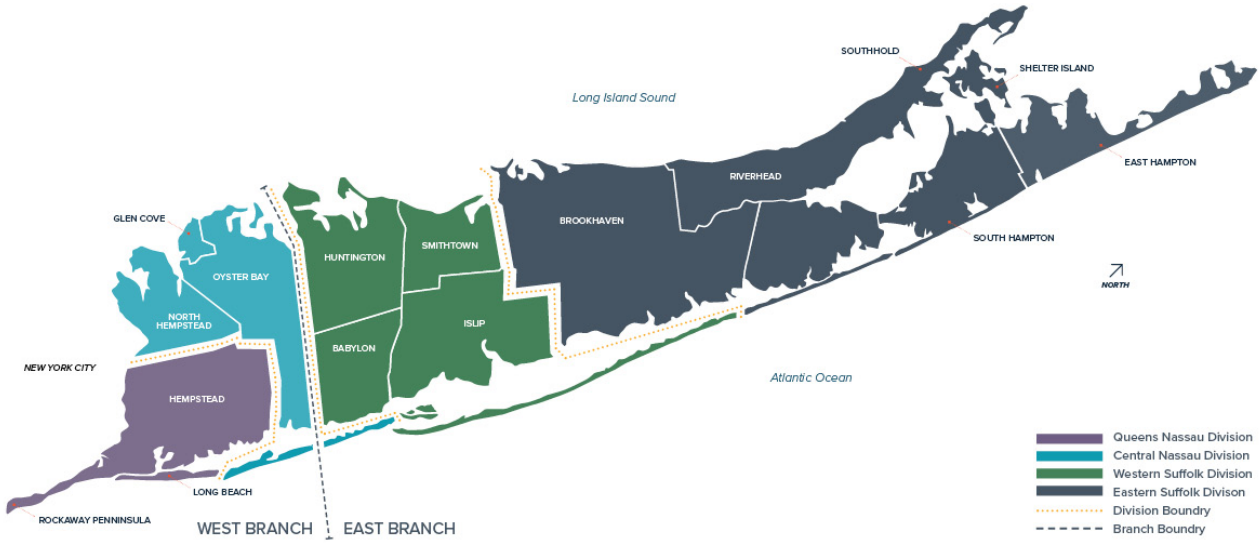


Figure 1.2 – Long Island and the Rockaways' Service Territory

1.4.2 Operating Divisions

The Transmission & Distribution (T&D) system on Long Island is comprised of two (2) branches broken into four (4) divisions. Each divisional area, along with its operational headquarters and unique challenges to restoring power, are described below.

1) West Branch
   a) Queens/Nassau Division – Hicksville
      - High population density and significant underground construction
   b) Central Division – Hicksville
      - Heavy tree conditions and rear property construction
2) East Branch
   a) Western Suffolk Division – Brentwood
      - Barrier beach and diverse geographic make-up
   b) Eastern Suffolk Division – Riverhead
      - Large geographic area and isolated forks with limited major thoroughfares for ingress and egress

In the event of a system emergency, PSEG Long Island works closely with local government officials and emergency response personnel to coordinate electric restoration efforts across these divisions.

1.4.3 Console Areas

During an emergency, PSEG Long Island further segregates the divisions into console areas. This is done to facilitate better control of the workforce and enhanced coordination of restoration efforts. Consoles are broken down into color codes, as depicted in Figure 1.3 below.

DIVISION	COLOR CONSOLES				
	Red	Blue	Green	Yellow	Grey
Queens/Nassau	✓	✓	✓		
Central Nassau	✓	✓	✓	✓	✓
Western Suffolk	✓	✓	✓	✓	
Eastern Suffolk	✓	✓	✓	✓	

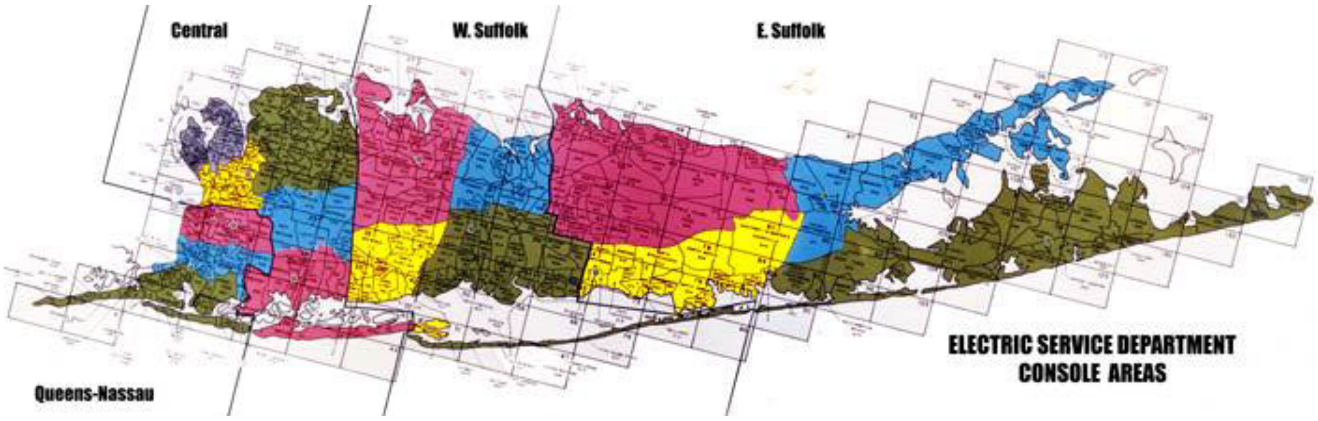


Figure 1.3 – PSEG Long Island Division Console Areas

2. CONCEPT OF OPERATIONS

2.1 Purpose and Objectives

2.1.1 Purpose

The purpose of this Concept of Operations (ConOps) is to provide an all-hazards strategic framework for PSEG Long Island personnel to effectively respond using the Incident Command System (ICS) and National Incident Management System (NIMS). The ConOps is also designed to ensure the appropriate PSEG Long Island processes and procedures are activated and supported to minimize response times, provide effective response and communications with the public, its customers, as well as internal and external stakeholders.

The PSEG Long Island's Emergency Restoration Plan (ERP) can be activated during business and/or after hours, both with and without prior warning. The foundation of this plan utilizes existing PSEG Long Island's procedures to help the development of the plan's preparedness and response. It outlines the changes to normal organizational leadership structure during an emergency activation into an ICS incident management structure to ensure proper chain of command and span of control principles for crisis management required in the NIMS protocols.

PSEG Long Island utilizes the NIMS management principles (e.g. Common Terminology, Chain of Command, Unity of Command, and Span of Control) to enable consistent approaches to addressing various hazards and threats it may face. This will help to reduce the dependence on institutional knowledge.

This plan has been developed, updated, and maintained in compliance with 16 CRR-NY II A 105 and other regulatory requirements.

PSEG Long Island's Emergency Preparedness (EP) organization is responsible for the maintenance, updating, and distribution of the overall plan. EP will work with relevant PSEG Long Island stakeholder and Subject Mater Expert (SME) groups to ensure the content of the various incident management plans and the associated documentation (e.g., strategies, processes, and associated business continuity / continuation / contingency plans) are periodically reviewed and updated.

2.1.2 Scope

PSEG Long Island takes an all-hazards approach to incident response. The plan is developed to enable PSEG Long Island to respond to electric incidents and emergencies that may impact the ability to provide safe, adequate, and reliable service to Long Island and the Rockaways. An all-hazards approach to emergency preparedness encourages effective and consistent responses to various conditions, emergencies, and disasters regardless of cause.

Potential hazards that are likely to impact Long Island and the Rockaways and have been considered include (but is not limited to):

- Storms
- Fires
- Floods
- Supply loss
- Civil unrest
- Loss of critical applications (Cyber-attacks, breaches, business disruptions, etc.)
- Earthquakes
- Spills

PSEG Long Island have developed a number of incident management plans to address these risks and threats, and this document outlines how the plans are interconnected and activated to enable the organization to effectively respond to the threats faced.

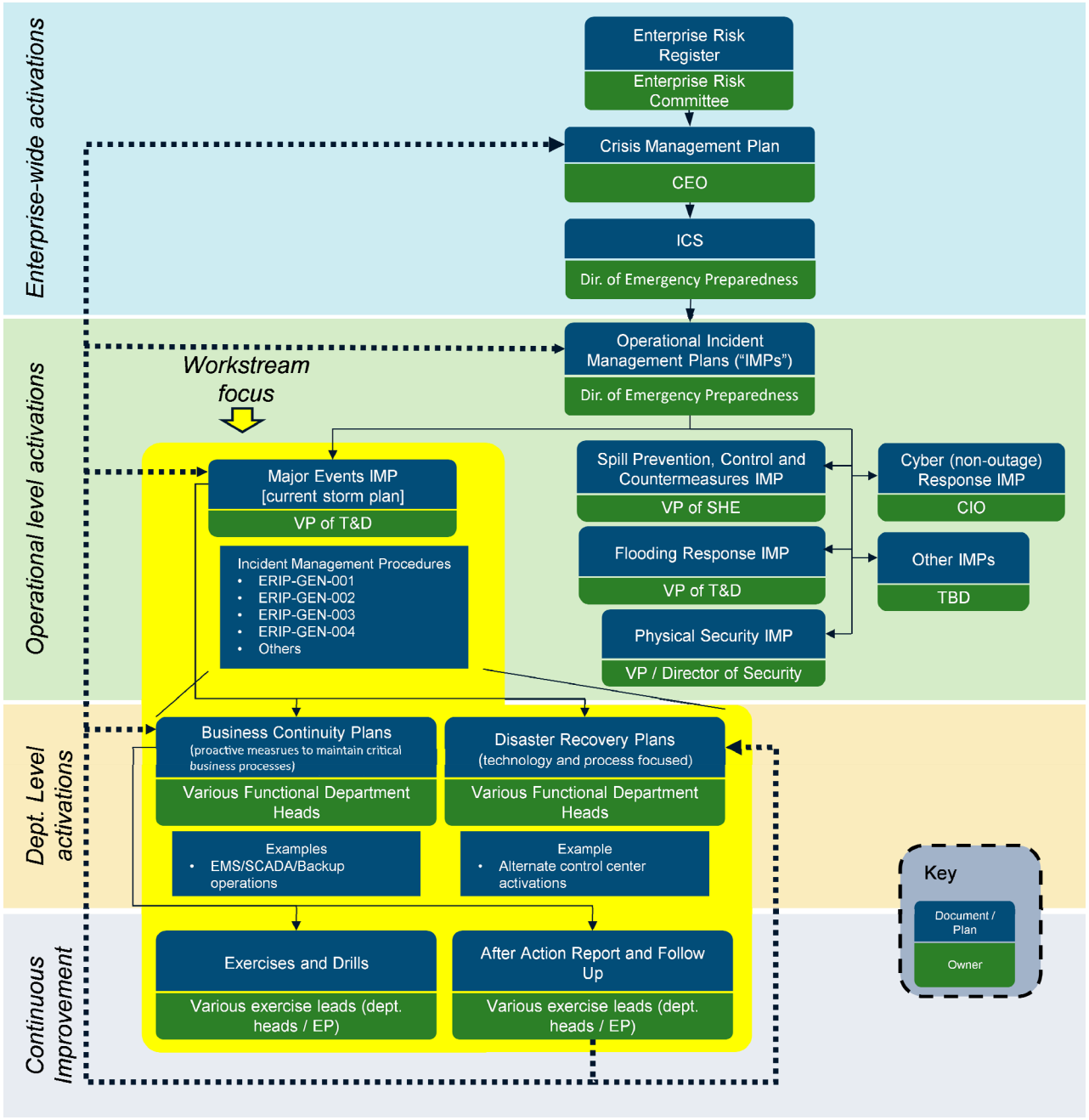


Figure 2.1 – Emergency Response Levels and Workflows

2.2 Objectives

- Advance PSEG Long Island's response capabilities as applicable to hazards faced.
- Leverage existing PSEG Long Island organizational structure and resources to maximize effectiveness.
- Conform to 16 CRR-NY II A 105 and other regulatory requirements.
- Use NIMS-ICS to increase consistency of response.
- Define how the various incident management plans are activated and outline how they can be concurrently activated to effect restoration.
- In a spirit of continuous improvement, document PSEG Long Island response processes to capture lessons learned from activations, responses, and industry leading practices.

2.3 Emergency Operations Guiding Principles

PSEG Long Island's emergency response guiding principles are to:

- Ensure public and workforce safety.
- Establish and instill leading emergency management standards and practices.
- Ensure response plans are in place to address the risks faced by PSEG Long Island.
- Ensure the emergency response is timely, organized, coordinated, decisive, and cost effective.
- Ensure plans and processes are flexible, scalable and adaptable to address situations that can range between simple and complex.
- Actively partner with internal and external stakeholders to coordinate, practice, and improve preparedness plans.
- Engage in training and exercises to test and ensure PSEG Long Island personnel are well prepared to respond to incidents.

2.4 Long Island Specific Hazards and Incident Management Plans (IMPs)

PSEG Long Island recognizes that interruptions of service will inevitably occur. PSEG Long Island routinely works to maintain, update, and devise mitigation and incident management plans to address the specific hazards, threats, and risks observed in Long Island and the Rockaways (See Table below).

Identified Risk	Incident Management Plan	Location / Department
1) Storms	Emergency Restoration Plan	Emergency Preparedness [redacted]
2) Hazardous Material Spills	SPCC IMP	Env. Projects & Permitting [redacted]
3) Flooding impacting underground equipment and structures	Flooding IMP	Emergency Preparedness [redacted]
4) Loss of substations (e.g., loss of transmission feed, damage / sabotage / floods)	Individual Substation specific SAMP / AMP	Asset Management & Reliability [redacted]
5) Loss of critical equipment (e.g., large power transformers)	Under Development	Planning Electric

6) Loss of critical PSEG Long Island facilities (e.g. from physical threats, vandalism, and incidents causing loss of access)	ATCC Plan (and distribution control room equivalent plans)	Bus. Cont. and Emerg. Mgmt. Corporate Security [redacted]
7) Cyber intrusion	Not Publically Available	Cyber Intrusion
8) Wildfire	Under Development	Emergency Preparedness
9) Critical IT/OT system failures	ERIP-GEN-004 Restoration Contingency Plans	Emergency Preparedness [redacted]
10) Pandemic	Pandemic IMP	Bus. Cont. and Emerg. Mgmt. [redacted]
11) Isolated / Island wide black out	Black Start IMP	Transmission Operations
12) Situations requiring de-energization at scale	Load shedding IMP	Transmission Operations
13) Maintain Critical Business Processes	Business BCP	Bus. Cont. and Emerg. Mgmt. [redacted]

The IMPs listed above are implemented and managed by various organizational levels as indicated in the diagram below. The type, expected duration and impact of each business disruption will determine which levels of the organization are activated. incident management plans are a collection of Business Continuity Plans (BCPs), Business Impact Analyses (BIAs), Emergency Restoration Implementation Procedures (ERIPs), Check Lists, and other documentation and guides. The illustrative document hierarchy diagram is shown below:

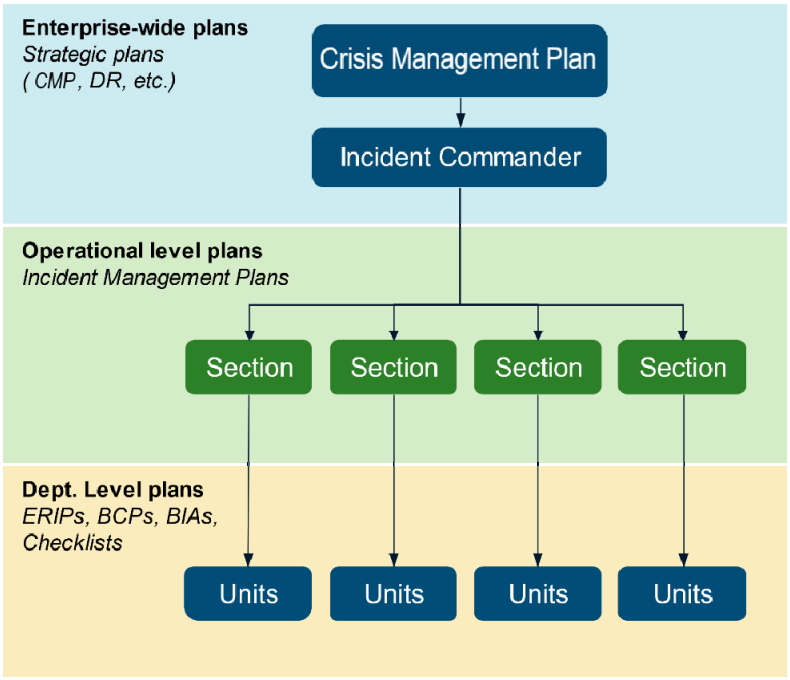


Figure 2.2 – Incident Management Levels and Workflows

2.5 IMP Activations and Operational Processes

The activation of various IMPs will be determined by the anticipated impacts to:

- Impact to normal business operations
- PSEG Long Island resources
- Public and employee safety
- Regulatory requirements / commitments
- Communities, business partners and internal/external stakeholders

The overall PSEG Long Island Incident Commander (IC) is the sole authority for activating various IMPs, assigning Incident Management Plan leads and allocating resources. The IC can choose to activate various plans (or parts thereof) to ensure effective and coordinated emergency management efforts to reduce overall restoration times. For example, the Incident Commander may choose to activate separate incident management teams (IMTs) to address transmission supply losses and the overall Major Event IMP. This enables the most relevant IMPs are utilized, the responding teams are focused, and available resources are appropriately allocated to most effectively address the priorities and restoration efforts. With each IMPs (e.g., major events IMP) there may be subsequent activation plans of sub-IMPs.

Section chiefs are responsible for passing along information and recommendations for the IC to activate other IMPs should the need to arise.

PSEG Long Island utilizes the concept of unified command, in which multiple IMP leads can work together under the same IC and will be co-located to facilitate flow of information and communicate with one voice in incident management. The information flow within each IM team will flow to the assigned IMP Lead.

2.6 Plan Development, Maintenance, and Updates

In the spirit of continuous improvement, the emergency restoration plan that can be activated by the IC will be reviewed on a periodic basis. These reviews will look to update processes, procedures, referenced appendices as well as other related components for accuracy and to ensure lessons learned from after-action reviews are captured.

2.6.1 Plan Maintenance

The plan will be reviewed on an annual basis to ensure content is up to date, regulatory requirements are met, lessons learned are captured. In addition, EP will conduct a comprehensive review of the plan to ensure that the document structure is relevant, streamlined, and content is accurate. SME input will be solicited for the comprehensive process. The resultant plan from the comprehensive review of the plan will be reviewed with and approved by both PSEG Long Island leadership and LIPA.

Updated and approved plans will be shared internally on the PSEG Long Island Portal in the Operations Manual for reference and use during exercise and activation events.

Any changes to the document will be captured in red-line versions and maintained internally for reference.

2.6.2 Plan Evaluation

The overall plan will be reviewed by EP to be completed by Q3 annually, and each IMP will be reviewed by their owners by Q2 annually. Tabletops, exercises, and drills meant to test the information flow, PSEG Long Island's ability to activate and carry out the plans, as well as decision making capabilities will be conducted.

2.6.3 Training and Exercise

EP is responsible for programming the training and exercise for PSEG Long Island response personnel and various departments. Trainings may range from initial trainings, annual refreshers, Just-in-time trainings. Training records will be maintained to ensure individuals (PSEG Long Island employees and select contractors) will be familiar with the various PSEG Long Island response plans, policies, and standards.

Exercises may take the form of tabletops, drills, and functional exercises. EP is responsible to schedule, coordinate, and design the exercises, and various plan/document owners are responsible for carrying out exercises. EP department is responsible for implementation of a quality control / assurance process to ensure that the various exercises are sufficiently challenging, presents realistic simulations and tests, and has sufficient rigor to meet the exercise objectives. The Annual Hurricane Tabletop Exercise is to be conducted by June 1.

2.6.4 After-Action Reports

Post plan activation and exercises, EP is responsible for the after-action review process and preparing an After-Action Report (AAR). AARs are meant to capture what worked well, what needs to be improved, how the plans / lessons learned will be incorporated into the relevant plans, as well as a timeline for completion. Updates and actions that have been identified for action will be reviewed annually to ensure they have been completed and updates have been made.

II. Prepare & Plan

3. PERSONNEL RESPONSIBILITIES

This section outlines the key functions of the various components and positions of the Emergency Restoration organizational structure. An orderly and consistent flow of information between Operations, Communications, Logistics, and associated support organizations is necessary in times of storms or other system incidents/events/ emergencies. Organizational charts indicating chain of command, span of control and the interrelation between organizational elements are included.

3.1 Senior Leadership at PSEG Long Island and PSE&G New Jersey

Prior to, and during major storms or other system incidents/events/emergencies, senior leadership, including Vice Presidents and above, at PSEG Long Island and PSE&G New Jersey maintain on-going and open dialog to discuss and share intelligence regarding an impending weather event. This proactive dialogue allows for the timely communication of “situational awareness” between leadership teams, and provides a platform to facilitate discussions regarding the potential sharing of personnel resources and other support functions 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 employees, customers, and other external stakeholders.

With the threat of a major storm or other system incident/event/emergency, PSEG Long Island’s leadership team will convene a meeting of the incident management team with representation from all applicable functional sections (e.g., Operations, Planning, Logistics and Communications) to discuss and strategize a response to the anticipated event. Decisions made by the senior leadership team are then openly shared and communicated across the broader response organization to provide increased visibility to the storm event and anticipated action plan. This also helps to set 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 within the ICS for a major event.

A Crisis Management Team made up of PSEG Long Island executives will be established and available to support storm response for incidents that rise to the level of crisis, by providing oversight, strategic direction and a means to effectively and efficiently respond to the incident.

3.2 Emergency Restoration Organizational Charts

Figure 3.1 provides an overview of PSEG Long Island's Emergency Restoration Organization Command and General Staff structure, which is utilized during restoration activities. This structure includes tactical functions such as Safety, Legal, Liaison, and Communications, as well as operational functions such as Operations, Planning, Logistics, and Finance. Please refer to Section 3.3 for a list of roles and responsibilities.

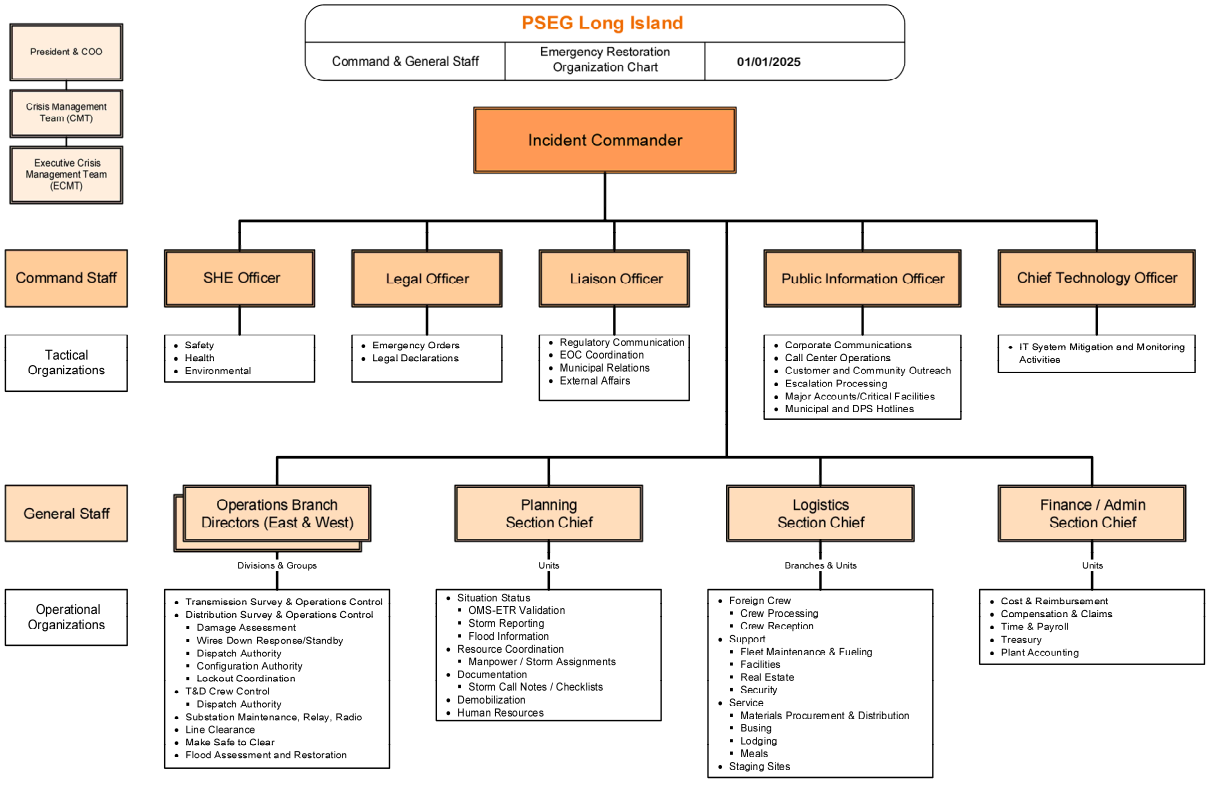


Figure 3.1 – Command and General Staff Organizational Chart

Figure 3.2 further details PSEG Long Island's Safety, Health, and Environmental (SHE) organizational structure during restoration, and includes tactical functions of safety, health, and environmental functional areas.

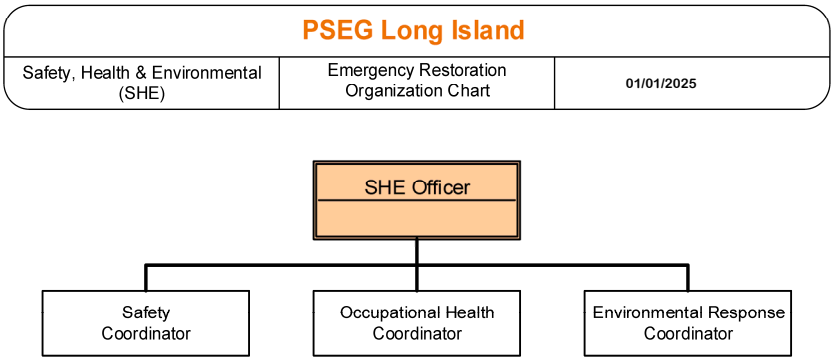


Figure 3.2 – SHE Officer Organizational Chart

Figure 3.3 further details PSEG Long Island's Legal organizational structure during restoration.

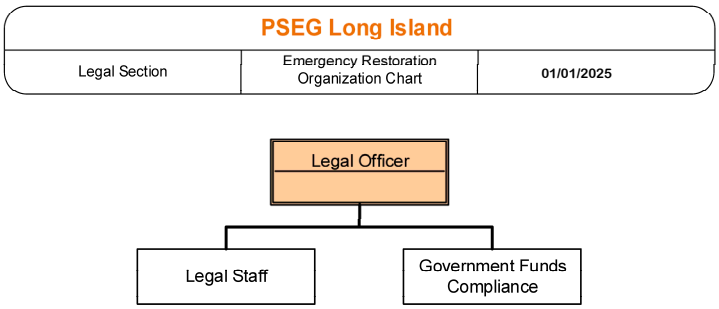


Figure 3.3 – Legal Officer Organizational Chart

Figure 3.4 further details PSEG Long Island's Liaison organizational structure during restoration, and includes all tactical functions of external affairs, governmental relations, emergency management, and supporting functional areas.

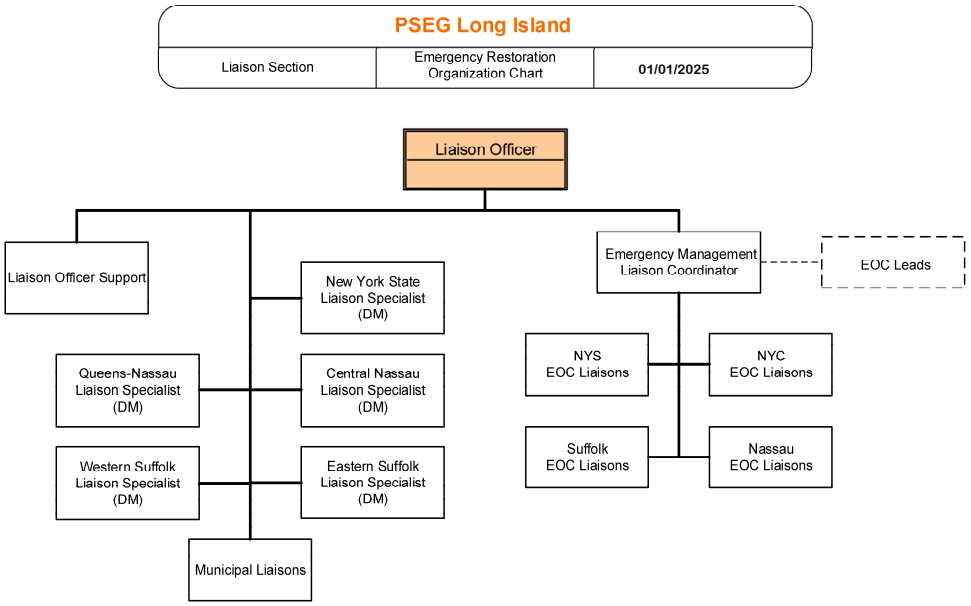


Figure 3.4 – Liaison Officer Organizational Chart

Figure 3.5 further details PSEG Long Island's Public Information (Communications) organizational structure during restoration, and includes all tactical functions of customer contact, large customer support, corporate communications, social media coordination, and supporting functional areas.

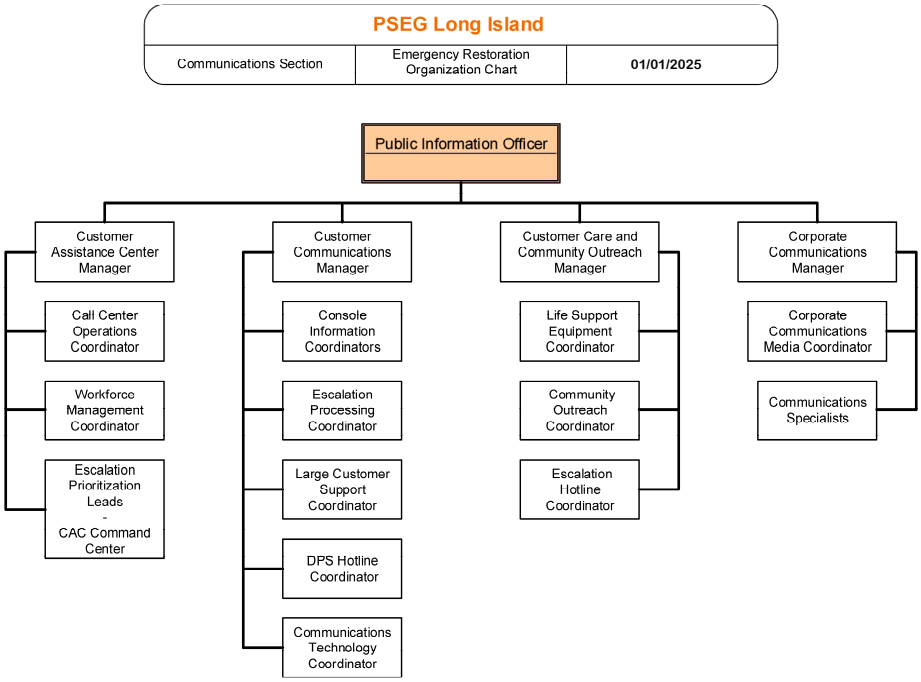


Figure 3.5 – Public Information Officer (PIO) Organizational Chart

Figure 3.6 further details PSEG Long Island's Information Technology (IT) organizational structure during restoration events, and includes all operational functions of IT monitoring, mitigation and response activities associated with IT systems, applications, hardware, and other supporting infrastructure.

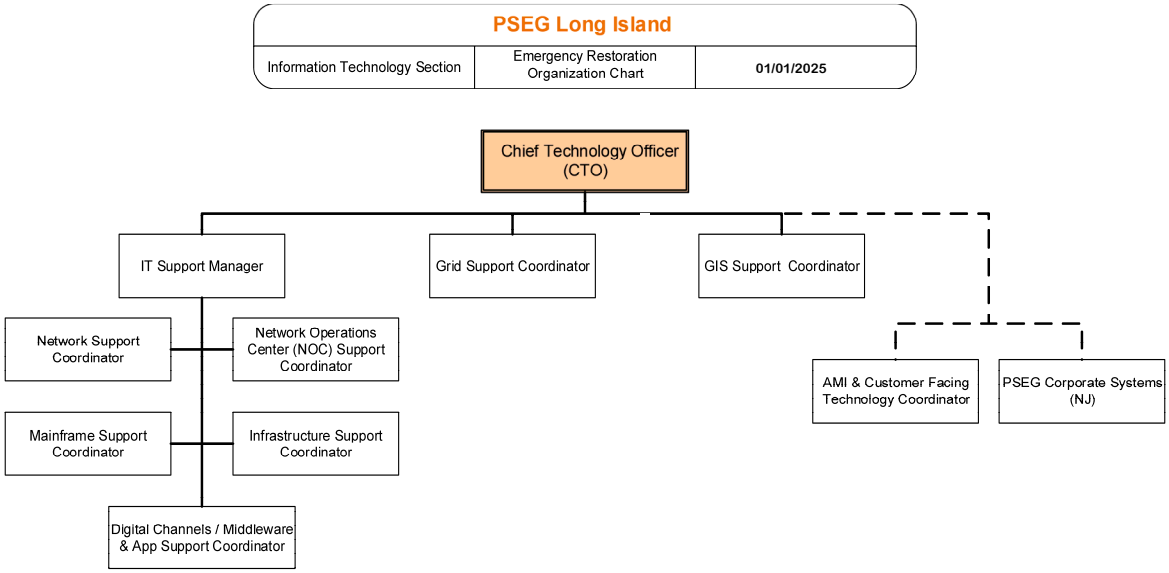


Figure 3.6 – Information Technology Organizational Chart

Figures 3.7.1 and 3.7.2 further detail PSEG Long Island's Operations organizational structure during restoration, and includes all operational functions of damage assessment (survey), crew control, field resource deployments, and supporting functional areas.

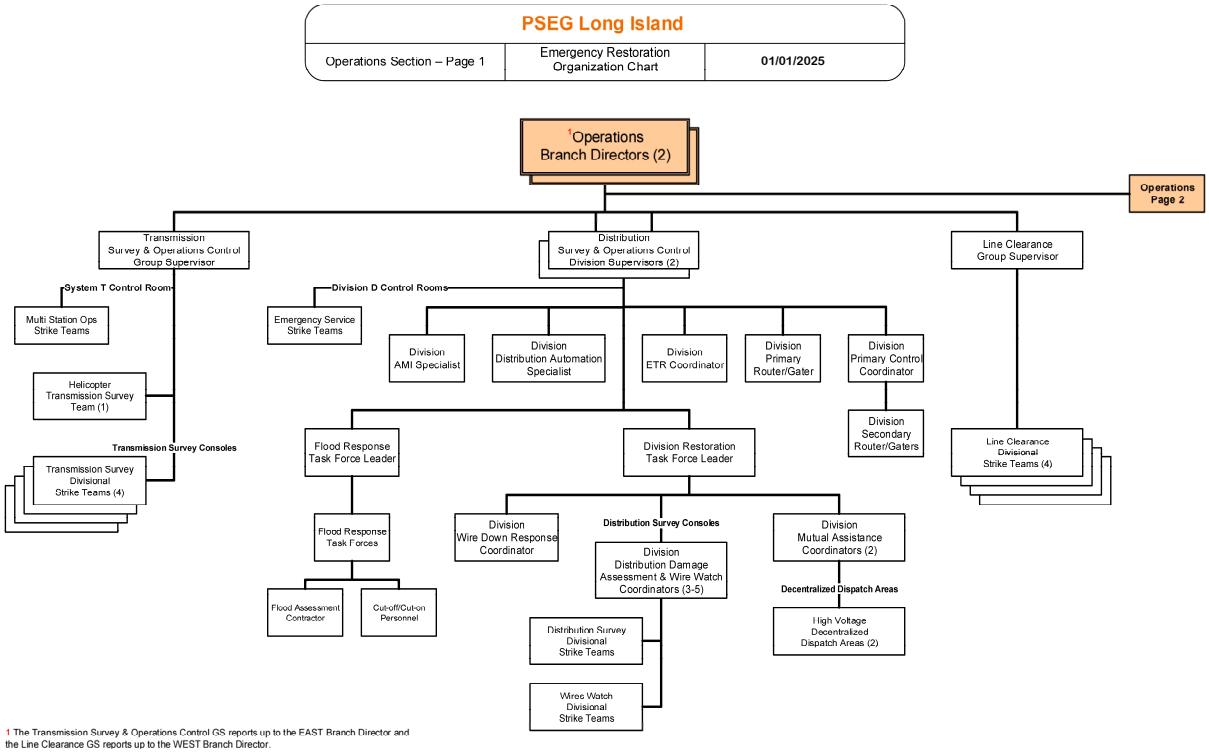


Figure 3.7.1 – Operations Organizational Chart (Page 1)

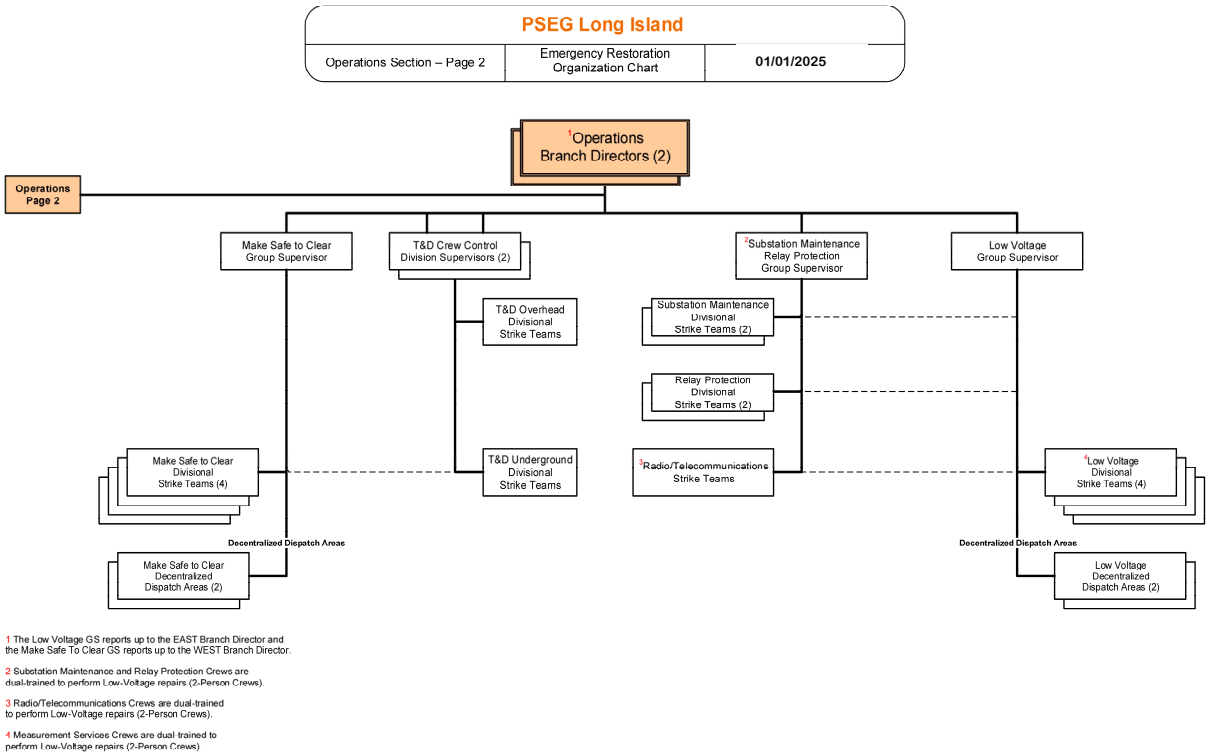


Figure 3.7.2 – Operations Organizational Chart (Page 2)

Figure 3.8 further details PSEG Long Island's Planning organizational structure during restoration, and includes all operational functions of situational awareness, resource coordination, documentation, and supporting functional areas.

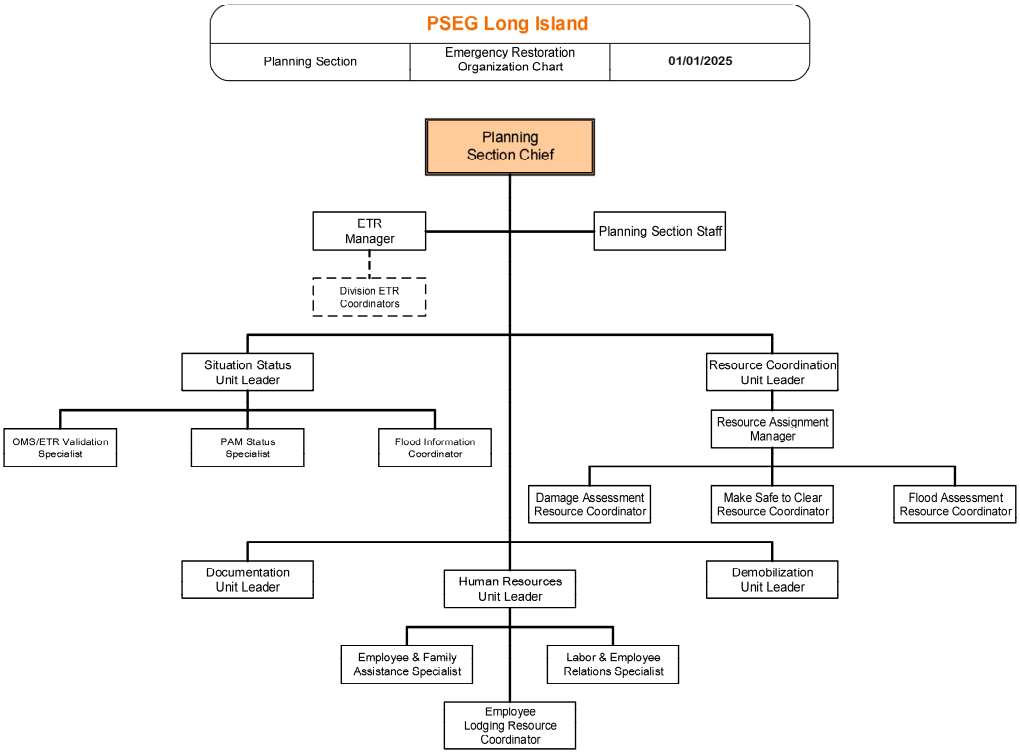


Figure 3.8 – Planning Organizational Chart

Figure 3.9 further details PSEG Long Island's Logistics organizational structure during restoration, and includes all operational functions of support, staging, and service operations.

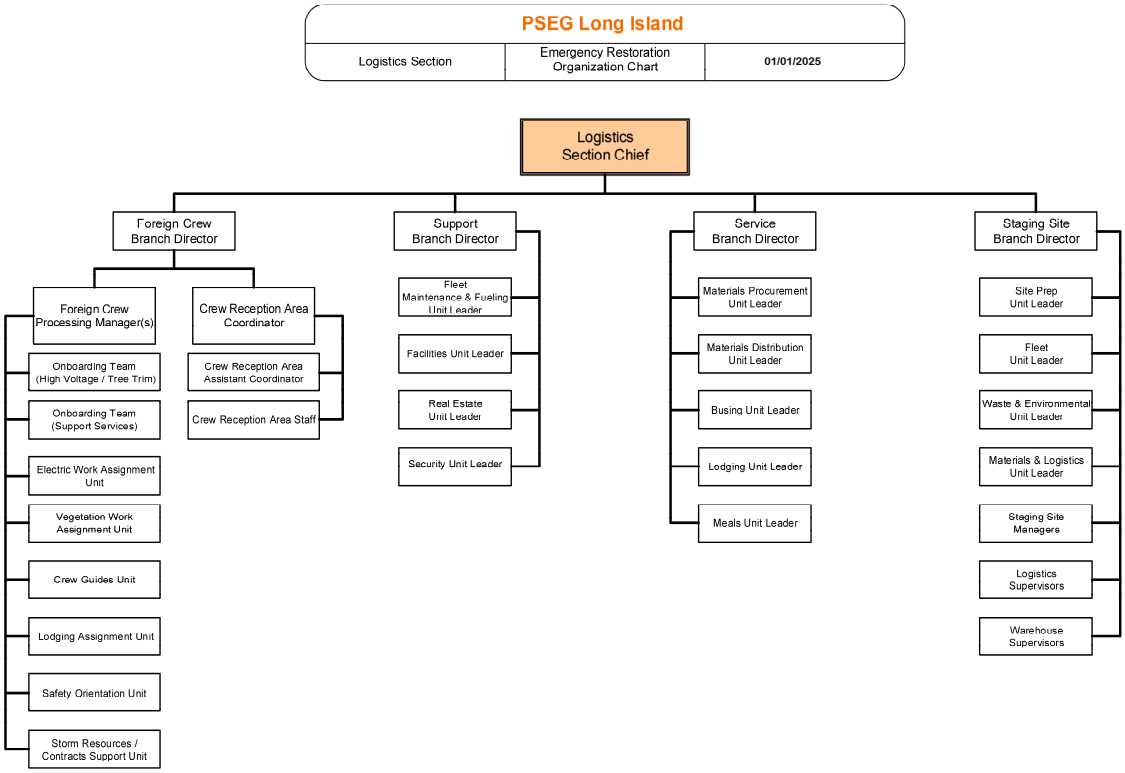


Figure 3.9 – Logistics Organizational Chart

Figure 3.10 further details PSEG Long Island's Finance/Administration organizational structure during restoration, and includes all operational functions of time/cost reporting, reimbursements, contracts, claims, and supporting functional areas.

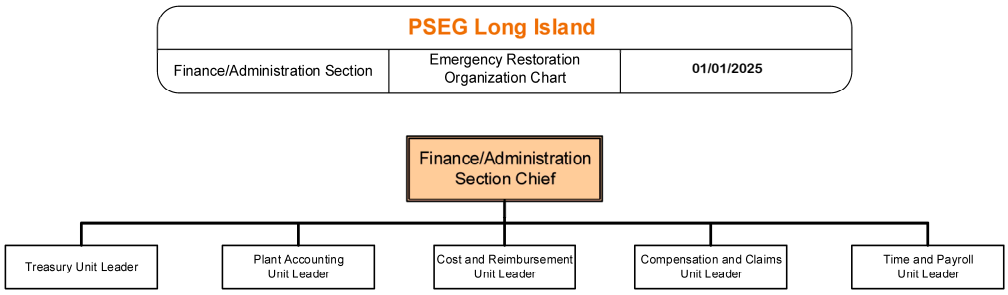


Figure 3.10 – Finance/Administration Organizational Chart

3.3 Roles and Responsibilities

Figure 3.11 details the key leadership roles during restoration operations and delineates significant corresponding function(s) that are coordinated in the respective areas. Additional functions can be found within internal role and responsibility documents and restoration checklists.

ROLE	CATEGORY	FUNCTION(S)
President and Chief Operating Officer (COO)	Executive	– Oversees PSEG Long Island restoration response – Provides policy guidance and strategic direction – Communicates with key elected officials, business leaders, and PSEG Long Island and PSE&G New Jersey senior leadership
Incident Commander	Command	– Oversees and assesses the overall event and response – Establishes immediate priorities and sets operational period incident objectives and strategies – Mobilizes an appropriate response organization – Coordinates with key staff and officials – Approves requests for resources and release of resources
Legal Officer	Command	– Oversees the Legal Organization – Supports the Emergency Restoration Organization to help determine compliance of plans, procedures, policies, and directives are consistent with federal, state, and local law – Supports the Emergency Restoration Organization to help determine incident records and documentation are accurate and maintained, in accordance with applicable laws and regulations – Interprets the 16 NYCRR Rules and Regulations of the PSC
Safety, Health, and Environmental (SHE) Officer	Command	– Oversees the SHE Organization – Develops recommended measures to assure personnel safety – Oversees tracking and reporting of accidents and/or injuries – Socializes hazardous or unsafe conditions – Oversees incident Environmental and Medical Plans
Liaison Officer	Command	– Coordinates with assisting agencies, cooperating agencies, and Agency Representatives during a restoration event – Communicates the status of PSEG Long Island's storm preparation and/or emergency response efforts with external government, public service, and public safety officials – Oversees Liaison organization coordination with State, County, Town, City, and Village EOCs

ROLE	CATEGORY	FUNCTION(S)
Public Information Officer (PIO)	Command	– Leads the Communications Organization to assess, respond to, and communicate during restoration events – Oversees communications plans and protocols
Chief Technology Officer (CTO)	Command	– Leads the IT organization in efforts to mitigate, monitor and respond to IT related restoration plans and activities – Oversees the functionality and performance of mission critical systems and applications
Operations Branch Directors (West & East)	General	– Oversees the management of all operations directly related to the primary mission of restoring electric service during an incident – Determines the overall need for resources – Directs operational plans and initiatives – Develops tactical objectives and conducts tactical operations to carry out the plan – Oversees operations of relevant tactical resources including, Transmission and Distribution Survey & Operations Control, T&D Crew Control, Substation Maintenance/Relay Protection, and Line Clearance
Planning Section Chief	General	– Oversees the Planning Section, including the collection, evaluation, and dissemination of information surrounding the incident – Coordinates supplemental manpower requests and needs – Oversees resource assignments, notifications and activations – Oversees documentation, reporting and situation status report dissemination (including DPS reporting)
Logistics Section Chief	General	– Oversees the Logistics Section including the Foreign Crew, Support, Service, and Staging branches – Coordinates strategic logistical goals and initiatives with Incident Commander and Senior Leadership – Oversees services, materials, and/or facilities in support of an incident – Oversees the Logistics pre-activation and demobilization resource and support plans
Finance/Administration Section Chief	General	– Manages the Finance Section unit, which has oversight of applicable financial, administrative, and cost analysis aspects of an incident – Provides oversight to reimbursement process
Escalation Processing Coordinator	Communications	– Oversees the tracking, reporting, and processing of critical facility and crucial infrastructure outage and/or emergency escalations – Oversees the coordination of escalation processing between Communications and Operations – Oversees Department of Public Service (DPS) Hotline – Oversees DPS requests and escalation response plans

ROLE	CATEGORY	FUNCTION(S)
Corporate Communications Manager	Communications	– Oversees communications messaging to be shared with PSEG LI employees, general public and media – Oversees the development of the message and materials including; key talking points, external press releases and key company plans – Oversees PSEG Long Island's Website and social media operations and postings
Customer Care and Community Outreach Manager	Communications	– Oversees effective communication with LSE customers – Maintains 24x7 coverage for the Municipal hotline and back up coverage for the Critical Facility/ Escalation Hotline – Plans for the needs of affected communities including oversight of Community Outreach Centers and/or water/ice distribution, as applicable
Large Customer Support Coordinator	Communications	– Oversees the Account Management Team in preparation of communications to Large Commercial customers, Major Account customers, and Critical Facilities across business segments – Oversees Critical Facility/Escalation Hotline – Oversees ongoing coordination and communication between the Account Management Team, Escalation Team, and Operations during restoration
Life Support Equipment (LSE) Coordinator	Communications	– Oversees initial preparation communications to all registered LSE customers – Oversees the daily contact efforts to all LSE customers without power during an event – Coordinates wellness visits to LSE customers not reached by phone through EOC liaisons and/or internal outreach liaisons and subsequent status reporting
Customer Assistance Center (CAC) Manager	Communications	– Oversees the efficient operation of Contact Center operations during emergency conditions through staffing and technology resources – Oversees the CAC Command Center and its daily coordination with the Escalation Team – Actively manages the Outage Map, Outbound Restoration calls, Interactive Voice Response (IVR), and High Volume Call Application (HVCA) systems and their associated messaging
Transmission Survey & Operations Control Group Supervisor	Operations	– Oversees the operations of the Transmission Survey & Operations Control Group – Implements the operational action items appropriate to the Transmission Survey & Operations Control Group, under the direction of the Operations Branch Director - East

ROLE	CATEGORY	FUNCTION(S)
Distribution Survey & Operations Control Division Supervisors	Operations	– Oversees the geographic operations of 1 of 4 Distribution Survey & Operations Control Divisions – Implements the operational action items appropriate to 1 of 4 Distribution Survey & Operations Control Divisions, under the direction of one of the Operations Branch Directors
T&D Crew Control Division Supervisors	Operations	– Oversees the geographic operations of 1 of 4 T&D Crew Control Divisions – Implements the operational action items appropriate to 1 of 4 T&D Crew Control Divisions, under the direction of one of the Operations Branch Directors
Substation Maintenance – Relay Protection Group Supervisor	Operations	– Oversees the geographic operations of 1 of 2 Substation Maintenance – Relay Protection Groups – Implements the operational action items appropriate to 1 of 2 Substation Maintenance – Relay Protection Groups, under the direction of one of the Operations Branch Directors
Line Clearance Group Supervisor	Operations	– Oversees the operations of the Line Clearance Group – Implements the operational action items appropriate to the Line Clearance Group, under the direction of the Operations Branch Director – West
Situation Status Unit Leader	Planning	– Oversees the preparation, posting, and dissemination of incident data including briefs, notifications, and status reports – Coordinates the collection and distribution of operational data in support of reporting protocols and requirements
Human Resources Unit Leader	Planning	– Oversees resource support initiatives relative to labor relations, family assistance, and employee lodging – Coordinates with union and company leadership
Documentation Unit Leader	Planning	– Coordinates storm notes collection and documentation plans – Coordinates collection, dissemination, and retention of pre-event checklists
Resource Coordination Unit Leader	Planning	– Oversees the maintenance and coordination of incident resources and restoration assignments – Oversees storm notifications and activations – Maintains the assignment and status of assigned restoration personnel – Coordinates supplemental resource needs and/or requests including utility partners and task force personnel – Approves movement or reassignment during storm

ROLE	CATEGORY	FUNCTION(S)
Demobilization Unit Leader	Planning	– Oversees the demobilization plan – Reviews resource records and coordinates the size and extent of the demobilization effort
Make Safe to Clear Group Supervisor	Planning	– Oversees MSTC efforts to clear critical roadways of electrical hazards due to downed wires – Coordinates with internal and external stakeholders on MSTC plans, needs and efforts
Foreign Crew Branch Director	Logistics	– Oversees the FCP Team and associated support preparations for incoming foreign line crews, tree crews, damage assessors, wire watchers, low voltage crews and crew guides – Oversees the processing, management, and documentation of supporting foreign crews and personnel – Oversees the FCP Reception Staging site and associated site actions
Support Branch Director	Logistics	– Directs the activities of the support branch units including Fleet Maintenance & Fueling, Facilities, Real Estate, and Security in support of restoration operations
Service Branch Director	Logistics	– Directs the activities of the service branch units including Materials Procurement & Distribution, Busing, Lodging, and Meals in support of restoration operations
Staging Site Branch Director	Logistics	– Oversees the management and coordination at staging sites, base camps and laydown yards – Oversees staging site plans and setup – Coordinates staging site needs and equipment requests
Fleet Maintenance & Fueling Unit Leader	Logistics	– Oversees fleet operations including vehicle/truck needs, repairs, and maintenance – Oversees fueling operations including stationary and mobile tanker plans – Oversees transportation plans and equipment requests
Facilities Unit Leader	Logistics	– Oversees the management and maintenance of company facilities, operating yards, and associated support location during restoration events – Oversee facility operations, repairs, construction, and supporting requests
Real Estate Unit Leader	Logistics	– Oversees and manages company-wide real estate needs and requests – Coordinates with landowners of planned and potential site location on usage during events

ROLE	CATEGORY	FUNCTION(S)
Security Unit Leader	Logistics	– Oversees the development and implementation of company-wide security plans and protocols – Oversees actions taken to protect employees, support personnel, assets, and operating locations
Materials Procurement Unit Leader	Logistics	– Oversees the procurement plans and protocols in support of material, equipment, and resource needs – Oversees agreements, contracts and planned services to be utilized during restoration operations
Materials Distribution Unit Leader	Logistics	– Oversees the receipt, preparation, and distribution of restoration materials, supplies, and equipment – Oversees the material storm room and mobile storm room plans and procedures
Lodging Unit Leader	Logistics	– Oversees the process for securing sleeping arrangements for employees, foreign utility crews, and supporting personnel during restoration events – Oversees procurement and reservation plans – Oversees the allocation and lodging distribution plans – Reviews alternative housing options and plans, as necessary
Meals Unit Leader	Logistics	– Reviews and confirms food service arrangements with vendors in lieu of activation – Identifies and coordinates a feeding plan for each facility and/or situation – Reviews and coordinates food service operations at company and secondary work locations for PSEG Long Island employees, Foreign Crews, and support personnel
Busing Unit Leader	Logistics	– Oversees the shuttling needs of the restoration event – Oversees shuttling operations for foreign utility crews and employees between housing locations, staging sites, and work locations
Cost & Reimbursement Unit Leader	Finance	– Oversees the preparation of daily cost analysis and estimates for restoration expenditures – Oversees the cost reconciliation and substantiation process for incident invoices and expenses – Oversees the preparation and submission of reimbursement package, as applicable

ROLE	CATEGORY	FUNCTION(S)
Claims & Compensation Unit Leader	Finance	– Oversees financial concerns resulting from property damage, injuries, or fatalities associated with restoration efforts – Reviews logs, forms, and other pertinent documentation for post-incident processing
Time & Payroll Unit Leader	Finance	– Oversees proper daily recording of personnel time – Oversees payroll is issued according to company policies
Treasury Unit Leader	Finance	– Oversees adequate cash supply for primary business operations – Oversees maintenance of corporate financial goals
Plant Accounting Unit Leader	Finance	– Oversees accuracy of financial reporting of company assets – Oversees plant assets are properly quantified, capitalized, and recorded for cost and depreciation

Figure 3.11 – ICS Restoration Roles and Responsibilities

3.4 Supplemental ERP Contact Sheet

PSEG Long Island's Staff Engineer in Emergency Planning maintains a supplemental contact sheet for all roles detailed within the ICS Restoration Roles and Responsibilities in Figure 3.11. PSEG Long Island Emergency Planning 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 M.

4. TRAINING, EXERCISES, AND AFTER ACTION REVIEWS

4.1 Training and Exercises

Training and exercises are an integral part of preparing employees for potential restoration events. Continual training and operational based exercises are critical elements of the emergency preparedness process and effective methods to refresh and reinforce skills in preparation of restoration events. Training and exercises support a cycle of continuous improvement and assist with the identification of process enhancements. PSEG Long Island is committed to ongoing exercises and trainings for the benefit of preparedness and restoration operations.

4.1.1 Training

An important aspect of storm restoration planning is the advanced training of company personnel. PSEG Long Island takes a proactive approach regarding training during non-storm conditions to provide those employees with non-traditional storm roles are sufficiently prepared to respond during emergencies. Skills training is not a requisite for those employees with traditional storm roles (e.g., linemen and customer call representatives), as their assignments are equivalent in nature to their regular day-to-day jobs. Storm restoration training is provided to all employees via the internal Learning Management System (LMS) and is a self-paced interactive training session. PSEG Long Island assigns the following two (2) courses to all employees, on an annual basis:

- Emergency Restoration Plan (ERP) Training
    - Review of all ERP sections, guidelines and associated key restoration activities
- Incident Command System (ICS) Training
    - Review of PSEG Long Island's ICS structure utilized during restoration events

These training classes support employee readiness and awareness to key restoration plans and protocols. In addition to the classes above, PSEG Long Island delivers restoration training classes concentrated on specific restoration roles and/or responsibilities (e.g., EOC Liaison and Dispatch Area Operations). Additional training may be provided based upon storm roles and training needs.

The EP Department is responsible for the identification, coordination, and notification of restoration roles for personnel and oversight of associated restoration training. The EP Department, in conjunction with SMEs from selected organizations, is responsible for governance of the development and delivery of training, as well as the notification of training to personnel and tracking of training. A Training Governance Specialist provides training oversight, tracking and centralization. PSEG Long Island strives to complete a minimum of 90% of planned trainings each year. Completion of training is measured and reported on a monthly basis as part of an internally kept scorecard metric.

Training can vary in length depending on an employee's work experience and their associated role. For example, upon hiring, some employees may receive more in-depth training, while other employees may undergo refresher courses on restoration roles, as required based on need. Refresher courses are primarily used to train on new/revised procedures and reinforce restoration principles and, therefore, may not be required annually. Often times during a year, PSEG Long Island activates its employees to perform their restoration assignment during an actual event. In these instances, real-time conditions can substitute and/or supplement training courses. During cases where training is substituted by a real-time event, PSEG Long Island will document and memorialize those occurrences and associated individuals to satisfy annual training requirements.

PSEG Long Island utilizes a variety of training platforms and methods when training its employees for emergency restoration operations. Training can include lectures, seminars, workshops, and video presentations. Modular training sessions are also utilized for training employees. Modular training sessions can be both self-study and/or traditional classroom based instructor led training. Computer based/Web based training may also be utilized and can serve as an effective refresher immediately before the onset of an event. Interactive classroom style training often provides the greatest amount of success and is one of the main sources of training companywide. These sessions allow employees to work hands-on and experience real life training scenarios. This method allows employees to better comprehend and anticipate their expected roles during an emergency.

Please see Appendix P for a targeted listing of restoration training courses being offered. Appendix P training target dates are subject to change.

4.1.2 Exercises

While training of employees continues to be a priority of PSEG Long Island, restoration personnel in selected roles also participate in various exercises throughout the year. PSEG Long Island currently plans, develops, and executes a variety of exercise programs with a focus on Command and Control, Operations, Planning, Logistics, and/or Communications. PSEG Long Island develops and aligns exercises, in conjunction with Federal Emergency Management Agency's (FEMA) Homeland Security Exercise and Evaluation Program (HSEEP). This program provides a set of guiding principles utilized for exercise programs to provide standardization for exercise development, evaluations, and improvement planning initiatives. PSEG Long Island currently utilizes HSEEP principles during the following planned exercises types:

- Discussion-Based Exercises

  Familiarize and/or re-enforce participants with current plans, policies, agreements and procedures

  - Tabletop Exercises (TTX)
  - Workshops
  - Seminars

- Operations-Based Exercises

  Validate plans and procedures, clarify roles and responsibilities, and identify resource gaps in an operational environment

  - Drills
  - Functional Exercises
  - Full-scale 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 assist in identifying the areas in need of improvement or additional attention going forward. Exercises also provide opportunities for 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.

4.1.3 Annual Hurricane Tabletop Exercise

PSEG Long Island conducts a company-wide Annual Hurricane Tabletop Exercise to test the abilities and coordination among restoration personnel and departments at a system level. More importantly, this discussion-based exercise tests the effectiveness of employees performing job functions outside of their normal areas of responsibility.

The annual tabletop exercise is designed to simulate and discuss key steps and processes traditionally faced during a large-scale restoration event. The TTX is designed to educate and align efforts among internal and external participants. The Annual Hurricane TTX is designed to be discussion based, but PSEG Long Island does host additional "hands-on" exercises including operational drills and functional exercises focused on restoration contingency plans.

The Annual Hurricane TTX brings together all the relevant departments needed for an effective response. PSEG Long Island's Annual Hurricane Tabletop Exercise sharpens our one-team approach and requires participants to respond to discussion-based injects for simulated conditions that might be encountered in an actual event. The storm exercise scenario is based around a large-scale electric service interruption (e.g., tropical storm or hurricane). The EP Manager/Director will oversee the exercise's design, implementation, and results. The goals of the Annual Hurricane Tabletop Exercise may include, but are not limited to:

- Testing the readiness of PSEG Long Island employees
- Training personnel and clarifying roles and responsibilities
- Demonstrating PSEG Long Island's ability to plan, implement, and successfully exercise established restoration processes and protocols
- Demonstrating established communications protocols and plans
- Demonstrating the ability to utilize the OMS system to facilitate restoration actions and enhance associated storm communications including ETRs
- Demonstrating PSEG Long Island's commitment to safety, efficiency, and communications, while delivering excellence in all restoration organizations
- Illustrating coordination, both internally and with external agencies, utilities, and partners (discussions with TelCo and/or CaTV may include pole replacements, wire down plans and MSTC protocols)
- Identifying resource gaps and/or process improvement opportunities

PSEG Long Island also invites outside agencies such as fire, law enforcement, public safety, emergency management personnel, LIPA, and DPS to participate in the Annual Hurricane TTX. The above listed outside agencies are notified of the exercise during the planning stages and are regularly engaged in these exercises. DPS staff will be notified at least two (2) weeks in advance of the schedule annual exercise. Effective coordination between PSEG Long Island and the first responder community is vital to any restoration event and participation of these entities provides a forum to work with and learn from one another. Following the Annual Hurricane Tabletop Exercise, PSEG Long Island's EP Department reviews the event to identify areas for improvement.

PSEG Long Island also actively participates in exercises, which include external stakeholders, throughout the year. These exercises can encompass events facilitated by local and state emergency response organizations, as well as other exercises conducted by our partner utilities (e.g., GasCo, TelCo, and CaTVCo). PSEG Long Island also participates in a variety of large-scale exercises focused on coordination, including materials sharing exercises and NRE exercises.

4.2 After-Action Reports (AARs) and Continuous Improvement

Comprehensive performance assessments are a critical component to continuous improvement and PSEG Long Island may conduct such reviews in the aftermath of a large-scale storm or other system emergencies and after key exercises. As a practice, PSEG Long Island conducts AARs to identify learning opportunities and to introduce changes to enhance the overall process going forward.

After-Action Reporting is a formal and thorough process, with comprehensive reports being generated for the purpose of memorializing performance during an event and providing opportunities for education, training, and continuous improvement. Following a major storm event and after key exercises, PSEG Long Island will launch a formal AAR of its performance, as appropriate.

Teams of 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 and is analyzed and captured for inclusion in the report. Each AAR includes key storm information, including but not limited to: storm summary, outage data, manpower and opportunities for improvement. AAR information is then used to create an associated Improvement Plan (IP) which documents all opportunities, action items, responsible parties, and targeted due dates. PSEG Long Island EP will work with the various departments to coordinate completion of Improvement Plan action items.

To ensure AARs are effectively utilized following significant storm events, the following details will guide the activation and management of the AAR process.

- AARs will be conducted for all events when customer outages exceed 48 hours
- AARs may also be conducted for additional "event-specific" restoration events where continuous improvement opportunities exist
- Following an event where the activation threshold has been met, PSEG Long Island EP staff will distribute a survey electronically to PSEG Long Island Leadership and key process owners to gather feedback and ideas for improvement.
    - This survey will create an opportunity for all key stakeholders to share feedback and ideas, immediately following an event
    - Information received via surveys will be reviewed and incorporated into the AAR process, in conjunction with opportunities for improvement identified by EP Team
- The EP Team will then complete a formal AAR within 60 days, upon the completion of restoration operations for the defined event
- PSEG Long Island will continue to utilize its current AAR and IP templates along with its AAR Survey questionnaire.

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 solicits input from internal and external stakeholder groups and aims to build upon PSEG Long Island's knowledge base for the purpose of process improvement, as shown below.

One or more of the following practices are routinely utilized for the purposes of enhancing After-Action Reporting:

1) Consultation with LIPA

   PSEG Long Island solicits information from LIPA throughout the year for the benefit of continuous improvement. PSEG Long Island will work with LIPA to identify opportunities for improvement and/or enhancements to storm plans and protocols. PSEG Long Island will then incorporate recommendations and/or feedback as appropriate.

2) Consultation with NYS DPS

   PSEG 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 seek feedback and integrate the recommendations (i.e., DPS Storm Review reports), as a means to continuously improve its performance.

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 restoration protocols. PSEG Long Island continues to consult and confer with 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 provide real life experience and knowledge, which is beneficial to identifying process improvements going forward.

5) Consultation with External Stakeholders

   PSEG Long Island solicits information 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.

6) Participation in External Events

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
- All Hazards Consortium (AHC)
- Chartwell Outage Communications Committee
- EUCI Logistics Restoration Workshop
- DHSES Regional Round Table Meetings
- Participation in various municipal and local workshops and exercises

PSEG Long Island continuously looks for areas of improvement and opportunities to drive change for the better. 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 improvement efforts going forward.

III. Pre-Event Preparations

5. EMERGENCY CLASSIFICATIONS AND ACTIVATIONS

5.1 Storm Assessment

PSEG Long Island's Senior Leadership team, in conjunction with key operational personnel, participate on strategy and anticipation calls to discuss the impending storm event and review potential pre-storm initiatives and strategic goals. These PSEG Long Island senior leaders assess a combination of factors to determine the level of activation, including but not limited to:

- Forecast analytics, historical data, and predictive/statistical modeling
- Weather conditions and projections (projected wind speed, time of year, and precipitation characteristics)
- Predicted corresponding impact (system damage, restoration duration, and outages)
- Other internal and external factors (staffing, manpower availability, and customer expectations)
- Timing of assumption of Incident Command roles (PSEG Long Island Incident Commander, Restoration Officers and Section Chiefs, etc.)

5.2 Storm Classifications

PSEG Long Island utilizes an emergency classification and storm severity matrix. The classification of an emergency is dependent upon the severity and affected geography of the emergency. Figure 5.1 provides a high-level overview of the Storm Classifications.

STORM CLASS	DESCRIPTION	CONDITION
I	Normal Operations and/or Minor Storm Events (Restoration duration < 24 hrs)	White
II	Localized Damage and/or Moderate System Wide Damage (Restoration duration ≥ 24 hrs and < 72 hrs)	Blue
III	Major Storm Events and/or System Disaster (Restoration duration ≥ 72 hrs)	Red

Figure 5.1 –Description and Condition of Storm Classifications

5.2.1 Class I "White"

Under Class I "White," the severity of the resulting damage is moderate, consisting mainly of localized or limited system damage. This includes normal "blue sky" operations and minor storm events. Expectations are such that complete restoration of system circuits and station interruptions can be accomplished, utilizing existing divisional manpower, within 24 hour period. The Distribution Operations Department is able to coordinate repairs to the T&D Electric systems with minor additional assistance from the division's internal Overhead/Underground (OH/UG) Lines Department. Elements of this plan are not expected to be activated during Class I "White" system conditions.

5.2.2 Class II "Blue"

Under Class II "Blue," the severity of the resulting damage is more significant than Class I "White," consisting mainly of extensive localized damage or moderate system damage across the service territory. The expectation is such that complete restoration of system circuit and station interruptions can be accomplished, using available company resources, with customer outage duration not exceeding a 72 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 Class I "White" to Class II "Blue." Class II "Blue" events can be further categorized into Class IIA and IIB based on expected outages system wide (incidents and customers interrupted).

5.2.3 Class III "Red"

Under Class III "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. Expectations are such that complete customer outage duration will exceed 72 hours utilizing only company resources, and therefore, outside resources (e.g., assistance from other utilities, contractors). are required.

Class III "Red" events can be further categorized into Class IIIA and IIIB based on expected outages system wide (incidents and customers interrupted).

When any of the following actions are taken, Class III "Red" is in effect:

- Foreign Crews or off-system contractors are called in to augment the PSEG Long Island repair force
- One or more decentralized Dispatch Areas are mobilized to dispatch repair crews under Remote Dispatch Authority (RDA)
- One or more decentralized Dispatch Areas are placed under Remote Configuration Authority (RCA) to direct the repair operations on distribution feeders delegated to that dispatch area

5.2.4 Storm Severity Matrix

PSEG Long Island's Storm Severity Matrix (see Figure 5.2) is a reference guide used in preparing, assessing, monitoring, and executing a response plan and can be adjusted based on other internal and external factors. It incorporates PSEG Long Island's three storm classifications and the anticipated impact for each class, and further categorizes the expected outages, system wide statistics (i.e. incidents and customers interrupted) between Class IIA/B and Class IIIA/B events. The matrix also includes a subset of key restoration functions and/or processes utilized by PSEG Long Island as part of its operational plan.

The PSEG Long Island Incident Commander, Restoration Officers, and Section Chiefs will utilize the Storm Severity Matrix when monitoring and preparing for a forecasted event. The following items being assessed include, but are not limited to:

- Storm damage (actual vs predicted)
- Restoration progress and operational results
- System operations (i.e., relative to normal Class I – "White" operations)

Given the analysis of the criteria listed above, and in conjunction with Section 5.1, the storm classification may change and restoration efforts may be modified, allowing for a deescalated or escalated response.

STORM CLASS EMERGENCY CONDITIONS		CLASS I – "WHITE"	CLASS II – "BLUE"		CLASS III – "RED"	
FORECASTED WEATHER	Weather Conditions	Normal Weather Minor/Moderate Lightning Light/Moderate Snow Light/Moderate Winds	Tropical Storm, Nor'easter Severe Lightning Heavy Snow > 6" with SLR < 8:1; Ice Accretion > 3/8"		Cat 1-3 Hurricane, Tropical Storm, Nor'easter, Major Ice Storm, Heavy Snow > 6" with SLR < 5:1; Ice Accretion > 1"	
	Sustained Wind Speeds (months)	< 35 MPH (4/1 – 10/31) < 45 MPH (11/1 – 3/31)	35 – 60 MPH (4/1 – 10/31) 45 – 70 MPH (11/1 – 3/31)		> 60 MPH (4/1 – 10/31) > 70 MPH (11/1 – 3/31)	
	Anticipated Damage	Minimal to Minor	Moderate; Isolated		Severe; Widespread	
EXPECTED OUTAGES (System Wide)	Restoration Duration	< 24 hours	≥ 24 hours and < 72 hours		≥ 72 hours	
			CLASS IIA	**CLASS IIB**	**CLASS IIIA**	**CLASS IIIB**
	Outage Management System (OMS) Incidents	< 150	150 – 1,300	1,300 – 2,500	2,500 – 6,700	> 6,700
	Customers Interrupted	< 5,000	5,000 – 60,000	60,000 – 115,000	115,000 – 300,000	> 300,000
COMMS	Corporate Communications	Normal	Monitoring – Partial activation		Full activation of Corporate Communications Center	
	Customer Operations	Normal	Monitoring – Partial activation		Full activation	
LIAISON	State, County, Municipality EOC Staffing	Normal	Soft Activation (as required)		Full activation	
	Utility Coordination (i.e., TelCo, GasCo)	Normal	Normal		As required, by operational need	
OPERATIONS	Estimated Times of Restoration (ETR)	Default	Default with Weather Multiplier		Assessing Conditions (Null ETR), Progression to DPS Guidelines (Global, Regional, Local), Weather Multipliers	
	Restoration Procedures	Normal Cut/Clear	Cut/Clear Dispatch Authority		Cut/Clear Dispatch Authority Circuit Sweep Configuration Authority Make Safe to Clear	
	Resource approach	Division handles storm with normal staffing	Division handles storm with additional internal staffing and on-island contractors; Construction and Survey consoles activated; Potential increased use of local contractors or Mutual Assistance		Full activation of Restoration Organization; Mutual Assistance activated and/or mobilized; North Atlantic Mutual Assistance Group (NAMAG) or National Response Event (NRE) engaged	
	Mutual Assistance Commitment	Event Dependent	1 Day Prior		2 – 4 Days Prior	
PLANNING	Emergency Planning (EP) Team	No	Partial Activation		Full Activation of Planning Section	
LOGISTICS	Foreign Crew Processing (FCP)	Normal	Partial Activation		Full activation	
	Materials Operations	Normal	Storerooms Open 24x7		Full activation of Logistics Support Center (LSC) and/or Team	
	Fleet Operations	Normal	Garages Open 24x7		Full activation of Logistics Support Center (LSC) and/or Team	
Regulatory requirement for event determination:		> 5,000 Customers interrupted for > 30 minutes in a Division > 20,000 Customers interrupted for > 30 minutes Companywide				

Figure 5.2 – Storm Severity Matrix

5.3 Storm Activation and Notification

When notified that the PSEG Long Island Incident Commander is implementing preparatory measures for a potential large-scale storm, the Restoration Officers and Section Chiefs will discuss and determine the level of activation that they deem necessary for an efficient and effective operation (e.g., partial vs full activation, Class II – "Blue" vs Class III – "Red"). PSEG Long Island's Storm Resource Matrix, depicted in Figure 5.3 below, is used as a guideline for approximating the amount of resources needed at the onset of each storm classification, and further categorizes the response to Class IIA/B and Class IIIA/B events.

Storm Classification Resource Types (System Wide)	CLASS I	CLASS IIA	CLASS IIB	CLASS IIIA	CLASS IIIB
On-Island High Voltage (HV) Staffing Levels	Division handles storm with normal staffing	PSEGLI FTEs - up to 200 Contractor FTEs - up to 150	PSEGLI FTEs - up to 200 Contractor FTEs - up to 325	PSEGLI FTEs - up to 200 Contractor FTEs - up to 325	PSEGLI FTEs - up to 200 Contractor FTEs - up to 325
Non-PSEGLI HV Line FTEs	Event Dependent	up to 100	100 – 400	400 – 1,600	1,600 – 2,800
Line Clearance Staffing Levels	Event Dependent	up to 200	up to 300	up to 1,000	up to 1,600
Damage Assessment	Event Dependent	Transmission: up to 20 FTEs Distribution: up to 60 FTEs	Transmission: up to 40 FTEs Distribution: up to 120 FTEs	Transmission: up to 80 FTEs Distribution: up to 140 FTEs Supplemented with 32 to 128 Contractor and/or Mutual Assistance FTEs	Supplemented with > 128 Contractor and/or Mutual Assistance FTEs
Wire Watch (WW)	Event Dependent	up to 10 FTEs	up to 20 FTEs	up to 32 FTEs Supplemented with 40 to 120 Contractor and/or Mutual Assistance FTEs	Supplemented with > 120 Contractor and/or Mutual Assistance FTEs
Low Voltage (LV)	Event Dependent	up to 40 FTEs	up to 80 FTEs	up to 180 FTEs Supplemented with up to 50 Mutual Assistance and/or Contractor FTEs	Supplemented with 52 to 100 Mutual Assistance and/or Contractor FTEs
Make Safe to Clear (MSTC)	Event Dependent	up to 20 FTEs	up to 40 FTEs	up to 100 FTEs Supplemented with up to 74 Mutual Assistance and/or Contractor FTEs	Supplemented with 76 to 150 Mutual Assistance and/or Contractor FTEs

Figure 5.3 – Storm Resource Matrix

Upon notification from the PSEG Long Island Incident Commander, Restoration Officers and Section Chiefs will notify and staff their respective storm organizations, as appropriate. The Resource Coordination Unit within the Planning Section may also assist with notifying selected personnel of activation plans during a restoration event when requested.

Escalation above Class I “White” conditions ordinarily starts on a divisional basis as soon as the assistance of more than five OH/UG Line Crews is required in any one division. Other elements of the restoration organization may be activated in accordance with need (e.g., damage assessors, and communications). The EP Department and/or the Planning Section may coordinate and assist with the expansion of operations and the associated activities to follow.

6. WEATHER ASSESSMENT AND DAMAGE PREDICTIONS

A successful response to any storm emergency is predicated on a comprehensive anticipation and early warning system. An early appraisal, based on current and forecasted conditions and prior storm experience, becomes a critical component to plan and execute an effective restoration effort.

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, with active weather monitoring, to position itself to be best prepared for impending storms and the ensuing response. This awareness and planning allows for appropriate decision making to occur, in terms of readying the system and confirming adequate resources are mobilized to efficiently respond to the damage ultimately 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 helps the Company and its employees to better prepare for the impending storm and planned restoration activities. Most importantly, it helps to set expectations with customers and other key stakeholders so that they, too, can be best prepared for the impending storm.

6.1 Preparatory Responsibility

It is the responsibility of PSEG Long Island's Senior Leadership team and key operational personnel to closely monitor all weather and to evaluate their anticipated size, scale, and complexity. The importance of evaluation cannot be overstated and must be made at the earliest possible time with the most current information available. Upon assumption of the roles of Incident Commander, Restoration Officers, and Section Chiefs, they have the responsibility to activate emergency procedures within the affected division, commensurate with the projected size, scale, and complexity of the emergency.

6.2 Weather Monitoring Approach

PSEG Long Island obtains weather information and alerts from a variety of sources and disseminates the information to the appropriate personnel, based on 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 emergency restoration organization, securitization of additional resources, and other related preparatory activities. An effective weather monitoring approach assists in both short and long term planning, with regard to overall restoration efforts.

Weather forecasts are received and reviewed by the T&D Electric Operations and Emergency Preparedness departments on a daily basis. Key operational personnel also receive these daily forecasts. Reports and advisories are regularly received from both the National Weather Service (NWS) and Data Transmission Network's (DTN's) Meteorological Service. The NWS provides weather reports from its New York office at varying intervals throughout the day, based on the severity of the storm. DTN provides weather forecasts specific to PSEG Long Island's service territory three times daily, as well as on-demand consulting services provided by a dedicated team of available meteorologists.

Key personnel and field locations across the service territory are provided with access to WeatherSentry Online, provided by DTN, 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:

- Subscription Services
  - DTN (internet, e-mail/text notifications, and verbal discussion with a meteorologist)
    - www.dtn.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
  - AccuWeather (Internet)
    - www.accuweather.com

PSEG Long Island also utilizes the Sperry-Piltz Ice Accumulation (SPIA) chart when planning for the potential impact of a winter weather event. The SPIA chart provides valuable information regarding the potential impact (or non-impact) of forecasted ice accumulations on overhead utility infrastructure. A copy of the SPIA chart is provided in Figure 6.1. This chart addresses sleet, freezing rain, and ice events for Overhead Utility Operations. The Saffir-Simpson Scale, (see Figure 6.2) which categorizes a hurricane's maximum sustained wind speed and the corresponding impact of these winds, is also utilized by PSEG Long Island when planning for the potential impact of a tropical weather event. The Saffir-Simpson Scale approximates the types of damage and impacts associated with winds of the indicated intensity. Both the SPIA chart and the Saffir-Simpson Scale provide valuable information to PSEG Long Island personnel when conducting preparations for anticipated weather related incidents.

The Sperry-Piltz Ice Accumulation Index, or "SPIA Index" – Copyright, February, 2009

ICE DAMAGE INDEX	* AVERAGE NWS ICE AMOUNT (in inches) *Revised-October, 2011	WIND (mph)	DAMAGE AND IMPACT DESCRIPTIONS
0	< 0.25	< 15	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	0.10 – 0.25	15 - 25	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
	0.25 – 0.50	> 15	
2	0.10 – 0.25	25 - 35	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
	0.25 – 0.50	15 - 25	
	0.50 – 0.75	< 15	
3	0.10 – 0.25	> = 35	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
	0.25 – 0.50	25 - 35	
	0.50 – 0.75	15 - 25	
	0.75 – 1.00	< 15	
4	0.25 – 0.50	> = 35	Prolonged & widespread utility interruptions with extensive damage to main distribution feeder lines & some high voltage transmission lines/structures. Outages lasting 5 – 10 days.
	0.50 – 0.75	25 - 35	
	0.75 – 1.00	15 - 25	
	1.00 – 1.50	< 15	
5	0.50 – 0.75	> = 35	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeks in some areas. Shelters needed.
	0.75 – 1.00	> = 25	
	1.00 – 1.50	> = 15	
	> 1.50	Any	

(Categories of damage are based upon combinations of precipitation totals, temperatures and wind speeds/directions.)

Figure 6.1 – SPIA Chart

SAFFIR-SIMPSON HURRICANE WIND SCALE

CAT	Wind Speed		Old SS Scale	
	mph	kt	mb	surge
TD	0-38	0-33		
TS	39-73	34-64		
1	74-95	65-83	980-994	4-5'
2	96-110	84-95	965-979	6-8'
3	111-129	96-112	945-964	9-12'
4	130-156	113-136	920-944	13-18'
5	>157	>137	<920	>18'

Figure 6.2 – Saffir-Simpson Scale

In addition, when tropical systems are approaching, hurricane-tracking weather maps from the NWS and its Hurricane Center are received and reviewed by the Electric System Operations Department and Emergency Preparedness. These maps assist in the decision-making process, relative to restoration preparedness and response efforts (see Figure 6.3).

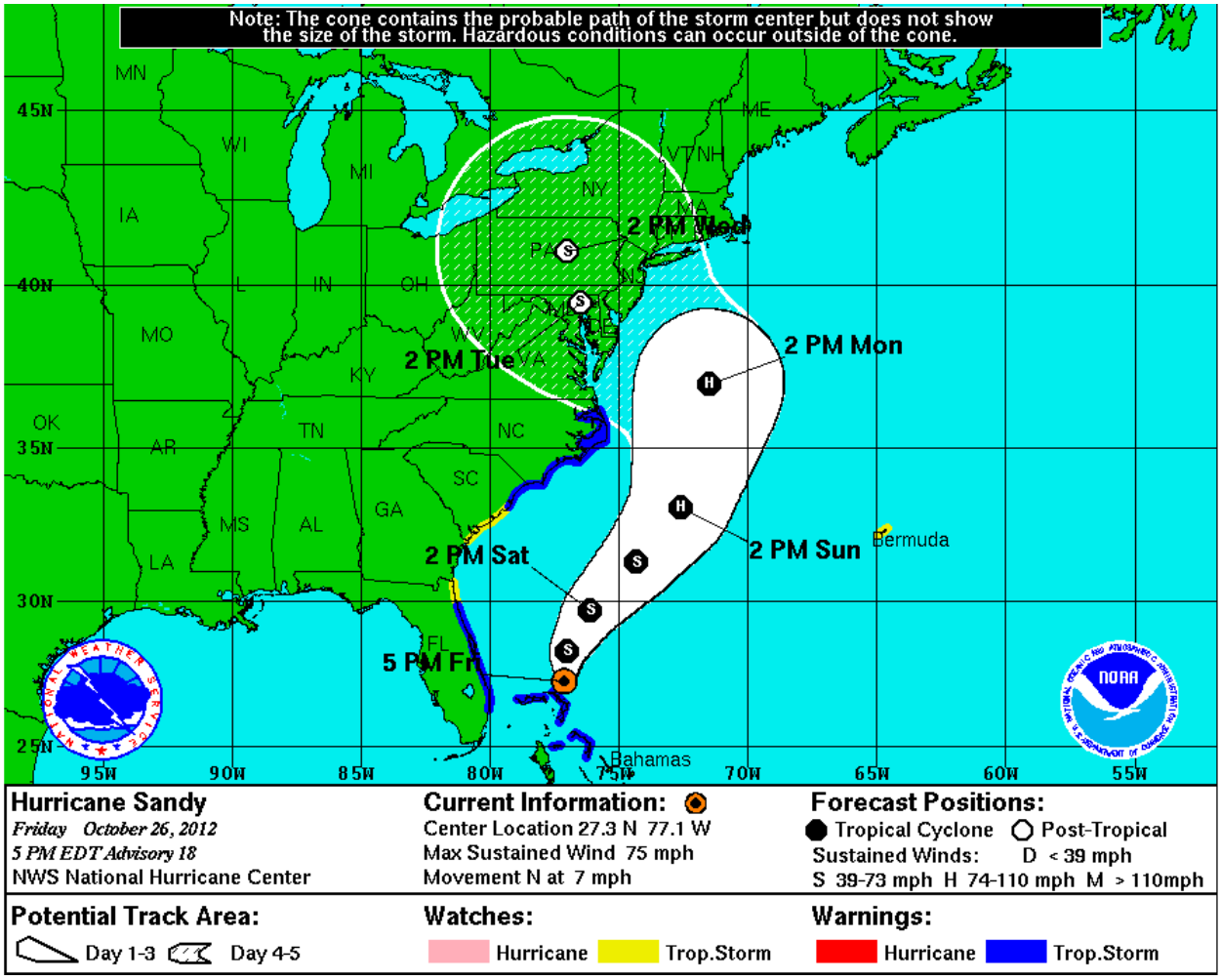


Figure 6.3 – Sample Hurricane Tracking Map

6.3 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 PSEG Long Island's service area provide many challenges when preparing for such events. Each type of storm or weather condition varies and requires differing levels of preparation and response. Each type of storm or weather condition varies, resulting in damage to electrical facilities and outages to customers which require differing levels of preparation and response. The list of potential weather hazards and their effects on the electrical system are outlined in the following sections.

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 the electrical system are outlined in the following sections.

6.3.1 Thunderstorms/Lightning

Thunderstorms with considerable cloud-to-ground lightning can have an impact on PSEG Long Island's primary, transmission, and sub-transmission facilities. However, severe widespread thunderstorms may be accompanied by severe winds and will have a larger effect on secondary facilities and individual house services.

6.3.2 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, approach and length of the storm. To start, heavy rain will affect sub-transmission facilities and individual house services. Strong winds can have a large influence on transmission and individual house services as well, due to the possibility of widespread wire down conditions and pole damage.

Tropical storms and hurricanes often require an appropriate mobilization of field resources, in advance of the storm's arrival, due to its larger regional or national impact.

6.3.3 Winter Storms

6.3.3.1 Nor'easters

Nor'easters can bring heavy rains, strong winds, and blizzard-like conditions that often create considerable damage to the T&D Electric system. Nor'easters often bring significant downed wires and pole damage, resulting from falling trees and strong winds.

6.3.3.2 Major Sleet, Ice, or Wet Snow Storms

These storms can build up slowly, with damage continuing over several days. The area affected is often localized in ice storms, and widespread in wet snowstorms. Because of their slow prolonged buildup, damage assessments are often difficult to anticipate. The important aspect of these storms is that most 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.

For snow events, the Snow to Liquid Ratio (SLR) compares the amount of liquid precipitation with the number of inches of snow, and is one way of describing what makes light, fluffy snow different from heavy, wet snow. The temperature can greatly impact the amount of snow and how much it weighs. Therefore, the SLR can have a direct effect on the damage sustained, with lighter, drier snow typically causing little to no impacts to the electric system.

The "average" SLR is 10:1. In colder weather, snow has more airspace, resulting in more inches of snow (>10:1), but lighter in weight. Wet snow that falls at the freezing mark is usually heavy (<8:1), but may not accumulate that much. However, significant variations in SLR can occur even within a single storm system.

For these types of storms, as well as nor'easters, tree/leaf coverage may play a critical role in its effect on the electrical system due to the propensity of damaged trees and branches resulting in wires down.

6.3.4 Heat Storms

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 the electrical system due to the increased usage by commercial and individual users. Heat waves can also damage T&D equipment (i.e., wires, transformers, and fuses) through overheating caused by increased output levels.

6.3.5 Flooding

Flooding is a serious threat facing electrical utility providers, including PSEG Long Island. The severity is further heightened when the service territory is a highly populated island with many coastal communities, as is Long Island. This threat 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 magnitude, proximity, and timing of impact.

6.3.6 Damage Predictions

The ability to accurately predict damage to electric utility facilities associated with an impending storm and/or weather event (e.g., wind, accumulation of precipitation on wires, flooding) is essential in preparing for, and executing, a successful restoration effort. PSEG Long Island employs various tools and draws upon its experience from past events to develop preliminary damage estimates. Weather conditions, as well as its projected intensity, duration, type of damage, and impact, are closely monitored and adjusted to provide an estimate for damage potential.

Forecasting, with data from past events, helps prepare damage predictions. Damage predictions set the operational tone of actions to be taken post-impact.

Damage predictions are utilized 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. 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, as it is often necessary to mobilize support resources from areas that require significant travel to arrive on Long Island

PSEG Long Island utilizes a weather-based damage prediction solution that forecasts the occurrence and extent of damage from storms impacting our electric transmission & distribution system. Titled "Storm Impact Analytics" (SIA), this damage and outage incident prediction module uses historical weather data and outages, along with PSEG Long Island asset data, including geographical location of the corresponding assets within PSEG Long Island's service territory, this tool serves as an additional means to forecast severity, level of damage, and expected geography to be impacted. This tool, which is periodically refined, assists in improving PSEG Long Island's overall outage preparation and response strategy.

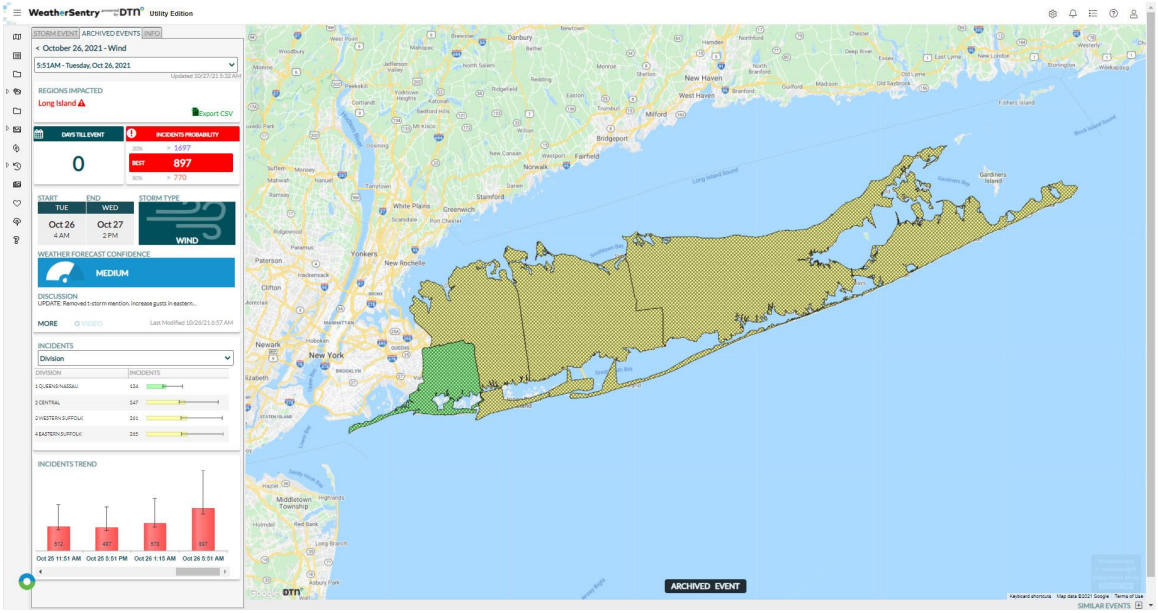


Figure 6.4 – DTN Storm Impact Analytics (SIA) Dashboard & Map

7. PLANNING PROTOCOLS

Objectives:

The overarching objective of the Planning Section during major events is to be responsible for resource requests and the collection, evaluation, documentation, and dissemination of incident information. Additionally, this Section oversees employee and family assistance needs and provides for an orderly demobilization.

Roles and Responsibilities:

In addition to the performance of other activities, the Planning Section serves as an information and resource hub during restoration events. The Planning Section is responsible for resource requests and the collection, evaluation, documentation, and dissemination of incident information. Additionally, this Section oversees employee and family assistance needs and provides for an orderly demobilization.

When activated, the Planning Section is managed by the Planning Section Chief, who is a member of the General Staff. The Planning Section is comprised of five (5) units:

1) Situation Status
2) Resource Coordination
3) Documentation
4) Demobilization
5) Human Resources

Each of the five Planning Section units is led by a Unit Leader, with staff and support personnel, and may include a number of Technical Specialists who assist in evaluating the situation and forecasting requirements for additional personnel and equipment. Technical Specialists may function within the Planning Section, or be assigned based on where their specialized knowledge and expertise are required.

7.1 Planning Section Chief

The Planning Section Chief oversees and coordinates the five units and their associated areas of responsibility within the Planning Section. Additional responsibilities for the Planning Section Chief will include:

- Manpower coordination
  - Mutual Assistance requests
    - North Atlantic Mutual Assistance Group (NAMAG) and other Regional Mutual Assistance Groups (RMAGs)
    - Partner Utilities and contractors
    - NYS Public/Private partnership
  - Internal personnel (PSEG Long Island and its PSE&G New Jersey affiliate)
  - Supplemental personnel requests and needs
- Restoration staffing levels
- ETR strategy support
- Agency and EOC coordination
- LIPA and DPS coordination
- Dispatch Area activation and coordination
- Establishment and execution of strategy, anticipation, and storm calls
- Coordination of specialized restoration resources and teams

7.2 Situation Status Unit

7.2.1 Situation Status

The Situation Status Unit oversees the preparation, posting, and dissemination of incident and/or event data including updates, briefs, notifications, and situation status reports. The Situation Status Unit oversees data collection and reporting for the following:

- Outage data
- Crew data
- ETR information
- DPS & LIPA reporting
- Storm matrix
- Weather information
- Flood information
- Liaison activations
- Safety incidents (if any)
- General Situation Status reports

7.2.2 Reporting

One of the primary purposes of the Situation Status Unit is the collection and dissemination of situational intelligence from various sources to keep the Incident Commander and other leaders situationally aware of restoration progress. To maintain the consistency of information, the Situation Status Unit coordinates all reporting requests. To do so, the Situation Status Unit utilizes SAS as the primary reporting platform, which provides both actionable real-time operational feedback and historical reporting. Other reporting tools and/or sources will be employed for data that is not captured within SAS reports.

Figure 7.1 summarizes some of PSEG Long Island's current reporting capabilities.

REPORT NAME	GENERATED BY	POPULATED BY	FREQUENCY	AUDIENCE
Outage Summary	Situation Status Unit Staff	Situation Status Unit Staff	Prior to Storm Calls	Situation Status Unit Leader; Documentation Unit Leader
Manpower	Situation Status Unit Staff	Situation Status Unit Staff	Prior to Storm Calls	Incident Commander; Planning Section Chief; Situation Status Unit Leader; Documentation Unit Leader
Storm Call Notes	Documentation Unit Staff	Documentation Unit Staff	After Storm Calls	Internal Stakeholders; DPS; LIPA
ETR	Situation Status Unit Staff	Situation Status Unit Staff	Once a Day	PSEG Long Island Leadership; Municipal Liaisons
EOC / CIC Liaisons Assignments	Planning Section Staff	Assistant Liaison Officer	Once a Day	Situation Status Unit Leader
Storm Event Operations Matrix	Situation Status Unit Staff	Division Restoration Task Force Leader	Twice a Day	Internal Stakeholders
Critical Facility / LSE Customer	Situation Status Unit Staff	Situation Status Unit Staff	Prior to 4-Hour PSC Situation Report	Situation Status Unit Leader
4-Hour PSC Situation Report	Situation Status Unit Staff	Situation Status Unit Staff	Per DPS Request	Planning Section Chief; DPS; LIPA
Municipal Update	Situation Status Unit Staff	Situation Status Unit Staff	Upon Request	Internal Stakeholders
Storm Duty Assignment Sign-in Sheet	Resource Coordination Unit Staff	Division Restoration Task Force Leader	Once a Day	Resource Coordination Unit Leader

Figure 7.1 – Reporting Information Table

Note: Reports are generated based upon need, feasibility, and storm conditions

7.2.3 Coordination with Department of Public Service (DPS)

7.2.3.1 Guidelines

The Planning Section maintains relationships with DPS throughout the year and during emergencies. The Planning Section provides updates on key restoration initiatives and plans to DPS, as conditions warrant. The Communications Organization oversees the DPS Hotline as detailed in Section 12.7.1. The Planning Section Chief coordinates with DPS in preparation for and during storm and other significant outage related emergencies as follows:

- Advising DPS Operations Section of PSEG Long Island's storm anticipation plans and/or status, as appropriate
- Maintaining communication with DPS staff, to provide on-going status updates and to promptly respond to requests for information

Concurrently, similar activities are coordinated with senior officials at LIPA.

7.2.3.2 4-Hour PSC Situation Report and Information Sharing with DPS[1]

The 4-Hour PSC Situation Report data sheet has been developed by the 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.

The main components of the 4-Hour PSC Situation Report include:

- Weather: Current and Forecasted
- Summary of Outages
- Synopsis - Brief bulleted summary of major damage experienced, significant events since last report including restoration progress, work plans for restoration, any additional impacts, anticipated challenges, etc.
- Estimated Time of Restorations
- Resource Summary Narrative: Bulleted summary of mobilization plan, resource movements, and resource request status as applicable
- Critical Facility and Life Support Equipment Customer Impacts
- Dry–Ice Distribution Activities
- Listing of critical facilities and LSE customers affected

[1] Submission of data is required by all New York utilities whenever NYS OEM activates the NYS EOC, or as requested by the DPS Staff.

During any type of event, outage data and crew assignment data are to be submitted, as requested by DPS staff (typically 7AM, 11AM, 3PM, and 7PM). Templates provided by DPS staff will be used to report information. The information is provided, via e-mail, during an event by the Situation Status Unit Staff. Concurrently, senior officials at LIPA are provided the information contained within the 4-Hour PSC Situation Report. A sample 4-Hour PSC Situation Report is provided in Appendix N.

In the event that quality issues with OMS or SAS reporting affect the ability to obtain Critical Facility and LSE Customer outage reports, the Planning Section Chief may make the decision to use AMI data as an alternative means of outage reporting. Reports for Critical Facility and LSE Customer outages are both available via AMI Command Center.

Crew assignment data includes a breakdown of Company and Foreign (non-Company) Line Crews, as well as Tree and Service Crews utilized for response efforts by the company and operating division.

In addition, PSEG Long Island, together with other New York utilities, participates in an automated process that provides outage information to the DPS staff every 30 minutes, via an automatic data file transfer, throughout the year, as conditions warrant.

7.3 Resource Coordination Unit

The Resource Coordination Unit oversees the coordination of incident resources and restoration assignments. The Unit is broken down into two distinct functional areas:

- Resource Assignment
  - Storm assignments
  - Workforce data
- Resource Coordination
  - Utilities
  - Damage assessment
  - Flood assessment
  - Make Safe To Clear

7.3.1 Resource Assignment

A key component of PSEG Long Island's ability to successfully implement its ERP 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. While many PSEG Long Island employees currently play a role in daily operations, functioning in traditional roles, others are shifted from their regular function to their storm assignment, functioning in non-traditional roles. 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 provided at various times during the year to key storm personnel with non-traditional restoration assignments. Exercises are utilized to practice storm assignments and reinforce what is taught in training. Please refer to Chapter 4 for more information on training, drills, and exercises.

PSEG Long Island's EP Department is responsible for administering and maintaining the readiness of personnel and tracking assignments through the company's emergency restoration assignment database, throughout the year. Upon hiring, all employees who are available for an emergency restoration assignment (non-traditional role individuals) are provided a storm restoration assignment; those who are available but are not immediately given a specific assignment, are placed in a "Manpower Pool", pending a permanent assignment. These assignments are determined by the employee's current functional skill set and PSEG Long Island's storm restoration needs. Where allowable, considerations are also given to the proximity of the assignment to the employees divisional work location or home. Efforts are also made to align roles to the skill sets of assigned personnel, when possible.

Employees or their direct supervisors are notified, via e-mail and/or telephone, of their assigned restoration roles. The EP Department makes certain that employees are aware of their emergency assignment, responsibilities, and corresponding assigned restoration location, along with any other information that is pertinent, such as scheduled training or exercises. These notifications can occur at any time, but are usually conducted just prior to annual refresher training and/or annual exercises. The EP Department also regularly verifies the required staffing levels for restoration efforts and adjusts workforce, as necessary.

Additionally, the EP Department sends out notifications to the appropriate restoration coordinator throughout the year, pertaining to storm restoration assignment changes and/or updates. The EP Department also confirms that storm restoration roles and staffing levels are, at a minimum, updated semi-annually, and maintained throughout the year.

The decisions made by PSEG Long Island's ICS Leadership Team based on Weather Assessment and Damage Predictions and Emergency Classifications and Activations (correspondingly described in Chapter 6 and Chapter 5, respectively) ultimately determine the activation levels and the corresponding personnel needs for each specific event.

7.3.2 Resource Coordination

This Unit is responsible for maintaining the status of all deployed resources (primary and support) assigned to an incident. Physical resources consist of personnel or teams available for assignment to, or employment during, incidents.

For effective management of their deployment, committed resources are categorized by capability and capacity across disciplines and tracked as to their current location and status.

Tactical resources at an incident can have one of three status conditions:

1) Available resources are personnel or teams that have been deployed to an incident, and are ready for a specific work detail or function
2) Assigned resources are personnel or teams that have checked in and are currently supporting incident operations
3) Out-of-service resources are personnel or teams that have been assigned to an incident, but are unable to function due to rest, or personal reasons; or because their condition makes them unusable

Resource status changes are provided by the various tactical elements to the Resource Coordination Unit so they may summarize the most up-to-date and accurate picture of resource utilization.

The Resource Coordination Unit makes certain that all assigned personnel have checked in at the incident.

7.4 Documentation Unit

The Documentation Unit oversees the collection and archiving of incident and/or event data in support of restoration operations. This Unit is responsible for consolidating and publishing status updates provided on the restoration calls by key internal and external stakeholders into a Storm Call Notes Report. Figure 7.2 shows the information gathering organizations and restoration topics discussed on the call. Please note that the size and severity of the storm will dictate which of the listed organizations will present on the call (e.g., Legal may only present if there is a liability concern). This report is subsequently forwarded, via e-mail, to a preset distribution list as a means of consistent information sharing.

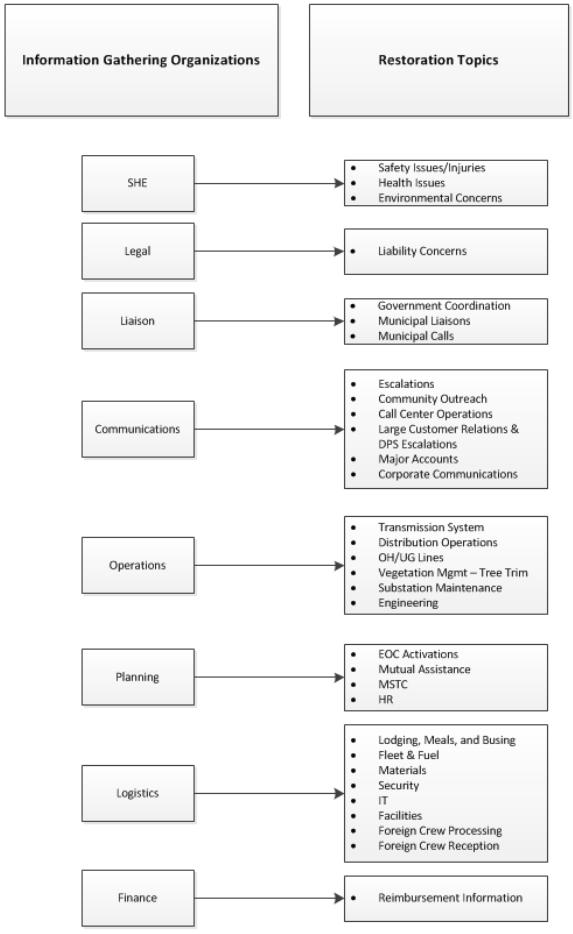


Figure 7.2 – Information Gathering and Restoration Topics

Additionally, the Documentation Unit distributes, collects, and retains pre-storm restoration checklists for severe restoration events that provide at least 72 hours of advanced warning. Restoration checklists have been developed for key restoration positions and include position-based action items and associated timeframes for completion. Pre-established checklists provide continuity between events and provide a position guideline when restoration assignments change. Checklists are distributed pre-storm, collected post-event, and stored so as to document that all necessary actions were executed.

7.5 Human Resources Unit

The Human Resources Unit oversees resource support initiatives relative to restoration personnel, including employee lodging, family assistance, and/or labor relations.

The Human Resources Unit is made up of three components:

- Labor and Employee Relations
  - The Labor and Employee Relations establishes and maintains on-going communications with Union Leadership. This component also coordinates labor related issues associated with restoration plans and/or conditions and safeguards that all 1049 contracted and other labor related requirements are properly followed.
- Employee Lodging Resource
  - This component coordinates employee lodging assistance, when conditions warrant accommodations (i.e., safety concerns and/or operational readiness). Employee Lodging Resource will work with the Logistics Section Lodging Unit to coordinate housing requests of PSEG Long Island employees, based upon availability and need.
- Employee and Family Assistance
  - This component coordinates employee and family assistance based upon event conditions and need. Coordination can include, but is not limited to, assistance with housing, transportation, and/or family support concerns. The component also coordinates employee and family assistance initiatives with external stakeholders and/or agency representatives, as needed.

7.6 Demobilization Unit

The Demobilization Unit oversees the coordination and dissemination of the demobilization plan(s) and/or requests with participating personnel and organizations. The Demobilization Unit reviews operational and resource data to determine potential size, extent, and timing of demobilization efforts and plans in accordance with these assessments. This Unit also works to coordinate with FCP on crew release times and plans, and also reviews and coordinates demobilization resource needs and requests with internal and external stakeholders.

At the conclusion of major restoration efforts, the shift from full activation to a reduced level of restoration is essential for an orderly transition of operations. The Distribution Survey and Operations Control Division Supervisors, T&D Crew Control Division Supervisors, and Substation Maintenance/Relay Protection Group Supervisors assess the need, within their geographic division, for the continued deployment of restoration crews. This assessment seeks to allow for the completion of permanent repairs, while maintaining a contingent of available resources to address any additional isolated outages.

This information is provided to the Operations Branch Directors to coordinate demobilization plans with the Planning Section Chief and Demobilization Unit Leader. They 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

Once the demobilization plan is approved, the Operations Branch Directors initiate the transition of staff to normal operations by informing the Distribution Survey and Operations Control Division Supervisors, T&D Crew Control Division Supervisors and Substation Maintenance/Relay Protection Group Supervisors in each of the operating divisions, as well as the Logistics Section, through normal communication channels (e.g., phone, e-mail). Internal resources are notified of demobilization by their respective restoration supervisors.

The Distribution Survey and Operations Control Division Supervisors, T&D Crew Control Division Supervisors, and Substation Maintenance/Relay Protection Group 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 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
- Directing the return of all restoration equipment 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 occurs once the defined storm role is complete. This is performed in coordination with the NAMAG, NRE, and/or appropriate collective bargaining agreements.

The Foreign Crew Branch Director is responsible for communicating a timetable for the orderly transition and release of restoration personnel and services. The Foreign Crew Branch Director will direct the Foreign Crew Processing Area to disseminate this information, via normal communication channels (e.g., phone, e-mail), to applicable crew guides, their associated foreign crew supervision, and the foreign crew resources home offices. 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

The deactivation of personnel during demobilization is event specific and dependent on resource requirements. Supervisors are responsible for the orderly and safe transition and release of restoration personnel and services.

IV. Event Response

8. PRIORITY MATRIX GUIDELINES

PSEG Long Island understands the challenges and potential disruption to its customers' lives that result from electrical outages, and strives to restore power to all customers in the quickest and safest manner possible. In support of this goal, PSEG Long Island utilizes a priority matrix system, during both normal and emergency operations, which provides for an efficient approach to restore electrical outages. Outages are prioritized using a variety of factors including, but not limited to, customer type (i.e., criticality of facility), number of customers affected, and outages involving emergency or safety conditions.

8.1 Prioritization Protocols

PSEG Long Island uses the following protocols to prioritize restoration efforts to assign work to qualified crews, regardless of normal or storm conditions. However, during storm conditions, and conditions where there are more outage restoration jobs than available crews, additional functions, crews, and thus prioritization protocols may be enacted. During normal working conditions, outage incidents are first analyzed by the grouping algorithms of the OMS and then reviewed by dispatch personnel. A determination is then 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) Eliminating unsafe and life-threatening conditions (e.g., wire down & burning). This may involve coordination with external parties to prioritize removal of downed electrical hazards to gain access "Right-of-Ways" (e.g., LIRR), or critical roadways (e.g., highways, county road, and other major thoroughfares, secondary and tertiary roadways).
2) Restoring PSEG Long Island Transmission and Substation facilities that have lost their source feed.
3) Restoring critical customers (special emphasis during storm conditions) as quickly and as reasonably possible.
4) Restoring distribution system lockouts.
5) Proceeding 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 in Figure 8.1. These classifications are designed to aid in achieving dispatch and restoration goals. Assigning jobs using the Outage Priority Matrix helps to maximize restoration effectiveness and minimize restoration time. Utilizing this Outage Priority Matrix, PSEG Long Island strives to restore the largest number of affected customers in the most timely and efficient manner.

For additional details, please refer to ERIP-OPS-033 – Assigning Transmission and Distribution Repair Incidents by Priority.

CODE	DESCRIPTION	EXPLANATION	NORMAL ASSIGNMENT
TLO	Transmission Lockout	Any fault on a locked out transmission circuit	Overhead Line Crews
LO ASU	Distribution Lockout (LO) or Automatic Sectionalizing Unit (ASU) Lockout	First fault on switchable 3-Phase primary main line locked out feeder (protected by the substation breaker or an ASU/ASUV)	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 or Automatic Circuit Reclosers (ACR/ACRV))	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
B	Line Fuse Blown or Check Line Fuse or Fuses Opened / Pending Survey Required	Used when outage pattern shows customers affected downstream side of fuse and not confined to a single secondary bus system with no reported wire down.	Electric Service Personnel, Overhead Line Crews, Foreign Utility Crews, or Contractor Primary Crews (some Two-Man Makeup Crews can refuse cutouts)
A	Secondary Down With Outage	Used when outage confined around secondary bus with a report of wire down (Note: If no outage, job is assigned a Follow Up No Outage priority)	Overhead Line Crews, Foreign Utility Crews, Contractor Primary Crews or Two-Person Makeup Crews
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, Overhead Line Crews, Foreign Utility Crews, Contractor Primary Crews, or Two-Person Makeup Crews
S S-WDPB	Single Single – Wire Down Pole-Building	Any individual customer affected and not associated with another customer or interruption.	Electric Service Personnel, Overhead Line Crews, Foreign Utility Crews, Contractor Primary Crews, Two-Person Makeup Crews or Contractor Low Voltage Crews

Figure 8.1 – Outage Priority Matrix

PSEG Long Island also places additional emphasis on critical facilities and other vital public health and safety locations. Critical facility customers, first responder organizations, and other vital sites, such as airports, hospitals, and water treatment plants are assigned the highest level of importance. As shown in Figure 8.2, PSEG Long Island adheres to the following Critical Facility Levels, in accordance with NYS DPS guidelines, when executing restoration operations.

CRITICAL FACILITY LEVELS

Critical Facility Level 1 - These facilities provide services critical to public health and safety:

- Hospitals and Emergency Medical Facilities
- Emergency Shelters and Cooling Centers
- Fire, Police, Paramedics, and Rescue Facilities
- Emergency Management Offices
- Water pumping stations and Wastewater treatment plants
- Critical Utility and Communications Facilities, including 911 Centers (PSAPs)
- Fuel Transfer and Fuel Loading Facilities (ports)
- Mass Transit (tunnels, electric drawbridges, ferry terminals, major rail facilities/rectifier stations)
- Airports
- Military Bases
- Critical Flood Control Structures

Critical Facility Level 2 - These facilities provide significant public services and may include some of the same type of facilities described in Level 1 depending on the event type, but are considered to some extent less critical by government agencies:

- Nursing Homes and Dialysis Centers
- Facilities to support other critical government functions
- Prisons and Correctional Facilities
- Communications (radio, TV, etc.)

Critical Facility Level 3 - These facilities provide some public services and may include some of the same type of facilities described in Level 2 depending on the event type, but are considered to some extent less critical by government agencies.

- Event Specific Concerns
- High-Rise Residential Buildings
- Customers providing key products and services (food warehouse)
- Managed Accounts, Large Employers, and Other Key Customers
- Other Government Buildings, Schools, and Colleges
- Residential developments with large elderly populations or other similarly vulnerable establishments, when requested by County OEM to be considered as a critical facility (for more information, see Section 14.7.2)

Figure 8.2 – Critical Facility Levels

8.2 Additional Prioritization Considerations

Outage Priority Matrix and Critical Facility Level protocols are consistent in both 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, PSEG Long Island's restoration efforts may assign crews to act in parallel to restore.

For more information on outage and non-outage wire down, damage assessment, and MSTC prioritization, please refer to Chapter 10.

9. ESTIMATED TIME OF RESTORATION (ETR) GUIDELINES

9.1 Purpose

ETRs are critical for customers, municipal officials, and emergency support personnel to be able to plan properly for the protection of people and property. ETRs are equally important to residential and commercial customers who have lost service so they can plan for their personal welfare. Our ETR protocols defined here and in ERIP-OPS-006 are aimed at providing the most timely development and communication of ETRs as possible. To be informative and useful, the ETRs must be timely, accurate, and made widely available. To that end, we strive to achieve these overarching objectives when providing ETRs during large scale weather event restoration.

We will strive to ensure that all ETR communication channels are synchronized from a timing and consistency perspective. In all cases the restoration ETRs will be harmonized with and follow the damage assessment and restoration type (circuit, incident etc.). While we strive to provide the most accurate ETRs at a given time we will resist changing ETRs multiple times during a large scale restoration.

9.2 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, area, and/or work assignment based on the conditions assessed on site, along with supporting historical data. ETRs can be critical in shaping all customers' (residential as well as Commercial/Industrial) initial actions to determine what alternative arrangements they need to make as a result of the outage. As such, it is important for the ETRs to be accurate in aligned with the PSEG Long Island Restoration modes & restoration actions. ETR determinations are ultimately constructed based on average restoration clear times (time to restore power for a specific equipment type), damage assessments, weather and field conditions, and manpower and equipment availability.

Consistent ETR information is readily available to our customers, stakeholders, and associated employees, and is distributed using an omni-channel approach (e.g., via phone, email, mobile app, and text notifications).

9.3 DPS Types of ETRs

Per NYS DPS Protocols, ETRs are segregated into three types: Global, Regional, and Local. These types allow PSEG Long Island to provide its customers with more accurate restoration estimates, based on the storm conditions and the corresponding restoration efforts. The types 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. This estimate should be applicable to at least 90% of the total customers out.
- Regional ETRs – Information is determined at a divisional level in OMS; Regional ETR information is also provided on a county basis via the Outage Map. These estimates should be applicable to at least 95% of the total customers out in the region.
    - NOTE: Due to jurisdictional boundaries and our divisional footprint, there might be some differences between ETR information between divisional and county levels
- Local ETRs – Information is determined at municipal, town, and/or an individual job basis. These estimates should be applicable to at least 95% of the total customers out in the town/village or an individual job/circuit.

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

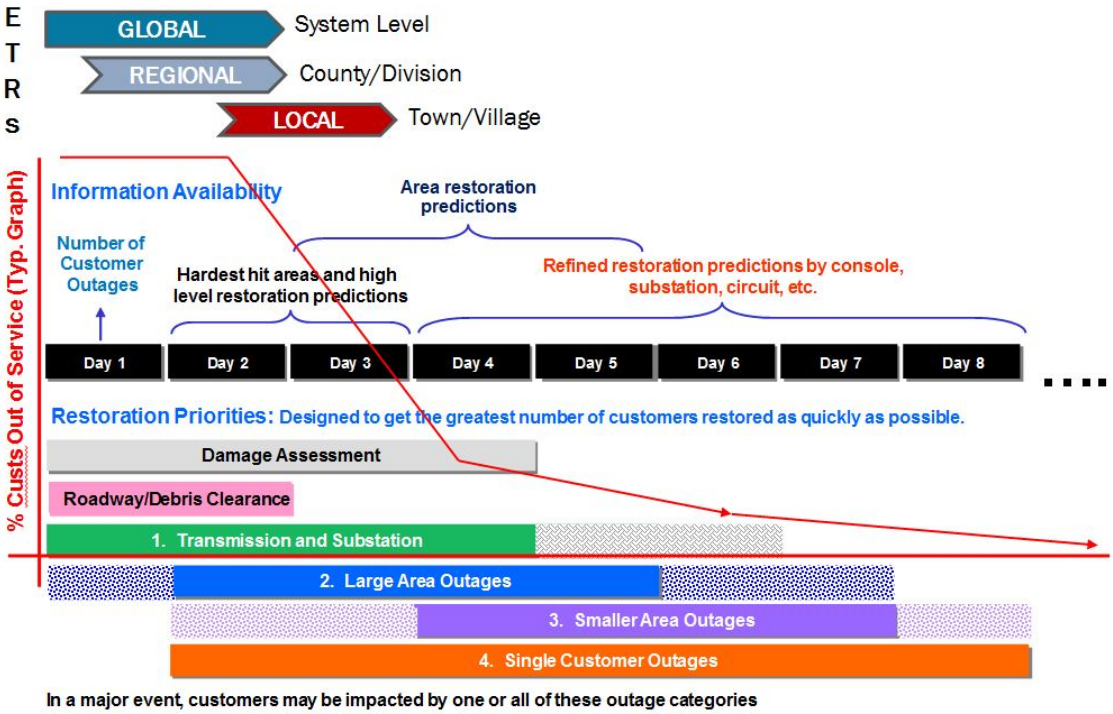


Figure 9.1 – Restoration Priorities, ETRs, and Predictions for Major Events

9.4 ETR Inputs

Initial 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 help to set customer expectations regarding the predicted outage duration at a system level. In any large-scale event, four vital pieces of information must be gathered for ETR purposes:

- Number of electric customers out of service
- Number of outage incidents
- Amount and type of damage to the T&D Electric system
- Resource availability (number of resources, specialty equipment, and timing of availability)

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

The ETR Strategy Team consists of both East and West Operations Branch Directors, ETR Manager, Planning Section Chief, and four Division Managers in Electric Service, who maintain constant communication with the Escalation Manager in Customer Service. This team will look at all available data in Class II and III storms, develop an ETR strategy, and provide it to all organizations in T&D Operations, Customer Service, and Corporate Communications. In addition, the ETR Manager will oversee ETR strategy throughout the event. The ETR Manager consults with the Strategy Team and Escalation Manager and provides guidance on ETR management, with their sole focus on monitoring ETRs and assuring the appropriate strategy is being implemented throughout the event. Please refer to ERIP-OPS-006.

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, which may include but not limited to:

- 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
  - Duration of event
  - Associated weather
  - Severity of damage
  - Types of damage experienced
  - Future weather patterns
- Resources
  - Crewing
  - Manpower availability
  - Average crew and manpower clear times
  - Travel and roadway conditions
  - Resource and asset availability

9.5 ETR Dissemination 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 estimate (or "assessing conditions" messaging), that is progressively refined throughout the restoration process.

Such ETRs are 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 (blue-sky day), minor storm, and major storm. Each condition requires a different strategy for creating customer messages and ETRs.

It may not be possible to provide an accurate estimate until a good cross-section of damage conditions are assessed and analyzed by field survey teams. During this period customers will receive an "Assessing Conditions" message. Automated ETRs may also need to be suppressed or manually adjusted to reflect this. 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 NICE IVR, CSR, text messaging and e-mail via Kubra Notifi, PSEG Long Island's website/mobile application MyPower Map and Municipal Portal, various paths of social media, media outlets, and press briefings. In addition, manual/automated outbound messaging may also be utilized. It is imperative that all outage information disseminated from these mediums is consistent.

PSEG Long Island's website outage section is another major source of ETR related information for customers and is updated within one hour of a press release with new information. The website presents outage data in the form of a map of the service territory, with icons displaying the number of outage jobs, counts of customers out of service, and the ETR, if available. Information on the outage map is refreshed every fifteen to thirty minutes with a timestamp displaying the date and time of the most recent update.

Please refer to Chapter 12, "Communication Protocols" for more information regarding coordination and dissemination of ETR communication and all pertinent customer information.

9.6 ETR Development Strategies

PSEG Long Island employs a variety of strategies pertaining to ETR administration, depending on the overall severity and impact of the storm. ETR strategies for PSEG Long Island align with our emergency classifications as described in Chapter 5 of this ERP. Each strategy utilizes different methods of ETR management, with the overall goal of more accurate ETRs and a better informed customer base.

Division ETR Coordinators and Primary Control Coordinators play a vital role during large-scale restoration efforts. These coordinators act as intermediaries between the ETR Strategy Team, Console Information Coordinators (CICs) and the Remote Dispatch Center personnel. Working under the direction of the ETR Manager, Division Manager and Operations Supervisor, the ETR Coordinator will assist with the oversight of the published ETRs. The ETR Coordinator will monitor incidents across dispatch areas in their respective division to review that the work plan is being maintained. The Division Primary Control Coordinator and the Mutual Assistance Coordinator will work in conjunction with above mentioned personnel, to prepare work packages and assign work for Dispatch Areas and OH/UG Lines Consoles, while coordinating escalated priority work into the daily schedule.

9.6.1 Class I “White” ETR Strategies

These strategies align with everyday practices and procedures employed by PSEG Long Island on a normal Class I “White” day. ETR strategy is managed within the division by the Division Operating Team (Division Manager, Operations Supervisor and Control Room Distribution System Operator). These protocols include:

1) Outage Management System (OMS)

   System generated ETRs are populated when the outage report is entered based on historical repair durations by device type, time of year, and time of day. For further information see ERIP-OPS-006.

2) Dispatch Operators

   ETRs are modified by dispatch personnel for non-mobile users and when field crews request ETR updates on their behalf. Dispatch operators can manually update ETRs when necessary. They will reach out to field personnel for current repair status when ETRs need to be updated.

3) Field Crew ETRs

ETRs will be confirmed or can be refined and updated by field personnel who have mobile data terminals, upon arrival on the jobsite, to provide more accurate estimates based on the conditions observed. On-site conditions and the work to be performed may alter the ETR and can be entered via mobile laptops.

9.6.2 Class II "Blue" ETR Strategies

These strategies employ similar tactics as Class I "White," but include additional actions due to the higher level of outages experienced under Class II "Blue" scenarios. The ETR Manager and the ETR Strategy Team are activated during Class II "Blue" and will utilize any of the processes below while establishing an overall ETR strategy.

1) Damage Assessment Messaging

During a Class II "Blue" outage, PSEG Long Island may elect to enable our "Assessing Conditions" messaging to begin the event. Customers will see the assessing conditions message until an ETR is applied to their outage. Customers will receive an ETR once the majority of the storm has passed and we know the extent of damage and outages.

2) Outage Management System (OMS) – Weather Multipliers

OMS supports the concept of a Weather Multiplier within its dispatching and ETR protocols. The Weather Multiplier function allows PSEG Long Island to adjust the original ETR calculations, based on the weather projected/experienced and crew availability. For example, lightning, rain, and winds will slow down restoration efforts, due to the safety concerns of our field personnel. A sudden influx of outage jobs may also delay restoration efforts, given the immediate demand for a given set of restoration resources (i.e., repair crews).

In turn, a Weather Multiplier may be initially utilized on all jobs while the weather conditions persist. Ultimately, the Weather Multiplier will extend all specified computer-generated ETRs (by specified Call Type configurable by OMS Administrator – Default is Outage and Emergency), based on the anticipated/experienced conditions and can be further adjusted, up or down, if conditions dictate. Multipliers may be applied from 1.5x up to 12x dependent on severity of storm.

3) Global ETR

When PSEGLI determines that a storm may last longer than 48 hours, a Global ETR will be calculated and communicated to the public. The Global ETR is calculated by the ETR Manager, the Situational Status Team, and the ETR Strategy Team. The Global ETR needs to be approved by the Incident Manager before it can be given to Corporate Communications. The Global ETR will be applied to all incidents that remain in an "assessing conditions" status, followed up by a press release to the public. Additionally, DPS and LIPA will be informed of the Global once it is approved and available. The Global ETR is calculated by using data such as:

-Total # of customers impacted (OMS data, AMI data or Load/Lock-out data)

-Total # of incidents

-Historical Storm Data

-Manpower Report (resources available)

4) Work Plan ETRs

The Division Manager/Operations Supervisor and OH/UG Lines Division Manager will make recommendations based on the conditions seen within their consoles and/or divisions to the ETR Strategy Team. Job priorities will be "bucketed" into different groups of work in order to apply Work Plan ETRs to incidents. The ETR Strategy team will determine how jobs will receive the Work Plan ETRs in the Outage Management System (manual by dedicated resources). Work Plan ETRs will be monitored and may be adjusted as needed.

5) Field Crew ETRs

ETRs will be confirmed or can be refined and updated by field personnel, once damage assessment is performed, to provide more accurate estimates based on the conditions observed. On-site conditions and the work to be performed may alter the ETR and can be entered via mobile laptops or via communications with dispatch personnel.

9.6.3 Class III "Red" ETR Strategies

These strategies employ the same tactics as Class II "Blue," but include additional actions due to the severe level of outages experienced in Class III "Red" scenarios. The ETR Manager and ETR Strategy Team will utilize the processes below while establishing an overall ETR strategy.

1) Damage Assessment Messaging

   During a Class III "Red" outage, PSEG Long Island will enable our "Assessing Conditions" messaging to begin the event. Customers will see the assessing conditions message until an ETR is applied to their outage. Customers will receive an ETR once the majority of the storm has passed and we know the extent of damage and outages.

2) Global ETR

   For Class III events, a Global ETR will be required. The Global ETR will be calculated and communicated to the public. The Global ETR is calculated by the ETR Manager, the Situational Status Team, and the ETR Strategy Team. The Global ETR needs to be approved by the Incident Manager before it can be given to Corporate Communications. The Global ETR will be applied to all incidents that remain in an "assessing conditions" status, followed up by a press release to the public. Additionally, DPS and LIPA will be informed of the Global once it is approved and available. The Global ETR is calculated by using data such as:

   -Total # of customers impacted (OMS data, AMI data or Load/Lock-out data)

   -Total # of incidents

   -Historical Storm Data

   -Manpower Report (resources available)

3) Work Plan ETRs

   The Division Manager/Operations Supervisor and OH/UG Lines Division Manager will make recommendations based on the conditions seen within their consoles and/or divisions to the ETR Strategy Team. During an event of this size, PSEGLI may elect to utilize circuit sweep restoration. This strategy adjusts our ETR Strategy to circuit based ETRs instead of job level ETRs. Circuit priorities will be "bucketed" into different groups of work in order to apply Work Plan ETRs to circuits. The ETR Strategy team will determine how circuits will receive the Work Plan ETRs in the Outage Management System (manual by dedicated resources).

4) Field Crew ETRs

   ETRs will be confirmed or can be refined and updated by field personnel, once damage assessment is performed, to provide more accurate estimates based on the conditions observed. On-site conditions and the work to be performed may alter the ETR and can be entered via mobile laptops or via communications with dispatch personnel.

5) Weather Multiplier ETRs

Towards the end of a major event, new outages may take longer than system generated ITRs, as a result the ETR Strategy Team may elect to use system generated weather multiplier ETRs for new incoming outages. This allows us to properly prioritize existing outages and still provide customers with an ETR on new outages.

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

PSEG Long Island works to continuously refine and communicate ETRs, as additional information becomes available throughout the restoration process. At a minimum, ETRs will be provided in accordance with DPS Case 13-E-0140, Estimated Time of Restoration Protocols (see Appendix I).

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
- Global ETRs (when provided) should be applicable to at least 90% of the affected customers in the reported level. Regional or Local ETRs (when provided) should be applicable to at least 95% of the affected customers in the reported level; publication of the Global ETR should cease, once Regional or Local ETRs are provided

ACTIONS REQUIRED BY UTILITY FOR OUTAGE EVENT EXPECTED TO LAST ≤ 48 HOURS
Within the first 6 hours of the restoration period
• Notify DPS Staff that the outage 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 outage events expected to last less than 24 hours, notification may be via the Department's information reporting system. • Provide available information to the public. Update customer representative, IVR systems and websites. • In certain situations, such as a nighttime outage 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 outage event, the determination of whether the restoration period will be less than 48 hours will be communicated to DPS Staff as soon as possible, but no later than noon the following day. Any delay in establishing the initial expectations will not affect the time requirements below.
Within the first 12 hours of the restoration period
• Provide DPS Staff and the public with any available regional/county ETRs and any available local/town or municipal ETRs. Update customer representatives, IVR systems, and websites. • Issue a press release that includes known ETRs for the next upcoming news cycle • Communicate with affected municipal and elected officials. This communication may or may not be by way of a municipal conference call.
Within the first 18 hours of the restoration period
• Provide DPS Staff and the public remaining regional/county ETRs. Update customer representatives, IVR systems, and websites. • Provide DPS Staff and the public with any additional local/town or municipal ETRs. Update customer representatives, IVR systems, and websites.
Within the first 24 hours of the restoration period
• Consider issuing a press release for the next upcoming news cycle based on conditions.
Reporting requirements during the outage event
• Provide restoration information updates four times daily to DPS Staff (7 am, 11 am, 3pm, and 7 pm) if requested by DPS Staff. Updates will continue until otherwise directed by DPS Staff. • Notify DPS Staff when all outage event related interruptions have been restored.

Figure 9.9 – DPS Guidelines for an Outage Event Expected to Last 48 Hours or Less*

ACTIONS REQUIRED BY UTILITY FOR OUTAGE EVENT EXPECTED TO LAST > 48 HOURS
Pre-event whenever sufficient notice of an impending weather event is available
• Make pre-event outbound calls to critical facilities customers, life support equipment customers, and special needs customers. • Complete pre-storm communications with outreach to employees, the news media, social media sites, blast emails and text messages to customers, and advisories to municipal and elected officials. • Consider having pre-event municipal conference calls based on the situation. An alternative municipal contact method may be used if it is more appropriate. Issue public statement and/or press releases.
Within the first 6 hours of the restoration period
• Notify DPS Staff that it will be a multi-day outage event lasting more than 48 hours. The notification to DPS Staff will state what the Company has defined as the start of the restoration period. • Provide a public statement and/or press releases indicating the likelihood of extended outages and make this information available via customer representatives, IVR systems, and websites. • In certain situations, such as nighttime outage 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 outage event, the determination of whether the restoration period will be greater than 48 hours will be communicated to DPS Staff as soon as possible, but no later than noon the following day. Any delay in establishing the initial expectations will not affect the time requirements below.
Within the first 12 hours of the restoration period
• Issue press releases based on the predetermined time periods defined in the emergency plan. • Communicate information such as system damage, outages, restoration status etc. with affected municipal and elected officials as appropriate. • Schedule the first post-storm municipal conference call(s), unless an alternative municipal contact method is more appropriate. The first scheduled municipal conference call does not necessarily have to be held within the first 12 hours but will be held within the first 24 hours. • Notify DPS Staff and the public of what areas sustained the most damage to the electric system and ETRs where known, on a county or regional basis.

Within the first 24 hours of the restoration period
• Complete the first scheduled municipal conference call. • Provide DPS Staff and the public with a global ETR, any available regional/county ETRs, and any available local/town or municipal ETRs. Update customer representatives, IVR systems, and websites. • Identify for DPS Staff and the public any heavily damaged areas where large numbers of customers may remain without service for more than a few days. If necessary, note that the situation is still unfolding, and more details will be provided as soon as they become available.
Within the first 48 hours of the restoration period
• Provide DPS Staff and the public remaining regional/county ETRs. Update customer representatives, IVR systems, and websites, eliminate all references to the global ETR. • Provide DPS Staff and the public with any additional local/town or municipal ETRs. Update customer representatives, IVR systems, and websites, eliminate all references to the global ETR.
Within the first 60 hours of the restoration period
• Provide DPS Staff and the public remaining local/town or municipality ETRs. Update customer representatives, IVR systems.
Reporting requirements during the outage event
• Provide restoration information updates four times daily to DPS Staff (7 am, 11 am, 3 pm, and 7 pm), unless directed otherwise. Updates will continue until otherwise directed by DPS Staff. • Notify DPS Staff when all outage event related interruptions have been restored.

Figure 9.10 – DPS Guidelines for an Event Expected to Last More Than 48 Hours

10. OPERATIONS PROTOCOLS

The overarching objective of the Operations Section is to manage all tactical operations associated with an incident, specifically the safe and efficient assessment of damage to the electric T&D infrastructure and restoration of electric service:

- The Operations Section is structured under two Branch Directors, geographically broken up into the T&D Operations West and East Branches (led by the West and East Distribution Operations Division Managers, respectively) to perform damage assessment, coordinate restoration activities, mobilize and manage the repair crews, and direct the overall repairs.
- The Operations Section works closely with the Planning Chief, the Incident Commander, and the rest of the General Staff in the development of the Restoration Plan for each operational period,
- The Operations Section's role is to execute the Restoration Plan.
- The next critical responsibility of the Operations Section is the prioritization of work assigned to restore power to the largest number of customers, as well as work to restore service to critical facilities and LSE customers as soon as possible. Restoration must be handled in the following order, when possible.
    i) Elimination of Unsafe Conditions (wires burning, wires down, road closures, etc.)
    ii) Transmission Circuits
    iii) Substations
    iv) Primary Distribution Lines and Branch Lines
    v) Secondary Distribution Lines and Services

This section of the ERP 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, which are intended to be scalable and flexible, may also be implemented during storms of intermediate intensity, such as a severe thunderstorm or strong windstorm, where significant localized damage has occurred.

The Operations section is comprised of the following organizations, along with their support staff and resources:

The T&D Operations West and East Branches perform the following actions:

- Coordinating restoration activities divisionally and at decentralized dispatch areas
- Surveying the distribution system for damage
- Managing the Foreign and Contractor Crews
- Repairing the electric T&D system

The Transmission Survey & Operations Control Group performs the following actions:

- Coordinating restoration activities centrally
- Surveying the transmission system for damage
- Staffing and monitoring of substations

The Line Clearance Group performs the following actions:

- Coordinating line clearance activities centrally
- Staffing the Contractor Line Clearance Crews

The responsibilities and supporting activities of Operations Section Branches, which significantly contribute to the overall restoration effort, are addressed in this section.

10.1 Overall Approach and General Strategies

During emergencies, the Operations Section is responsible for managing all tactical operations associated with an incident, specifically the safe and efficient assessment of damage to the electric T&D infrastructure and restoration of electric service. To accomplish this task, the Operations Section is structured into two branches, split geographically, with supporting staff. The T&D Operations West and East Branches perform damage assessment, coordinate restoration activities, mobilize and manage the repair crews, including PSEG Long Island, Contractor, and Foreign Utility Crews, and direct the overall repairs.

The activities of these branches occur at the Division Headquarters, and, depending on the level of decentralization for the particular event, at decentralized Dispatch Areas. The necessity to decentralize is dictated by the number of tactical resources required, and is greatly influenced by span of control considerations. A tiered restoration approach is the principle that guides how restoration is escalated, from divisional/console dispatch up to full delegation of configuration authority to decentralized dispatch areas. Please refer to Section 10.2.3 of the ERP for features on this approach.

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 and type 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 developed.

10.1.1 Damage Assessment/Survey Protocols

A key element of the Operations Section is damage assessment. This capability ranges from mobilizing select individuals to performing damage survey for minor events to mobilizing and staffing of a Divisional Operation Center's Survey Console during events where damage is widespread.

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. Sources of information for these can range from existing reports, SCADA scans, historical estimates to help provide the initial estimates of damage as the storm exits the LIPA service territory to provide guidance on preliminary resource (staffing and material) as well as form an initial guidance on the projected duration of restoration efforts. These estimates (along with estimated times of restoration) will be refined throughout the restoration process as additional information becomes available.

10.1.1.1 Initial Sources of Damage Information

Long Island Control Area (LICA) Report (electric demand to proxy high level outage counts)

When a major storm initially strikes, the first estimate of the number of customers affected is made from LICA, produced by the Critical National Infrastructure (CNI) Department. This report is used to compare the current level of electric demand on the system, on an hourly basis, with the forecasted demand, based on historical demand, at a similar time of year, and the current weather forecast during non-storm conditions. This is a best estimate of customers interrupted based on available data at the time. However, due to the lack of damage information, no highly reliable prediction of restoration duration can be made at that point.

Lockout Reports

Prior to the initial damage assessment being conducted, the “Lockout Coordination Center” is mobilized. This group, contained within the Planning Section, 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, based solely on distribution circuit lockouts and loss of supply.

Employing worksheets 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, the predictions can be revised.

Historical storm estimates

Two algorithms 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 a calculation 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.

AMI Storm Outage Report

Additionally, by obtaining the AMI Storm Outage Report from the Strategic Utility Technology Measurement Systems Group, the total number of AMI meters out system wide can be utilized to estimate and validate the impact of the storm, as well as support the establishment of the initial Global ETR.

10.1.1.2 Field Damage Assessment Survey Protocols

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 and to generate a preliminary prediction of global restoration duration. A prerequisite for this action is a completed Lockout Report, obtained via SCADA from the Lockout Coordination Center.

The T&D Operations Branch Directors 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 T&D Operations Branches are tasked with performing damage assessment from the four operating divisions (*Divisional Survey*). These Damage Assessment teams are mobilized, deployed, and dispatched to known incidents within the OMS. They are directed to record and report their findings, in a manner that allows for the development of work packages and ETRs.

As part of the ERP, Divisional Survey personnel are managed through a centralized Division Survey Console, which is staffed with coordination and dispatching personnel. Divisional Survey personnel are pre-identified and trained to conduct widespread damage assessments. Staffing plans are developed to address anticipated needs, through the execution of pre-existing contracts and mutual assistance requests. A list of external contractors is noted within Appendix R for securing additional Divisional Survey personnel.

The survey (damage assessment) involves “two-person” teams physically inspecting, either by car or on foot, the reported overhead primary and secondary damage locations associated with each locked out circuit. This makes certain that 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.

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

Damage assessment may be an on-going process through out the storm. The following outlines the initial damage assessment surveys needed to help PSEG Long Island establish the high level information needed to allocate restoration resources and generate the initial estimate of restoration times (e.g. global / regional). Further damage assessment efforts may be needed to ascertain more detailed resource requirements to fully restore power to affected customers. This incremental approach allows PSEG Long Island to triage areas and appropriately target restoration forces to make the most impact in the shortest time.

Within 24 hours of the start of restoration, for Class III, “Red”, events, PSEG Long Island targets to survey as part of a preliminary assessment at a minimum:

1) 75% of all locked out OH transmission circuits causing a loss of supply
2) 30% of the 3-Phase mainline and unfused branch line of all locked out OH 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 facilities 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, lockout algorithm, AMI data). This initial assessment is implemented to support the establishment of initial global ETRs. It should be noted that these percentages represent the minimum thresholds needed to achieve dependable situational awareness on the extent of damage, and, based on the severity and scale of damage, are highly variable.

Within 48 hours of the start of restoration, for Class III, “Red”, events, PSEG Long Island will provide additional damage assessment. PSEG Long Island targets to survey at a minimum:

1) 100% of all locked out OH transmission circuits causing a loss of supply
2) 75% of all locked out OH transmission circuits not causing a loss of supply
3) 100% of the 3-Phase mainline and unfused branch line of all locked out OH distribution circuits
4) 30% of the reported OH fused branch line incidents 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 to calculate the most accurate ETRs. This comprehensive assessment is implemented to further support decision making in resource acquisition and deployment.

Within 72 hours of the start of restoration, for Class III, "Red", events, PSEG Long Island targets to survey:

1) 100% of all locked out OH transmission circuits not causing a loss of supply
2) 100% of the 3-Phase mainline and unfused branch line of all locked out OH distribution circuits

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

The following Damage Assessment resource matrix (see Figure 10.1) was developed as a baseline of resources needed to perform damage assessment during restoration events. The matrix reflects PSEG Long Island's baseline complement of resources available to perform transmission and distribution survey during different storm classifications.

	Class I – White	Class II – Blue	Class III – Red
PSEG Long Island Damage Assessment Resources	None	Transmission: 2-40 FTEs Distribution: 2-120 FTEs	Transmission: 40+ FTEs Distribution: 120+ FTEs*

Figure 10.1 – Damage Assessment Resource Matrix

*In instances where it is determined additional Damage Assessors are required, PSEG Long Island would secure additional contractor/mutual assistance resources that would supplement internal resources assigned to Survey activities.

In the event external contractors are needed for damage assessment duties, resources are contacted by the Distribution Damage Assessment Strike Team Leaders. Depending on the impact of the storm, PSEG Long Island may contract for these additional damage assessment resources.

10.1.2 Restoration Protocols

After a major event, PSEG Long Island utilizes a parallel restoration process to assess damage and restore power that follow an industry best practice. Restoration protocols are designed to safely restore power to the largest number of customers, in the shortest amount of time. To that end, temporary repairs will be made during the restoration processes where practical to restore power first before making permanent repairs. PSEG Long Island's first priority is the safety of both the public and the crews making repairs and restoring power. This can mean that sometimes a storm must pass before damage assessment personnel and repair crews can be released to the field, to begin to assess and repair damage. Field damage assessments and repairs may commence when:

1) Field personnel can 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 decision to commence restoration is made locally by either the T&D Operations West or East Branch Director and Incident Commander to approve. This is termed as the "start of restoration" and, at the discretion of leadership, may be delayed to coincide with the beginning of daylight hours, if practical, to maximize safety and efficiency.

The "start of response" is defined as the time resources can be deployed safely to the field, i.e., make safe crews. PSEG Long Island is now required to inform the DPS Director of the Office of Resilience, Utility Security, Nuclear Affairs, and Emergency Preparedness (OREP) or Designee of the specific date and time of the start of response (Make Safe crews are sent out into the field) and, if different, the start of restoration, immediately after either begins. This information will be provided by the Operations Section, to the Planning Section Chief, who will inform LIPA and DPS.

The order in which repairs are made is aligned with the path that electricity flows from the power plants to the customer. PSEG Long Island crews begin with transmission and distribution circuits that affect large numbers of customers. Repair crews then restore primary branch-line distribution lines that can affect multiple customers, continuing 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 focuses restoration efforts 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. While efforts are made to provide prioritized restoration to Critical Facilities, it is not always possible to restore such customers on a prioritized basis. In addition, customers designated with LSE status do not imply priority restoration after a storm. However, when the end of restoration is nearing 100% and outage numbers are low, with all things being equal, consideration is given, when practical, to restoration of outages with LSE customers over those outages without LSE customers.

As such, PSEG Long Island also implements specific outreach programs to alert LSE customers 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 LSE customers. They include 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. For more details on this process, refer to Chapter 12 – Communications Protocols.

PSEG Long Island crews are initially assigned to high priority transmission work, while Foreign Crews are just arriving or still in transit. During such periods, divisions continue to perform damage assessment. Once Foreign Crews become available, they are allocated either directly to divisions or to decentralized dispatch areas.

Overall, at both the division and dispatch area levels during emergencies, all work for restoring electrical service on the T&D system is assigned, 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. Wires are cleared so that service can be restored up to the break. Special crews consisting of non-line personnel may be established to respond to municipal reports of downed wires, as required and as possible.

Response to emergency calls is prioritized based on the severity of risk for areas such as schools, playgrounds, and high pedestrian traffic areas, providing response as soon as possible. Please refer to Section 10.1.3 of the ERP for features on this activity.

Additionally, at the initial stages of the restoration process, PSEG Long Island crews may be directly assigned to municipalities to work with their DPW crews to "make safe" downed wires, so that trees and other debris may be removed from major roadways by municipal crews. Please refer to Section 10.1.4 of the ERP for features on this activity.

Transmission Circuits

Transmission line restoration is prioritized by the Transmission Survey and Operations Control Group Supervisor. Damage assessment and repair of transmission lines are directed by the designated Division Supervisor. Support personnel are assigned 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 Distribution Control Center, determines the need for bulk power circuits.

Substations

Substation repairs are directed by the Substation Maintenance/Relay Protection Group Supervisor, who consults with the Chief Transmission System Operator and the Division Distribution 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 (i.e., switches). Damages are then repaired, restoring the 3-Phase primary distribution circuits.

Repair crews then begin restoration of the 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. Depending on the extent of damage, this may entail the repair crew returning the following day to complete repairs. 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 and, depending on the extent of damage, may entail the repair crew returning the following day to complete repairs. 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 customer owned equipment requires repair to restore the customer's service, the repair crew will notify the customer and, if possible, restore the service wires by making temporary repairs, provided that the customer has authorized such via a temporary service agreement.

Critical Facilities

Where possible, priority for electric service restoration is provided 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. Customers are reminded that their LSE designation is not regarded or considered as a restoration priority. Service will be restored as quickly and safely as possible, following normal prioritization, safety guidelines, and the practicality of being able to restore.

Permanent Repairs

In addition to eliminating unsafe conditions, the initial focus of restoration is to get the power back on, and then return to make permanent repairs, where necessary. 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 the locations of temporary repairs is maintained within the OMS during the restoration process.

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 and includes plans to promptly address downed wires that are reported by municipal emergency officials within 18 hours of notification of the location of such downed wires for events up to 5-days, and within 36 hours of notification for events greater than 5-days, as specified in Case 13-E-0140.

PSEG Long Island complies with PSL Section 66(21)(a)(xi) which requires PSEG Long Island to have:

> "plans to prioritize the securing of downed wires over routine maintenance or other work unrelated to a response to an emergency event after notification by an individual of the location of such downed wires and where such notification includes information indicating wire burning, arcing/sparking, or the restriction of ingress and egress from a building or vehicle, or other immediate hazards. Such plans shall, at minimum, include procedures to identify, locate, and assess the reported wire no later than seventy-two hours after the response to an emergency event ends."

Response to down wires involves the dispatch of trained and qualified employees or contractors to investigate reports of downed wires, make safe, fix, or, if needed, arrange for standby personnel to protect the public.

The following Wire Watch resource matrix (see Figure 10.2) was developed as a baseline of resources needed to respond to Wire Watch situations during restoration events. The matrix reflects PSEG Long Island's baseline compliment of resources available to perform Wire Watch activities during different storm classifications.

	Class I – White	Class II – Blue	Class III – Red
PSEG Long Island Wire Watch Resources	None	1-20 FTEs	20+ FTEs*

Figure 10.2 – Wire Watch Resource Matrix

*In instances where it is determined additional Wire Watch resources are required, PSEG Long Island would secure additional contractor/mutual assistance resources that would supplement internal resources assigned to Wire Watch activities.

In the event external contractors are needed for wire watching duties, resources are contacted by the Distribution Damage Assessment Strike Team Leaders, in conjunction with the Government Funds Compliance Group.

Non-outage emergency call 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
- WIRE DOWN – BLOCKING ROAD

Qualified individuals are dispatched to reported wire down locations to determine whether the incident involves PSEG Long Island equipment (i.e., is not facilities owned by Cable or TelCo). 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 Watcher 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, applying caution tape or, 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. At no time, shall any conductors be moved by Survey Teams or Wire Watchers.

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.

Response to downed wires is under the direction of the T&D Operations Branch Directors, for performing the initial investigation, and for clearing the hazard. Dispatchers within the Distribution Survey and Operations Control Divisions and T&D Crew Control Divisions will prioritize and sort reports for assignment. Dispatchers will determine the appropriate resources to be assigned to both evaluate and guard downed wires or make the incident safe.

When assigning/dispatching and responding/assessing wire down reports, the Wire Down Priority and Severity levels, as specified in Case 13-E-0550 and PSL 66(21)(a)(xi), are utilized as a guideline. Reports of downed wires with the highest risk to public safety, based on comments received, are assigned higher priority.

In addition to performing damage assessment, Divisional Survey teams also respond to non-outage emergency jobs during restoration activations at the division 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 (e.g., telephone, cable, etc.), or request a Wire Watcher to stand by lower priority downed wires, thereby enabling them to continue performing damage assessment, and allowing repair crews to focus on higher priority work. PSEG Long Island strives to relieve divisional Survey teams, who are standing by hazardous situations, with a Wire Watcher, within eight hours from the time relief was requested.

Damage assessment and/or repair personnel are then dispatched from the division or dispatch area, through 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. If necessary, the responder will either:

- Make the situation safe, so that wire is not a risk to the general public in the area
- 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 individuals are trapped by a downed wire, will result in the immediate dispatch of an Electric Serviceperson or Overhead Line Crew to the incident. Remaining wire down reports are then assigned to damage assessment and/or repair personnel, according to the wire down priority, as referenced below (highest to lowest):

Priority:

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

Priority 1B – Wire down reports, where it is indicated that the wire is causing a road closure resulting in no ingress or egress

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, OEM (including EOC personnel), and municipal emergency managers.

Blocked road incidents can be put in through OMS including multiple options for wire sparking, wire down, wire low, or wire blocking the road. Escalated incidents are put in the Municipal Portal by the municipalities or by various groups in the Communication, Escalation, and Liaison organizations in order to provide greater visibility and a higher priority. These incidents are reported directly from a municipal official, public works supervisor, or PSEG Long Island employee to confirm field conditions are already verified. Emergency jobs with the six clue codes from the Municipal Portal are routed and assigned to dedicated crews who are reserved for these escalated incidents exclusively.

Field conditions that involve road closure with no ingress or egress are clearly indicated with descriptive notes and may be assigned "escalation tags" within OMS to provide an even more heightened priority to Operations. For further details of the escalation process, please refer to Appendix T in Sub Section “External Interface – Municipal Portal,” Section 12.8, “Municipal Portal,” and Section 12.10, “Escalation Coordination.”

Damage assessment and/or repair personnel 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 damage assessment and/or repair personnel to remain on-site and guard the wire until they can be relieved by a Wire Watcher or 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. Damage assessment and/or repair personnel will barricade/tape off the area to clearly distinguish the hazardous area and attempt to notify nearby customers. These situations will also require damage assessment and/or repair personnel to remain on-site until relieved by a Wire Watcher or the conductor can be verified de-energized by a qualified employee or contractor. Once the wire is known to be de-energized, the damage assessment and/or repair personnel can then move on to their next location.

Severity 3 – Wire down is a secondary conductor. Damage assessment and/or repair personnel will attempt to notify nearby customers and will barricade/tape off the area to clearly distinguish the hazardous area. If the wire is either open wire secondary or triplex service cable that has an exposed end (wire is broken), damage assessment and/or repair personnel will remain on-site until relieved by a Wire Watcher or 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, damage assessment and/or repair personnel will inform their coordinator of this, and move on to the next order. Their coordinator may then provide this information to the appropriate company or liaison for communication to the responsible company.

The Division Distribution Damage Assessment Coordinators, within the Distribution Survey and Operations Control Division, assign Wire Watcher personnel to replace Divisional Survey Teams, when appropriate, so that these Survey Teams are able to proceed to their next assignment. The Division Distribution Damage Assessment Coordinators also keep track of where Wire Watchers are standing by, and will provide relief, as needed.

All personnel called upon to standby downed wires are trained in these Wire Down Protocols. Qualified personnel working with energized conductors in making the area safe or completing service restoration will also have received proper 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 large-scale weather events, the number of internal resources that are trained and readily available is limited, and the demand could greatly exceed those available. In these situations, PSEG Long Island anticipates the need for significantly more wire watch personnel, depending on the impact of the storm, and may contract for additional wire watch resources. 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.

For additional details, please refer to ERIP-OPS-011 – *Wire Down and Wire Watcher Protocols*.

10.1.4 Make Safe to Clear (MSTC) Protocols

PSEG Long Island recognizes the importance of clearing emergency evacuation routes and main thoroughfares, after major storm events. MSTC protocols concentrate on efforts to clear critical roadways by de-energizing and/or removing downed electrical wires that may be blocking roads or entangled in downed trees or roadway debris.

MSTC protocols are activated under a storm event where municipalities and/or emergency first responder organizations request PSEG Long Island assistance in clearing municipal roads blocked with debris and potential electric hazards.

In anticipation of a large-scale event and/or other system emergency affecting the electric system, the Incident Commander, in conjunction with the Operations Branch Directors (East & West) and the Make Safe to Clear Group Supervisor, will activate the MSTC Unit and these protocols, as required, in support of restoration needs and emergency conditions. The Make Safe to Clear Group Supervisor oversees all MSTC plans and protocols including pre-event municipal outreach, activation, response activities and event coordination.

In anticipation of a potential large scale weather event, the Make Safe to Clear Group supervisor will conduct outreach to their municipal contacts (e.g., Department of Public Work (DPW) officials, and OEMs) to review plans and anticipated weather conditions and impact.

Once the event and/or major storm has passed, the Make Safe to Clear Group Supervisor will conduct additional outreach to understand the current need and conditions faced by municipalities, as it pertains to road closures due to electrical hazards. The Make Safe to Clear Group Supervisor will then discuss the information received from the municipalities, along with incidents already received via traditional channels with the Operations Branch Directors and Division Managers to review and finalize an agreed upon MSTC strategy. The strategy for dispatching and responding to MSTC incidents includes two options and/or a hybrid of both.

1) Direct Dispatch – MSTC crews are held in a “bullpen” in anticipation of receiving MSTC incidents during the event. MSTC crews are then assigned and dispatched on MSTC jobs from the Road Debris Clearing (RDC) OMS referral group, according to the priority and receive date/time.
2) Dedicated – MSTC crews are assigned directly to the municipalities and are embedded with DPW crews for an assigned territory. MSTC crews will work directly with DPW crews until all valid MSTC conditions have been resolved for the territory. MSTC crews will reconcile all DPW work with jobs in OMS and provide status updates.

The decision to dedicate MSTC crews to municipalities will be reviewed based upon crew quantities, storm conditions and subsequent damage experienced by the requesting municipalities. MSTC incidents will be dispatched in the "direct dispatch", a "dedicated" fashion, and/or a hybrid fashion, based upon event conditions and the needs of municipalities. The Make Safe to Clear Group Supervisor will remain engaged with both the municipalities and PSEG Long Island Operational Leadership (i.e., Branch Directors and Division Managers) on MSTC efforts and associated restoration strategies.

When dedicated MSTC crews are utilized, the MSTC Group Supervisor will conduct daily outreach to requesting municipalities to manage expectations and deployment plans with municipal DPW supervision to provide for the proper utilization of MSTC resources. PSEG Long Island MSTC crews work cooperatively with the respective municipality's DPW crews to "make safe" downed wires, so that trees and other debris that are blocking major roads may be safely cleared by the DPW crews. MSTC crews are comprised of trained, PSEG Long Island Underground linemen that typically work in three man crews. MSTC crews have the proper skill sets to cut, clear, and/or de-energize downed wires, so that municipal DPW crews can then safely remove downed trees and other debris from the roadways. By doing this, the DPW crews can re-open key arteries that have become impassible during the storm event. PSEG Long Island MSTC crews have the proper tools to test and remove downed electrical cables, but are not equipped to perform debris removal, which remains the responsibility of the requesting municipality. In certain circumstances, MSTC crews will work with internal Line Clearance crews (i.e., vegetation management) on conditions where electrical hazards and vegetation damage intersect (i.e., downed tree caught in primary). Responding MSTC crews will ultimately assess the incident damage and coordinate response efforts to safely and expeditiously open assigned roadways.

MSTC crews will not engage in activities related to the clearing of secondary roads, individual properties, etc., and it is envisioned that MSTC crews will only be assigned to work with the municipalities to clear blocked priority roadways for at most a 48 to 72 hour period, immediately following the storm. Once it has been determined that dedicated MSTC crews are no longer necessary within a municipality, MSTC Crews will return to the bullpen and dispatch on MSTC incidents as they are received via the RDC referral group. As resources are limited, MSTC crews may also be re-deployed to assist other restoration organizations, in accordance with the severity of damage experienced by the various requesting entities, and the resources available for deployment.

As previously discussed in Section 10.1.3 – Wire Down Protocols, to address efforts related to "wire down"/ "make safe" issues not covered by these assigned resources, PSEG Long Island has a parallel process in place whereby resources are dispatched through its operating divisions across Long Island, in response to requests received for such assistance. In these cases, resources are dispatched on a job-by-job basis, in direct response to the trouble calls received.

During large-scale weather events, the number of internal resources that are trained and readily available is limited, and the demand could greatly exceed those available. In these situations, PSEG Long Island anticipates the need for additional personnel to perform MSTC activities. Depending on the impact of the storm, PSEG Long Island may contract for additional MSTC resources, or may reassign other available internal resources to support MSTC activities and backfill their roles with additional contractor support. Therefore, it is critical to address blocked roadways, in the priority outlined in this protocol, and to efficiently utilize the available MSTC crews.

The following MSTC resource matrix (see Figure 10.3) is utilized as a baseline of resources identified to respond to MSTC conditions during restoration events. The matrix reflects PSEG Long Island's baseline compliment of underground resources available to perform MSTC activities during different storm classifications.

	Class I – White	Class II – Blue	Class III – Red
PSEG Long Island Underground Resources (MSTC)	None	0-40 FTEs	40-100 FTEs*

Figure 10.3 – Make Safe to Clear (MSTC) Resource Matrix

*In instances where it is determined additional MSTC resources are required, PSEG Long Island would secure additional contractor/mutual assistance resources that would supplement internal resources assigned to MSTC activities.

10.1.4.1 Make Safe to Clear (MSTC) Dispatch Strategy

PSEG Long Island receives many requests for assistance at wire down locations affecting blocked roads during restoration events. With that, PSEG Long Island strives to dispatch verified MSTC incidents based upon priority, conditions on the scene and the origin of the request. PSEG Long Island aims to dispatch MSTC incidents out of the Road Debris Clearance (RDC) OMS referral group in the following order:

1) MSTC incidents indicating a road closure with no ingress or egress
2) Escalated MSTC incidents (i.e., escalation received from OEM officials, municipality and/or tagged with a MSTC escalation tag)
3) Municipal Portal requests
4) Municipally reported incidents with “blocking road” comments (non-Municipal Portal)
5) Customer reported incidents with “blocking road” comments that have been verified by a survey team ensuring MSTC conditions have been met
6) Jobs directly routed to the RDC referral group by the Router/Gater based upon the comments and identifiers within the incident report. These incidents have not been surveyed, but reflect details that support a MSTC dispatch.

10.1.4.2 Make Safe to Clear (MSTC) County Prioritization Plan

During large-scale restoration events with many potential MSTC locations, PSEG Long Island may coordinate with State and County OEM representatives on a prioritization plan for pending MSTC incidents to maintain an effective and agreed upon use of MSTC crews. State and County EOC personnel can assist with identifying critical roadways in most need of attention, including the identification of blocked primary, secondary and local roads needing PSEG Long Island assistance to reopen. Having EOC personnel assist with priorities also alleviates multiple requests received from various towns, villages and municipalities requesting MSTC assistance, while supporting a fair and agreed upon mechanism for clearing critical roadways.

PSEG Long Island Emergency Preparedness Staff will coordinate MSTC priority plans with State and County EOC personnel, in conjunction with the MSTC Group Supervisor and/or MSTC Assistant Group Supervisors. Emergency Preparedness Staff may also coordinate MSTC prioritization plans with PSEG Long Island EOC Liaisons when activated and/or conditions warrant. The agreed upon MSTC prioritization plan will be utilized for the next day’s work plans and dispatch strategy for assigned MSTC crews. MSTC prioritization plans will remain in effect until dispatch levels return to normal conditions and/or until all critical roadways have been cleared of electrical hazards.

County prioritization plans will be coordinated based upon MSTC restoration plans, event conditions and the needs of State/County OEM.

10.1.4.3 Road Clearing Task Force

To improve restoration efforts surrounding road clearing efforts during large scale events PSEG Long Island has established a formalized 'Road Clearing Task Force' and supporting processes to improve response plans and allow participants to better coordinate and expedite road clearing activities during restoration events. PSEG Long Island has created County specific plans supporting the 'Road Clearing Task Force' initiative in conjunction with County OEM and DPW leadership. Road Clearing Task Force plans include hosting a daily call among participants to discuss MSTC efforts, coordination plans, escalations, etc. The 'Road Clearing Task Force' calls will be established at the request of County OEM or PSEG Long Island and should be hosted in anticipation of major event and/or during response operations, if conditions are warranted. The 'Road Clearing Task Force' plan/calls include the following details:

Road Clearing Task Force Participants to include, but are not limited to:

- PSEG Long Island
- Nassau or Suffolk County OEM
- County Department of Public Works (DPW)
- County Police Department
- NYS Division of Homeland Security & Emergency Services (DHSES)
- NYS Department of Public Service (DPS)
- NYS Department of Transportation (DOT)
- Verizon
- Altice

Objectives for 'Road Clearing Task Force' members include, but are not limited to:

- Improve coordination among first responder agencies and utilities
- Reduce redundancy of efforts and multiple calls regarding the same issue
- Enhance abilities to expedite critical road clearance issues with responsible parties
- Improve response times surrounding overall road clearing efforts
- Develop daily communications mechanism (i.e., daily phone call) to improve information sharing among participants, during events

- Plans and Procedures for 'Road Clearing Task Force' include, but are not limited to:
- Activate 'Road Clearing Task Force' in anticipation/response to a large scale storm event
    - PSEG Long Island & County OEM
- Establish daily call schedule and distribute call-in information to members
    - PSEG Long Island to set up and distribute meeting invite
    - A pre-event call will be established based upon event timing
    - Event calls will be established at the request of County OEM, based upon event conditions and needs
- Task Force Daily Call Agenda
    - Weather Conditions and Storm Effects
    - PSEG Long Island - MSTC Resource Levels and Response Plans
    - PSEG Long Island - Daily Progress and Status
    - County DPW/OEM Update
    - NYS DOT/DPS/OEM Update (if applicable)
    - Partner Utilities Update (if applicable)
    - Critical Escalations and/or Concerns
    - Next day work plans
- Task Force Plans
    - Task Force members will participate in a once daily, check in call, when activated
    - Task Force members will work within their own organizations to coordinate and assist with the clearing of blocked roadways
    - Task Force members will share information and data relative to road clearing efforts to assist and expedite the overall process
        - MSTC crew mobilization and deployment plans (PSEG Long Island)
        - Reported blocked roadway locations and/or jobs (PSEG Long Island)
        - Blocked roadway locations and/or lists (State DOT and County DPW)
        - Closed reports, but needs another utility (PSEG Long Island, VZ, Altice)
    - Task Force members will work together to expedite and coordinate escalations and/or other critical blocked roadways
    - The Task Force will assist with the prioritization of roadways and subsequent roadway clearing efforts during large scale events with substantial numbers of blocked roadways and/or limited MSTC resources

PSEG Long Island worked with both Nassau and Suffolk OEM on agreed upon 'Road Clearing Task Force' process plans. In New York City, PSEG Long Island participates in NYC OEM's 'Down Tree Task Force' that has similar goals and plans as the 'Road Clearing Task Force'.

For additional details, please refer to ERIP-OPS-017 – *Make Safe to Clear Protocols During Restoration Events*.

10.2 System Headquarters Processes

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 Class III "Red". Once Class III "Red" has been declared, the PSEG Long Island T&D Operations VP, assuming the role of Incident Commander, is responsible for command and control. The Incident Commander sets the incident objectives, strategies, and priorities, and has overall responsibility for the incident.

Simultaneously, the Division Managers, Electric West and East assume the roles of T&D Operations West and East Branch Directors, respectively. The T&D Operations Branch Directors establish the tactics to achieve the incident objectives and directs all operational resources. The Transmission Operations Manager assumes the role of Transmission Survey & Operations Control Group Supervisor, and the Vegetation Management Manager assumes the role of Line Clearance Group Supervisor. Both the Branch Directors and the Group Supervisors implement the operational tactics necessary to achieve the incident objectives.

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 SHE Officer, the Legal Officer, the Liaison Officer, and the PIO. The Incident Commander may also activate other roles 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. An automated roster callout system is utilized, via phone call or mobile app, for notification and callout of certain emergency restoration roles (primary, secondary, etc.), allowing PSEG Long Island to communicate expediently with employees.

The Incident Commander is also responsible for notifying the General Staff segment of the restoration organization, including the Planning Section Chief, Logistics Section Chief, Finance/Administration Section Chief, and the two T&D Operations Branch Directors. Upon notification, the General Staff Section Chiefs and Branch Directors subsequently notify and mobilize the personnel from their respective sections, and direct them to initiate their emergency restoration callouts.

Consequently, the T&D Operations Branch Directors make notification to the Line Clearance and Transmission Survey and Operations Control Group Supervisors. Upon notification, these elements subsequently notify and mobilize the personnel from their respective branches, groups, and areas, and direct them to initiate their emergency restoration callouts.

The T&D Operations Branch Directors also have responsibility for making notifications to the T&D Operations Branch portions of the restoration organization in their respective geographic territories. The Distribution 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 of the distribution system, commensurate with the size, scale, and complexity of the emergency. The T&D 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.

The Transmission Survey and Operations Control Group Supervisor (Transmission System Operations Manager) is responsible for making notifications to, and mobilizing personnel required for survey and operations control of, the transmission system, commensurate with the size, scale, and complexity of the emergency.

The Line Clearance Group Supervisor (Vegetation Management Manager) is responsible for making notifications to, and mobilizing personnel required for line clearance operations, commensurate with the size, scale, and complexity of the emergency.

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)
  - Damage Assessment Teams
  - Wire Watcher Personnel
- Foreign Utility
  - High and Low Voltage Crews
  - Damage Assessment Teams
- Contractor
  - High and Low Voltage Crews
  - Tree Crews
  - Crew Guides
  - Damage Assessment Teams
  - Wire Watcher Personnel

The T&D Electric Operations West and East Departments are routinely engaged, on a continuing basis, in the type of work necessary to restore electric service. Traditional lines of communication exist between these departments that facilitate, to whatever degree necessary, the coordination of PSEG Long Island and regular contractor work forces, in all storm classifications and conditions of readiness. PSEG Long Island has readily available contracts with various vendors (e.g., crew guides, flaggers, damage assessors, etc.) that can be utilized during restoration events. When needed, depending on the number and type of external resource required, the contract owner, in conjunction with the Government Funds Compliance Group, communicates with outside contractors to activate the contract and procure the resources needed to assist with restoration. For a listing of contracted damage assessors, please refer to Appendix R.

Distribution Operations and OH/UG Lines management personnel are located adjacent to each other, at the divisional level, thereby enhancing interaction and 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, Class III “Red” events require supplemental help by Foreign Utility and Foreign Contractor Crews. Restoration events in adjacent service territories or other parts of the country may influence the availability of line workers, tree trim resources, and other support personnel, as well as accessibility to our logistics support contractors, and the timing of when such resources become available.

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 EEI Mutual Assistance Agreement to augment PSEG Long Island repair forces under the ERP.

1) PSE&G New Jersey Coordination

As part of this process, PSEG Long Island also coordinates with Public Service Electric and Gas Co. (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 is expected to exceed 48 hours using only PSEG Long Island Crews and regular Contractors, consideration is given to obtaining Foreign Crew support. The PSEG Long Island President and 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, the T&D Operations Branch Directors would direct the Logistics Section Chief to prepare for the arrival of outside Line and Tree Crew assistance. The Logistics Section is responsible for the processing of Foreign Crews at a FCP site.

To facilitate the acquisition of Mutual Assistance and contractor crews from Canada, a procedure for crossing the US/Canada border has been developed by the NYS OEM. This procedure must be followed, or assistance will not be allowed to cross the border. Effective pass through the border requires coordination with the Port of Entry (POE), the NYS OEM, and NYS DPS as described in the border crossing procedure included in Appendix S. It is the responsibility of the Foreign Crew Branch Director, collaborating with the Planning Section Chief, to implement this procedure.

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 frequency and severity of storms in the United States, competition for resources and ever-increasing expectations regarding restoration activities, 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 the means for 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.

iii) New York State Public/Private Utility Mutual Assistance Protocol Coordination

The New York Public/Private Utility Mutual Assistance Protocol is an outline of general principles and practices for the NYS utilities to follow, enabling them to leverage a public/private partnership among the utilities within NYS (see Appendix H). This provides access to critical resources to facilitate and expedite utility restoration following an emergency impacting the customers and visitors of NYS.

The foundation of this protocol draws upon the concepts, which have been utilized by members of, but not limited to, the NAMAG and New England Public Power Association (NEPPA) mutual assistance programs. This protocol is intended to be flexible in every respect, since it is not possible to predict exactly what the nature or scope of an emergency will be. It is flexible in allowing individuals in command to call upon further reserves of personnel, supplies, equipment, and space as required, but in an organized, documented, and logical manner.

In instances where PSEG Long Island requests mutual assistance through the NAMAG process, a formal notification will be made to the member organizations (New York Association of Public Power (NYAPP) and Municipal Electric Utilities Association (MEUA) of NY) that the NAMAG process has been enacted and that mutual assistance may be requested from the municipalities and electric cooperatives. This protocol is not intended to usurp any organization's primary means of securing additional assistance, rather to provide a supplemental source of additional potential resources within NYS.

iv) Emergency Assistance Agreement with National Grid (Long Island)

PSEG Long Island maintains an Emergency Assistance Agreement with National Grid (Long Island). This agreement allows National Grid to provide local personnel and equipment to support restoration efforts during major events, when PSEG Long Island requests emergency assistance. National Grid is not under any obligation to furnish emergency assistance and any resources that are provided are at the sole discretion of National Grid.

c) Call-up Thresholds (Resource Matrices)

The number of crews required and the approximate duration of their needs shall be determined jointly by the PSEG Long Island Incident Commander and the T&D Operations Branch Directors.

Tropical Cyclone Resource Matrix Guide:

PSEG Long Island has developed a Tropical Cyclone Resource Matrix Guide, which is used as a guide to aid the Incident Commander and the T&D Operations Branch Directors in making the determination of the appropriate number of Foreign Utility and Contractor Crews. This matrix can be seen in Appendix K, an example of which is illustrated in Figure 10.5. The matrix provides time-measured decision points, commencing at 96 hours prior to the anticipated impact of the storm, for the initiation of commitment to crewing, and the initiation of contracted third party vendor assistance for staging areas.

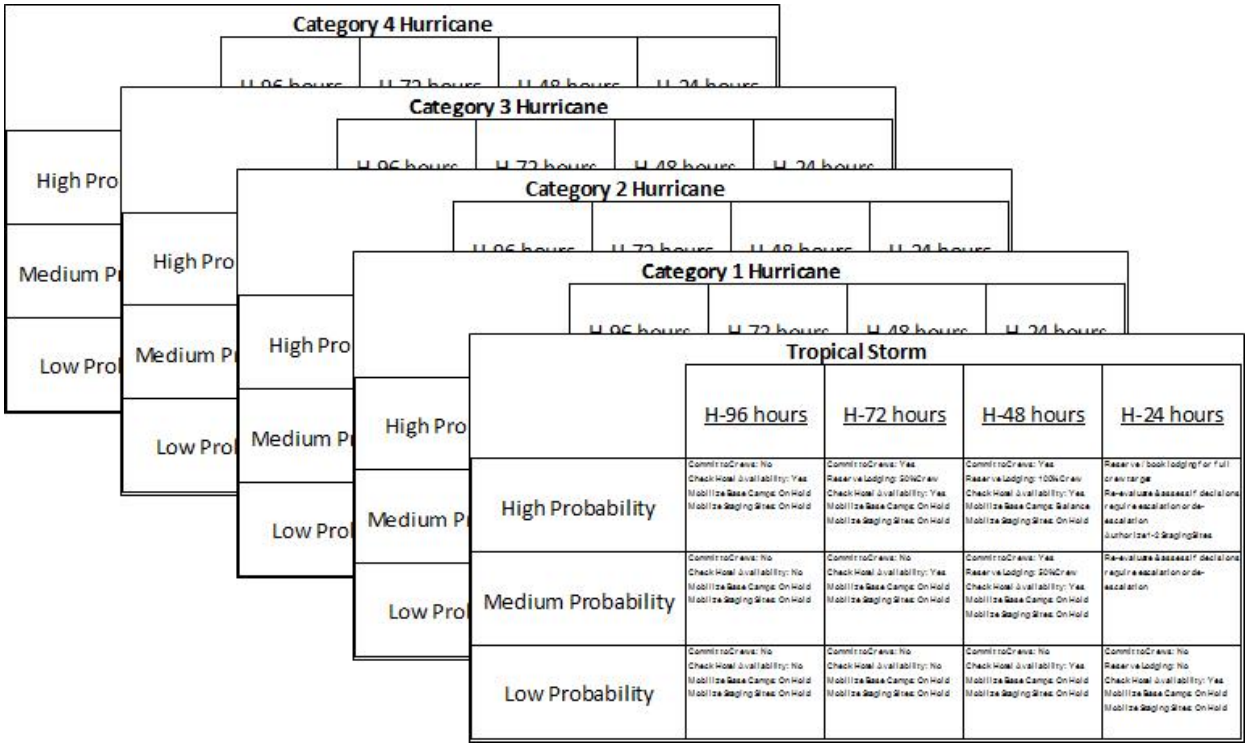


Figure 10.4 – Tropical Cyclone Resource Matrix Guide

The matrices span events from tropical storms through Category 4 hurricanes, and take into account only two variables, as it relates to the service territory:

- Probability of the centerline of the error-swath cone
- Probability of those intensities of sustained wind speeds being experienced

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, expected accumulation of ice, etc. The number of crews will be adjusted resulting from the extent of damage suggested by the lockout information, and as field damage assessment proceeds and additional intelligence is gathered. Based on the severity of damage and the number of incidents, additional manpower may be mobilized. These include damage assessors, wire watchers, and flood assessment personnel.

d) Action Plan

As Foreign Crews begin to arrive, they are initially received at a Foreign Crew Reception Center. Here, they are processed into the system by the Foreign Crew Management (FCM) organization. For more information regarding Foreign Crew Branch protocols, please see Section 11.4.

Once Foreign Crews are processed, they are allocated to divisions in "area" control, and subsequently, to decentralized dispatch areas in remote dispatch authority or remote configuration authority, as appropriate. The assignment to divisions and/or dispatch areas 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 ERP 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.

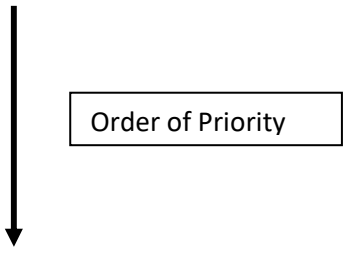
Once a Section Chief or Command Staff Officer has determined that there is a need for retiree assistance, the Planning Section Chief is contacted, in advance of obtaining retirees, to discuss their specific requirements. The Planning Section Chief will notify the Resource Coordination Unit Leader that retirees are being engaged. The Resource Coordination Unit Leader will engage the Human Resources Unit Leader to contact retirees and handle the administrative details of their employment arrangements.

10.2.3 Tiered Restoration

The tiered restoration approach is the principle that guides how restoration is escalated, from divisional/console incident based dispatch up to full delegation of configuration authority directly to decentralized dispatch areas.

Traditional Outage Restoration Tiers

Tiers
Transmission
Substation
Circuit Level
Area (Transformers, Fuses)
Singles



The above table shows the restoration strategy currently used during a storm. The highest priority is given to transmission related outages and damages. Then, substation outages/damages are given the next priority. Circuit level outages/damages are prioritized next followed by fuses, transformers and subsequently singles.

A Tiered Restoration decision matrix, shown below in Figure 10.5, was developed to provide a high-level guide of the triggers and decision points for activation of Divisional/Console Dispatch, versus Decentralized Dispatch in Remote Dispatch Authority (RDA), Circuit Sweep, or Remote Configuration Authority (RCA) mode of operation. It provides specificity of criterion to help the Operations Branch Director to make this decision. The matrix is a guideline only, and the activation of different Escalation Points ultimately rests with the Operations Branch Director.

		Decision Points				**Restoration Strategy**
Tiered Restoration Approach		# Mainline Events	# Incidents	# Contractor Crews	# Damage Locations (Non-Single) Per Lockout	
Divisional/Console Dispatch		N/A	N/A	<50	N/A	Traditional
Decentralized Dispatch	Remote Dispatch Authority (RDA)	N/A	N/A	>50	N/A	Traditional
	Circuit Sweep	>200	>6000	>400	>20	Circuit Sweep
	Remote Configuration Authority (RCA)	>400	N/A	N/A	>50	Circuit Sweep

Figure 10.5 – Tiered Restoration Decision Matrix

The Tiered Restoration Approaches in the matrix are:

- Divisional/Console Dispatch: This is the normal process that is in place on a blue sky day, and during the initial stages of storm where dispatch is conducted out of the Distribution Operations Control Rooms and the Overhead/Underground Lines Division consoles or Area Dispatch Authority (ADA). ADA is the process by which divisional dispatch consoles are supported through local console dispatch, and is implemented when off-island resources exceed dispatch capability of the existing OH/UG divisional consoles. Please refer to Section 10.3.5 of the ERP for additional details. During the duration of this tier, job level ETR strategies are used, and crew feedback is employed to continually update the ETR throughout the lifecycle of a job.
- Remote Dispatch Authority (RDA): RDA is the process whereby decentralized dispatching is supported through localized dispatch areas. This escalation point refers to at least one or more decentralized Dispatch Areas being opened and placed into RDA mode. Please refer to Section 10.4.2.1 of the ERP for additional details. During the duration of this tier, job level ETR strategies are used, and crew feedback is employed to continually update the ETR throughout the lifecycle of a job.
- Circuit Sweep: Circuit sweep is a restoration technique where personnel and crews are assigned to a circuit and work to restore affected customers to completion. This escalation point refers to placing an area in a circuit sweep restoration mode. During the duration of this tier, circuit level ETR strategies are used, and crew feedback is employed to continually update the ETR throughout the lifecycle of a circuit. For additional details, please refer to ERIP-OPS-012 – *Circuit Outage/Circuit Sweep Restoration Protocols*.
- Remote Configuration Authority (RCA): This escalation point refers to putting a circuit in Remote Configuration Authority where configuration control is managed outside the distribution control room, usually from a decentralized Dispatch Area that has been granted RCA. Please refer to Section 10.4.2.2 of the ERP for additional details. During the duration of this tier, circuit level ETR strategies are used, and crew feedback is employed to continually update the ETR throughout the lifecycle of a circuit.

The ETR strategies utilized include applying features such as Null and Global. Detailed ETR information related to the above approaches can be found in the ETR Strategy Procedure (ERIP-OPS-006).

The Decision Points in the matrix are:

- # Mainline Events: This includes lockouts, ASU Auto sects, and AAA priority incidents.
- # Incidents: This refers to the total number of incidents in OMS.
- # Contractor Crews: This refers to contractor crews being brought in during the storm.
- # Damage Location/Lockout: This refers to the number of damage locations per circuit.

Decision Process:

- The above matrix is a guide to prompt a decision point from the Operations Branch Director to enact one of the Tiered Restoration Approaches.
- Each decision point is independent of each other. Any of the tiered approaches can be enacted when the threshold for any of the decision points is exceeded.
- RCA can be used in conjunction with the other three escalation points – Divisional/Console Dispatch, RDA, and Circuit Sweep.

Restoration Strategy:

- Divisional/Console Dispatch: During this tier, the restoration strategy follows the traditional approach as described above.
- RDA: During this tier, the restoration strategy follows the traditional approach as described above.
- Circuit Sweep: During this tier, the restoration strategy follows the circuit sweep strategy as described in ERIP-OPS-012. In this strategy, crews work on a circuit until all outages on the circuit are restored.
- RCA: During this tier, the restoration strategy follows the circuit sweep strategy as described in ERIP-OPS-012.

Delegation of Authority:

- The matrix is to be used by Operations Branch Director to decide on whether to activate a given stage when the decision point is met.
- If the Operations Branch Director is unavailable, Distribution Survey & Operations Control Division Supervisors shall have the authority to make the decision.

Activation Criteria Development:

- Experienced Operation Managers identified key drivers for each of the restoration approaches (Main Line Incidents, Total Incidents, # of crews and Incidents per lock out)
- Operation Managers reviewed historical storm information and drafted activation level matrix
- Operation Managers reviewed material with Senior Directors, Manager of EP, and VP T&D
- Operations Managers finalized activation guidelines

10.2.4 Operational Coordination with Other Utilities

10.2.4.1 Guidelines

Working arrangements have been established between PSEG Long Island and other utilities (TelCo, CATVCo, GasCo, etc.) 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 enhance situational awareness and enable the betterment of each individual utility's emergency restoration response.

PSEG Long Island conducts operational meetings annually with these companies to update procedures and review working arrangements between organizations, during emergency restoration efforts. These meetings arranged by EP and Major Account Consultants will discuss the placement of their respective liaisons in PSEG Long Island Divisional Operations Headquarters. A listing of contact information for TelCo, CATVCo, GasCo, and neighboring municipal electric utilities can be found in Appendix F.

There is no formal joint operational restoration arrangement between PSEG Long Island and wireless telecommunication providers. Both before and during major events, coordination with wireless telecommunication providers is performed by the Large Customer & Customer Relations Group of the Communications Organization, and is outlined in Chapter 12 – Communications Protocols.

10.2.4.2 Activation Plan

The above utilities provide a list of Critical Facilities to PSEG Long Island annually (Critical Facilities will be available upon request from PSEG LI's Emergency Preparedness Department). 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 T&D Operations Branch Directors notify the appropriate TelCo, CATVCo, and/or GasCo executive that PSEG Long Island has declared Class III "Red," and that the Joint Restoration procedure is being implemented. The T&D Operations Branch Directors also request that a TelCo, CATVCo, and/or GasCo representative report to its Hicksville Operations Center to review coordination, at the division level.

Restoration information is openly shared at the system, division, and dispatch area 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 T&D 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.

Additional efforts are underway to create an information-sharing template to be utilized by responding utilities (i.e., electric, TelCo, CATVCo) during larger restoration events. This information-sharing template will be utilized to enhance situational awareness and facilitate improved coordination among utilities during events when conditions affect multiple entities. Sample information that may be shared can be found in Section 12.7.2.1. Information sharing plans will include a mechanism for sharing information during events and the relevant points of contact among responding entities.

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 Class III "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 are important, should a storm affect the service territory.

Once Class III "Red" has been declared, the Distribution Operations Division Managers assume the role of Distribution Survey and Operations Control Division Supervisors. In turn, they notify the OH/UG Lines Division Managers, who assume the role of T&D 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 Class III "Red," the Distribution Survey and Operations Control Division Supervisors and the T&D Crew Control Division Supervisors are responsible for notifying and mobilizing their respective restoration organization, at the local division level and below, and directing them to initiate their Emergency Restoration callouts.

Simultaneously, the Distribution Survey and Operations Control Division Supervisors notify the Division Primary Router/Gater, the Division ETR Coordinator, the Division Distribution Automation (DA) Specialist, the Division AMI Specialist, and the Division Primary Control Coordinator. The Division Primary Control Coordinator then notifies the Division Secondary Router/Gaters.

Upon notification by the Distribution Survey and Operations Control Division Supervisors of the declaration of Class III "Red," the Distribution Design Lead Engineers assume the role of Division Restoration Task Force Leaders, and notify their Assistant Leaders, the Division Mutual Assistance Coordinators (MACs), the Division Distribution Damage Assessment Coordinators, and the Division Wire Down Response Coordinator. The Division MACs then notify their Dispatch Area Task Force personnel, consisting of Dispatch Area Lead Coordinators, Dispatch Area Alternate Coordinators, Dispatch Area Tag Holders, and Dispatch Area Operators. Concurrently, the Division Distribution Damage Assessment Coordinators notify their Division Distribution Damage Assessment Operators, as well as all the Distribution Survey personnel assigned to their division. This divisional operations structure and reporting relationship is illustrated in Figure 10.7.

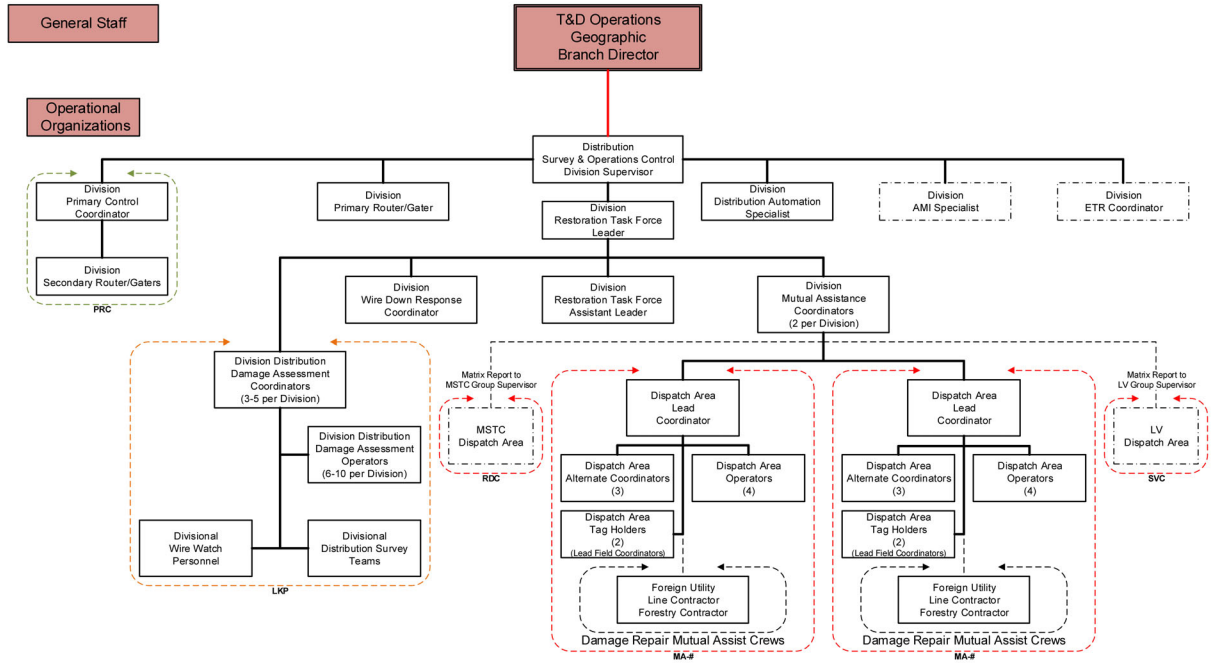


Figure 10.6 – Typical Divisional Operations Structure

Once the decision to decentralize operations has been made, the Distribution Survey and Operations Control Division Supervisors, along with the Division Restoration Task Force Leader, assign and brief the Dispatch Area Task Forces. Concurrently, the Division Restoration Task Force Leader briefs their Division MACs, who are located at the division console, and provides them a list of the decentralized Dispatch Areas that will be activated along with the names of the assigned Dispatch Area Lead Coordinator, Dispatch Area Alternate Coordinators, Dispatch Area Tag Holders, and Dispatch Area Operators. Dispatch Area Task Forces report to their assigned location when weather conditions are safe to proceed. The Distribution Survey and Operations Control Supervisor makes all decisions concerning crew distribution between their division and dispatch areas.

10.3.2 Transmission Circuit Protocols

The first restoration priority in a storm is the transmission system. Following Class III "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 Divisional Transmission Survey Strike Teams, patrolling in vehicles, on foot, and/or by helicopter. The current model establishes a baseline of 40 qualified two-person Transmission Survey Strike Teams, system wide. 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 Survey and Operations Control Group Supervisor, affected transmission circuits are patrolled, repaired, and reenergized. For additional details, please refer to ERIP-OPS-023 – *Transmission Damage Assessment Protocols*.

10.3.3 Distribution Survey/Damage Assessment Protocols

Divisional damage assessment is performed in all areas regardless of whether a divisional/console dispatch or one of the decentralized dispatch restoration approaches has been activated. The current model establishes a baseline of 112 qualified internal two-person Distribution Survey Strike Teams, system wide. The teams are largely resourced from trained PSEG Long Island personnel, and would be supplemented by contracted damage assessment personnel, as necessary. The Division Distribution Damage Assessment Coordinators and Division Distribution Damage Assessment Operators direct these teams and dispatch incidents to these teams, according to established priorities and locations.

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 a Storm Lookup Report, creating a record of all the damage found at a specific location. This report provides documentation of damage for assigning Repair Crews, and allows for the field reported damage to be entered into OMS.

For additional details, please refer to ERIP-OPS-004 – *Distribution Survey/Damage Assessment Protocols*.

10.3.3.1 Rapid Survey

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 Distribution 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.

10.3.3.2 Restoration Survey

Following the completion of Rapid Survey, a patrol of the remaining portions of the locked-out circuit (all fused branch line primary, secondary, and service facilities) may be initiated. This Restoration Survey is implemented to provide Distribution Operations, either conducting restoration divisionally, or from a decentralized Dispatch Area, the ability to restore a feeder on a “piece by piece” basis. Restoration Survey is defined as a patrol of the distribution facilities, from sectionalizing device to sectionalizing device, so that all damage between these sectionalizing devices can be identified, and systematic repairs made to energize sections of circuits. The Circuit Sweep restoration approach incorporates Restoration Survey.

During Restoration Survey, faults may be located that allow switching to be performed to restore undamaged portions of circuits. As part of Restoration Survey, Survey Teams are dispatched to survey branch taps with unblown fuses associated with distribution circuit lockouts to determine if they must be opened prior to energizing mainline 3-Phase.

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 decentralized Dispatch Areas, to safely perform repairs.

10.3.3.3 Incident Survey

Survey Teams assigned to a division are also dispatched to “known” incidents within OMS, or dispatched to reports of wire down with power.

Survey Teams are also dispatched to reports of wire downs that have been reported by members of the 911 call center, police, fire, OEM (including EOC personnel), and municipal emergency managers. Once the report has been investigated by a Survey Team, a wire watcher may be sent to the location to relieve the team, allowing the team to continue conducting damage assessment.

10.3.4 Primary Control (PRC) Protocols

In most events, routing/gating decisions are made by the Division leadership in pre-storm meetings. Decisions include whether to send “wire down-lights on” incidents to Damage Assessment or “single no lights” incidents to Secondary/Service Crews. For major events, these decisions are based on the severity of damage and the location of the most severely impacted areas.

When activated, Primary Control (PRC) analyzes and prioritizes the outage incidents that have already been surveyed. They are responsible for reviewing the CAD Forms in OMS associated with these jobs, prioritizing outage jobs, and creating corresponding work packets, which include a cover sheet, in addition to copies of the Storm Look-up Reports. For additional details, please refer to ERIP-OPS-008 – *Primary Control Protocols*.

Once PRC has created a prioritized work packet for the work, they “gate” repair jobs based on restoration priorities, and subsequently “route” those incidents with the highest priorities to dispatch areas that are in one of the decentralized dispatch modes of operation (RDA, Circuit Sweep or RCA). It is recognized that at the initial onset of a storm event, jobs that may not have been surveyed, may bypass the damage assessment process and could be routed directly to a decentralized dispatch area.

Work packets are delivered to decentralized dispatch areas from which crews are being managed. At the decentralized dispatch area, the crew supervision meets with the Lead Coordinator (or Dispatcher) to review the work and discuss any work permits/clearances that may be needed. Crew Guides may deliver additional work packets, throughout the day, to the crews or supervision, directly at the incident location and in advance of the next work assignment.

10.3.5 Area Dispatch Authority (ADA) Protocols

The PSEG Long Island ERP is both flexible and scalable, based on the severity of the event. Under the current model, dispatch authority and configuration authority is typically maintained at the divisional level, but can be decentralized down to the distribution feeder circuit 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 circuit 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 decentralized Dispatch Areas is generally limited to areas where damage conditions are so extensive that outage analysis and crew control from the centralized division headquarters may no longer be practical.

If damage to the distribution facilities of one or more substations is severe and warrants the assignment of Foreign Crew resources under a Dispatch Area Task Force, the division may grant these areas either Remote Dispatch Authority (RDA) or Remote Configuration Authority (RCA), commonly referred to as “Local Control.” 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 console dispatch, and is implemented when off-island resources exceed dispatch capability of the existing OH/UG divisional consoles.

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

ADA is intended to be utilized to support significant Class II “Blue” events, where damage may be very localized and decentralization down to the dispatch area level and the placement of these dispatch areas into RDA or RCA is not deemed necessary. Additionally, ADA may be utilized during some Class III “Red” events to provide expanded capabilities of the organization to effectively manage additional repair resources when off-island resources exceed the dispatch capability of the existing OH/UG Lines divisional consoles. Operation and management of ADA is identical to that of storm console operation and management at the centralized storm consoles.

Under ADA, the Division Distribution Control Center maintains configuration authority. The authority granted to an ADA is shown in Figure 10.7.

	DAMAGE ASSESSMENT *Performed by Division*	CREW DISPATCHING AUTHORITY	SYSTEM CONFIGURATION AUTHORITY	EMERGENCY SWITCHING
AREA DISPATCH AUTHORITY (ADA)	Incident Based Survey	Yes	No	No (Branch line fuses only)

Figure 10.7 – Area Dispatch Authority (ADA) Comparison

10.3.6 Decision to Decentralize:

Following the passing of the storm, the Distribution Survey and Operations Control Division Supervisors (one per division) assess system outage status for their own division. This initial status, obtained from substation loss-of-supply and lockout information, will determine the geographic areas that may require deployment of a Dispatch Area Task Force.

The Distribution Survey and Operations Control Division Supervisors make the determination of which areas should be placed in ADA, RDA, or RCA. Areas from which the largest proportion of customer calls have been received, in addition to the physical facility of the remote site to support decentralization, are considered when determining which areas should be placed in ADA, RDA, or RCA.

Once the divisional Survey Consoles are active for one operational period, OMS can provide a quick ranking of the amount of damage being reported by the console. From this information, further decisions can be made as to where additional available repair crews should be deployed. The number of crews assigned to each Dispatch Area is conditional on the amount and severity of damage, as well as the size of the territory to be covered.

10.4 Dispatch Area Procedures

10.4.1 Key Actions and Responsibilities

The Dispatch Area portion of the ERP identifies those procedures and actions that are undertaken by Dispatch Area Task Forces. A single Dispatch Area Task Force consists of a Dispatch Area Lead Coordinator, three Dispatch Area Alternate Coordinators, and four Dispatch Area Operators, plus two Dispatch Area Tag Holders (Lead Field Coordinators), reinforced by repair crews, who report to a decentralized dispatch area, following the declaration of Class III "Red." Dispatch Area Task Forces within the same division report up to a Division MAC. A sample of this organizational structure is depicted in Figure 10.8.

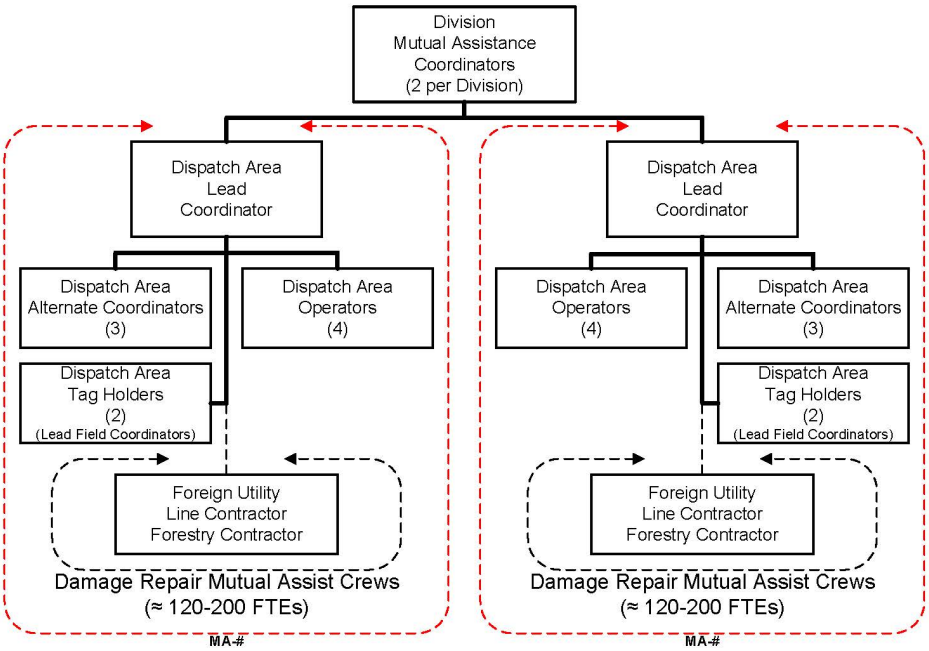


Figure 10.8 – Dispatch Area Organizational Chart

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

Similar to ADA, discussed in Section 10.3.5, locations utilized for the operation of decentralized Dispatch Areas 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. Multiple Dispatch Area Task Forces can be deployed to operate from the same physical decentralized dispatch area, but controlling different geographic territories. Separate Dispatch Area Task Forces can also be deployed to oversee different functional elements, such as Low Voltage (LV) damage repair crews or Make Safe to Clear (MSTC) response crews, as needed.

Under the guidance of their Division MAC, the Dispatch Area Lead Coordinator is responsible for activating the decentralized dispatch area and directing repair crews, when their dispatch area is placed in RDA or RCA. Additionally, if RCA is granted, the Dispatch Area Lead Coordinator is responsible for assuming control for the operation of distribution sectionalizing devices and the distribution feeder breakers, commonly known as “Local Control”.

The Dispatch Area Task Force, under the direction of the Dispatch Area Lead Coordinator, is responsible for ensuring the entry of all data related to that decentralized dispatch area, including manpower, personnel attendance, and OMS inputs.

In summary, Dispatch Area Task Forces operate under their respective Division Headquarters, and report their restoration activities performed at the Decentralized Dispatch Area level to their respective Division MAC at Division Headquarters. All support functions (e.g., logistics, communications, etc.) are facilitated through the Division MAC.

For additional details, please refer to ERIP-OPS-007 – *Decentralized Dispatch Area Activation/Redeployment/Demobilization Process*

10.4.2 Protocols for Decentralization

When outage analysis and crew control, from the centralized division headquarters, are no longer practical, or when off-island resources exceed the dispatch capability of the existing OH/UG Lines divisional consoles, or of remote, non-centralized OH/UG Lines storm consoles, the decision will be made by the T&D Operations Branch Directors to decentralize further, by activating dispatch areas. These levels of decentralization are displayed in Figure 10.9.

	DAMAGE ASSESSMENT *Performed by Division*	CREW DISPATCHING AUTHORITY	SYSTEM CONFIGURATION AUTHORITY	EMERGENCY SWITCHING
REMOTE DISPATCH AUTHORITY (RDA)	Incident Based Survey	Yes	No	No (Branch line fuses only)
REMOTE CONFIGURATION AUTHORITY (RCA)	Rapid Survey or Restoration Survey	Yes	Yes	Yes

Figure 10.9 – Dispatch Area Decentralization Comparison

Decentralized dispatch areas that are granted either Remote Dispatch Authority or Remote Configuration Authority serve as compact geographic areas that are utilized as reporting locations for Foreign Crews. Grouping Foreign Crews from each company together within decentralized dispatch areas is desirable because it provides a means for their own supervision to maintain better crew control. Foreign Crews are only assigned to those areas that are under ADA, RDA, or RCA. However, dispatch areas are not placed under RDA or RCA until repair crews are available. PSEG Long Island crews may also be assigned to dispatch areas in RDA or RCA.

10.4.2.1 Remote Dispatch Authority (RDA) Protocols

Remote Dispatch Authority (RDA) is the process whereby decentralized dispatching is supported through localized dispatch areas. RDA is implemented when off-island resources exceed dispatch capability of the existing OH/UG divisional or area consoles. RDA is established in existing operating facilities near damage locations.

The key to the success of RDA is establishing a “ring fence” around the areas for the dispatch operation to safeguard that multiple parties are not dispatching crews into the same area.

Under RDA, the Division Distribution Control Center maintains configuration authority, and performs all 3-Phase mainline model updates in OMS, while the Dispatch Area performs all branch line model updates.

10.4.2.2 Remote Configuration Authority (RCA) Protocols

Remote Configuration Authority (RCA), or more commonly known as “Local Control”, of the restoration effort at the dispatch area 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 Distribution Survey and Operations Control Division Supervisor delegates configuration authority, also known as “Local Control,” to the Dispatch Area Lead Coordinator, in order to expedite repairs and restore service, as rapidly as possible. Configuration authority is typically delegated on a feeder-by-feeder basis (i.e., “Feeder Control”), but may be delegated to an entire substation area, as deemed necessary by the Distribution Survey and Operations Control Division Supervisor.

When a Dispatch Area Lead Coordinator is delegated Local Control, they assume command of the feeder or area, including operation of distribution line sectionalizing devices and feeder breakers. In addition, the Dispatch Area Lead Coordinator must return control of the feeder breakers to the Transmission System Operator (TSO) at the end of each operational period, or when the area is demobilized.

Under RCA, the Division Distribution Control Center delegates configuration authority to the Dispatch Area. However, the Division Distribution Control Center maintains and performs all 3-Phase mainline model updates in OMS; while the Dispatch Area continues to perform all branch line model updates in OMS.

10.4.2.3 Notification to Dispatch Area to Assume Dispatch Authority or Local Control

The T&D Operations Branch Directors notify the Distribution Survey and Operations Control Division Supervisors for Hewlett, Hicksville, Brentwood, and Riverhead, as to which areas in their respective divisions are to be placed into RDA or RCA, as well as the number of crews to be assigned to each dispatch area.

In turn, the Distribution Survey and Operations Control Division Supervisors notify the Division MACs, as to which of their dispatch areas are going to be placed into RDA or RCA. The number of crews assigned to each Dispatch Area is conditional on the amount and severity of damage, as well as the size of the territory to be covered.

Finally, each Division MAC then notifies their Dispatch Area Lead Coordinators to assume RDA or RCA, and conveys to them the number of crews their dispatch area will be receiving, as well as the expected arrival time of these resources. If the dispatch area has been placed in RCA, the Dispatch Area Lead Coordinator then contacts the TSO, and requests permission to take control of the distribution feeder breakers that have been delegated to them. For additional details, please refer to ERIP-OPS-032 – *Placing Dispatch Areas into Remote Dispatch Authority & Remote Configuration Authority and Assumption of Configuration Control*.

10.4.3 Emergency Switching

Under RCA only, the Dispatch Area Lead Coordinator is delegated configuration authority, which includes the authority to operate distribution system equipment/devices, consisting of substation distribution feeder breakers and distribution line sectionalizing switches. This is permitted so that restoration of service, to as many customers as possible, can be rapidly accomplished, in a safe and effective manner.

The Dispatch Area Lead Coordinator and Dispatch Area Tag Holder are expected to sectionalize the circuits under their control to restore service safely and expeditiously. The Dispatch Area Tag Holder must receive the appropriate “return of permission-to-work” from any workers who were granted permission-to-work. Under no circumstances can a Dispatch Area Tag Holder 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 fieldwork has been completed.

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's T&D Operations Branch Directors 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 utilize the Liaison Organization and associated mechanisms to notify the municipalities affected by the deenergization, and provide the rationale for the action. Notifications will be made via a PSEG Long Island EOC Representative or by a member of the PSEG Long Island Liaison Organization. PSEG Long Island's Distribution Operations Department will re-energize substations and/or areas, once deemed that conditions exist, where the substations and/or areas can be safety 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 uphold public safety in advance of a major storm. In such cases, requests can be made, in writing, to PSEG Long Island's EP Department, via fax or e-mail, and should include marked maps of areas requested to be de-energized (see Figure 10.10). Such requests are to be coordinated through the county EOCs.

In addition, requests to de-energize an area can be made through the PSEG Long Island representative at an activated EOC, via the Municipal Hotline at the Customer Contact Center or through the PSEG Long Island Liaison Organization. In all cases, the aforementioned request form must be completed by the requestor and/or PSEG Long Island for documentation purposes.

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

PSEG Long Island's Communications Department 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 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 widespread flooding affecting multiple towns, villages, and municipalities across Long Island and the Rockaways. Such flooding 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 anticipated to cause significant widespread multi-jurisdictional flooding, the Engineering Department, with the assistance of the Planning Section, will closely monitor the anticipated potential impact of forecasted flooding for a specific event.

In addition, PSEG Long Island will initiate discussions with the gas utility concerning their planned flood restoration response, up to five days prior to an event, with the potential for significant flood damage and/or impact. PSEG Long Island's Communications Department will then 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, 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.

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 damage assessment, disconnection, and reconnection of electrical service, in events where severe widespread multi-jurisdictional flooding is experienced (see Figure 10.11). In cases where flood damage is more localized, PSEG Long Island will work cooperatively with the affected local municipality and make resources available, as appropriate.

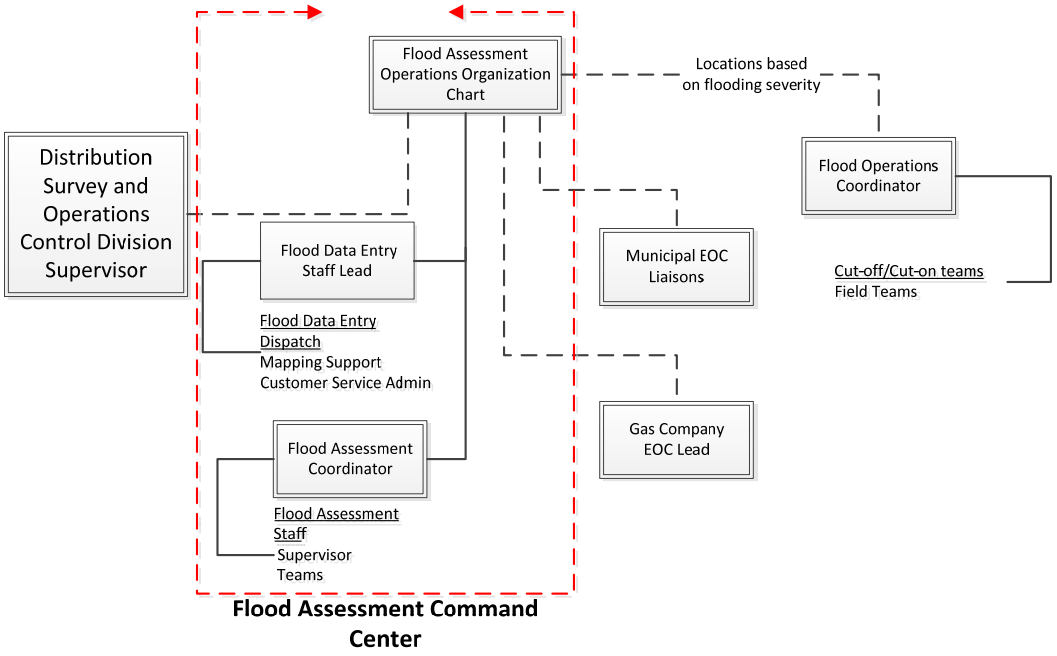


Figure 10.11 – Flood Assessment Operations Organizational Chart

In advance of the anticipated weather event, PSEG Long Island's Flood Assessment Operation Lead will review flood prediction maps prepared by weather services and/or internal data sources.

Once the storm has passed, and it is safe to deploy resources to the field, PSEG Long Island's Flood Assessment Operation Lead will make the appropriate resources available, in areas suspected of flooding, to perform a rapid assessment. PSEG Long Island flood assessors will 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.

In the course of conducting these assessments, or when isolating meters from the system during the restoration process, if obvious unsafe conditions caused by flooding are 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.

Figure 10.12 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 Flood Assessment team members 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 isolating the home or building’s electrical meter or service wires. Unsafe conditions may 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.

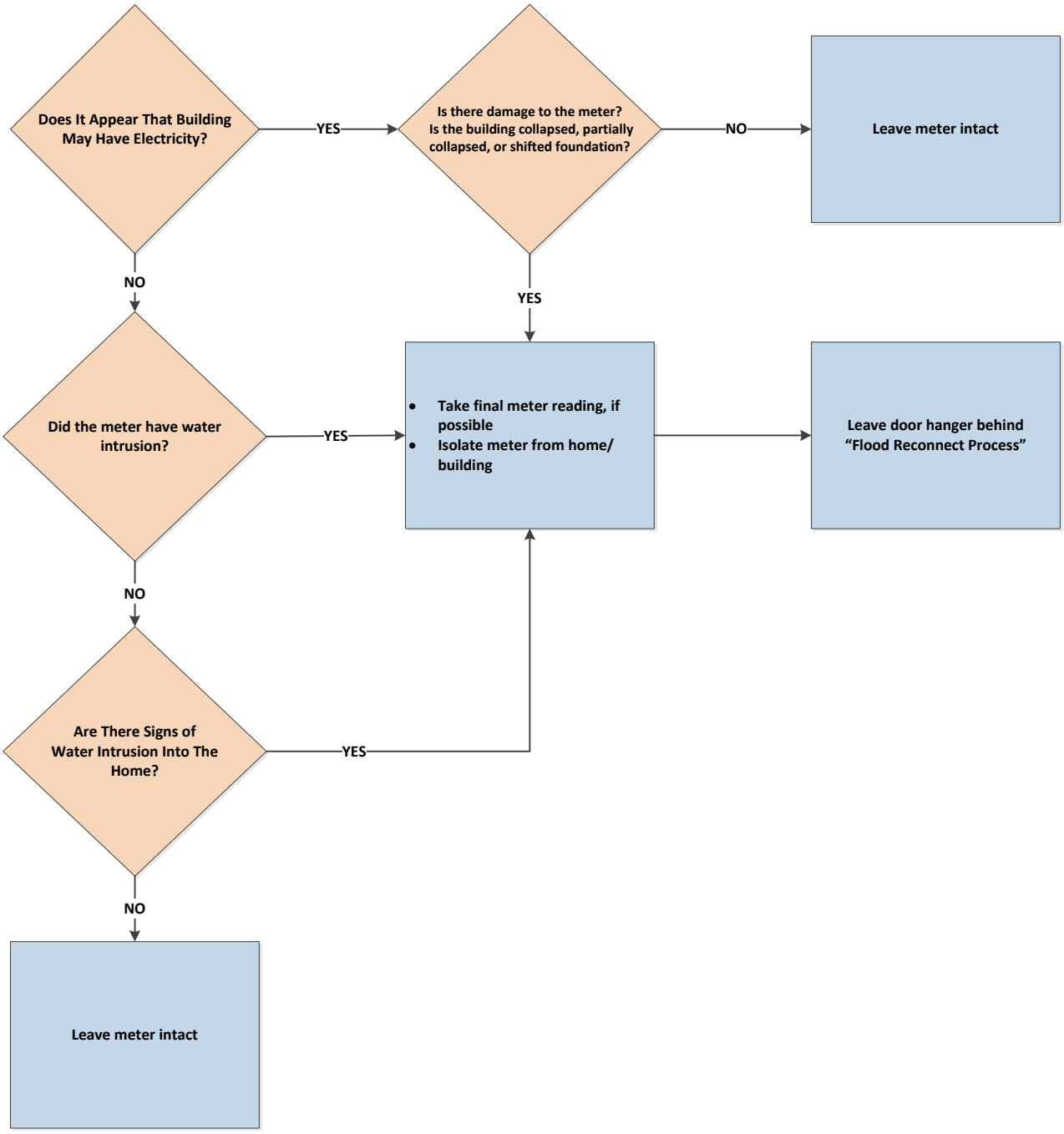


Figure 10.12 – Decision Matrix for Flooded Homes/Buildings

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 door hanger (see Figure 10.13) explains the potential reasons for de-energization, details the process for restoring electric service, and explains the steps required for re-energization.

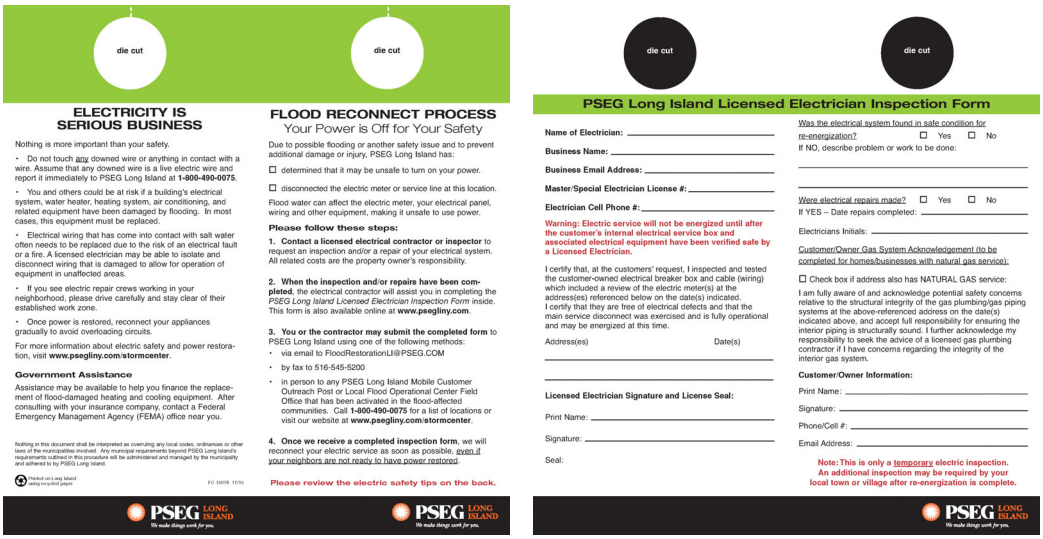


Figure 10.13 – Restoration of Electrical Service after Major Flooding Door Hangers

Additionally, PSEG Long Island’s Communications Department will utilize various channels (e.g., website postings, social media, external communications, etc.) to communicate information regarding required forms. 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 (i.e., follow up documentation and/or inspection requirements beyond temporary authorization for re-energization). PSEG Long Island will forward all electrical inspection forms received from customers to the local jurisdiction or municipality.

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's Flood Task Force, prior to the restoration of electric service. Electrical Inspection Forms (see Figure 10.14) can be accessed on PSEG Long Island's website and other means identified by PSEG Long Island (e.g., local town hall, Mobile Customer Outreach Post, 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 acceptably submit the required form, PSEG Long Island's Flood Task Force will work directly with customers to reconnect electric service in a safe and timely manner. In addition, when PSEG Long island's Flood Task Force receives the Licensed Electrical Inspection form, PSEG Long Island will notify the gas utility of homes that are approved for re-energization. This process will be coordinated to provide for the safe and timely restoration of utility services.

PSEG LONG ISLAND

PSEG Long Island 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 customers' request, I inspected and tested the customer's owned electrical breaker box and cable (wiring) which included a review of the electric meter at the address referenced below on the date 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.

Customer Address SEAL:

_____

_____

Licensed Electrician Signature and License Seal:

Print Name: _____

Signature: _____

Date:_____

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 #:_____ Date:_____

Customer/Owner email: _____

Note: This is only a temporary Electric inspection. An additional inspection may be required by your local town or village after re-energization is complete.

Figure 10.14 – Sample PSEG Long Island Licensed Electrician Inspection Form

NYS Code Enforcement Disaster Assistance Response (CEDAR) Teams

In the spirit of efficiency and cooperation, where conditions permit, PSEG Long Island will work closely 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, though 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. This is 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. This 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.

New York City (NYC) Area

If major flooding occurs in the NYC area, PSEG Long Island's restoration personnel will work with the Department of Buildings in NYC to re-energize service to homes. PSEG Long Island's restoration personnel will work directly with customers affect by flooding to reconnect electric service in a safe and timely manner.

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 may be conducted. Efforts can range from a survey of just the most severely damaged circuits, to a complete survey of the 3-Phase mainline, or a complete re-survey of the entire T&D electric system. The purpose of such efforts is to identify and record any remaining substandard conditions so that appropriate corrective actions can be initiated, thus minimizing future interruptions.

Identified substandard conditions may include temporary repairs but are more often equipment issues that have not caused an interruption in electric service such 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. In such instances, identified locations would then be prioritized and assigned for field correction. Efforts would also be made to identify, and make permanent, any 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.

11. LOGISTICS PROTOCOLS

11.1 Overview and Plan Methodology

The Logistics Section plays a vital role in the execution of PSEG Long Island's storm restoration efforts. The Logistics Section's mission is to facilitate and support all required logistical needs for the restoration event to enable a thorough and efficient storm response. These activities are governed by the severity and scope of the emergency. The Logistics Section plans for, and supports, the operational needs of restoration organizations during large-scale storm events and other system emergencies. The actions of the Logistics Section routinely begin prior to the storm arrival, given the importance and reliance on their services. Logistics Section operations remain in effect throughout the duration of the activation and/or emergency and often continue into the recovery phase of restoration operations.

The Logistics Section facilitates and organizes its actions into four functional branches: Foreign Crew, Support, Staging, and Service. The Logistics Section's four-branch structure supports a more strategic and long-term perspective regarding resource requests and needs. Each branch is further broken down into sub-functional units to consolidate and more effectively respond to emergencies and/or activations. Each functional unit has an assigned leader and the support personnel needed to carry out the associated critical actions and responsibilities. The Logistics Section's branches and supporting functional units are detailed below:

1) Foreign Crew Branch
    a) Foreign Crew Processing
    b) Foreign Crew Reception
2) Support Branch
    a) Fleet Maintenance & Fueling
    b) Real Estate
    c) Facilities Management
    d) Security

3) Staging Branch
   a) Site Preparation
   b) Fleet and Fuel
   c) Materials and Logistics
   d) Waste and Environmental

4) Service Branch
   a) Materials Procurement
   b) Materials Distribution
   c) Lodging
   d) Busing
   e) Meals

11.2 Logistics Support Center (LSC)

PSEG Long Island will activate a Logistics Support Center (LSC) during restoration operations. The LSC includes representation from key logistical functional areas and the personnel responsible for leading the associated efforts. The LSC allows for information sharing on a real-time basis and the ability for functional unit leaders to have instant “face-to-face” interactions with one another. This close coordination allows for improved situational awareness and more rapid and efficient decision-making, thereby creating a more organized and comprehensive response structure.

The readiness of the LSC is maintained throughout the year and can be activated with short notice at the request of the Logistics Section Chief. Personnel assigned to the Logistics Section also prepare for activations through annual exercises, training, and drills, where the LSC is fully assembled to further simulate a real world scenario

11.3 Senior Leadership

11.3.1 Logistics Section Chief

In anticipation of a large-scale storm or other system emergency affecting the electric system, the PSEG Long Island T&D Services Director assumes the role of Logistics Section Chief. If the Logistics Section Chief is not available, the Service Branch Director will serve in their absence.

The role of the Logistics Section Chief is to lead the Logistics Section, its personnel, and supporting functional areas. Throughout the duration of an event, the Logistics Section Chief coordinates Section initiatives with the Incident Commander, PSEG Long Island Senior Leadership, Branch Directors, and Unit Leaders.

The Logistics Section Chief is responsible for overseeing the Foreign Crew, Support, Service, and Staging Branch Organizations, as well as their supporting units described in the following sections of this chapter. Additionally, they work closely with the SHE Officer, Planning Section Chief, and PSE&G counterparts to confirm mutual assistance logistical needs are addressed and demobilization plans are carried out. Logistical updates are communicated to key internal PSEG Long Island restoration personnel, as well as LIPA and DPS.

11.4 Foreign Crew Branch

11.4.1 Overview

The Foreign Crew Branch of the Logistics Organization is comprised of the following functional areas:

- Foreign Crew Processing Organization
- Foreign Crew Reception Organization

11.4.2 Foreign Crew Branch Director

The Foreign Crew Branch Director coordinates and leads the above functional areas and its associated personnel. The Foreign Crew Branch Director coordinates with the Operations Branch Directors, Planning Section Chief, and/or Logistics Section Chief on planned Foreign Crew support. Once the need for external resources has been determined, the Foreign Crew Branch Director notifies key Foreign Crew personnel (i.e., processing and reception) of the planned restoration activation schedule. In addition, the Foreign Crew Branch Director will oversee and coordinate the management of all Foreign Crew activities at the Foreign Crew Processing Unit [redacted] and the Foreign Crew Reception Unit ([redacted] in conjunction with restoration plans and operations. The Foreign Crew Branch Director will maintain communication throughout the event with the Operations Branch Directors, Planning Section Chief, and their logistical counterparts in reference to ongoing daily restoration plans, initiatives, and foreign crew support needs.

11.4.3 Foreign Crew Processing Organization

The Foreign Crew Processing Organization oversees the day-to-day management of the crew processing operations throughout the restoration event. They establish contact with the foreign crew organizations (contractor or utility companies) that are assisting in storm response to determine their planned deployment schedule and time of arrival. Incoming foreign personnel are then on-boarded by the Foreign Crew Processing Organization at the Bethpage Office via virtually or in-person, based upon restoration plans. This organization is responsible for the processing of the following foreign personnel:

- High and Low Voltage crews
- Tree crews
- Crew Guides
- Wire Watcher personnel
- Damage Assessment Teams

In addition, the Foreign Crew Processing Organization is divided into specified units to aid in the processing of foreign support personnel. These units consist of the following:

- Onboarding Team – High Voltage / Tree Trim
  - Coordinates crew travel information and personnel data with responding mutual assistance companies in advance of arrival
  - Reviews and validates Roster Sheet, which contains Foreign Crew personnel details and equipment to be deployed for support storm restoration (please see Appendix P for a sample Crew Roster (Roster Sheet))
  - Coordinates with foreign crew personnel on PSEG Long Island's mobilization and restoration plans
- Onboarding Team – Support Services
  - Same responsibilities as Onboarding Team above, but responsibilities are focused on foreign Low Voltage, Crew Guides, Damage Assessors and Wire Watchers mobilized to assist with restoration efforts
- Crew Guides Unit
  - Oversees assignment and management of Crew Guides assigned to foreign crew personnel
  - See Section 11.4.3.1 below for additional details on Crew Guides
- Electric Work Assignment Unit
  - Provides Crew Guide (and Foreign Crew supervision) with an initial Decentralized Dispatch Area and/or operating yard locations and a PSEG Long Island point of contact for obtaining electric restoration work assignments
- Vegetation Work Assignment Unit
  - Provides Crew Guide (and Foreign Crew supervision) with an initial Decentralized Dispatch Area and/or operating yard locations and a PSEG Long Island point of contact for obtaining vegetation restoration work assignments
- Lodging Assignment Unit
  - Provides Crew Guide and Foreign Crew supervision with a hotel assignment and hotel contact information
- Safety Orientation Unit
  - Provides crew orientation (e.g.., territory information, travel restrictions, police/hospital) and safety meeting (e.g., proper PPE, work methods) for incoming Foreign Utility supervision (e.g., electric, vegetation, wire watcher, damage assessor)

- Storm Resources / Contracts support
  - Manages invoice and billing process with supporting foreign crew companies
  - Coordinates with FCP Team to confirm documentation aligns with invoices and payments

Processing foreign personnel utilizing the above units enhances overall efficiency, while minimizing the number of issues that may occur, during the restoration event, as well as assisting with documentation and reconciliation efforts, post event.

11.4.3.1 Crew Guides

Crew Guides act as the intermediary between PSEG Long Island Foreign Crew Management/Operations personnel and Foreign Crew supervision. Crew Guides are processed through the Crew Guides Unit and serve to direct Foreign Utility Crews (Line and/or Tree) to job and lodging locations, while documenting the daily actions of Foreign Crews (meals, work performed, materials used, equipment utilized, etc.). Crew Guides serve as the liaison between the foreign crew and Foreign Crew Processing and/or Operations restoration personnel (e.g., Console Dispatchers, Field Coordinators, Dispatch Area staff, Store Room personnel). Additional responsibilities include, but are not limited to, the following:

- Facilitate meal requests and needs
- Lead crews to and from work sites
- Facilitate lodging accommodations in conjunction with Lodging Assignment Unit
- Report any accidents or injuries to field supervision and internal Operations personnel
- Remain aware of published ETR times for jobs assigned and report any cases where published ETR needs to be extended
- Communicate locations of transformer leaks or oil spills to Operations and/or Environmental personnel
- Request switching, if necessary
- Document daily activities for their assigned crews (e.g., crew details, work performed, materials used) via Crew Guide Manual and submit to Foreign Crew Processing for documentation purposes
- Provide communication between field and office including location of crews, job status, and next work location
- Call in restoration information to Dispatcher immediately after service is restored to each case/location

11.4.4 Foreign Crew Reception Organization

If an event requires Foreign Utility Crews and additional outside personnel to support the effort, the Foreign Crew Reception Organization contacts the NYS Parks Department to activate and utilize [redacted] as the primary crew reception site. PSEG Long Island utilizes this site during foreign crew activations and arrivals. The site is centrally located to assist with crew deployments and is close to PSEG Long Island's crew processing headquarters in [redacted]. The crew reception site is built-out, per established site drawings, to serve as the primary reception staging area for accepting foreign crews upon their arrival. In a small-scale incident, PSEG Long Island may use the Bethpage Office location as a crew reception site.

PSEG Long Island utilizes multiple site configurations for the crew reception site at [redacted] ranging from area layouts for 80 to 245 vehicles. Figure 11.1 shows a sample layout for 245 vehicles.

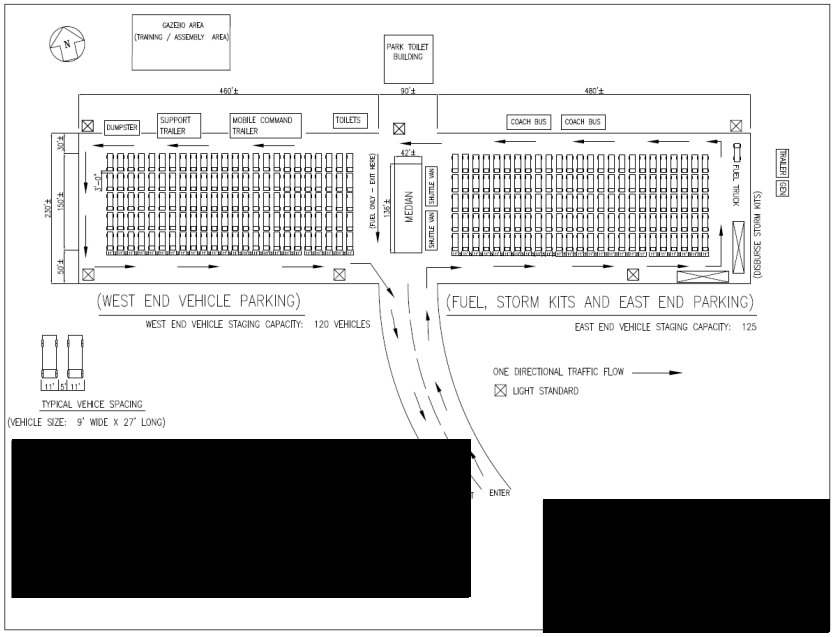


Figure 11.1 – [redacted] (245 Vehicle Capacity)

The Foreign Crew Reception Organization oversees the day-to-day management of the crew reception operations throughout the restoration event. Moreover, they oversee the set-up of the crew reception site and ensure key assets have been delivered and documented in support of planned site usage.

At the crew reception site, crews receive safety and information briefings by PSEG Long Island personnel and safety advocates. Foreign crew vehicles and/or trucks are re-fueled for crew deployments and crews are subsequently issued the required restoration storm kits (equipment and materials). Finally, crews are reunited with their supervision and Crew Guides before proceeding to operational locations. During emergency conditions, PSEG Long Island strives to deploy all field crews directly to their work location after they are processed and receive their job assignment and safety briefs. However, deployment directly to the field can sometimes be delayed due to work restrictions, travel, or contractual terms and conditions (e.g., safety issues, weather conditions, shift times, lodging).

Note: In response to emergency events during a State-wide travel ban, utility employees are exempt from any and/or all New York State imposed travel bans (Legislation Bill A.25/S.3275) to perform all service work related to the restoration and maintenance of energy and communications infrastructure.

11.5 Support Branch

11.5.1 Overview

The Support Branch of the Logistics Organization is comprised of the following functional areas:

- Fleet Maintenance and Fueling Unit
- Facilities Unit
- Real Estate Unit
- Security Unit

11.5.2 Support Branch Director

The Support Branch Director coordinates and leads the above functional areas and its associated personnel. Throughout the event, the Support Branch Director coordinates with the Logistics Section Chief on planning initiatives, action items, and any potential areas of concern associated with these functional areas. These goals and priorities are then cascaded down to the Support Branch Unit Leaders for incorporation into their pre-established restoration routine. The Support Branch Director reviews and assesses their unit's progress and reports to the Logistics Section Chief to confirm that responsibilities have been completed and any other issues or concerns have been appropriately addressed.

11.5.3 Fleet Maintenance and Fueling Services Unit

The role of the Fleet Maintenance & Fueling Unit Leader in the Logistics Section is to continuously assess the event for vehicle repair and maintenance issues, as well as towing and garage services. In addition, they coordinate fuel services (i.e., in-house fueling, vehicle refueling at off-site locations, fuel vendor coordination, etc.) to meet the demands of the event. If needed, the Fleet Maintenance & Fueling Unit Leader will also help secure additional vehicles to supplement existing fleet assets.

The Fleet Maintenance & Fueling Unit Leader coordinates with the Staging Site Area Manager regarding equipment, fueling, and transportation needs at vehicle staging sites. They also serve as a liaison with external agencies (e.g., NYS DOT) on fueling and transportation issues and requests.

11.5.4 Real Estate Unit

The role of the Real Estate Unit Leader is to continuously assess the event for Real Estate related needs, including staging site locations and site agreements. Semiannually, the Real Estate Unit Leader will validate and update their list of contact information (e.g., names, phone numbers, e-mail addresses) for staging areas on file (e.g., buildings, parks, airports, universities, firehouses). The Real Estate Unit Leader contacts their list of staging area property owners/representatives, via telephone or e-mail, to confirm/update each staging site's subject contact information.

The Real Estate Unit Leader communicates with property owners, where pre-arranged site agreements exist with PSEG Long Island, to utilize their property as established emergency staging sites during restoration events. Additionally, they will coordinate with non-agreement property site owners to secure additional sites, as needed. If supplemental real estate is required for restoration operations, the Real Estate Unit Leader will contact owners of vacant land and/or useable facilities for short term lease agreements. For all utilized staging sites, the Real Estate Unit Leader confirms site readiness with the property owners.

11.5.5 Facilities Unit

The Facilities Unit Leader is responsible for the management and maintenance of all company facilities, operating yards, and associated support locations during restoration operations. The Facilities Unit Leader is also responsible for overseeing all facilities management services, including the proper operations of Heating, Ventilation and Air Conditioning (HVAC) equipment, janitorial services, garbage removal, etc. performed to support and maintain company and restoration sites.

The Facilities Unit oversees the setup of restoration sites, including the CAC, LSC, Decentralized Dispatch Area, and other support locations. Additionally, they coordinate building repairs and contract labor performed at work locations. The Facilities Unit Leader directs the testing and maintenance of critical back-up systems (e.g., emergency generators, Uninterruptible Power Supplies (UPS)) and building support infrastructure throughout the restoration event.

Furthermore, the Facilities Unit coordinates with building landlords regarding shared space services and planned restoration operations. They also oversee the distribution of mail and duplication services, when applicable.

11.5.6 Security Unit

The Security Unit Leader is responsible for the development and implementation of PSEG Long Island's security plans supporting the safety and security of company employees, support personnel, work locations, and assets.

The Security Unit Leader and Staff review, determine, and address security threats and potential hazards at current and planned restoration work locations. Appropriate levels of security patrols are provided at all utility crew support sites including, but not limited to:

- Staging area locations
- Crew processing sites
- Material laydown yards
- Hotels and/or motels
- Base camps and/or tent cities
- Alternative housing facilities
- Truck staging sites
- Fueling locations

Additionally, the Security Unit Leader will oversee all credentialing and access protocols at all company work locations and crew support sites, as appropriate. When appropriate, security incidents and/or claims regarding company personnel, work locations, and/or assets are investigated, documented, and reported.

During restoration events, the Security Unit Leader coordinates with Federal, State, and Local law enforcement on security concerns and to facilitate restoration activities and crew movements, as necessary.

11.6 Staging Branch

11.6.1 Overview

The Staging Branch of the Logistics Organization is responsible for the setup, management, and coordination of all activities at staging sites and/or emergent support facilities during restoration operations. PSEG Long Island utilizes a variety of staging sites to support emergency activations.

Site types are broken down by functional area or support category and can include, but are not limited to, the following:

- Crew Reception sites
  - Foreign Crew reception, check in and initial preparations
- Crew Processing sites
  - Foreign Crew processing and coordination
- Staging Sites (general)
  - Forward operating sites and dispatch areas operations
- Base Camps and Tent Cities
  - Crew staging and short/long-term lodging sites
- Material Laydown sites
  - Material preparation, staging and distribution
- Truck Mobilization and Fueling sites
  - Utility crew vehicle staging and fueling locations

11.6.2 Staging Site Locations

PSEG Long Island has an executed agreement with [redacted] to access seven (7) sites across Long Island (Nassau County (3); Suffolk County(4)), and has secured access to over thirty (30) different properties in past storm events. The seven (7) sites with agreement are as follows:

[redacted]

PSEG Long Island has also had prior arrangements with additional sites, should conditions require a larger operational footprint. Arrangements can be requested with site contacts and the utilization of these sites are coordinated upon emergency activations, in conjunction with property owner needs and daily operations.

While these sites have "non-agreements," PSEG Long Island has been able to enter into a memorandum of understanding for their use between property owners and PSEG Long Island, during certain conditions. The Real Estate Unit, along with staging site personnel, will arrange and coordinate, as required. There are thirty-nine (39) total sites (Nassau County (11), Suffolk County (26), Queens County (2)). The thirty-nine staging sites with *non-agreements* are as follows:

[redacted]

[redacted]

While all staging site locations may not be activated regularly, PSEG Long Island takes a proactive approach by developing and maintaining site layout drawings for key staging site locations, in the event an activation takes place.

11.6.3 Mobile Command Center(s)

PSEG Long Island also utilizes Mobile Command Centers during large-scale system emergencies and storm restoration efforts. Mobile Command Center vehicles can replace temporary accommodations that previously needed to be rented and set-up, whenever a major storm brings in outside utility crews. The Mobile Command Center can also be deployed to hard-hit areas or other areas requiring a local presence within our service territory to manage and assist PSEG Long Island personnel on site.

Built on a three-axle trailer platform, the Mobile Command Centers have its own Wi-Fi network, televisions displaying satellite news feeds, and eight workstations. Security cameras and external lighting assist with location deployments and safety concerns. Other features include an on-board generator, air conditioning, heat, and a refrigerator. A photograph of one of PSEG Long Island's three Mobile Command Centers is included in Figure 11.2.

Figure 11.2 – Mobile Command Center

11.6.4 Additional Staging Support

If a storm event causes significant damage to PSEG Long Island's T&D electric system, and a large Foreign Crew workforce is required to support PSEG Long Island, additional staging support can be established. If the planned Foreign Crew personnel headcount exceeds the capacity of available Long Island and Queens County hotels, alternative housing arrangements will be implemented. These measures include setting up sleeping arrangements at available universities, large vacant buildings/complexes, and firehouses across the territory to house the Foreign Crews.

PSEG Long Island may also use third party logistics contractors to build out base camps in order to house, feed, and fully accommodate the needs of the Foreign Crews, if necessary. The photos (see Figure 11.3) depict base camps constructed during Superstorm Sandy in 2012, in support of restoration efforts. Upon the authorization from the Logistics Section Chief and/or Incident Commander, PSEG Long Island may utilize approved logistics contractors for base camps services and support, when conditions warrant. For more information on alternative housing, please see Section 11.7.5.

PSEG Long Island personnel serve in an operational and documentation oversight role at the base camps and support locations throughout the duration of the event. The Staging Branch also oversees the planned site layouts, security, and safety initiatives of the agreed upon sites. The Support Branch Director, along with the Lodging Unit Leader, assists the Staging Unit in preparation of large-scale utility crew base camps, as required.

Figure 11.3 – [redacted]

11.6.5 Staging Site Roles and Key Positions

Depending on the planned usage and size of the staging site, the Staging Site Branch Director may oversee a contingent of key staging site positions and their associated functional areas. The Staging Site Branch Director determines the needs of each site and determines an acceptable level of personnel to be utilized. The functional staging site roles include, but are not limited to:

- Site Preparation Unit Leader
- Fleet Unit Leader
- Materials and Logistics Unit Leader
- Waste and Environmental Unit Leader
- Warehouse Supervisors
- Logistics Supervisor
- Staging Site Manager(s)

11.6.6 Staging Site Branch Director

The Staging Site Branch Director oversees and coordinates the planning (e.g., potential site locations, design, layout) and management of operational activities at staging locations and/or support sites, in conjunction with restoration operations.

The Staging Site Branch Director reviews staging site and/or base camp inventory levels to confirm proper resources are maintained throughout the duration of restoration operations. This review includes coordinating logistics between warehouses and staging sites, providing intra-site logistics to move materials, and overseeing fueling activities at staging sites.

11.6.7 Fleet Unit Leader – Staging Sites

The Fleet Unit Leader at the staging sites oversees and coordinates all fleet and transportation activities (e.g., motor vehicle repair and maintenance and associated transportation equipment) in support of staging site operations. In addition, they coordinate with the Fleet and Fuel Maintenance Unit Leader (in the LSC) on staging site fueling operations and services.

11.6.8 Site Prep Unit Leader – Staging Sites

The Site Prep Unit Leader at the staging sites oversees and coordinates all staging site setup and demobilization tasks. In addition, they coordinate support services at the staging site (e.g., snow/debris removal, traffic plans, parking).

11.6.9 Materials and Logistics Unit Leader – Staging Sites

The Materials and Logistics Unit Leader at the staging sites coordinates material management and distribution during restoration events. In addition, they oversee and coordinate storm kit distribution in support of planned operations.

11.6.10 Waste and Environmental Unit Leader – Staging Sites

The Waste and Environmental Unit Leader at the staging sites oversees and coordinates environmental and waste activities and spill response in support of staging site operations.

11.6.11 Warehouse Supervisors

The Warehouse Supervisors are responsible for preparing material deliveries for distribution from warehouses to material laydown sites. Additionally, they oversee the check in/out of materials from PSEG Long Island warehouses.

11.6.12 Logistics Supervisor

The Logistics Supervisor oversees material circulation for the entire PSEG Long Island service territory and coordinates the distribution and replenishment of materials to restoration personnel and support sites.

11.6.13 Staging Site Manager(s)

The Staging Site Manager(s) oversees staging site operations and material distribution at assigned staging sites, in conjunction with warehouse employees, material handlers, and staging site contractors. Staging site managers will document staging site activities throughout the event.

11.7 Service Branch

11.7.1 Overview

The Service Branch of the Logistics Organization is comprised of the following functional areas:

- Materials Procurement Unit
- Materials Distribution Unit
- Lodging Unit
- Busing Unit
- Meals Unit

11.7.2 Service Branch Director

The Service Branch Director coordinates and leads the above functional areas and its associated personnel. Throughout the event, the Service Branch Director coordinates with the Logistics Section Chief on planning initiatives, action items, and any potential areas of concern associated with these function areas. These goals and priorities are then cascaded down to the Service Branch Unit Leaders for incorporation into their pre-established restoration routine. The Service Branch Director reviews and assesses their unit's progress and reports to the Logistics Section Chief to confirm that responsibilities have been completed and any other issues or concerns have been appropriately addressed.

11.7.3 Materials Procurement Unit

The Materials Procurement Unit Leader directs and coordinates the efforts of obtaining the necessary materials required to support logistical operations during restoration efforts. The Materials Procurement Unit Leader also oversees the activities pertaining to materials and equipment purchases, service related needs, vendor management and contracts, supply sources, accounts payable issues, and inbound logistics.

In addition, the Materials Procurement Unit Leader and Staff will review, oversee, and expedite the status of open orders pertaining to critical storm supplies, non-stock materials, equipment, and services.

The Materials Procurement Unit is required to semi-annually update the contact information (names, phone numbers, e-mail addresses, fax numbers, etc.) for logistics-related vendors on file. In addition to updating contact information, the Materials Procurement Unit Leader and Staff will confirm contracts and/or agreements and review potential plans and/or needs.

11.7.4 Materials Distribution Unit

The Materials Distribution Unit Leader is responsible for assessing and properly addressing the material(s) needs in support of restoration operations including ordering, receiving, maintaining, and distributing supplies and equipment, in support of restoration operations. In addition, they will oversee storeroom facilities and secondary mobile distribution sites throughout the entirety of restoration operations.

The Materials Distribution Unit Leader and Staff will assess and quantify inventory levels against storm target quantity levels and determine potential material needs, in conjunction with the Service Branch Director, Staging Site Branch Director, and corresponding Unit Leaders. Furthermore, the Materials Distribution Unit Leader and Staff will prepare, review, and deliver storm restoration kits to support Foreign Utility and Contractor Crews, when utilized.

Moreover, the Materials Distribution Unit Leader, in conjunction with the Staging Site Branch Director, Logistics Section Chief, and Planning Section Chief, will coordinate with other NYS Utilities, under the NYS Utilities Material Sharing Program, to draw on the group's stockpile of key materials and equipment (e.g., transformers, poles, cross arms, cables, wire, insulators, fuses) during restoration, if required.

11.7.4.1 Material Sharing Group

If material or equipment mutual assistance is required, the Planning Section Unit Leader, in conjunction with the Materials Distribution Unit Leader or Logistics designee, will 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 weather events, 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 to stockpile key materials and equipment to share, as outlined by the Group's governing principles and procedures.

11.7.5 Lodging Unit

The Lodging Unit Leader is responsible for reviewing and determining the anticipated lodging requirements and, ultimately, the procurement of lodging accommodations for PSEG Long Island personnel, Foreign Utility Crews, and support personnel as required. If in the event the number of personnel, both internal and external, exceeds the quantity of rooms available, the Lodging Unit Leader and Staff will review alternative housing needs and potential agreements with universities, firehouses, government sites, sporting arenas, etc. Additionally, in conjunction with the Logistics Section Chief, they will review and implement existing contracts with third party logistics contractors to establish and operate base camp staging sites for lodging accommodations.

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 each hotel/motel, via phone or e-mail, and verify/update the respective hotel/motel's contact information. In addition to updating contact information, the Lodging Unit Leader and Staff will also document various hotel details in support of anticipated lodging needs (e.g., parking, room capacity, catering halls).

PSEG Long Island also utilizes a third party lodging vendor, CLC Lodging, to assist with securing hotel rooms during restoration events. CLC Lodging coordinates with local hotels and motels regarding room availability, costs, reservations, etc. and provides the Lodging Unit Leader with detailed summaries to facilitate decision making regarding anticipated lodging plans. The Lodging Unit Leader and the lodging vendor will secure hotel accommodations based on event needs and conditions.

11.7.6 Busing Unit

The Busing Unit Leader is responsible for assessing and establishing the shuttling needs associated with restoration activities and associated operations. This includes shuttling services from staging areas, operating centers, and places of lodging for PSEG Long Island personnel, Foreign Crews, and support personnel, as required. The Busing Unit Leader will coordinate with other Unit Leaders to review and confirm additional shuttling needs have been identified, coordinated, and addressed.

11.7.7 Meals Unit

The Meals Unit Leader is responsible for coordinating and supplying the daily meal requirements at company and secondary work locations for PSEG Long Island employees, when requested. Additionally, the Meals Unit Leader will also manage food services (e.g., boxed lunches) for Foreign Crews and support personnel at staging sites and alternative lodging locations.

The Meals Unit Leader is required to semi-annually update the 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 each food/eatery establishments, via telephone or e-mail, and verify/update the respective establishment's contact information. In addition to updating contact information, the Meals Unit Leader and Staff will also document various catering details in support of anticipated meal needs (e.g., delivery capabilities, travel limitations, production quantities).

11.8 National Guard Assistance – Logistics Support

The Logistics Section also supports the needs of National Guard personnel when deployed to PSEG Long Island's service territory. PPE required to perform assigned roles will be provided to National Guard personnel. Supplemental equipment relative to planned tasks may also be distributed, if required. "Just-in-time" training may also be provided at worksites or staging areas, if necessary.

11.9 Demobilization

Upon the direction of the Logistics Section Chief, the Logistics Section and supporting Units will begin demobilization of the LSC and/or staging site(s), as required. These actions can be utilized in anticipation of an event coming to conclusion or the shifting of priorities due to changes in restoration needs. While performing demobilization actions, or shortly thereafter, the Logistics Section will review and aim to replenish inventory levels depleted during restoration operations. The Logistics Section will also coordinate demobilization protocols with the Planning Section Unit Leader and corresponding Demobilization Unit.

12. COMMUNICATIONS PROTOCOLS

12.1 Overall Approach and General Strategies

The Communications Protocols section provides a summary of communications related plans and actions that are put in place when responding to storm events with dynamic and often unpredictable circumstances and situations. Other events may also negatively affect electric service to customers, across Long Island and the Rockaways, before or during restoration events.

PSEG Long Island's Communications Plan provides its customers and key stakeholders with storm preparation and restoration information necessary to properly prepare for anticipated storms. It also conveys information associated with local emergency response efforts utilized when recovering from emergencies. During the event, communications will be tailored to those customers that are still without power, with helpful information on restoration strategy, so customers understand where their outage stands in the restoration process.

The Communications team maintains contact with customers and the general public, health and 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 the Long Island Power Authority (LIPA) officials before, during, and after an event.

Additionally, PSEG Long Island utilizes bill inserts, the website, social media, periodic mailings, e-mail, and community outreach programs 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.

12.2 Plan Methodology and Activation Descriptions

The Communications Protocols offer key activity and role level details to be followed throughout PSEG Long Island's service territory during a large-scale electric service interruption.

The Communications outreach effort is scalable and customizable, based on the conditions experienced. During outage events, the Communications team continuously evaluates the status of weather, the electric grid system, outages and downed wires, blocked or restricted roadways, public feedback and other useful data that will be valuable to employees, the public, municipal leaders, elected officials, public service, and emergency response teams. Efforts are focused on providing consistent messaging with the most updated and complete information available.

12.3 Communications Team Planning and Coordination

With the guidance of, and in coordination with the Incident Commander, the Public Information Officer (PIO) convenes a meeting of the Communications team leaders once a Storm Strategy Call is scheduled 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, listing each area of responsibility, which is updated, revised, and augmented as the event progresses, from the early warning stages through full customer restoration. Emergency Restoration assignments are generated by the Resource Coordination Unit Leader (Planning Section), and any position changes during a storm are filtered through this position as well.

12.4 Roles and Responsibilities

12.4.1 Public Information Officer

The Public Information Officer (PIO) provides clear, timely, accurate, and consistent information to employees, customers, regulators, emergency response partners, and stakeholders. They also work with managers and coordinators to supervise each critical function and sub-function.

12.4.2 Customer Communications Manager

The Customer Communications Manager confirms availability of dedicated communication channels for the Customer Relations team to support the DPS inbound calls. Additional lines of communication are open for the Large Customer Support (LCS) team to reach out to and respond to Large Commercial Customers, Managed Accounts, and Critical Facilities across business segments.

12.4.3 Customer Care and Community Outreach Manager

The Customer Care and Community Outreach Manager ensures effective communication with LSE customers, maintaining 24/7 coverage for the Municipal Escalation Hotline, as well as planning for the needs of affected communities and opening Community Outreach Centers.

12.5 Corporate Communications

The Corporate Communications Manager is responsible for conveying communication materials and contact information; restoration status updates and ETR forecasts; general information about storm safety and local emergency services available; key talking points regarding the storm restoration plan to PSEG Long Island employees, PSEG Long Island's website and social media channels; the general public; and news and media outlets.

The Corporate Communications support staff maintains a complete list of contacts for all media outlets across the service territory, including newspapers, periodicals, radio and TV broadcasters, and internet news services. The media contact list is updated throughout the year.

12.5.1 Internal Communications

The Corporate Communications Internal Communications Specialist prepares and distributes updates prior to and throughout each day of an event. This is undertaken to allow PSEG Long Island employees to have an understanding of the damages and impacts of the event, expectations for their support, and an understanding of the nature, scope, and status of PSEG Long Island's restoration response. Communication to internal employees will directly follow external press releases. The Corporate Communications team prepares employee updates and distributes them through a variety of channels, including electronic newsletter (The Link), which is available via computer, mobile devices, e-mail, and intranet. The updates include general information, tips to prepare their families and homes for the event, safety guidance focused on the issues and dangers associated with working in, and traveling through the conditions associated with the current storm.

12.5.2 External Communications

The PIO and Corporate Communications team disseminate information and updates to the general public and media outlets of the approaching threat, possible electrical impacts, safety tips, PSEG Long Island contact information, restoration priorities, crew availability, and ETR statuses via press releases, press briefings, website updates, e-mail blasts, and social media updates.

12.5.3 Media Coordination

The Corporate Communications Media Specialist corresponds with broadcast, online, and print media outlets to provide key messaging during an event. They formulate press releases, coordinate interviews, and disseminate periodic status updates, including safety precautions, restoration information, field photos and videos, before, during, and after an event. The Corporate Communications Media Specialist sends a press release to a list of internal communications organization leads to provide updated information across all available communication platforms.

The Corporate Communications support staff maintains a complete list of key contacts and alternate contacts for all media outlets, including newspapers, periodicals, radio and TV broadcasters, and internet news services across the PSEG Long Island service territory. Semi-annually, the Corporate Communications Media Specialist and support staff update the media list and key contacts.

12.5.4 Website and Social Media Coordination

The Corporate Communications Website and Social Media Specialists update the PSEG Long Island website continuously during an electrical emergency or when the service territory is impacted by flooding, mandatory evacuations, or other special circumstances. They upload restoration information, safety tips, and procedural guidance within one hour after a press release is published. The Corporate Communications Website and Social Media Specialists use available internet and social media channels to share proactive, current, and consistent messaging.

The Social Media Staff at the Customer Assistance Center (CAC) respond in real-time to customer inquiries on social media applications, such as Facebook, Instagram, and X (formerly known as Twitter). Customers reporting unsafe conditions or medical hardship may be escalated by the Social Media Analyst to a Call Center Supervisor or the CAC Command Center. PSEG Long Island is currently implementing artificial intelligence automation to help manage the increased customer usage during large scale events.

12.5.5 Communications Technology

The Chief Technology Officer (CTO) will monitor the PSEG Long Island website and social media platforms. The CTO will report the platforms' stability or performance issues to Emergency Preparedness (EP) who will alert DPS. The CTO will also notify the PIO who will share the performance or stability issues with the customers and direct them to alternate ways of reporting outages or obtaining additional information.

12.5.6 Communications Plan for Customer Reimbursement

In the event that the LIPA system experiences a Widespread Prolonged Outage Event, the Authority will credit eligible customers that experienced a prolonged outage for spoiled food and/or spoiled prescription medication in accordance with the LIPA Tariff. The LIPA Tariff defines "Widespread Prolonged Outage Event" as an "electric power outage event meeting the following criteria: (a) The event impacts at least 20,000 customers at the same time; (b) The event involves customers who remain without power for 72 Hours or more due to Authority-owned equipment unable to provide power."

The Planning Section Chief or designee will notify LIPA and the PIO that the criteria for a Widespread Prolonged Outage Event has been met. The PIO will direct the Customer Communications Manager to distribute relevant communications regarding the Widespread Prolonged Outage within 1 calendar day. PSEG Long Island will publish information on its website and send text alerts, e-mails, outbound calls, and press releases detailing eligibility requirements, how to apply for reimbursement, and deadlines for claim submission (see Figure 12.2 – Customer Reimbursement Press Release). PSEG Long Island may also contact affected customers directly. To receive reimbursement for food spoilage and prescription medication spoilage, customers are to provide PSEG Long Island, as agent for LIPA, with Itemized Lists and/or Proof of Loss within fourteen (14) days following the end of the Widespread Prolonged Outage Event.

12.6 Managed Accounts and Critical Facilities

The Large Customer Support (LCS) Coordinator ensures that the leadership and assigned points of contact for Managed Accounts and Critical Facilities receive timely and accurate updates prior to, and throughout storms or other electrical emergencies.

Major Account Consultants maintain a complete list of key operational and managerial contacts for all hospitals, nursing homes, and other managed Critical Facilities (e.g., government offices, critical infrastructure, water treatment, fuel distribution, and other key commercial and public safety facilities) served across the Rockaways and Long Island for their assigned customers. Critical Facility customer lists are maintained within CAS by Major Account Support Staff, based on critical facility coding in the Customer Information System. It enables PSEG Long Island to maintain the most current and updated information possible throughout the year. Comprehensive customer lists are pulled and reviewed, at least semi-annually, to verify accuracy and completeness.

Major Account Consultants maintain day-to-day relationships with municipal building and critical facility management to assist them in planning for potential emergencies and electrical outages. They review the critical facility accounts and contact information with the customer semi-annually by e-mail for completeness and accuracy purposes. Major Account Consultants also review the critical facility lists with EP Staff, who share the lists with NYC and County EOC personnel, semi-annually, to capture modifications to the list. District Managers may coordinate with the Major Account Consultants on any changes to the critical facilities listing provided by elected or municipal officials. The most current Critical Facility lists are available to each municipality through the Municipal Portal by downloading the data, which may be run by the municipality or provided by EP staff.

When large-scale outages are projected to last more than two days on the storm strategy call, additional hotline numbers may be established by the Customer Communications Manager as an additional layer of contact for managed, critical facilities and municipal customers. After an event occurs and electrical outages are reported, the assigned Major Account Support Lead runs reports throughout each day, to identify, track and monitor all affected Critical Facilities.

12.6.1 Non-Managed Critical Facilities

The Business First Advocates (BFAs) serve as Small Medium Business (SMB) Liaisons during events due to their blue-sky role and relationships with small and medium businesses. They will report to Large Customer Support for Non-Managed Critical Facilities customer outages (e.g., firehouses and other small critical businesses). Semi-annually, the BFAs review and update the non-managed critical facility lists.

In advance of potentially damaging storms, the Major Account Consultants proactively send e-mails to Managed Accounts and Managed Critical Facilities, and the BFAs send e-mails to Non-Managed Critical Facilities. The e-mails include safety tips, reminders on how best to prepare for the forecasted conditions and potential outages, the toll-free number to report outages, the direct number for the assigned Major Account Consultant or BFA, and the Critical Facility hotline when activated (see Figure 12.1 – Sample Major Accounts Preparation E-mail).

12.6.2 Major Accounts Utility Coordination

Annually, during non-storm conditions, the Major Account Consultants coordinate with utilities (i.e., GasCo, TelCo, CaTV, water) within the PSEG Long Island service territory to verify and update the critical facilities list. Critical facilities are noted within the Outage Management System (OMS) and are provided with priority restoration. OMS is the primary system for capturing and storing data and information about outages and the condition of the electric system. OMS governs outage identification, the dispatching of crews, and the management of the restoration response.

The Major Account Consultants will proactively communicate, via telephone, with the Long Island Rail Road (LIRR) and telecommunication companies (Verizon and Altice) prior to an impending storm event or electric emergency to provide updates about PSEG Long Island's plans, how to report outages, and contact PSEG Long Island. Additionally, with the assistance of the EP team, contact information of the designated staff facilitating pole replacement activity, shared downed wire issues and escalations will be provided to each of the telecom utilities (Verizon & Altice) before the event. At the discretion of the Operations Branch Director or the emergency point of contact at the utilities listed above, a utility representative may report to the various Operations Centers to review plans and coordinate restoration activities.

The Major Account Consultants will remain in contact with LIRR and telecommunications companies throughout the event. When utility coordination is activated, the EP staff member will provide a report via e-mail at least once daily to Verizon and Altice about the jobs that relate to the telecommunication providers. This report will include the location of the job, customer information, and other details as reported or surveyed. It will also include any findings by the damage assessor as noted in OMS.

12.7 Life Support Equipment (LSE) Customers

Life Support Equipment (LSE) customers are customers who rely on electric equipment to sustain life. The Customer Information System is coded for residences of customers that have notified PSEG Long Island that an LSE is in use, when accompanied by a completed qualification form signed by a physician. LSE customers are required to certify annually; however, all LSE accounts retain the designation regardless of the recertification results, as per DPS regulations. Removal is subject to the DPS approval process involving review of the Utility Request for Removal form and substantiating documentation.

Customers are reminded that designation as a LSE customer is not considered a restoration priority, and service will be restored as quickly and safely as possible, following normal prioritization and safety guidelines. PSEG Long Island does not assign LSE customers with an elevated priority in OMS. However, when all other conditions are equal, an outage with an LSE customer will be prioritized over an outage without an LSE customer (such as two single customers' jobs, where one is LSE).

Upon notification from the PIO, the Customer Care and Community Outreach Manager will initiate an automated outbound call campaign to notify LSE customers of the potential for an extended outage due to an impending storm. The automated messaging encourages customers to make necessary arrangements if an extended power outage has potential to disrupt the operation of critical personal health devices. Messaging will also offer tips and suggestions for preparing to 'weather a storm' or to evacuate to a safe location. The focus of the pre-storm messaging is to provide proactive, early warnings of potential prolonged disruptions so LSE customers can prepare in advance.

LSE Representatives will make a minimum of two attempts to reach LSE customers, within the first 12 hours from the start of event. The two attempts can be a combination of live calls and in person visits and will serve to confirm if the:

- Customer is safe and well
- Customer has arranged for any assistance required to stay in their homes
- Customer had to evacuate their home
- Customer account correctly indicates that the customer or a member of their household rely on electrically operated LSE
- Customer's service is affected by the storm as indicated by the Outage Management System

The representative will also provide the following information to the LSE customers:

- Call 911, in case of an emergency
- ETR, if available
- Information regarding the PSEG Long Island's direct Critical Facilities hotline ([redacted], for any further questions or concerns
- In the event a customer expresses a need for assistance related to their health or safety, the representative will refer the customer to an appropriate response agency

When initial call attempts to reach the customer are unsuccessful, additional contact methods are utilized, including wellness visits by PSEG Long Island Outreach Liaisons. These visits will serve to obtain and convey the same information as done on live calls, as noted above. Occasionally, LSE customers will be referred to City or County EOCs (Nassau, Suffolk and NYC) for wellness visits to be conducted by emergency response agencies, human services, and volunteer organizations. The coordination between the LSE team and the County/City EOCs is facilitated by the PSEG Long Island EOC Liaisons when activated, or the EP staff. Similarly, a 3rd party vendor may be utilized to conduct wellness visits during events to supplement the efforts of PSEG Long Island Outreach Liaisons, prior to any referrals to City and County EOCs. The 3rd Party vendor will be activated at the joint discretion of the Community Outreach Coordinator and Customer Care and Community Outreach Manager, depending on various factors including volume, staffing, time constraints and other conditions.

The LSE team will track all contact and wellness visit results to determine contact is made through the completion of restoration. A detailed daily report of all activity (at the individual customer level), including number of referrals, on a standardized template is provided to DPS, when requested.

12.7.1 Special Needs and Medical Emergency Customers

Customers can register with PSEG Long Island as Special Needs Customers or Medical Emergency Customers per the enrollment process indicated on PSEG Long Island's website and other published brochures. The registration process requires the customer to obtain a medical provider's note confirming their eligibility. Once all documentation is verified by the CSS team, the customer will be designated with the applicable tag/flag in the Customer Information System (CAS). Once registered, CSS team will conduct annual outreach to Special Needs customers to confirm qualifications and update their contact and emergency information. Additionally, CAC personnel are trained to verify contact information for Special Needs and Medical Emergency customers during each live call encounter and make updates to their account as necessary.

During an electric emergency, if requested by the customers, PSEG Long Island will refer Special Needs and Medical Emergency customers, to appropriate agencies, such as the County Offices for the Aging, County Health Departments, County Departments of Social Services, American Red Cross, Local Police and Fire Departments, Advocacy Groups for the Hearing and Sight Impaired, etc. When an ETR is established, the Communications Technology team will send proactive ETR information via text, call, or e-mail channels to Special Needs and Medical Emergency customers, along with the rest of the customers affected by the outage. The Special Needs and Medical Emergency customers can choose to opt out of receiving notifications.

12.8 Community Outreach Centers

The Community Outreach Coordinator manages 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 with a high confidence weather forecast threatens to create significant outages that are expected to last 48 hours or longer, PSEG Long Island's PIO, in conjunction with the Customer Care and Community Outreach Manager, will determine if Community Outreach Centers should be opened, and the types of support to be provided, depending upon the time of year and expected conditions. In some cases, the decision to open outreach centers may occur after the impact of an unexpected storm or emergency event that results in unanticipated damage, and will be based on actual outages and customer needs.

Upon activation, the Customer Outreach Coordinator will identify potential locations for the setup of outreach centers, based upon the projected or actual damage and population density, and may include Customer Office locations, Staging Sites or other centrally accessible locations where tents or Mobile Command units can be set up to distribute supplies. The Customer Outreach Coordinator will provide the site's location to contracted vendor providing logistical support.

The Customer Outreach Coordinator will schedule PSEG Long Island Outreach Liaisons to staff these locations, determine hours of operation and confirm supplies. Then they will notify the Corporate Communications Media Specialists of the locations, hours of operation, and available provisions for distribution (e.g., wet or dry ice) at each site. The Corporate Communications team will disseminate the information to customers, within 1 hour of receipt per the DPS scorecard requirement, through various communication channels, including press releases, website updates, social media, Interactive Voice Response (IVR) messaging and/or e-mail blasts.

Community Outreach Liaisons may be dispatched to severely impacted communities to assist with the distribution of pertinent information, such as restoration updates, storm preparation materials, and supplies such as bottled water, non-perishable foods, and safety items.

12.9 Customer Assistance Center (CAC)

The Customer Assistance Center (CAC) Manager has overall responsibility for efficient call center operations. They develop the Storm Plan, including call out and call answer messaging systems, outage communications tools, and implementation of the CAC Command Center.

The CAC will routinely extend shifts, recruit or mandate overtime, cancel vacations and time off, and/or utilize cross-departmental support (to increase the staffing complement), as well as to activate the High Volume Call Application (HVCA) to maintain CAC performance and integrity. The HVCA allows PSEG Long Island to manage call volume, subject to conditions regarding staffing, performance, and outage volume. The CAC Manager will determine when HVCA is activated.

The CAC Call Representatives take electric emergency calls and provide restoration information to customers. They maintain and staff dedicated lines for police and fire departments, Critical Facilities, and for municipalities to reach an agent 24/7 during emergency events. The satellite communication system has been tested and implemented in the CAC to enable police and fire departments to reach an agent successfully in the event of a POTS (Plain Old Telephone System) failure, as experienced during Tropical Storm Isaias in August 2020.

12.9.1 CAC Command Center

The CAC Command Center receives escalated tickets from the CAC, social media, and other Customer Service departments. These tickets cannot be resolved easily with the customer due to extended ETRs or extenuating circumstances. The CAC Command Center Leads and Supervisors will review OMS and the restoration strategy to obtain additional data that may help the customer. When appropriate, the CAC Command Center Leads and Supervisors will coordinate with the Escalation Processing Team and Console Information Coordinators to escalate incidents to Operations. Additionally, the CAC Command Center Leads and Supervisors will collect any reported reoccurring issues and share them with the Call Center Coordinator. The Call Center Coordinator will alert Corporate Communications and the CAC Manager.

12.9.2 Call Center Operations

The Call Center Operations Coordinator coordinates the activities of call representatives and other CAC support teams. The Call Center Supervisors will support the Call Center Operations Coordinator to sufficiently train and prepare call representatives to support the increased call volume and event specific customer needs. In addition, the team distributes communication updates quickly and effectively, and provides consistent messaging for all phone agents.

12.9.3 Interactive Voice Response (IVR) Messaging

The Workforce Management Coordinator manages IVR messaging and ensures that it is revised within 1 hour of a communications press release, and does not exceed 60 to 90 seconds in length. The messaging includes:

- Detailed or broad scale data related to ETRs (global or regional)
- Message indicating damage assessment phase when ETRs are not available yet during the initial period of an event
- Storm status
- Outage and restoration information
- Dry Ice/Shelter/Water information
- Reference to the company website for detailed or additional information on the above topics
- Updated time and date stamps

In the absence of a communications press release, IVR messaging will be reviewed and updated, at a minimum, every 8 hours during the storm restoration period. When there is no new or additional information to add, and the previous message continues to be relevant and accurate, the Workforce Management Coordinator will update the time and date stamp.

The Workforce Management Coordinator will provide post event documentation of the IVR updates to the Corporate Communications team for additional reporting.

12.10 Department of Public Services (DPS) Call Center Coordination

The DPS Hotline (Customer Relations) Coordinator, Supervisor and DPS Hotline Representatives are responsible for contacting the DPS to coordinate coverage for the same hours of operation as the extended hours for the DPS Call Center. DPS Hotline staff perform identical duties blue sky days, and are assigned and empowered to assist with any issues forwarded by the DPS's staff.

In support of the DPS escalation procedure, the DPS Hotline Coordinator will contact the designated NYS DPS Call Center Manager, as soon as an event occurs, or if potential storm damage is predicted.

1. The DPS Hotline Coordinator (Customer Relations) monitors an internal phone line for escalations submitted to DPS called the DPS Hotline. Only DPS has access to the hotline. The Coordinator will send the following response to DPS, once they receive notification of the hours that the DPS Call Center will be open for storm calls:

2. "PSEG Long Island Customer Relations staff will be available to accommodate your extended Call Centers hours of 7:30AM to 7:30PM on **insert day of the week, month, and date** (e.g., Saturday, January 23rd). You may call the Customer Assistance Group Line/Hotline at [redacted] during those hours."

Representatives from the DPS are invited to participate in PSEG Long Island's daily storm update calls, and receive written summaries of the call notes following each call.

12.11 The Municipal Portal

PSEG Long Island's Municipal Portal is a tool that is utilized to track and provide restoration status information to governmental leaders and elected officials during restoration events. Municipalities and elected official can input tickets for Critical Facility outages and MSTC jobs into the Municipal Portal which simultaneously creates a ticket in the OMS. They can opt-in to receive job status updates text or e-mail.

Governmental leaders and elected officials can also rank each outage job with a priority of importance for their locality. PSEG Long Island will consider the priority when developing restoration work plans. The Municipal Portal also includes a user friendly map for inputting Wire Down/MSTC jobs. Users may place a pin on a map location where the issue exists. Clear and timely status information will be sent to governmental leaders and elected officials via text or e-mail.

The CTO and staff will test the Municipal Portal before and throughout an event. The CTO will inform EP of stability or performance issues, and EP will alert DPS. The CTO will also notify the PIO, who will direct External Affairs and Major Account Consultants to broadcast information to their municipal customers.

The Municipal Portal requirements are as follows:

- Providing centralized data storage of escalated issues put in by the municipalities
- Providing government officials with an additional means of reporting outages and making requests for MSTC assistance to make an area safe for road debris removal
- Enhancing automated communications between PSEG Long Island, external stakeholders, and government officials when the municipality signs up for alerts for particular facilities
- Ensuring comprehensive tracking and visibility to escalated tickets that are entered directly by the municipality

12.11.1 Municipal Hotline

The Customer Care and Community Outreach Manager leads the Municipal Hotline Team which is a centralized point of contact for municipalities. While this hotline is available 24/7 blue sky days, a dedicated team of call agents is assigned once storm activation is declared. The call representatives collect and address escalations and appeals from municipal leaders, elected officials, state, county, and NYC OEM leadership, PSEG Long Island EOC and Municipal Liaisons, District Managers, Major Account Consultants, or other employees and executives who have received notification of critical outage conditions from municipalities, critical facilities and infrastructure, or uniquely urgent requests, such as MSTC support. The Municipal Hotline representatives may communicate with their Call Center Supervisor and Manager, or directly with the Console Information Coordinators (CICs), District Managers, EOC/Municipal Liaisons and CAC Command Center to resolve restoration inquiries or escalation statuses. The Municipal Hotline is monitored by the Workforce Management organization and the CTO.

Municipalities can get direct updates about restoration status via email or text based on real time information in OMS through the Municipal Portal. An additional manual internal Escalation Progress Tracker database may be used, if OMS and the Municipal Portal are deemed unstable by the CTO.

12.12 Escalation Coordination

The Escalation Processing Coordinator schedules and oversees the Escalation Processing Staff, the Small Medium Business (SMB) Liaisons, and CICs with the Lead CIC. The Escalation Processing Coordinator also monitors the escalation tagging process with support from the Escalation Lead, and provides situational updates to the Escalation Team. The role of the Escalation Team is to obtain customer feedback from the Liaison Organization, the SMB Liaisons, Major Accounts, LSE Customer Organization, and CAC Command Center and process it for prioritization and dispatch by T&D Operations. The Escalation Team will disseminate escalation updates and summaries to the initial reporting Customer Service organizations, the Customer Communications Manager, and other PSEG Long Island Senior Leadership as needed.

12.12.1 Small Medium Business (SMB) Liaisons

The Business First Advocates (BFAs) serve as SMB Liaisons during events due to their blue-sky role and relationships with small and medium businesses. They will also report to Large Customer Support for non-managed critical facilities customer outages. They maintain lists of these customers and locations to review and update semi-annually.

In anticipation of an event, the SMB Liaisons will contact the small and medium businesses and non-managed critical facilities via e-mails to offer safety tips and reminders on how to prepare for the forecasted conditions and potential outages. SMB Liaisons will also provide information on reporting outages by phone, text, or My Account, and will include their direct contact information.

During an event, the SMB Liaisons remain in contact with their customers to provide updates about PSEG Long Island's mobilization and coordination efforts, restoration plans, escalations, and road clearing issues.

After an event where storm hotlines have been activated, the SMB Liaisons will e-mail the hotline deactivation communications to small and medium businesses and non-managed critical facility customers.

12.12.2 Escalation Processing Staff

The Escalation Processing Coordinator and Escalation Processing Staff supervise the incoming requests for escalation from the Customer Service and Communications organizations. These organizations will send incidents qualifying for escalation to the shared "Storm Escalations" email inbox. Escalation Processing Staff will use the Storm Escalation Progress Tracker to track the incidents and tag them in OMS when appropriate to enhance the visibility for Operations.

12.12.3 Console Information Coordinators

Console Information Coordinators (CICs) report to the Lead CIC and Escalation Processing Coordinator and are responsible for monitoring and processing the escalations in Queens, Nassau County, and Suffolk County. The CIC is the Communications advocate who works with Operations to review restoration priorities and crew availability, work plan strategy, and identify and escalate emergent issues and situations. They use OMS, the Municipal Portal, and Escalation Tagging to track and prioritize escalations in their respective divisions (Queens/Nassau, Central Nassau, Western Suffolk, and Eastern Suffolk). The CICs work closely with the Division Manager and Dispatchers in all areas, providing consolidated lists of escalated incidents to be incorporated into the Operations Restoration Work Plan, based on Critical Facility level prioritization, customer feedback, and number of available field workforces.

12.12.4 Escalation Progress Tracker

The Escalation Progress Tracker is an additional internal escalation tracking system to capture, record, track, and respond to escalated issues and priorities that are not already identified through the Municipal Portal or Escalation Tags. It may be used as a prioritization tool if IT deems OMS and the Municipal Portal are unstable. Escalations are reported through the CAC Command Center, Municipal Liaisons, Municipal Hotline, or the LCS team. The Escalation Progress Tracker will remain in place as an additional backup mechanism should PSEG Long Island need to supplement the other escalation avenues.

Following severe storms, many individuals contact PSEG Long Island requesting status updates on key outages and/or customer inquiries. The Customer Communications Manager will determine if the Escalation Progress Tracker is needed before or during an event. The Excel format can be used offline in the event of network issues.

12.13 Communication Graphics

PSEG Long Island Preparing for Winter Weather

PSEG Long Island is monitoring the forecast for potential winter weather that is expected to bring a mix of snow and rain Wednesday through Thanksgiving morning. Please be aware that snow can cling to tree branches and any remaining leaves, causing branches to fall onto electric wires.

In anticipation of the storm, PSEG Long Island is getting ready to respond to potential 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 to handle any outages. If necessary, contractors, including tree crews, will be available to assist our own skilled workforce.

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 online and on our mobile website at www.psegliny.com. Updates are posted on www.psegliny.com/stormcenter during severe weather.

> Then please call me on my cell phone at (516) 817-XXXX. I will work with our service personnel to keep you apprised on the status of the efforts to restore your power.

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, customer and employee safety is first and foremost. Remember, safety is always the only choice.

PSEG Long Island will be ready to respond as quickly and safely as possible. We'd also like to take this opportunity to wish you and your family a very happy and safe Thanksgiving.

[redacted]

PSEG LONG ISLAND
We make things work for you.

Figure 12.1 - Sample Major Accounts Preparation E-mail

PSEG Long Island
333 Earle Ovington Blvd
Uniondale, NY 11553

PSEG LONG ISLAND

FOR RELEASE
XXX XX, 202X

Contact: [redacted]

PSEG Long Island May Offer Credits to Customers Due to Prolonged Outages During XX

(UNIONDALE, N.Y. – XX) – PSEG Long Island has expanded its claims policy for customers that experienced a prolonged outage due to the inability of utility-owned equipment to provide power. Residential and certain small business customers may be eligible for bill credits of the daily service charge. Bill credits reimbursing the daily service charge will automatically be applied to eligible customer accounts.

In addition, residential and certain small business customers may be eligible for reimbursement of perishable food spoiled by a lack of refrigeration. Residential customers may also qualify for reimbursement of spoiled prescription medication due to lack of refrigeration.

The current event involves customers who have remained without power for more than 72 hours due to utility-owned equipment unable to provide power. The 72 hours start at the time power goes off, so such an outage can span into a fourth day.

PSEG Long Island will reimburse residential customers:

- **Up to $235** for spoiled food, when providing an itemized list, or
- **Up to $540**, when also providing proof of loss (i.e., photos, receipts).
- **The actual loss** of spoiled prescription medication when providing both an itemized list and proof of loss.

Certain small business customers may also be eligible for reimbursement of **up to $540** for perishable food that spoiled due to a lack of refrigeration, when providing an itemized list and proof of loss (*i.e.*, photos, receipts).

Customers will have fourteen (14) days from the end of the outage event to submit claims for food and prescription medication spoilage due to lack of refrigeration.

For more details on food/medication reimbursement, including deadlines for submission of claims, please visit www.psegliny.com/claims or email to PSEG-LI-Stormclaims@pseg.com. The reimbursement claims cannot be processed over the phone.

# # #

PSEG Long Island
PSEG Long Island operates the Long Island Power Authority's transmission and distribution system under a long-term contract. PSEG Long Island is a subsidiary of Public Service Enterprise Group Inc. (PSEG) (NYSE:PEG), a publicly traded diversified energy company.

Figure 12.2 - Sample Customer Reimbursement Press Release

13. LIAISON PROTOCOLS

13.1 Overall Approach and General Strategies

The External Affairs Team maintains close relationships with elected officials, municipal leaders, and public safety officials throughout the year to familiarize them with PSEG Long Island's restoration protocols, and prepare them for interacting with PSEG Long Island during storms and other system incidents/events/emergencies.

The External Affairs Team will proactively reach out to public officials at all levels of government through various channels, such as phone, e-mail, text, and the NY Alert system when storms or other threats are approaching Long Island and the Rockaways.

When the Incident Command System (ICS) is activated for system incidents, events, or emergencies, the Liaison Organization structure includes the tactical functions of external affairs, governmental relations, emergency management, and supporting functional areas.

The Liaison Organization coordinates municipal calls to convey key information, arrange on-site support at EOCs by PSEG Long Island Liaisons, provides remote support for additional local municipalities, and continues to provide two-way communications throughout the event. Additionally, the Liaison Organization provides restoration/ETR strategy updates to municipal officials which enables external agencies to respond to inquiries and concerns from residents in their jurisdiction.

13.2 Roles and Responsibilities

13.2.1 Liaison Officer

The Liaison Officer is responsible for communicating the status of PSEG Long Island's storm preparation and emergency response efforts with external government, public service, and public safety stakeholders. The Liaison Officer coordinates the efforts of the District Managers and EOC and Municipal Liaisons to meet the dynamic and evolving needs of elected officials and municipal leaders across the service territory.

13.2.2 District Managers

District Managers are a key interface between PSEG Long Island personnel, local officials, municipal leaders, and their staff during restoration operations. District Managers are assigned to PSEG Long Island's operating divisions and serve as the main point of contact during both "blue sky" and restoration events. Performing the same assignment during various operational conditions provides a consistent and dedicated point of contact for local officials and their personnel.

District Managers may receive requests from local officials to address Make Safe to Clear (MSTC) locations, in addition to those directly reported through the Municipal Portal. Our crews will clear and de-energize power lines to make the area safe for tree and debris removal through our MSTC protocols and procedures in coordination with the System Make Safe to Clear Specialist. PSEG Long Island crews may occasionally work directly with Town/County public works and highway departments when deemed necessary. District Managers establish two-way communications between PSEG Long Island and elected officials and municipal leaders to deliver accurate and timely messages, reports, and updates. Tailored messages are sent out following press releases, as well as direct communication via phone, text, and e-mail.

District Managers also communicate with EOC and Municipal Liaisons in their division if an incident arises that needs their attention. They may reach out to the Console Information Coordinators (CICs) in each division who can provide status updates on the outstanding work and prioritize the restoration of escalated outage jobs.

13.2.3 Municipal Liaisons

The Municipal Liaison establishes and maintains contact with assigned elected officials throughout an emergency event, and communicates via the preferred medium as requested by the municipality. The Municipal Liaison provides timely and accurate status updates, facilitates coordination of issues with the appropriate internal departments on behalf of the municipality, raises awareness regarding escalated issues, and communicates with internal PSEG Long Island employees. They also enter escalated outage/MSTC jobs in the OMS or Municipal Portal that are not already in either system. Municipal Liaisons monitor the Municipal Portal and escalated incidents in OMS for their assigned jurisdiction with support from the Console Information Coordinators (CICs) and Escalation Team.

13.2.4 Emergency Operations Center (EOC) Liaisons

The EOC Liaisons interface with town, county, city, or state EOCs and PSEG Long Island personnel to provide bidirectional communication of status updates and situational awareness. EOC Liaisons may be deployed to an EOC (when opened and staffing is requested) by the Liaison Officer or Emergency Preparedness EOC Leads.

EOC Liaisons may coordinate PSEG Long Island requests for assistance, resources, and actions with the appropriate agency liaison assigned to the EOC (e.g., NYS Division of Homeland Security & Emergency Services (DHSES), NYS Department of Transportation (DOT), County and State Police Departments, Department of Public Works (DPW), and Fire Rescue Emergency Services Organizations). EOC Liaisons may reach out to the District Managers and CICs in the divisions to facilitate escalations and obtain operational updates. They provide EOC reports outs via the requested application (e-mail, WebEOC, ETeam, Microsoft Teams, etc.) and reporting cycle timing specific to each municipality. EOC Liaisons will share updates about any PSEG Long Island community outreach locations activated for dry ice distribution. These sites may be at existing PSEG Long Island customer walk-in centers or in community centers where extensive outages have occurred.

Additionally, EOC Liaisons assist with coordinating LSE wellness visits between PSEG Long Island and first responders/health care organizations. Lists of LSE customers without power are sent directly to the EOC Liaisons, who direct it to the established contact at the EOC for wellness checks. They will return any status updates back to the PSEG Long Island LSE Lead.

13.2.5 Emergency Preparedness (EP) Coordinators/EOC Leads

PSEG Long Island Emergency Preparedness (EP) Coordinators serve as EOC Leads during events due to their blue-sky role and relationships with State, County and City emergency management organizations.

In anticipation of an event, EP Coordinators/EOC Leads will reach out to their dedicated emergency management contacts and provide details regarding mobilization efforts and restoration plans. EP Coordinators/EOC Leads remain in contact with OEM personnel throughout the duration of event and share updates regarding coordination efforts, escalations, road clearing issues, critical facilities, and LSE operations and outreach plans, etc.

The EP Coordinators/EOC Leads contact each EOC by 4 PM, via phone call or e-mail to review any outstanding critical facility outages and request prioritization of these locations by OEM officials. EP Coordinators/EOC Leads will provide feedback from Operations and identify if these facilities are able to be restored that day, through day/overnight crews, or if they will be part of the next day's work plan. Storm notifications are saved to each storm file.

13.3 Coordination Efforts

13.3.1 Prioritization of Emergency Services

Public Authorities Law Section 1020-mm states, in relevant part, that:

> *If, during a widespread prolonged outage that affects at least twenty thousand customers in the service territory of the authority, and the service provider is not able to restore electric power services within twenty-four hours to any affected police department, fire department, ambulance service or advanced life support first response service facility that is prewired with an appropriate transfer switch for using an alternate generated power source, such service provider shall notify the village, town or city in which such facility is located.2*

Each county in the LIPA service territory is responsible for providing a list of facilities applicable to PAL Section 1020-mm within their territorial boundaries and the locations of such facilities to PSEG Long Island.[3] The creation, maintenance, and provision of these lists to PSEG Long Island, including the provision of any updates to such lists, are the responsibility of each county and not PSEG Long Island.

To comply with PAL Section 1020-mm's notification requirements, effective December 22, 2023, a representative from PSEG Long Island will provide notification in the form of a call, text, or e-mail apprising the Chief Executive Officer (CEO) or designee of each impacted Village, Town, or City of the affected applicable outages, including any known information about the outage cause or duration. The representative will contact the CEO or designee as soon as practicable after PSEG Long Island ascertains that a service outage will last longer than 24 hours. In the event the CEO or designee cannot be reached, PSEG Long Island will follow-up with a form of contact that provides documentation of the time of attempted contact (e-mail with a timestamp).

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[2] N.Y. Pub. Auth. Law § 1020-mm(1) (West).

[3] N.Y. Pub. Auth. Law § 1020-mm(2) (West).

13.3.2 Elected Officials and Human Services Agencies

The District Managers and support staff maintain a complete list of key and alternate contacts for elected officials for local, county, and state authorities across the service territory. District Managers connect with municipal officials throughout the year and document any changes in contact names or data. The District Managers review and update the contact lists semi-annually, in January and June, in coordination with the elected officials.

PSEG Long Island fosters relationships with Human Services Agencies throughout the year and the External Affairs Support Staff manage a list of essential contacts at each agency. These lists are used throughout the year for day-to-day interactions with the stakeholders.

13.3.3 State, Counties, City and Local Municipalities

PSEG Long Island EP Coordinators/EOC Leads meet with state, county, and NYC OEM representatives semi-annually to review restoration plans, procedures, critical facility lists, contact information, critical roads, dry ice distribution locations, and other key priorities.

- The first meeting will be held in person or though virtual platform (not a conference call).
- The second meeting will be offered via e-mail, timed close to when the next meeting would be normally held (~ 6 months later). The e-mail to the EOC/POC will contain critical facilities' lists, updated utility contact information, etc., and any other information normally discussed at these meetings.
    - If parties request the second meeting, the utility will schedule same either in person or through virtual platform.
    - If the second meeting is declined, the utility will provide a point of contact for the EOC to discuss any changes/updates to critical facilities list or contact information etc. or answer any questions.

Similarly, Emergency Planning and External Affairs are in contact with all municipalities (e.g., City, Town, County) and offer to meet with town officials semi-annually (at least once per year in person/virtual platform) to review restoration plans, procedures, contact information, and key priorities for their jurisdiction. Associated villages are extended an invitation to these meetings as well by their dedicated District Manager. Acceptance and participation in these meetings is tracked by External Affairs support staff. EP Coordinators and External Affairs will then coordinate with the Major Account Consultant responsible for that segment (NYC, Town government, etc.) regarding any changes or additions to the critical facility lists that result from these meetings to provide these accounts with proper coding. Critical facility lists are published yearly in the ERP and the most current list is readily available to municipal officials in the Municipal Portal. Critical Facility locations are found in the Municipal Portal, in map and list form, for their territory, and are available 24/7 to municipal officials.

13.3.4 Municipal Portal

PSEG Long Island's Municipal Portal is a tool that is utilized to track and provide restoration status information to governmental leaders and elected officials during restoration events. Municipalities and elected official can input tickets into the Municipal Portal which simultaneously creates a ticket in the OMS. They can opt-in to receive job status updates text or e-mail.

External Affairs offers Municipal Portal training throughout the year via e-mail or direct contact to municipalities at the county, city, town and village level. External Affairs tracks the training dates and participants.

13.3.5 Municipal Calls

The Liaison Organization structures municipal calls and outreach to all municipal contacts. At the beginning of the storm, liaisons provide their contact information and request the preferred method of contact for each municipal official. The schedule for outreach varies depending on the timing and extent of weather and damage to the system. During storm events that are expected to last over 48 hours, a municipal call will be held within the first 24 hours (see Figure 13.1 - Sample Municipal Call Agenda). The Incident Commander and President and COO of PSEG Long Island will consult with the Liaison Officer on the need for island wide and regional calls, and the Liaison Officer Support Staff will send out invitations via phone call and e-mail to the scheduled Municipal calls through the NY-Alert system (see Figure 13.2 - Sample Municipal Call Invitation). For storms where we experience significant multi-day outages, calls will take place on a daily basis until 90% of customers are restored. Regional calls will be arranged during events with significant multi-day outages impacting a specific region.

The President and COO of PSEG Long Island, Liaison Officer, District Managers as well as Operations and Communications Leads provide municipal leaders, elected officials, and their emergency and/or operation leads with appropriate information related to the PSEG Long Island restoration plan and status, and particular incidents that have impacted the electric system within the PSEG Long Island service territory. Liaison Officer support staff collate information from Operations, Emergency Preparedness, and the Communications senior leadership. This may include updates on the damage sustained, hard hit areas, key actions and priorities, next steps in the restoration process, outage summaries, key restoration milestones achieved, outages affecting critical facilities or critical infrastructure, and operational objectives for the following day. Information on restoration strategy for customers that are still out will be provided in order for municipal officials to provide feedback to customers in their jurisdiction.

13.3.5.1 Municipal Call Log

The Municipal Call Log (see Figure 13.3 – Municipal Call Log Application) is a shared document that is used to track and monitor issues reported by municipal officials, including outbound/incoming communications, type of communication and contact information. District Managers and Liaisons can review incidents reported in their division, avoid duplication of effort, and track and resolve issues.

In the event that quality issues with OMS or the Municipal Portal affect PSEG Long Island's ability to input outages, the Municipal Call Log is an alternative means to track outages and escalations reported to the Liaison Organization.

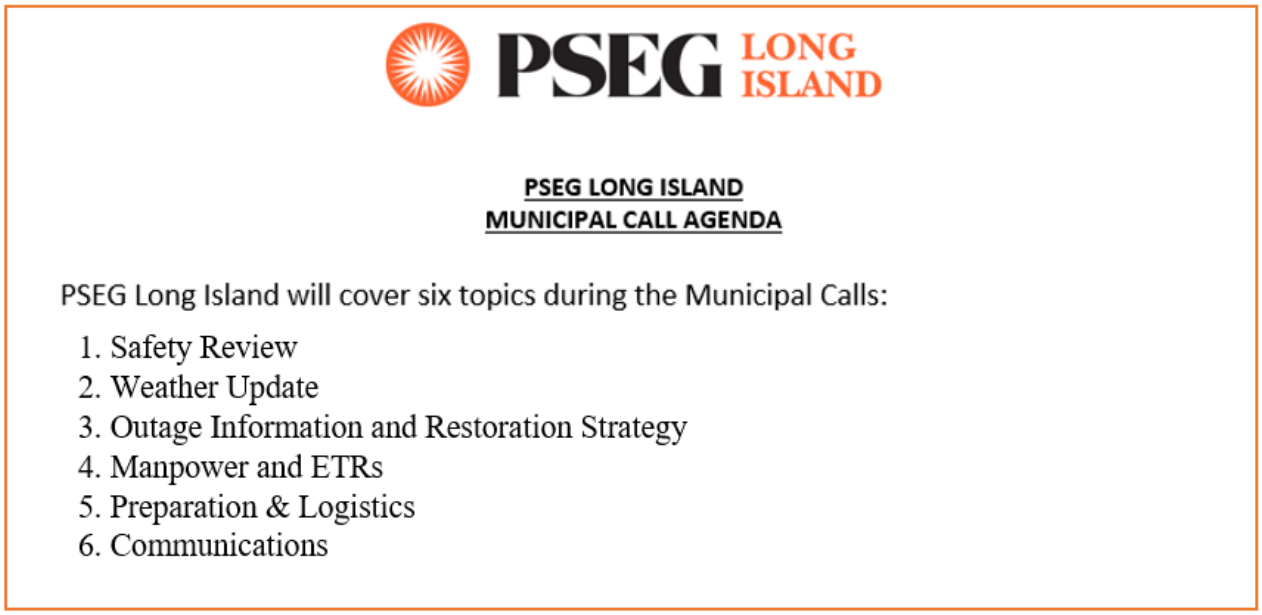
13.3.5.2 Transition to Divisional Calls

PSEG Long Island surveys and identifies localized damages after the event or storm. The municipal calls transition from a centralized conference call to a division-based (e.g., Queens/Nassau, Central Nassau, Western Suffolk, and Eastern Suffolk) call to provide geographically specific information to officials and address politically sensitive operational issues. The District Manager and Distribution Operations Manager in each division co-host the conference calls. The District Manager coordinates and tracks follow up or response requests.

13.4 Escalation Processing and the Municipalities

The District Managers and Liaisons coordinate with the CICs and Escalation Processing Team to track outages and emergency incidents, provide restoration status updates, and escalate incidents. They may escalate outages affecting Critical Facilities and MSTC conditions blocking municipal roads that require the utility to clear the area of electric utility hazards and make it safe for the towns to remove debris and clear the road. The Escalation Progress Tracker is an internal tool used to track MSTC and escalated outages.

13.5 Liaison Graphics


PSEG LONG ISLAND

PSEG LONG ISLAND
MUNICIPAL CALL AGENDA

PSEG Long Island will cover six topics during the Municipal Calls:

1. Safety Review
2. Weather Update
3. Outage Information and Restoration Strategy
4. Manpower and ETRs
5. Preparation & Logistics
6. Communications

Figure 13.1 – Sample Municipal Call Agenda

PSEG LONG ISLAND

Please click here to acknowledge receipt of this message [neconfirm.everbridge.net]

Please Stand By for an important message from P-S-E-G Long Island

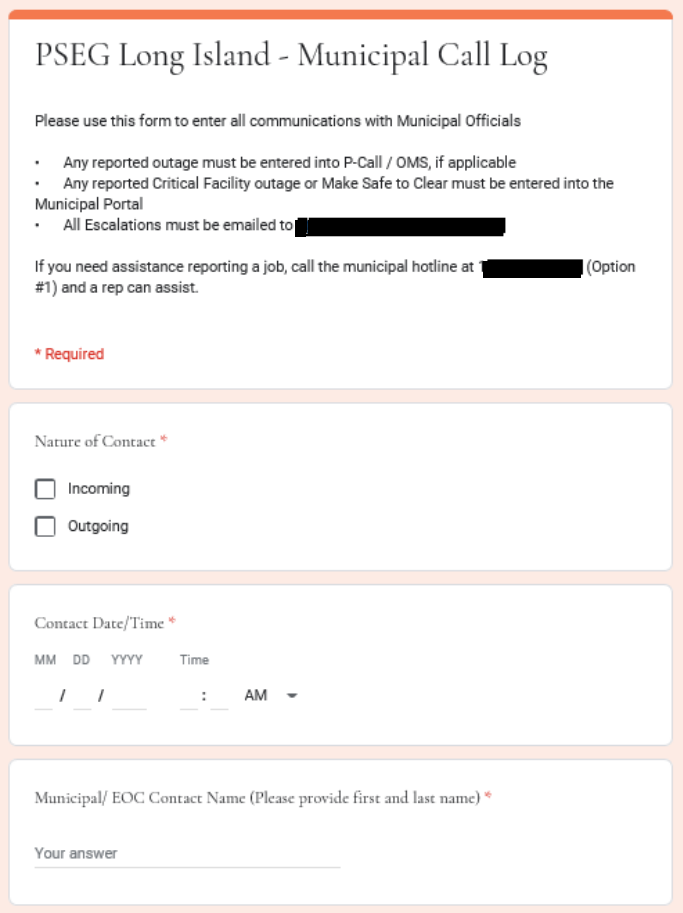
P-S-E-G Long Island is prepared for the potentially strong winds and heavy precipitation forecasted for the holiday weekend, Sunday into Monday. As a result, we would like to invite you to an Island wide conference call with the President and C-O-O, of P-S-E-G Long Island, Today, Sunday, January 16th at 6:00 p-m. On this call, we will provide you with the latest on the weather and P-S-E-G Long Island's current state of readiness.

To participate in the call, please use the following dial-in information: 8, 7, 7, 7, 4, 3, 9, 1, 5, 3 participant code 3, 9, 5, 0, 6, 5, 5, repeat the dial in number is 8, 7, 7, 7, 4, 3, 9, 1, 5, 3 participant code 3, 9, 5, 0, 6, 5, 5.

Due to the high volume of participants, please join the call 5 minutes early.

Thank you and stay safe

Figure 13.2 – Sample Municipal Call Invitation



PSEG Long Island - Municipal Call Log

Please use this form to enter all communications with Municipal Officials

- Any reported outage must be entered into P-Call / OMS, if applicable
- Any reported Critical Facility outage or Make Safe to Clear must be entered into the Municipal Portal
- All Escalations must be emailed to [redacted]

If you need assistance reporting a job, call the municipal hotline at [redacted] (Option #1) and a rep can assist.

* Required

Nature of Contact *

Incoming

Outgoing

Contact Date/Time *

MM DD YYYY Time

__ / __ / ____ __ : __ AM

Municipal/ EOC Contact Name (Please provide first and last name) *

Your answer

Figure 13.3 Municipal Call Log Application

V. Post-Event Recovery & Mitigation

14. FINANCE/ADMINISTRATION PROTOCOLS

14.1 Overall Approach and General Strategies

The Finance/Administration Section, headed by the Finance/Administration Section Chief, is responsible for supporting financial, administrative, and cost analyses associated with restoration efforts. The primary purpose of this section is to substantiate the various costs and expenses, while tracking and reporting the rate and level of expenditures during restoration operations. The Finance/Administration Section supports PSEG Long Island's Office of Government Funds Compliance (OGFC) with LIPA/FEMA reimbursement protocols and submissions, including cost reconciliation and substantiation procedures.

14.2 Cost & Reimbursement Unit

The Cost & Reimbursement Unit, headed by the Cost & Reimbursement Unit Leader, is responsible for providing cost data analysis and preparing estimates of potential restoration event costs.

In addition to the above responsibilities, the Cost & Reimbursement Unit Leader supports restoration reimbursement protocols. It is the role of this unit, in conjunction with the cost-bearing units of the Operations and Logistics Sections, to ensure that expenditures and/or invoices are adequately identified and reconciled for auditing purposes. OGFC oversees the reimbursement process. These units work together, during and post-event, to gather the necessary supporting documentation needed to substantiate all incurred costs (e.g., labor, materials, lodging, meals). Once incurred costs have been justified, the Cost & Reimbursement Unit will prepare an invoice package for submission to LIPA.

Additionally, OGFC, together with the Legal Section, oversees all FEMA compliance matters and requests, as required.

PSEG Long Island strives to further enhance the Finance/Administration Section, paying particular attention to reimbursement eligibility. To this end, restoration procedures (i.e., logistical, operational, and financial ERIPs) have been reviewed, modified, and/or created to so that the appropriate supporting documentation is maintained and that invoices are properly reconciled and substantiated. OGFC will oversee submittal of supporting documentation in the event of a FEMA reimbursement claim. Additionally, PSEG Long Island has a checklist to support reimbursement documentation and associated process owners for accountability purposes. The Finance Section supports this effort.

14.3 Compensation & Claims Unit

The Compensation & Claims Unit, headed by the Compensation & Claims Unit Leader, is responsible for financial concerns resulting from property damage (e.g., oil spills, landscape maintenance), injuries, or fatalities associated with restoration efforts.

This unit has a very robust claims handling process by which customers can file claims via the PSEG Long Island website, mail, fax, or multiple telephone lines. The Compensation & Claims Unit strives to handle claim reimbursements within 30-45 days, dependent upon on volume. LIPA Tariff Leaves No. 105A and 105B establish certain customer policies during a during a Widespread Prolonged Outage Event, as such term is defined in the Tariff, related to communications, collection-related activity, bill credits, and reimbursement for certain food and medicine due to spoilage. For more information, please reference PSEG LI's Extended Outage Food Medicine Reimbursement Policy.

It is vital that the Compensation & Claims Unit develop a strong relationship with the SHE Officer to review the Incident Medical Plan (ICS Form 206) and ensure that all logs, forms, and other pertinent documentation are completed for post-incident processing.

14.4 Time and Payroll Unit

The Time and Payroll Unit is responsible for ensuring proper daily recording of personnel time and the issuance of payroll, in accordance with PSEG Long Island policy. This unit will also assist field personnel with time entry during restoration events and ensure that time is properly charged according to storm accounting protocols. Additionally, in order for LIPA to recover available federal funds, PSEG Long Island provides more detailed labor related data. In order to provide this information, PSEG Long Island uses functionality within its SAP time module to capture this information. By completing employee timesheets using the short text functionality to address the location and activity description elements of hours charged to storm accounting, sufficient data will be created to support LIPA's claims for federal reimbursement.

14.5 Treasury Unit

The Treasury Unit plays a vital role in ensuring the company has enough cash available at all times to meet the needs of its primary business operations. This unit also ensures that corporate financial goals are maintained throughout the year, as well as during restoration events. Personnel in these units will primarily transition into the Cost & Reimbursement Unit during restoration events to further support operations.

14.6 Plant Accounting Unit

The Plant Accounting Unit is responsible for ensuring accurate financial reporting for company assets and projects. This unit quantifies, capitalizes, and records the cost and depreciation of plant assets throughout the year, as well as during restoration events. Personnel in these units will primarily transition into the Cost & Reimbursement Unit during restoration events to further support operations.

15. RESTORATION CONTINGENCY PLAN

15.1 Overview

Restoration contingency plans have been created by PSEG Long Island for key storm processes to maintain operations if a critical system failure occurs and/or communications channels are inoperable during storm events. Contingency plans have been developed for key storm processes for both a full scale and/or a tiered system failure during potential events. Contingency plans include details surrounding activations, roles and responsibilities and coordinating with internal & external stakeholders.

Developing contingency plans for critical system failures enhances our restoration abilities and plans by focusing on supporting Information Technology (IT) storm systems, leveraging other existing technologies and providing alternative processes if disaster recovery cannot resolve IT system and/or performance issues. Contingency procedures will leverage all existing PSEG Long Island technologies and data sources to continue critical operations such as damage assessment and repair, providing Estimated Times of Restoration (ETRs), responding to customer inquiries and communications with Life Support Equipment (LSE) customers and municipalities.

In addition to details provided within this section, please see ERIP-GEN-004 Restoration Contingency Protocols for Critical System Failure for additional details on contingency plans and procedures. ERIP-GEN-004 also includes contingency plans for additional key system failures including the loss of email, our public website, SCADA, DSCADA and CAS.

15.2 Delegation of Authority (DOA) & Activation Guidance

Monitoring mission critical technology and responding to performance declines or failures in a timely and efficient manner is critical to an effective response. Directors and managers have the authority to activate contingency procedures when issues are observed with storm system performance or critical systems begin to fail or when actual failure occurs. Additional personnel at lower levels in the organization can activate procedures, when deemed appropriate, to properly respond to and manage the active event. Authority to activate comes with a requirement to notify appropriate management through Managers and Directors to the appropriate Vice President and Incident Commander, if activated. DOA, activations and associated notifications will align with our ICS structure as detailed Section 3 – Personnel Responsibilities. Additional details on notifications and associated communications can be found further down in this section.

15.3 Storm Process Areas & Responsible Parties

When building out contingency plans, PSEG Long Island identified key storm processes and corresponding process owners to facilitate plan development. Storm processes detailed within this document were selected to align with designated areas/speakers who participate and report out on the PSEG Long Island Storm Call during restoration events. Storm processes detailed in this document are existing processes critical to managing an event, with some segmentation and adjustment to facilitate contingency plan development. Building out contingency plans were aligned with ICS plans as detailed in Section 3 for accountability, consistency and alignment of efforts during all events, including contingency plan activations and notifications.

Seventeen (17) storm processes were reviewed by process owners and corresponding contingency plans were created to effectively manage and respond to a critical system failure during restoration events. Storm process owners focused on building out contingency plans for the loss of critical systems (i.e., OMS and/or inbound call communications) as the baseline for plan development. Additionally, process owners have also developed additional contingencies for assigned processes.

See Figures 15.1 the list of storm process areas and the responsible party responsible for activating and overseeing associated contingency plans and activities .

Restoration Contingency Process Areas		
Process Number	**Storm Process**	**Responsible Party: Storm Role**
1	Situational Awareness – Customers Out/Restored	Planning Section Chief
2	ETR Strategy	ETR Manager
3	IT System Mitigation & Monitoring Activities	Chief Technology Officer
4	Damage Assessment	Operations Branch Directors – West / East
5	AMI & Customer Facing Technology	AMI & Customer Technology Manager
6	Dispatch & Restoration Strategy	Operations Branch Directors – West / East
7	Municipal Coordination	Make Safe to Clear Group Supervisor
8	Vegetation Management	Line Clearance Group Supervisor
9	Call Center Operations	Customer Assistance Center Manager
10	Corporate Comms. & Social Media	Corporate Communications Manager
11	Outage Map Messaging	Escalations Manager
12	Customer Communications	Escalations Manager
13	Escalations	Escalations Manager
14	Community Outreach & LSE/SN Customers	Customer Care & Community Outreach Manager
15	Managed Accounts & Critical Facilities	Large Customer Support Coordinator
16	Transmission System	Transmission Survey & Operations Control Group Supervisor
17	Low Voltage Crew / Pre-Check Dispatch	Low Voltage Crew Control Group Supervisor

Figure 15.1 – Restoration Contingency Process Areas

15.4 Contingency Plan Details

Contingency plans include details focused on procedures in the event of a full critical system failure and/or tiered system failure. Contingency plan details include:

- Pre-planning procedures
  - Monitoring and Mitigation
  - Alternative work methods
  - Resources and Training
  - Internal & external outreach and communications
- Actions at the time of the event
  - Procedures for how the storm process will be sustained
  - Coordination with internal and external partners
- Process / Information inputs and outputs
  - Data collection, preparations and dissemination
- Tiered system loss
  - Alternative plans for the loss of one application versus another
- Incremental Resources
  - Additional personnel needed to support contingency plans and procedures

15.5 Decision Making

The monitoring and subsequent steps associated with an observation of a mission critical system issue is vital to an effective, coordinated and agreed upon response plan. Figure 15.2 below details the decision making process and associated steps to be performed by the IT organization when a mission critical system performance or functionality issue occur.

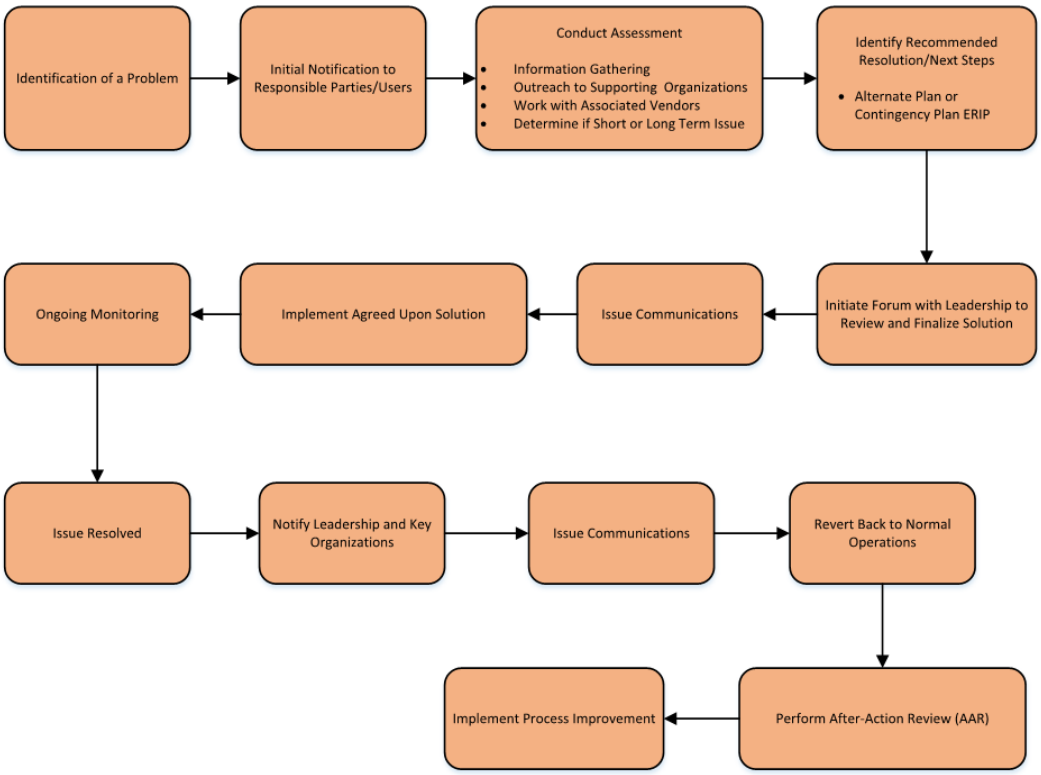


Figure 15.2 – Mission Critical System Oversight and Decision Making

15.6 Notifications and Communications

The IT organization will coordinate with and notify leadership and key stakeholders of critical system failures/conditions according to DOA and ICS guidelines detailed earlier in this document. Upon identification of critical system failure, the IT Support Manager will notify the Chief Technology Officer. The Chief Technology Officer will then notify the Incident Commander and LIPA IT Leadership and will provide a preliminary business impact and associated estimated recovery time (based upon information available). Notifications will be as prompt as reasonably possible to facilitate situational awareness among parties. Associated notifications to process leads/business units will also follow ICS guidelines to promote an effective and comprehensive awareness effort.

When a mission critical system failure or decline in performance is identified, PSEG Long Island will host a forum to discuss the conditions and associated next steps. This Storm call is hosted by the IT NOC team. The forum will include the Incident Commander, Chief Technology Officer, Public Information Officer, system/application SMEs, supporting process leads and LIPA IT Leadership. The group will review critical system conditions, observations and potential solutions to respond to the issue. An agreed upon decision will then be executed, proceeded by appropriate notifications and communications. The Team above would meet as required throughout the duration of the event, until the critical system failure has been resolved.

The IT Section will gather the information detailed in the chart below to document and drive discussions surrounding critical system failure(s) and associated next steps.

Affected System / Application	Impacted Business Unit/Function	Severity	Effect on Customers	Expected Recovery Time	Notifications Made
i.e., IVR	-Electric Service -Call Center	Level 1 – Mission Critical Level 2 - Major Breakdown	-Significant -Partial -No Effect	-Timeframe	-Chief Technology Officer -Incident Commander -LIPA -Process Owners/Business Units

Figure 15.3 – Critical System Failure Awareness Table

Additional notifications and/or communications will be issued to internal and external stakeholders to advise of critical system conditions and anticipated next steps, including but not limited to:

- Internal Stakeholders
  - PSEG Long Island Leadership, Managers, Process Leads and key supporting personnel
  - Executive Crisis Management Team (ECMT) – when activated
  - Crisis Management Team (CMT) – when activated
- External Stakeholders
  - PSEG Long Island Customers
  - Long Island Power Authority (LIPA)
  - New York State Department of Public Service (NYS DPS)

Information pertaining to critical system failure observations and corresponding next steps will be shared with internal and external stakeholders via email, cell phone communications and/or digital and media channels. Mission Critical System notifications and communications may vary (i.e., frequency of communications and content) based upon the event, criticality of system loss, information availability and affected parties. PSEG Long Island will make every effort to notify and communicate both internally and externally during critical system failure events.

Additional factors may be considered when advising customers of critical system failures including, but not limited to: time of day, weather/storm impact, expected return of application and the overall effect on customers. The Public Information Officer and Corporate Communications Team will be informed at each stage of the critical system failure/remedy that appropriate messaging is relayed to internal and external stakeholders during critical system failure events. See ERIP-GEN-004 Section 5.10 - Corporate Communications & Social Media Section of the Restoration Contingency Protocols for Critical System Failure document for additional details.

VI. Appendices

Appendix A – Cross Reference Spreadsheet with Public Service Law NYCRR 105

PART 105 SECTION	SECTION TEXT	WHERE ADDRESSED IN PSEG LONG ISLAND 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 4.1
§ 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 1st 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 1st 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 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 4.1
§ 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 LONG ISLAND 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
§ 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 5 Section 9.4
§ 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.	Appendix D Section 7.3 Section 4.1
§ 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:	Appendix D Section 7.3 Appendix L
§ 105.4 (b) (5) (i)	all utility personnel assigned service restoration responsibilities;	Section 7.3
§ 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 12.4.2 Section 12.4.3
§ 105.4 (b) (5) (iv)	human services agencies;	Section 12.4.2 Section 12.4.3 Section 12.4.4 Appendix F
§ 105.4 (b) (5) (v)	print and broadcast media;	Section 12.10 Section 12.10.3 Appendix E
§ 105.4 (b) (5) (vi)	operators/managers of motels, restaurants and dormitories, etc.;	Section 11.7
§ 105.4 (b) (5) (vii)	state, county and local elected officials, law enforcement officials, and emergency management and response personnel;	Section 13.1.1 Appendix F
§ 105.4 (b) (5) (ix)	medical facilities; and	Section 12.6.2

Figure A.1 (continued) – Cross Reference Spreadsheet with Public Service Law NYCRR 105

PART 105 SECTION	SECTION TEXT	WHERE ADDRESSED IN PSEG LONG ISLAND PLAN
§ 105.4 (b) (5) (x)	vendors.	Section 11.7.3
§ 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 1.1 Section 10.1.3 Section 10.5.2 Section 7.3 Section 11.5.3 Section 11.7.4
§ 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 7.3 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 8 Section 9 Section 10 Appendix T
§ 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 3 Section 5 Section 8

Figure A.1 (continued) – Cross Reference Spreadsheet with Public Service Law NYCRR 105

PART 105 SECTION	SECTION TEXT	WHERE ADDRESSED IN PSEG LONG ISLAND 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 12.4.4 Section 12.5 Section 12.5.1
§ 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 12.5 Section 12.6.2 Section 13.1 Section 13.2 Section 13.3 Section 13.4 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 5 Section 10.2.1 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 11
§ 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.	Appendix J
§ 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 LONG ISLAND 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 – ERIP Titles and Descriptions

GROUP	NAME	PURPOSE
General	ERIP-GEN-001	This document lists all of the ERIPs, sorted by ICS organization.
	ERIP-GEN-002	This document provides a brief description of all of the ERIPs.
	ERIP-GEN-003	This procedure describes the internal classifications to determine storm levels and the decision-making process behind the activation of the Emergency Restoration Plan (ERP) and Emergency Response Implementation Procedures (ERIPs), either partially or in totality.
	ERIP-GEN-004	The purpose of this is procedure is to outline contingency plans for key storm processes to successfully operate if a critical system failure occurs and/or communications channels are inoperable during restoration events. This procedure highlights contingency plans for key storm processes for both a full scale and/or a tiered system failure during events.
Safety, Health, Environmental (SHE)	ERIP-SHE-001	This procedure details the roles and responsibilities required to secure/maintain contracts with Environmental Contractors, control and maintain spills during restoration events, and reconcile invoices.
Liaison	ERIP-LIA-001	The purpose of this procedure is to ensure that municipal and government officials and their emergency and/or operation leads are provided appropriate emergency preparedness and recovery information related to incidents that impact the electric system. This procedure also establishes a process to communicate and coordinate with intended participants through regular pre-, during, and post-event conference calls.
	ERIP-LIA-002	The purpose of this procedure is to provide an overview of the Liaison Officer/ District Managers storm process and the utilization of Liaisons to the Emergency Operation Centers (EOCs) of Nassau County, New York City (NYC), Suffolk County, and New York State, as well as local villages and municipalities.
Communications	ERIP-COM-001	This procedure outlines the pre- and post-emergency notifications to Managed Accounts and Critical Facilities by the Account Management Large Customer Support (LCS) team.
	ERIP-COM-002	This document defines the procedure for notifying and maintaining contact and support with Life Support (LSE) customers during storm or power related emergencies.
	ERIP-COM-003	The purpose of this procedure is to ensure adequate staffing levels in the Customer Assistance Center (CAC) and to describe the operation of the CAC under major storm conditions, in order to optimize restoration efforts and provide best-in-class customer service.
	ERIP-COM-004	This procedure provides the Customer Care and Community Outreach Coordinator and the Community Outreach Manager with pre- and post-emergency implementing action guidelines.
	ERIP-COM-005	This procedure outlines the responsibilities of the Department of Public Service (DPS) Support team (Customer Relations) during restoration events.
	ERIP-COM-006	It also defines the roles of the DPS Manager and supporting team in interacting with DPS and the handling of storm related customer complaints.

Communications	**ERIP-COM-007**	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 service territory. The focus is to bring together the Corporate Communications team with Customer Service and Electric Operations to discuss and prepare information for release.
	ERIP-COM-008	The purpose of this procedure is to detail the actions taken to assure PSEG Long Island customers and stakeholders are provided appropriate information as related to storm incidents that impact the electric system within the service territory.
	ERIP-COM-009	The purpose of this procedure is to describe 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 Emergency Capacity Event that could adversely impact PSEG Long Island customers. As a result, the procedure is intended to identify the participants, actions and communications necessary to inform and/or respond to critical issues raised by government entities, media, and customers.
Logistics	**ERIP-LOG-001**	This procedure details the roles and responsibilities required to secure/maintain contracts with security vendors, mobilize and demobilize security staff, and reconcile invoices.
	ERIP-LOG-002	This procedure details the roles and responsibilities required to secure/maintain contracts with fleet/fuel vendors, mobilize and demobilize fleet/fuel assets, and reconcile invoices.
	ERIP-LOG-003	This procedure details the roles and responsibilities required to utilize non-PSEG Long Island properties during restoration events and document the site usage.
	ERIP-LOG-004	This procedure details the roles and responsibilities required to secure and/or maintain facility service functions, respond to facility service requests, and reconcile invoices.
	ERIP-LOG-005	This procedure details the lodging processes utilized to obtain temporary housing accommodations for assisting Foreign Utility Crews and/or PSEG Long Island personnel during storm restoration events or other system emergencies when conditions warrant such arrangements.
	ERIP-LOG-006	This procedure details the roles and responsibilities required to secure/maintain contracts with busing contractor(s), mobilize and demobilize transportation services, and reconcile invoices.
	ERIP-LOG-008	The purpose of this procedure is to outline the processes utilized to procure food services for PSEG Long Island employees, support personnel, and Foreign Crews during restoration events or other system emergencies.
	ERIP-LOG-009	The purpose of this procedure is to outline the processes utilized to inventory, replenish, track, deliver, and return materials, tools, and/or storm kits that are issued for use during restoration events or other system emergencies.
	ERIP-LOG-010	The purpose of this procedure is to outline the responsibilities and associated processes centered around the activation, operation, and demobilization of staging sites during restoration events or other system emergencies.

Finance	**ERIP-FIN-001**	This procedure describes requirements for charging costs to a Storm Event and associated accounting, reporting, and record keeping procedures, as defined by the Amended & Restated Operations Services Agreement (A&R OSA), and in support of FEMA Public Assistance (PA) and other State/Local requirements.
	ERIP-FIN-002	The purpose of this ERIP is to supplement and support the processes described in ERIP-FIN-001, "Storm Accounting Protocols" and assist with the reconciliation of documentation and, further, the substantiation of any incurred cost throughout the four phases of a Storm Event.
	ERIP-FIN-003	This procedure describes the method used to lease a personal vehicle from an employee during larger scale storm events or other system emergencies. It includes the use of the Lease Authorization and Insurance of Private Vehicle form.
Operations	**ERIP-OPS-001**	This procedure outlines PSEG Long Island's procedures for processing Foreign Utility Crews and associated support personnel during restoration events. It details the activation of the Foreign Crew Processing Organization, Foreign Crew Processing Center, and Foreign Crew Reception Staging Area. Furthermore, the procedure details the functional units of the Foreign Crew Processing Organization and their associated roles and responsibilities.
	ERIP-OPS-003	The purpose of the procedure is to detail the outage/incident creation process in the Outage Management System (OMS) and how work is assigned to various referral groups.
	ERIP-OPS-004	This procedure details the overall activities necessary to perform distribution damage assessment, specifically the notification, mobilization and dispatch operation of distribution survey teams from various departments and external survey personnel, as well as the responsibilities and actions necessary when performing distribution damage assessment. This procedure details the two sub-categories of incident-based damage assessment – Rapid Survey and Emergency Restoration Survey – performed by survey teams and how the teams are expected to proceed for each.
	ERIP-OPS-005	The purpose of the Outage/Damage Repair procedure is to detail the overall activities necessary to perform tasks required for the outage/damage repair process during decentralized storm restoration.
	ERIP-OPS-006	This procedure details the process for the development of ETRs by PSEG Long Island T&D Operations which is used in customer and stakeholder outage communications during Condition III Red events. This procedure also discusses the NYS DPS ETR requirements and associated metrics approved by the NYS Public Service Commission for large scale storm events.
	ERIP-OPS-007	This procedure identifies the actions necessary to open and activate a decentralized dispatch area in preparation for operating under Remote Dispatch Authority (RDA) and/or Remote Configuration Authority (RCA).
	ERIP-OPS-008	The purpose of the procedure is to detail the activities necessary to perform the Outage/Damage Incident Primary Control (PRC) Process of the Outage Restoration Model.

Operations	**ERIP-OPS-011**	The purpose of this procedure is to do the following. Describe the mobilization and dispatch operation of Wire Watchers from various departments within PSEG Long Island, as well as outside contractors and New York State supporting resources (if mobilized). Outline the responsibilities and actions required of Wire Watchers, when assigned to stand by downed electric wires. Define the steps necessary to screen and survey wire down calls. And provide accurate information to the Division Wire Watch Coordinators.
	ERIP-OPS-012	The purpose of the procedure is to detail the activities undertaken to locate damage and restore circuits during storm restoration utilizing the circuit sweep approach.
	ERIP-OPS-013	The purpose of the procedure is to detail the activities necessary to validate the customer outage status for single customer outages before sending out a field crew. Activated when additional staff is required to assist Control Room based on current or projected backlog of single customer outages, thereby eliminating unnecessary truck roll outs.
	ERIP-OPS-014	This procedure provides information and instructions to the personnel assigned as Crew Guides supporting foreign utility crews mobilized to assist PSEG Long Island during restoration events.
	ERIP-OPS-015	This procedure serves as a high-level document summarizing and outlining the decentralized outage restoration model, as well as the restoration processes/activities necessary to perform storm restoration.
	ERIP-OPS-016	The purpose of this procedure is to detail the process for requesting and obtaining power restoration support and assistance from New York State (NYS) sources when a major event occurs and the customary sources of supplemental personnel, such as mutual assistance, contractors, or internal staff, cannot provide adequate personnel to address needs or NYS resources are made available for support.
	ERIP-OPS-017	The purpose of this procedure is to outline the roles and responsibilities of Make Safe to Clear (MSTC) personnel and supporting organizations, as well as the associated processes centered around municipal requests to PSEG Long Island for assistance in the clearing of electrical hazards from critical roadways.
	ERIP-OPS-018	This procedure has been prepared to provide working arrangements between PSEG Long Island and telephone companies (TelCo) – currently only Verizon operates within the PSEG Long Island service territory – when PSEG Long Island's Emergency Restoration Procedure has been placed in effect during major storms/system emergencies.
	ERIP-OPS-019	This procedure describes the working protocols between PSEG Long Island and Cable Television (CaTV) providers (currently only Altice, Spectrum, and Verizon FiOS operate within the PSEG Long Island service territory) when PSEG Long Island's Emergency Restoration Plan has been placed in effect during major storms/system emergencies.
	ERIP-OPS-020	This procedure has been prepared to describe working arrangements between PSEG Long Island and natural gas providers (currently only National Grid operates within the PSEG Long Island service territory) when PSEG Long Island's Emergency Restoration Plan has been placed in effect during major storms/system emergencies.

Operations	**ERIP-OPS-021**	The purpose of this procedure is to describe the necessary actions to be taken by PSEG Long Island and their customers to restore electric service when PSEG Long Island determines that post-incident flood assessments are required and initiates restoration activities in areas where customer premises may have sustained water damage and/or water intrusion to their electrical equipment due to flooding.
	ERIP-OPS-022	The purpose of this procedure is to describe the necessary actions to be taken by PSEG Long Island when the following occur. PSEG Long Island determines that substations/equipment need to be de-energized to safeguard them from the impact of storm surge and flooding. 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-OPS-023	A key component of the PSEG Long Island Emergency Restoration Plan is storm restoration damage assessment. This procedure details the overall activities necessary to perform transmission damage assessment.
	ERIP-OPS-024	This procedure provides guidelines on the process to gather and disseminate system-wide transmission and distribution lockout information. Timely analysis of lockout information will provide the Transmission Operations and Distribution Operations departments with the input necessary to assess weather-caused damage to the T&D system and determine appropriate corrective measures.
	ERIP-OPS-027	This procedure provides instructions to the Transmission Survey and Operations Control Group for assigning Multi-Station Operators or other qualified personnel to substations that are not monitored and/or controlled centrally (supervisory). These personnel assess the damage sustained to the substation equipment and structures, record the transmission and distribution device operations, and report distribution breaker lockouts.
	ERIP-OPS-028	The purpose of this procedure is to describe the mobilization and dispatch operation for high voltage crews in the OH/UG Construction Department.
	ERIP-OPS-032	The purpose of this procedure is to describe the steps necessary to establish which decentralized dispatch areas should be placed into Remote Dispatch Authority (RDA) or Remote Configuration Authority (RCA).
	ERIP-OPS-033	This procedure describes the method for assigning electric transmission and distribution system repair work by priority.
	ERIP-OPS-036	This procedure outlines the requirements of the Asset Management team to evaluate LIPA critical assets as per the Corporate Strategic Asset Management Plan (SAMP-10000) and the individual Asset Management Plans (AMPs) for all critical LIPA Transmission and Substation facilities during major storm events / system emergencies.

Planning	**ERIP-PLN-001**	The purpose of this procedure is to document the process for initiating, obtaining, completing, and collecting restoration checklists.
	ERIP-PLN-002	The purpose of this procedure is to detail restoration call types, frequencies (time frames), and participants involved. In addition, it highlights the process for capturing appropriate information and dissemination to affected parties.
	ERIP-PLN-003	The purpose of this document is to provide instruction on generating storm reports. This ERIP will list the person(s) responsible for creating the report, how to create the report, and how often the report should be generated.
	ERIP-PLN-004	This procedure outlines the use of the Storm Event Operations Matrix (also referred to as "Matrix" within this document) as a tool for collecting, consolidating, reporting and sharing information concerning a decentralized storm restoration event. It describes the use of the Matrix spreadsheet as a means for conveying various important information about the storm restoration event.
	ERIP-PLN-005	This procedure details the scorecard metrics, definition and measurement criteria, points awarded, metric owner, and the source in which the data can be obtained.
	ERIP-PLN-006	This procedure describes those steps necessary to maintain safe operating conditions between LIPA electric transmission and distribution facilities and Independent Power Producers before, during, and after the passage of a severe storm (forecasted or actual Condition III "Red" event) or other forecasted or actual system emergency or system pre-emergency.
	ERIP-PLN-007	The purpose of this procedure is to outline guidelines for communication and coordination between PSEG Long Island and telecommunication providers Verizon and Altice in the service territory during restoration events.
Information Technology	**ERIP-IT-001**	The purpose of this procedure is to outline the roles and responsibilities of Information Technology (IT) personnel during restoration activations and/or other system emergencies. This procedure details the associated processes centered on the mobilization, set up, operations, and maintenance of IT/Communications networks, equipment, and applications during large-scale events and/or other system emergencies.

Figure B.1 – ERIP Titles and Descriptions

Appendix C – Restoration Checklists

TITLE
General
CL-GEN-001 – President and COO Checklist
CL-GEN-002 – Incident Commander Checklist
Safety, Health, Environmental (SHE)
CL-SHE-001 – Safety, Health, and Environmental (SHE) Officer Checklist
CL-SHE-002 – Safety Operations Coordinator Checklist
CL-SHE-003 – Health Coordinator Checklist
Legal
CL-LEG-001 – Legal Officer Checklist
Liaison
CL-LIA-001 – Liaison Officer Checklist
Communications
CL-COM-001 – Public Information Officer Checklist
CL-COM-002 – Corporate Communications Manager Checklist
CL-COM-003 – Customer Assistance Center Manager Checklist
CL-COM-004 – Customer Care and Community Outreach Manager Checklist
CL-COM-006 – Escalation Manager Checklist
CL-COM-007 – Life Support Equipment Coordinator Checklist
CL-COM-008 – Large Customer Support Coordinator Checklist
CL-COM-009 – Community Outreach Coordinator Checklist
Operations
CL-OPS-002 – T&D Operations Branch Director Checklist
CL-OPS-003 – SPT Group Supervisor Checklist
CL-OPS-005 – Foreign Crew Branch Director Checklist
CL-OPS-006 – Line Clearance Group Supervisor Checklist
CL-OPS-007 – Transmission Survey & Operations Control Group Supervisor Checklist
CL-OPS-008 – Distribution Survey & Operations Control Division Supervisor Checklist
CL-OPS-009 – T&D Crew Control Division Supervisor Checklist
Information Technology (IT)
CL-IT-001 – Chief Technology Officer (CIO) Pre-Storm Checklist
Planning
CL-PLN-001 – Planning Section Chief Checklist
CL-PLN-003 – Resource Coordination Unit Leader Checklist
CL-PLN-004 – Make Safe to Clear (MSTC) Group Supervisor Checklist
Logistics
CL-LOG-001 – Logistics Section Chief Checklist
CL-LOG-003 – Support Branch Director Checklist
CL-LOG-004 – Staging Branch Director Checklist
CL-LOG-005 – Service Branch Director Checklist
CL-LOG-006 – Fleet Maintenance & Fueling Unit Leader Checklist
CL-LOG-007 – Facilities Unit Leader Checklist
CL-LOG-008 – Real Estate Unit Leader Checklist
CL-LOG-010 – Security Unit Leader Checklist
CL-LOG-011 – Materials Procurement Unit Leader Checklist
CL-LOG-012 – Materials Distribution Unit Leader Checklist
CL-LOG-013 – Lodging Unit Leader Checklist
CL-LOG-014 – Busing Unit Leader Checklist
CL-LOG-015 – Meals Unit Leader Checklist
Finance
CL-FIN-001 – Finance/Administration Section Chief Checklist

Figure C.1 – Restoration Checklists

NOTE: While PSEG Long Island utilizes their restoration checklists to ensure activities are performed in anticipation of storm events, checklists are intended to be used for large-scale events or system emergencies that provide advanced warning to complete preparatory action items.

Appendix D – Mitigation Activities

1. OVERVIEW

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

2. COMMUNITY OUTREACH

2.1 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 storms and what they can do to prepare.

Information is shared with the public through numerous channels, such as PSEG Long Island's Storm Center website, videos, 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 relegate such important activities to just a few days preceding or during a storm. Information disseminated to the public addresses a variety of topics including:

- Preparing your home and family
- Preparing your business
- Storm safety and preparedness
- Outage reporting
- Current power outages
- Important PSEG Long Island contact information
- Generator safety
- Social media information
- Frequently Asked Questions (FAQs)
- Customer safety precautions around down wires

PSEG Long Island also maintains a comprehensive ”Outages” website section that provides additional information on the topics detailed above, along with educational videos (see Appendix O). The following videos focus on storm safety and preparedness:

- Our Storm Restoration Process
- Evacuating
- Prepare Your Home and Family
- Stay In Touch With PSEG Long Island
- Indoor Electric Safety
- Generator Safety
- Hazards & Safety
- Trees and the Electric Grid

2.2 First Response and Governmental Organizations

PSEG Long Island engages many first response organizations on preparedness and planning initiatives, including government officials, state/county/city/local emergency management organizations, police and fire organizations, partner utilities (i.e., gas, telecommunications, and cable) and local municipalities. PSEG Long Island aims to further develop these relationships through information sharing and collaboration throughout the year, for the benefit of response and recovery efforts during emergency outage scenarios.

PSEG Long Island actively participates in various County, City, Town, and Village sponsored events, workshops, exercises, and seminars throughout the year on the topics surrounding emergency planning, hurricane preparedness, and restoration operations. PSEG Long Island also provides presentations, and participates in exercises and drills with the first responder community. Members of PSEG Long Island’s staff also participate in many Federal, State, and Local training programs centered on emergency planning and response protocols (e.g., ICS, NIMS, Homeland Security Exercise and Evaluation Program (HSEEP)) throughout the year. These collaborative initiatives expand upon planning efforts and further promote information sharing between participating organizations.

PSEG Long Island openly welcomes these same entities to participate in its annual tabletop exercise and other relevant events. The companywide exercise centers on planning and response activities during a large-scale restoration event, and promotes open communication and collaboration between entities. This alignment helps to facilitate a clear and coordinated response when an emergency occurs, and promotes dialog and continuous improvement between organizations.

PSEG Long Island routinely seeks the input of our first response organizations when instituting new emergency planning procedures, and aims to coordinate its planning initiatives with such agencies for the benefit of all customers and municipalities served. PSEG Long Island invites first response organizations to review and discuss its annually updated ERP and corresponding planning initiatives.

PSEG Long Island also strives to coordinate with our governmental and emergency first response organizations during emergency preparations. PSEG Long Island hosts pre-storm calls and/or meetings to discuss operational strategies, timelines, activation schedules, and anticipated activities. Further coordination between entities is accomplished through the deployment of PSEG Long Island Municipal and EOC Liaisons. These liaisons often work directly within a town, city or county's command site, and assist with information sharing, executing escalation protocols, and facilitating overall coordination between entities. EOC Liaisons are activated and scheduled by the Emergency Management Liaison Coordinator, with EP Staff serving as a support/secondary point of contact for the state, county, and NYC EOC. Municipal Liaisons are activated and scheduled by support staff in the Liaison Organization and coordinate all requests, escalations, and daily activities with the District Managers as the secondary point of contact. For more information, please see Chapter 11, "Liaison Protocols."

Coordination between PSEG Long Island and its municipal, government, and emergency management partners is paramount to an efficient response, with many efforts undertaken to support, grow, and continuously advance these partnerships.

2.3 Safety Partnerships

PSEG Long Island's top priority is always the safety of its customers and personnel. Along with PSEG Long Island's own resources and preparation tips, customers can also take advantage of several resources available through its partnerships.

BereadyLI.org is a collaboration between The United Way of Long Island, 2-1-1 Long Island, and PSEG Long Island. Aimed at helping Long Island residents prepare for disasters, bereadyLI.org is an interactive, comprehensive, and easy-to-use website, compiling critical information applicable to children, the elderly, those with special needs, and even pets, in an effort to simplify the process of being prepped before disaster strikes. By working with experts in the field, the site compiles the most relevant and crucial information for residents to prepare for whatever Mother Nature brings our way.

To help parents teach children to prepare for emergency events, the PSEG Foundation partnered with Sesame Workshop to develop the 'Let's Get Ready' and 'Here for Each Other' programs. These programs help adults explain to young children various ways they can be physically and emotionally prepared for an emergency, and help adults and children cope with disasters.

For school age children, “Safety Town” presentations are delivered at schools, civic groups, and community events through our Community Partners Program. A live demonstration of the power of electricity, through use of an electrified model of a neighborhood, focuses on the dangers of coming in contact with, or in proximity to, live wires.

3. STORM HARDENING EFFORTS

PSEG Long Island continues to harden the Long Island electrical system to withstand the effects of major storms including but not limited to hurricanes, flooding, high winds, and ice.

3.1 “Power On” Program

PSEG Long Island’s “Power On” initiative will continue to improve reliability by strengthening distribution lines. Circuit improvements include replacing older equipment, the installation of stronger poles set deeper with added backfill to withstand winds up to 135 mph, replacement with stronger/thicker wire on a more narrow cross arm design to be more resilient, tree trimming to reduce the risk of damage to equipment and wires.

3.2 Circuit Improvement to Isolate Faults

We continue to add supervisory “smart" switches on circuits to minimize customer outages via isolating fault to the new design criteria of approximately 500 customers per switch segment. Replacement and conversion of new switches for new substation circuits has been completed.

3.3 Tree Trimming/Vegetation Management Programs

Following industry best practices, PSEG Long Island tree trim crews have created greater clearance around trees and distribution power lines, pruning to 12 feet above, 8 feet to the side, and 10 feet below high voltage lines. Circuit tree trim cycles are supplemented by using historical data to forecast areas which have been impacted by vegetation and those circuits are prioritized. Additional programs include:

- The Vine Mitigation Program - works to proactively clear areas where vines are interfering with electric lines and equipment.
- Hazard Tree Removal Program - removes or cuts back unhealthy, dead or damaged trees and limbs in the area of our electric lines that may cause an outage in the future.
- Trim to Sky Program – this enhanced specification removes all overhanging limbs on mainline distribution circuits from the substation to the first protective device on the circuit (automated switching device).

3.4 Planned Reliability Programs for 2025:

- Continuing effort of installation of ASUVs through 2025
    - Expansion on new 9’ Arm G&W switches to be deployed in Bird Zone areas to address repairs.
    - Execution of the results from the Coordination Study Program to convert ASUVs switches to ACRV reclosers minimizing momentary interruptions across the system.
- Storm hardening of infrastructure
    - Power-On program of stronger poles, smaller profile pole heads, stronger and more tree resistant wire
    - FEMA Storm Hardening program will begin in Q4 of 2025
- Installation of Branch Line Reclosures
    - Installed approximately 1500 branch line reclosers in 2024
    - Multi-year plan starting in 2025 to install an additional 8500 branch line reclosers
- Automation of existing smart switch infrastructure
    - Reprogramming of ASU switches to ACRV reclosers (makes a switch act like a breaker to eliminate momentaries)
- Trim to sky program
    - All overhanging limbs to be removed to sky on distribution circuits beginning at the substation distribution exit feeder to the first automated mainline switch of the circuit
- Hazard tree removal program
    - Including identification, prioritization, and removal of hazard trees to improve storm reliability
- Storm hardening of identified transmission load pocket
    - In 2025, will begin the Engineering required for construction activities supporting the hardening of the Huntington Village Load pocket in 2026

Appendix E – Corporate Communications Media Contact List

As of December 1, 2024

MEDIA OUTLET	CONTACT NAME	EMAIL	PHONE
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Figure E.1 – Corporate Communications Media Contact List

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 is included as Figure F.1.

Emergency Management Contacts

As of December 1, 2024

AGENCY	ADDRESS	PHONE NUMBER
New York State Division of Homeland Security and Emergency Services (DHSES) Region #1 – Downstate Operations Office Building	[redacted]	[redacted]
New York State Division of Homeland Security and Emergency Services (DHSES) State Headquarters	[redacted]	[redacted]
New York State Department of Transportation Region #10 Long Island TMC/INFORM	[redacted]	[redacted]
New York City Office of Emergency Management	[redacted]	[redacted]
Nassau County Office of Emergency Management	[redacted]	[redacted]
Suffolk County Department of Emergency Management	[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 listings of our utility partners are included as Figures F.2.1 to F.2.4.

Verizon Emergency Contacts

As of December 1, 2024

Verizon Executive Emergency Contact				
		OFFICE	CELL	E-MAIL
Senior VP - Field Operations	[redacted]	[redacted]	[redacted]	[redacted]
VP of Operations	[redacted]	[redacted]	[redacted]	[redacted]
Verizon 24/7 Emergency Contact at PPM Center				
	[redacted]			
Senior Director - PPM Operations	[redacted]	[redacted]	[redacted]	[redacted]
Verizon Engineering Control Center (Bay Shore, NY)				
Senior Director of Engineering	[redacted]	[redacted]	[redacted]	[redacted]
SUFFOLK COUNTY				
Suffolk Design Pole Associate Director	[redacted]	[redacted]	[redacted]	[redacted]
Suffolk Pole Engineer	[redacted]	[redacted]	[redacted]	[redacted]
NASSAU COUNTY				
Nassau Design Pole Associate Director	[redacted]	[redacted]	[redacted]	[redacted]
Nassau Pole Engineer	[redacted]	[redacted]	[redacted]	[redacted]

Verizon Area Operations Manager				
Senior Director - CXM Operations	[redacted]	[redacted]	[redacted]	[redacted]
Suffolk Area Associate Director - Network Operations	[redacted]	[redacted]	[redacted]	[redacted]
Nassau Area Associate Director - Network Operations	[redacted]	[redacted]	[redacted]	[redacted]
Long Island Construction Control Center (Centereach, NY)				
Nassau and Suffolk	[redacted]	[redacted]	[redacted]	[redacted]
Verizon Operations Control Center - All Nassau and Suffolk (Garden City, NY)				
Senior Director - Operations Support	[redacted]	[redacted]	[redacted]	[redacted]
Associate Director - Operations Support	[redacted]	[redacted]	[redacted]	[redacted]
Verizon NYS PPM (Brooklyn, NY)				
Senior Director - PPM Operations	[redacted]	[redacted]	[redacted]	[redacted]
Associate Director - Operations Support	[redacted]	[redacted]	[redacted]	[redacted]
Verizon L.I. Installation and Repair Dispatch Resource Center (DRC)				
Senior Director - Operations Support	[redacted]		[redacted]	[redacted]
Associate Director - Operations Support	[redacted]	[redacted]	[redacted]	[redacted]

Verizon OEM EOC Liaisons				
NYC OEM **Verizon Control Center**	----	[redacted]	[redacted]	----
Nassau County EOC Liaison	----	[redacted]	----	----
Suffolk County EOC Liaison	----	[redacted]	----	----

Verizon Operations I & M Control Center - All Nassau and Suffolk (Garden City, NY)				
Director of Operations I & M	[redacted]	[redacted]	[redacted]	[redacted]
Verizon NYS PPM (Brooklyn, NY)				
---	---	**OFFICE**	**CELL**	**E-MAIL**
Director PPM Operations	[redacted]	[redacted]	[redacted]	[redacted]
Senior Manager PPM Operations	John[redacted]	[redacted]	[redacted]	[redacted]
Verizon L.I. Installation and Repair Dispatch Resource Center (DRC)				
Senior Manager - DRC	[redacted]	[redacted]	[redacted]	[redacted]
Verizon OEM EOC Liaisons				
NYC OEM **Verizon Control Center**	---	212-693-3000 [redacted]	[redacted]	---
Nassau County EOC Liaison	---	[redacted]	---	---
Suffolk County EOC Liaison	---	[redacted]	---	---

Note: Verizon FiOS emergency contacts are the same as Verizon Telephone emergency contacts.

Figure F.2.1 – Local Utility Contacts (Verizon)

Altice USA Emergency Contacts
As of December 1, 2024
****Alice USA is currently Working from Home****

Altice USA Executive Emergency Contacts				
	NAME	**OFFICE**	**CELL**	**E-MAIL**
Regional VP Field Operations	[redacted]	[redacted]	[redacted]	[redacted]
VP Network Operations	[redacted]	[redacted]	[redacted]	[redacted]
Director, Crisis Management	[redacted]	[redacted]	[redacted]	[redacted]
Director, Government Affairs	[redacted]	[redacted]	[redacted]	[redacted]
Regional Operation Center (ROC)				
LI ROC		[redacted]		[redacted]
NOC VP	[redacted]	[redacted]	[redacted]	[redacted]
ROC Director of Operations	[redacted]	[redacted]	[redacted]	[redacted]
Order of people to call in a Network Emergency/Outage Situation			**Order of people to call in a Declared State of Emergency**	
1. ROC			**1.** [redacted]	
2. [redacted]			**2.** [redacted]	
3. [redacted]			**3.** [redacted]	
4. [redacted]			**4.** [redacted]	
			5. [redacted]	

Figure F.2.2 – Local Utility Contacts (Altice USA)

Charter Emergency Contacts
As of December 1, 2024

For Power Outages or Before a Lock Out			
TITLE	**NAME**	**OFFICE PHONE (IF AVAILABLE)**	**E-MAIL**
[redacted]			

Figure F.2.3 – Local Utility Contacts (Charter)

National Grid – Gas Emergency Contacts
As of December 1, 2024

National Grid Executive Emergency Contacts			
HQ: [redacted]			
TITLE	**NAME**	**PHONE #**	**E-MAIL**
VP DNY Gas Operations	[redacted]	[redacted]	[redacted]
Director of System Strategic Planning (Engineering)	[redacted]	[redacted]	[redacted]
Manager Dispatch NYC	[redacted]	[redacted]	[redacted]
Manager Dispatch LI	[redacted]	[redacted]	[redacted]
Director Emergency Planning	[redacted]	[redacted]	[redacted]
Downstate NY Emergency Dispatch Control Centers			
NYC CC	---	[redacted]	---
Nassau CC	---	[redacted]	---
Suffolk CC	---	[redacted]	---
National Grid DNY Emergency Planning			
Principal Program Manager	[redacted]	[redacted]	[redacted]
Lead Program Manager	[redacted]	[redacted]	[redacted]
OEM/EOC			
NYC - National Grid Liaison Manager	[redacted]	[redacted]	[redacted]
Nassau - National Grid Liaison Manager	[redacted]	[redacted]	[redacted]
Suffolk - National Grid Liaison Manager	[redacted]	[redacted]	[redacted]

Figure F.2.4 – Local Utility Contacts (National Grid - Gas)

Other Municipal Electric Utility Contacts:

In addition, when necessary, PSEG Long Island may initiate a line of communications with the three (3) municipal electric utilities that operate within the PSEG Long Island service territory. The listing of these contacts is included as Figure F.2.5.

Other Municipal Electric Utilities within PSEG Long Island Service Territory:
As of December 1, 2024

Village of Rockville Center As of December 1, 2024				
TITLE	**NAME**	**OFFICE**	**CELL**	**E-MAIL**
Superintendent of Electric Department	[redacted]	[redacted]	[redacted]	[redacted]
Deputy Superintendent of Electric Department	[redacted]	[redacted]	[redacted]	[redacted]
Emergency Management Officer ***(Superintendent of Buildings)***	[redacted]	[redacted]	[redacted]	[redacted]

Village of Freeport As of December 1, 2024				
TITLE	**NAME**	**OFFICE**	**CELL**	**E-MAIL**
Superintendent of Electric Utilities	[redacted]	[redacted]	[redacted]	[redacted]
Superintendent Electric Distribution	[redacted]	[redacted]	[redacted]	[redacted]
Director/EMO Coordinator	[redacted]	[redacted]	[redacted]	[redacted]

Village of Greenport As of December 1, 2024				
TITLE	**NAME**	**OFFICE**	**CELL**	**E-MAIL**
Village Administrator – Electric		[redacted]		[redacted]
Electric Department Supervisor	[redacted]	[redacted]	[redacted]	[redacted]
Mayor	[redacted]	[redacted]	[redacted]	[redacted]

Figure F.2.5 – Other Municipal Electric 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 (effective as of January 1, 2024) are detailed in Figures F.3 to F.8.

FIRST NAME	LAST NAME	TITLE	DISTRICT	COUNTY	WORK PHONE
[redacted]					
[redacted]					
[redacted]					
[redacted]					
[redacted]					
[redacted]					
[redacted]					

Figure F.3 – Federal Officials

FIRST NAME	LAST NAME	TITLE	DISTRICT	COUNTY	WORK PHONE
[redacted]					

Figure F.4 – State Officials

FIRST NAME	LAST NAME	TITLE	DISTRICT	COUNTY	WORK PHONE
[redacted]					

Figure F.5 – County Officials

FIRST NAME	LAST NAME	TITLE	DISTRICT	COUNTY	WORK PHONE
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
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Figure F.6 – Town Officials

FIRST NAME	LAST NAME	TITLE	DISTRICT	TOWN	COUNTY	WORK PHONE
[redacted]						

FIRST NAME	LAST NAME	TITLE	DISTRICT	TOWN	COUNTY	WORK PHONE
[redacted]						

Figure F.7 – Village Officials

NON-PROFIT	NAME	TITLE	PHONE NUMBER	BOARD CHAIR/PRESIDENT
[redacted]				

Figure F.8 – Human Service Agencies

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-One	ON	1,300,000		Yes
Hydro Quebec	QC	4,107,400		No
Iberdrola – (Central Maine Power, NYSEG)	ME,N Y	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 (https://eei-restorepower.groupsite.com/main/summary) Select Restore Power under the Resources tab. The Roster and Border Guidance files are located in the Other Documents section.

All Hazards Consortium website (http://www.ahcusa.org/)

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 ¾ 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

Edison Electric Institute
Power By Association

SUGGESTED GOVERNING PRINCIPLES COVERING EMERGENCY ASSISTANCE ARRANGEMENTS BETWEEN EDISON ELECTRIC INSTITUTE MEMBER COMPANIES

Electric companies have occasion to call upon other companies for emergency assistance in the form of personnel or equipment to aid in maintaining or restoring electric utility service when such service has been disrupted by acts of the elements, equipment malfunctions, accidents, sabotage or any other occurrences where the parties deem emergency assistance to be necessary or advisable. While it is acknowledged that a company is not under any obligation to furnish such emergency assistance, experience indicates that companies are willing to furnish such assistance when personnel or equipment are available.

In the absence of a continuing formal contract between a company requesting emergency assistance ("Requesting Company") and a company willing to furnish such assistance ("Responding Company"), the following principles are suggested as the basis for a contract governing emergency assistance to be established at the time such assistance is requested:

1. 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 would include any request for the Responding Company to prepare its employees and/or equipment for transport to the Requesting Company's location but to await further instructions before departing). The emergency assistance period shall terminate when such employees and/or equipment have returned to the Responding Company, and shall include any mandated DOT rest time resulting from the assistance provided and reasonable time required to prepare the equipment for return to normal activities (e.g. cleaning off trucks, restocking minor materials, etc.).

2. To the extent possible, the companies should reach a mutual understanding and agreement in advance on the anticipated length – in general – of the emergency assistance period. For extended assistance periods, the companies should agree on the process for replacing or providing extra rest for the Responding Company's employees. It is understood and agreed that if; in the Responding Company's judgment such action becomes necessary the decision to terminate the assistance and recall employees, contractors, and equipment lies solely with the Responding Company. The Requesting Company will take the necessary action to return such employees, contractors, and equipment promptly.

3. Employees of Responding Company shall at all times during the emergency assistance period continue to be employees of Responding Company and shall not be deemed employees of Requesting Company for any purpose. Responding Company shall be an independent Contractor of Requesting Company and wages, hours and other terms and conditions of employment of Responding Company shall remain applicable to its employees during the emergency assistance period.

4. Responding Company shall make available upon request supervision in addition to crew leads. All instructions for work to be done by Responding Company's crews shall be given by

5. EEI's Vice President of Energy Delivery or his/her designee who shall maintain a list of each Mutual Assistance Agreement Participating Company Signatory which shall be posted in the RestorePower Workroom as [redacted].

[redacted]

Officer Name:
Title:
Date:

Officer Name: [redacted]

Date: [redacted]

Appendix H – New York Public/Private Utility Mutual Assistance Protocol

Promulgation Document

This New York Public/Private Utility Mutual Assistance Protocol ("Protocol") has been reviewed and endorsed for use by: (1) Central Hudson Gas & Electric, Consolidated Edison Company of New York, Inc., AVANGRID Networks, Inc. for New York State Electric & Gas and Rochester Gas and Electric, Niagara Mohawk Power Corporation D/B/A National Grid, Orange and Rockland Utilities, Inc. (individually, "NYS IOU" and collectively "NYS IOUs"); (2) the New York Power Authority ("NYPA"); (3) the Long Island Electric Utility Servco LLC (a wholly owned subsidiary of PSEG Long Island LLC), as agent of and acting on behalf of Long Island Lighting Company d/b/a LIPA for use in the State of New York during an emergency impacting utilities ("LIPA"); (4) the Municipal Electric Utilities Association of New York State ("MEUA"), of MEUA itself and as agent for and on behalf of its utility members identified in Appendix A ("MEUA Members"); (5) the New York Association of Public Power ("NYAPP") on behalf of NYAPP Itself and as agent for and on behalf of its utility members identified in Appendix A ("NYAPP Members"); and (6) the American Public Power Association ("APPA") on behalf of itself and the APPA Mutual Aid Program ("APPA Members").

For purposes of this Protocol, the NYS IOUs, NYPA, LIPA, MEUA Members, NYAPP Members, and APPA Members are individually referred to as "Utility Party" and collectively as "Utility Parties"; MEUA, NYAPP, and APPA are individually referred to as "Association Party" and collectively as "Association Parties"; and the Utility Parties and the Association Parties are individually referred to as "Party" and collectively as "Parties".

Table of Contents

Table of Revisions

This document will be reviewed by all parties on an annual basis unless otherwise necessary. Documentation of this review and any revisions will be documented in the table below. Written updates will be distributed electronically to each party point of contact for inclusion in their appropriate policies, procedures etc.

When inserting revisions the person revising the document shall complete and *initial* the table below

Revision #	Date	Section/Page(s)	Change	Revised By
0	Oct 2015	Original Issue		N/A
1	February 2016	4-6	Formatting & Names	J.T. Flick
2	April 2017	3-6	Updated Signatories	J.T. Flick
3	June 2019	8-9, 15-16	Updated Signatories & Language to include escalation to National Mutual Assistance programs	J.T. Flick

1. Executive Summary

This Protocol is an outline of general principles and practices for the Parties to access, coordinate and distribute critical resources to facilitate and expedite utility restoration following an emergency affecting a Utility party or its service area through mutual aid and a public/private partnership. This Protocol is intended to be flexible in every respect, since it is not possible to predict exactly what the nature or scope of an emergency will be. It allows Utility Parties to call upon other Utility Parties to voluntarily offer personnel, supplies, equipment, and space in an efficient and expeditious manner, which is organized and documented. The Protocol is not intended to be the primary means of securing assistance. Rather, this Protocol provides access to additional resources when necessary for assistance in New York.

2. Introduction

2.1 Mission Statement

To serve as a mechanism to leverage the public/private partnership among the Parties for access to critical resources to facilitate and expedite utility restoration in anticipation of and following an emergency impacting the state of New York.

2.2 Purpose

This Protocol outlines the process for Utility Parties to identify, request and share resources among one another in response to and recovery from an event that causes, or may have the potential to cause, impact to the utility infrastructure in the state of New York. In addition, it outlines the protocol to escalate outreach to the association parties for assistance in the event a resource need cannot be met after canvasing within the state of New York.

2.3 Scope

The scope of this Protocol is:

2.3.1 To provide a forum to ensure safe, effective and coordinated mutual assistance, regional response and service restoration for customers of Utility Parties in the state of New York during an emergency.

2.3.2 To provide an enhanced line of communications between the Parties in the event of emergencies impacting New York State of its resources.

2.3.3 To minimize risk to all Utility Parties by agreeing to provide assistance (material, personnel and equipment) on a not-for-profit[1] basis, and agreeing that the Utility Parties requesting assistance ("Requesting Organization") will reimburse Utility Parties providing assistance ("Responding Organizations") for all expenses incurred in providing the assistance.

2.3.4 To document the procedures to be followed during a time when mutual assistance is required by one or more of the Utility Parties.

2.3.5 To adhere to and operate in accordance with the procedures contained in this Protocol unless otherwise agreed to in writing by the Parties.

3. Organization Information

This Protocol applies to the Parties to this Protocol. The points of contact and contact information for each of the Utility Parties and the Association Parties can be found in Appendix B of this Protocol.

4. General Guidelines

4.1. Personnel Safety

4.1.1. Whether providing or receiving assistance, personnel safety will be the preeminent objective and responsibility of all Utility Parties. Any questions or concerns arising about any safety rules and/or procedures should be brought to the proper level of management for prompt resolution between management of the Requesting and Responding Organization(s).

4.1.2. The Requesting Organization agrees to make every effort to avoid moving Responding Organization personnel into harm's way during the initial, first-wave mobilization.

4.1.3. Responding Organization will follow its own safety rules, except as noted in paragraphs 4.1.6 and 4.1.7 below.

4.1.4. Responding Organization is responsible for following its own personal protective grounding practices.

4.1.5. Responding Organization will immediately report any and all accidents to Requesting Organization (both incidence and injury).

4.1.6. Switching procedures will be handled as the Requesting Organization designates, provided that the procedures do not violate the safety rules of the Responding Organization.

4.1.7. Requesting Organization will provide information on their switching and tagging rules. Requesting Organization switching/blocking tags will be used.

4.1.8. Security personnel requirements shall be discussed and mutually agreed upon by the Requesting and Responding Organizations prior to deployment of armed security personnel.

4.1.9. Any deployment of personnel who perform security functions must comply with federal, provincial, state, local and tribal regulations as applicable.

4.2. Maintenance of Contact Roster

4.2.1. In order to facilitate efficient communication and response, participating organizations will share the names, contact information (work phone, home phone, cellular phone, and e-mail addresses) for at least two (2) individuals authorized to participate in Joint Mobilization Activities on behalf of their organization.

4.2.2. Each Party Utility will be responsible for maintaining and updating the *Member Organization Contact Roster* at least every three months.

4.2.3. Association Parties are responsible for maintaining current contact rosters of their respective members and are the primary points of contact for the municipal/cooperative resources.

4.3. Code of Conduct

4.3.1. Whether providing or receiving assistance, all Utility Party personnel will be expected to conduct themselves in a professional and responsible manner.

4.4. Definition of Emergency Assistance Period

4.4.1. The Parties agree that the emergency assistance period shall commence when personnel and/or equipment expenses are initially incurred by the Responding Organization in response to the Requesting Organization's needs. This includes any request for the Responding Organization to prepare its employees and/or equipment for travel to the Requesting Organization's location but to await further instructions before departing. This preparation time should begin when normal work activities for the Responding Organization stops and preparations dedicated to supporting the off system effort begin. Except as noted in paragraph 4.4.3, the emergency assistance period shall terminate when such employees and/or materials 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 and restocking minor materials).

4.4.2. The length of stay by Responding Organization personnel will be mutually agreed to by both the Requesting Organization and Responding Organization(s). 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 extend beyond this time frame, Parties agree that Responding Organization personnel will usually be changed out (rotated) rather than take extended reset periods (days off). Responding and Requesting Organizations may agree upon exceptions to this procedure.

4.4.3. It is understood and agreed that if Responding Organization's system or members are threatened during any time after it has mobilized to provide mutual assistance, any part or all of the Responding Organization'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 Organization.
- If recall of Responding Organization's workforce becomes necessary, the Requesting Organization will be responsible for all expenses incurred by Responding Organization until the Responding Organization returns home and vehicles are cleaned and stocked for normal work activities.
- If Responding Organization's workforce is recalled to another of the Responding Organization's locations other than their original point of origin, the Requesting Organization 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.

5. Rules of Engagement

5.1. Rules of Engagement Procedures

5.1.1. Utility Parties agree to adhere to the procedures contained in this Protocol to request, identify and mobilize emergency mutual assistance resources. Because response time is critical in emergency situations, the Joint Mobilization Conference Call provides a mechanism that allows Utility Parties to quickly request assistance and identify the number and status of all available regional resources.

5.1.2. When any Utility Party has a need for additional resources, it will utilize its primary means of securing additional assistance first.

5.1.3. If a need still exists after the response to the request under 5.1.2, one (1) representative from each of the Utility Parties (or its group representative) will convene a joint mobilization call to ascertain if Utility Parties have resources available to provide aid.

5.1.4. In the event resource requests initiated through this protocol remain unmet, Utility Parties will escalate the request to its trade association national coordinator(s). The national coordinator(s) collaborate among the APPA, EEI and national emergency management agencies. This process:

- Can be executed in parallel with the above outreach to neighboring RMAGs
- Broadens the reach to potential support resources
- Provides for a more effective and equitable allocation of resources for deployment to the requesting impacted member companies

- Should be made and coordinated following the existing North Atlantic Mutual Assistance Group (NAMAG) protocols unless there are no other Association Party resources within the NAMAG or other RMAGs that are in need of/requesting mutual Assistance.

5.1.5 In the event a resource need still exists after canvasing the Utility Parties and New York Association Parties, the Utility Parties have the ability to, and should consider, escalating the request to the national Association Parties. If resources are brought to bear through this process, the resources would be coordinated locally similar to inviting other Regional Mutual Assistance Groups (RMAGs) to the event as done under the EEI (RMAG) process

5.1.6 The Joint Mobilization Conference Call provides Utility Parties with the opportunity to understand the scope of the emergency situation, including expected impact and potential damage to organizations or systems, and also provide information as to the steps taken to secure resources. The aim of the call is to achieve efficient, effective and equitable allocation of available resources and minimize costs associated with mobilization of resources.

5.2 Responsibilities of Organization Initiating Request for Resources (for "NY Only" Events)[2]

5.2.1 The Requesting Organization[3] serves as moderator for the Joint Mobilization Conference Call or ask another Party to moderate. The moderator:

- Presents an estimate of impact to the Requesting Organization. If the incident impacts or potentially impacts more than one Utility Party's service territory, the moderator will ask other Utility Parties for their projected damage assessments.
- Presents an estimate of resources needed by the Requesting Organization. If the event impacts or potentially impacts more than one Utility Party's service territory, the moderator will ask other Utility Parties for their projected resource needs.
- Asks all non-impacted Utility Parties to state the amount of resources it has available to provide assistance and a timetable for those resources.
- Leads discussion of (1) staging areas, if needed, to be used by assisting organizations, (2) transportation concerns, such as evacuation orders, fuel availability, and DOT exemptions, and (3) the availability of non-Utility Party resources that may be available to assist impacted Utility Parties.
- Addresses, to the extent possible, the Requesting Organizations responsibilities under Section 6.1.
- Establishes a schedule for update calls.

5.3. Responsibilities of Non-Initiating Organizations

- Non-threatened and non-impacted Utility Parties should be prepared to specify the number and type of resources available to assist impacted organizations or systems, including an estimate of when these resources can be dispatched.
- To enhance safety and flexibility, upon request non-threatened/non-impacted Utility Parties will be prepared to identify staging areas available in their territories.

5.4. Resource Allocation and Mobilization[1]

5.4.1. When more than one Utility Party has requested emergency assistance, all Parties understand and agree that it is the responsibility of the Requesting Organizations to agree upon the allocation of the available resources as between themselves.

5.4.2. The Parties agree that, in general, resources will be allocated on severity of need based on:

- Impact as calculated by percentage or degree of system loss and estimated time customers will have been without power.
- Travel time.
- Resources already secured either through existing contracts and/or other mutual assistance processes
- The intent will be to allocate available resources to meet all Utility Party utility needs in the most efficient and equitable manner possible.

5.4.3. The Parties agree that final dispatch of committed resources is to be coordinated directly between the Requesting Organization and the Responding Organization.

5.3 Joint Mobilization Call Documentation

5.3.1 During each call, a Party will be designated the responsibility for documenting resource allocations and email the minutes to the Utility Party representatives on the call.

6 Requesting Organization Responsibilities

6.1 Requesting Organization – Responsibilities Prior to Mobilization

6.1.1 To the extent possible, the Requesting Organization is to communicate the scope of impact and work conditions expected for Responding Organization personnel.

6.1.2 The Requesting Organization is to inform the Responding Organization if their requirements for the maintenance of receipts differ from the procedures stated in paragraph 7.2.4.

6.1.3 To facilitate communications, the Requesting Organization may provide a single point of contact (Coordinator) to interact with the Responding Organization.

6.1.4 The Requesting Organization is to address inquiries from Responding Organizations about labor contractual issues, safety issues, contact personnel, vehicle fueling arrangements, typical standard construction, meal and lodging arrangements, and other items.

6.2 Requesting Organization – Responsibilities during Emergency Assistance Period

6.2.1 The Requesting Organization establishes expectations for work, including start time and duration.

6.2.2 The Requesting Organization provides materials unless specifically noted otherwise and communicated to the Responding Organization.

6.2.3 The Requesting Organization provides a personnel representative to be a guide or bird dog with communications capability to assist responding team leaders.

6.2.4 The Requesting Organization provides vehicle security for parking areas unless specifically agreed otherwise.

6.2.5 With the exception of food and lodging during travel to and from the final work site, the Requesting Organization handles all food, lodging and incidental support needed by Responding Organization unless otherwise agreed to in writing.

6.2.6 Requesting organization provides laundry services unless otherwise agreed to in writing.

6.2.7 Requesting Organization reimburses the Responding Organization for lodging and will not pay for additional hotel related or hotel billed expenses unless agreed to by the Requesting Organization prior to the occurrence.

6.3 Requesting Organization - Procedures for Releasing Responding Organization(s)

6.3.1 Each Requesting Organization provides to the Responding Organization(s) a proposed "Release Schedule" as soon as possible before mobilizing personnel and equipment ("crews"). This Release Schedule will include:

- Name(s) of the Utility Party and its personnel to be released to the request.
- The numbers of workers from each Utility Party being released to the request.
- The coordinator of the crews being released to the request.
- The date and approximate time the crews expect to be released from the request.

6.3.2 The Requesting Organization recognizes that resources under this Protocol are being provided to assist with an emergency only. After the response and restoration work has been completed, the Requesting Organization shall NOT retain Responding Organization personnel or equipment to perform routine maintenance, street lighting work, or clean up type work (unless otherwise agreed to) and will aggressively work to demobilize personnel and equipment.

6.3.3 If there are other Utility Parties that need additional resources at the time of the release, it will be the decision of the Responding Organization or members as to whether they provide resources for another Utility Party's mutual assistance request under this Protocol.

6.3.4 When resources are being released by one Requesting Organization, and the Responding Organization elects to provide assistance to another Requesting Organization, it will go through the same process as it did initially as specified in Section 5.4.

6.4 Requesting Organization – Responsibility for Reimbursement of Expenses

6.4.1 The Parties understand and agree that the provision of emergency mutual assistance is a not for profit endeavor[5] for Responding Organization(s). The Requesting Organization will reimburse all costs and expenses incurred by the Responding Organization in the provision of the emergency assistance for the entire emergency assistance period as defined in Section 4.4 above.

6.4.2 If Responding Organization resources are released during/after mobilization but before being utilized, the Requesting Organization will reimburse Responding Organization 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.

6.4.3 During emergencies impacting more than one Utility Party, Responding Organization resources may be re-assigned to another Requesting Organization either: (1) en route to the Requesting Organization, (2) at an initial staging area before reaching the Requesting Organization, or (3) at the Responding Organization's final staging area. Additionally, resources may be assigned, in agreement with the Responding Organization, to assist a second Requesting Organization after completing work for the initial Requesting Organization. Note: In any of these instances, unless otherwise mutually agreed, the Requesting Organization that receives the re-assigned Responding Organization resources will be responsible for all Responding Organization costs from the time of re-assignment (including travel from demobilization point).

6.4.4 The Requesting Organization shall pay all invoice(s) from Responding Organization or members within 90 calendar days after receipt of invoice(s) with proper supporting documentation as specified by the Requesting Organization in advance.

7. Responding Organization Responsibilities

7.1 Responding Organization – Responsibilities Prior to Mobilization

7.1.1 To the extent possible, the Responding Organization 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.

7.1.2 To facilitate communications, the Responding Organization may opt to provide a single point of contact (Coordinator) to interact with the Requesting Organization.

7.1.3 Responding Organization completes and forwards a crew roster to the Requesting Organization with employee name and title, vehicle description, other equipment, and contact information, before departing their home location or current work location.

7.1.4 Responding Organization agrees not to load extra emergency stock on trucks unless specifically requested by the Requesting Organization.

7.1.5 In certain situations, the Requesting Organization may not have the capacity to effectively on-board and control small groups of resources. In these situations, every attempt will be made by the Responding Organization(s) to group the responding resources into a size that the Requesting Organization or member can effectively utilize. The Responding Organization(s) will make every attempt to assemble and arrive as a single unit and provide their own supervision incorporating a manageable span of control.

7.1.6 Upon request, the Responding Organization shall provide the Requesting Organization with a copy of associated labor contracts.

7.2 Responding Organization – Responsibilities during Emergency Assistance Period

7.2.1 Responding Organization handles all communication needs within their teams to ensure continuous communication capabilities.

7.2.2 The Responding Organization is 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.

7.2.3 Responding Organization maintains daily records of time and expenses for personnel and equipment. This documentation is provided with their invoices.

7.2.4 Unless otherwise agreed prior to mobilization, member utilities agree that Responding Organization(s) will maintain and furnish upon request receipts for all individual expenses and purchases made during the emergency assistance period in accordance with the United States Internal Revenue Service (IRS) in effect at the time assistance is requested.

7.2.5 Notwithstanding anything herein, the Requesting Organization and the Responding Organization may mutually agree to a different invoicing method than that outlined in Appendix B; however, every effort should be made to agree upon invoicing terms before mobilization begins.

7.3 Responding Organization – Responsibilities End of Emergency Assistance Period

7.3.1 Responding Organizations should submit their *preliminary invoice* to Requesting Organization *within 30 calendar days from date released* by the Requesting Organization. Responding Organization will provide supporting documentation at the time the preliminary invoice is mailed. Requesting Organization should receive *final invoice within 60 calendar days from invoice date of preliminary invoice.*

7.3.2 Utility Parties agree to maintain auditable records of billed expenses for emergency mutual assistance sufficient to satisfy the legal or statutory requirements and obligations incumbent upon the Requesting Organization.

8. Liability

8.1 Due to the compressed time frames associated with the rendering of mutual assistance, Utility Parties should ensure that liability, among other issues, be addressed in a timely manner; otherwise, the ability of one Party Utility to respond to another Party Utility could be impacted adversely, up to and including an inability to render any non-contractor assistance.

8.2 When rendering mutual assistance to one another and with specific regard to all liability for loss, damage, cost or expense, the Parties agree as follow:

8.2.1 Requesting Organization shall indemnify, hold harmless and defend Responding Organizations from, and against any and all liability for loss, damage, cost or expense which Responding Organizations may incur by reason of bodily injury, including death, to any person or persons or by reason of damage to or destruction of any property, including the loss of use thereof, which result from furnishing emergency assistance and whether or not due in whole or in part to any act, omission, or negligence of Responding Organization or except to the extent that such death or injury to person, or damage to property, is caused by the willful or wanton misconduct and/or gross negligence of the Responding Organization. Where payments are made by the Responding Organization under a workmen's compensation or disability benefits law or any similar law for bodily injury or death resulting from furnishing emergency assistance, Requesting Organization shall reimburse the Responding Organization for such payments, except to the extent that such bodily injury or death is caused by the willful or wanton misconduct and / or gross negligence of the Responding Organization.

8.2.2 In the event any claim, request for information, or demand is made or suit or action is filed against Responding Organization alleging liability for which Requesting Organization shall indemnify and hold harmless Responding Organization under paragraph 8.2.1 above, Responding Organization shall promptly notify Requesting Organization thereof, and Requesting Organization, at its sole cost and expense, shall settle, compromise or defend the same in such manner as it in its sole discretion deems necessary or prudent. Responding Organization shall cooperate with Requesting Organization's reasonable efforts to investigate, respond, defend and settle the claim request, or lawsuit.

8.2.3 In the event any claim, request for information, or demand is made or suit or action is filed against Requesting Organization alleging liability during an Emergency Assistance Period as defined in section 4.4.1 above, Requesting Organization shall promptly notify all Responding Organization. All Parties shall cooperate with reasonable efforts to investigate, respond, defend, and the settle the claim, request or lawsuit.

9. Confidentiality

9.1 Utility Parties understand and agree that invoicing details, including associated expenses and related information and conversations between member utilities during conference calls, including discussions regarding crew location and allocation are confidential and proprietary to the disclosing member utility (the "Confidential Information"). Therefore, member utilities agree not to share or release any Confirmation Information unless mutually agreed.

9.2 Utility Parties expressly acknowledge that they are subject to regulation by various state and federal regulatory agencies and that they may from time to time disclose Confidential Information to such regulatory agencies. In the event of such disclosure to regulatory agencies, the disclosing Utility Party shall seek to have the applicable regulatory agency afford confidential treatment to the Confidential Information.

10. Freedom of Information Laws

10.1 If a Party is subject to a freedom of information law that provides for public disclosure of records (collectively, a "FOIL") and such Party (the "FOIL Party") receives a request for the disclosure of potentially Confidential Information provided to it by another Party (the "Disclosing Party"), the FOIL Party, shall:

- Notify the Disclosing Party of the request;
- Provide the Disclosing Party with the information the FOIL Party intends to provide in response to the FOIL request;
- Provide the Disclosing Party the opportunity to provide information regarding the need for confidential treatment;
- Evaluate the third party's request for disclosure and the Disclosing Party's request for confidential treatment; and
- Determine if the Confidential Information is subject to disclosure under FOIL.

10.2 If the FOIL Party determines that Confidential Information is subject to disclosure under the applicable FOIL, it will provide prompt written notice of such determination to the Disclosing Party so that the Disclosing Party may seek a protective order or other appropriate remedy.

10.3. Nothing in this Protocol is intended to limit or otherwise modify a FOIL Party's obligations under any applicable FOIL.

IN WITNESS WHEREOF, by signing below, the Parties agree that they have read, understand, and agree to the terms and conditions provided for herein.

POWER AUTHORITY OF THE STATE OF NEW YORK

[redacted]

LONG ISLAND ELECTRIC UTILITY SERVCO LLC AS AGENT OF AND ACTING ON BEHALF OF THE LONG ISLAND LIGHTING COMPANY D/B/A LIPA

[redacted]

CENTRAL HUDSON GAS & ELECTRIC

[redacted]

CONSOLIDATED EDISON, INC.

[redacted]

ORANGE & ROCKLAND UTILITIES

[redacted]

NATIONAL GRID

[redacted]

AVANGRID Networks, Inc.,

[redacted]

MUNICIPAL ELECTRIC UTILITIES ASSOCIATION OF NEW YORK STATE,
on behalf of itself and MEUA Members

[redacted]

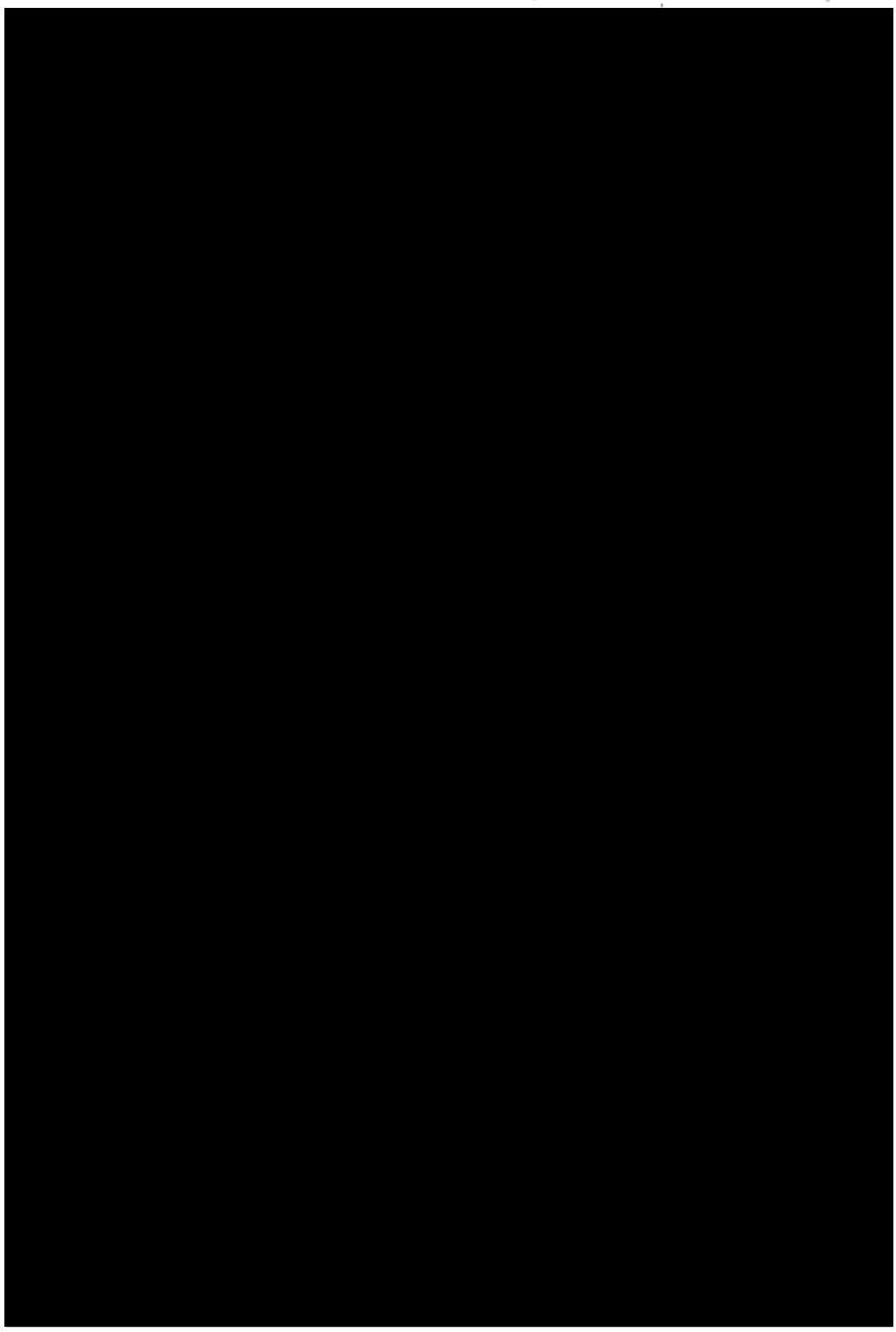
NEW YORK ASSOCIATION OF PUBLIC POWER,
on behalf of itself and NYAPP Members

[redacted]

AMERICAN PUBLIC POWER ASSOCIATION,
on behalf of itself and the APPA Mutual Aid Program

[redacted]

APPENDICES



American Public Power Association

APPENDIX B – POINTS OF CONTACT/CONTACT INFORMATION

APPENDIX C – INVOICE TEMPLATE

INVOICE

Utility
New York State, NY

DATE: [CLICK TO SELECT DATE]
INVOICE #
PROJECT & TASK #

TO

FROM

JOB DESCRIPTION	PAYMENT TERMS
Emergency Restoration Work	PAYMENT DUE **/**/****. (PAYMENT DUE WITHIN 90 DAYS AFTER RECEIPT OF INVOICE.)

DESCRIPTION	TOTAL
LABOR Total labor (full) cost	
LABOR HOURS Total hours billed by function: • Line or splicing personnel • Supervisory • Safety • Other (please specify and should be pre-approved)	
MATERIALS (Total Cost) Type of material(s) Quantity	
EQUIPMENT (Total Cost) Types of vehicles/equipment Total hours billed	
FIELD AND ADMINISTRATIVE EXPENSES Includes fuel, food, lodging, tolls, administrative, communications expenses and miscellaneous costs Special requests: • Type of special request • Total cost	
TOTAL DUE	

Appendix I – 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

COMMISSIONERS PRESENT:

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 penalties[3]. 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.

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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.

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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 is 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.

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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.

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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 Event[10], Customer Restoration[11], Outage Duration[12] and Start of Utility Restoration[13]. 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 Case[15] 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).

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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.

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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 un-forecasted 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.

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[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]

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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 PSL[20], 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.

[20] 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 Municipal Conference Calls held and effective	20 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	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 and provide, at minimum, baseline 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 4-hour PSC Situation Report guideline requirements	All reporting on time, including at a minimum information required by existing 4-hour PSC Situation Report 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 ≤ 40 per 100,000 customers affected	20 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

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 System Status Report – Electric System Status Report is a mapping and reporting system that allows DPS Staff to receive, process, analyze, and report outage data quickly and in a uniform format. Electric System Status Report 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 contactor 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 though 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 though 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 ETR Protocols are activated when more than 5,000 customers are out of service in a division or more than 20,000 customers are out of service companywide for more than 30 minutes. The ETR Protocols include minimum requirements for when, and at what level of detail an ETR will be communicated to the Department of Public Service (Department or DPS Staff). The tables below clarify the necessary actions to be taken by the involved utilities before and during the outage period for the specific outage event[4]. Utility procedures and practices that require actions prior to those identified will continue to be used.

The protocols are considered minimum requirements necessary to ensure the public and the Department are adequately informed. During restoration, utilities are to continuously refine ETRs and update DPS Staff and the public, customer representatives, IVR systems, and websites. The utilities will also provide restoration information such as outage counts and ETRs to the press/media outlets and public officials in the affected areas. Additionally, utilities will issue at least one press release daily for all outage events with an expected restoration period longer than 48 hours.

Regional and local ETRs will be used and applicable to at least 95% of the affected customers in the reported level. Regional ETRs are to be provided on a county basis and local ETRs are to be provided on a town or municipal basis. Global ETRs may be used initially for outage events expected to last greater than 48 hours and applicable to at least 90% of the affected customers. Once all regional ETRs have been issued references to the global ETR will be eliminated.

When adverse weather conditions exist, the start of the restoration period is the point in time when:

Field personnel can be dispatched without unacceptable safety risks from continued severe weather conditions and/or

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 for example severe flooding.

[4] An outage event is either a major storm, as defined in 16 NYCRR §97.1(c), or another electric service interruption or electric emergency.

Initial notification to the Department will follow the Event Notification Requirements issued in Appendix B of Case 04-M-0159 on December 15, 2008. Any additional information that is available will be included in the initial notification even if the notification is required prior to the start of restoration. For widespread outage events, company-wide outage statistics will also be provided as part of the initial notification.

Reporting is required at 7:00 am, 11:00 am, 3:00 pm, and 7:00 pm unless otherwise specified. The reports will include, at a minimum:

- Utility information
- Summary of the outage event, for major storms summarize the weather and weather forecast
- Summary of outages
- Synopsis - discussion of major damage and work plans for restoring customers
- ETRs
- Resource summary - on site and en-route, planned crew relocation and mutual assistance activity
- Summary of the impacts to critical facility customers and Life Support Equipment customers
- Dry ice 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 report submissions early in an outage event to satisfy the guidelines.

OUTAGE EVENT EXPECTED TO LAST 48 HOURS OR LESS

Within the first 6 hours of the restoration period
• Notify DPS Staff that the outage 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 outage events expected to last less than 24 hours, notification may be via the Department's information reporting system. • Provide available information to the public. Update customer representative, IVR systems and websites. • In certain situations, such as a nighttime outage 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 outage event, the determination of whether the restoration period will be less than 48 hours will be communicated to DPS Staff as soon as possible, but no later than noon the following day. Any delay in establishing the initial expectations will not affect the time requirements below.
Within the first 12 hours of the restoration period
• Provide DPS Staff and the public with any available regional/county ETRs and any available local/town or municipal ETRs. Update customer representatives, IVR systems, and websites. • Issue a press release that includes known ETRs for the next upcoming news cycle • Communicate with affected municipal and elected officials. This communication may or may not be by way of a municipal conference call.
Within the first 18 hours of the restoration period
• Provide DPS Staff and the public remaining regional/county ETRs. Update customer representatives, IVR systems, and websites. • Provide DPS Staff and the public with any additional local/town or municipal ETRs. Update customer representatives, IVR systems, and websites.
Within the first 24 hours of the restoration period
• Consider issuing a press release for the next upcoming news cycle based on conditions.
Reporting requirements during the outage event
• Provide restoration information updates four times daily to DPS Staff (7 am, 11 am, 3pm, and 7 pm) if requested by DPS Staff. Updates will continue until otherwise directed by DPS Staff. • Notify DPS Staff when all outage event related interruptions have been restored.

OUTAGE EVENT EXPECTED TO LAST GREATER THAN 48 HOURS

Pre-event whenever sufficient notice of an impending weather event is available

- Make pre-event outbound calls to critical facilities customers, life support equipment customers, and special needs customers.
- Complete pre-storm communications with outreach to employees, the news media, social media sites, blast emails and text messages to customers, and advisories to municipal and elected officials.
- Conduct pre-event municipal conference calls
- Issue public statement and/or press releases

Within the first 6 hours of the restoration period

- Notify DPS Staff that it will be a multi-day outage event lasting more than 48 hours. The notification to DPS Staff will state what the Company has defined as the start of the restoration period.
- Provide a public statement and/or press releases indicating the likelihood of extended outages and make this information available via customer representatives, IVR systems, and websites.
- In certain situations, such as nighttime outage 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 outage event, the determination of whether the restoration period will be greater than 48 hours will be communicated to DPS Staff as soon as possible, but no later than noon the following day. Any delay in establishing the initial expectations will not affect the time requirements below.

Within the first 12 hours of the restoration period

- Issue press releases based on the predetermined time periods defined in the emergency plan.
- Communicate information such as system damage, outages, restoration status etc. with affected municipal and elected officials as appropriate.
- Schedule the first post-storm municipal conference call(s), unless an alternative municipal contact method is more appropriate. The first scheduled municipal conference call does not necessarily have to be held within the first 12 hours but will be held within the first 24 hours.
- Notify DPS Staff and the public of what areas sustained the most damage to the electric system and ETRs where known, on a county or regional basis.

Within the first 24 hours of the restoration period

- Complete the first scheduled municipal conference call.
- Provide DPS Staff and the public with a global ETR, any available regional/county ETRs, and any available local/town or municipal ETRs. Update customer representatives, IVR systems, and websites.

  Identify for DPS Staff and the public any heavily damaged areas where large numbers of customers may remain without service for more than a few days. If necessary, note that the situation is still unfolding, and more details will be provided as soon as they become available.

OUTAGE EVENT EXPECTED TO LAST GREATER THAN 48 HOURS (continued)

Within the first 48 hours of the restoration period
• Provide DPS Staff and the public remaining regional/county ETRs. Update customer representatives, IVR systems, and websites, eliminate all references to the global ETR. • Provide DPS Staff and the public with any additional local/town or municipal ETRs. Update customer representatives, IVR systems, and websites, eliminate all references to the global ETR.
Within the first 60 hours of the restoration period
• Provide DPS Staff and the public remaining local/town or municipality ETRs. Update customer representatives, IVR systems.
Reporting requirements during the outage event
• Provide restoration information updates four times daily to DPS Staff (7 am, 11 am, 3 pm, and 7 pm), unless directed otherwise. Updates will continue until otherwise directed by DPS Staff. • Notify DPS Staff when all outage event related interruptions have been restored.

Appendix J – Department Of Public Service (DPS) And LIPA Scorecard Protocols

1. EMERGENCY RESPONSE PERFORMANCE MEASUREMENT GUIDE

The Storm Performance Scorecard ("DPS Storm Scorecard") was developed by the NYS DPS to measure the performance of utilities across NYS, when restoring power to customers after an outage event lasting three days or greater in length. While outage events can never be eliminated, these metrics establish minimum-targeted performance levels to assess utilities' restoration activities after significant outages.

This DPS Storm 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 is the earlier of the peak level of interruptions, or start of utility restoration.

Pursuant to the Second Amended and Restated Operations Services Agreement (A&R OSA), PSEG Long Island must complete and submit to LIPA an Emergency Preparation and Response Scorecard ("LIPA Scorecard") for any outage event during which outage duration, as defined in the A&R OSA, last more than 48 hours.

PSEG Long Island provides data with which the scorecard can be completed, on a per event basis, within 30 days of the completion of customer restoration to LIPA for a 48 hour LIPA scorecard with copy to DPS, and both LIPA and DPS for a 72 hour DPS Storm Scorecard. LIPA and/or DPS staff will use the information, provided by PSEG Long Island, in its review, and determine a score for each event and applicable scorecard. PSEG Long Island will continue to be required to file a Part 105 report within 60 days, as set forth in the NYCRR for a 72 hour DPS Storm Scorecard.

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.

2.1 Preparation

The Preparation metric is intended to score utility performance with respect to activities and communications performed prior to forecasted storms, and in response to alerts from the NWS, or a utility's private weather service.

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. 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).

2.3 Communications

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, 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 (e.g., calls, press releases, and social media).

2.4 Scorecard Metrics Owners Responsibility

To facilitate the Scorecard process, metrics were assigned to the appropriate stakeholders throughout the PSEG Long Island organization. Accordingly, each assigned stakeholder, in conjunction with Emergency Preparedness staff, is 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 and its associated metric ownership, the NYS DPS Storm Performance Scorecard is shown in Figure J.1 through Figure J.3.

NYS DPS 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	• Division Managers, Electric • Director, Corporate Communications • Director, External Affairs • Director, Revenue Operations • Manager, Account Management • Manager, Emergency Preparedness • Director, T&D Services

Figure J.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	Division Managers, Electric
Preliminary Damage Assessment	Completion of preliminary damage assessment	Division Managers, Electric
Crewing	80% of the forecast crewing committed to the utility	Division Managers, Electric
ETR (Made available by utility on web, IVR, etc.)	Publication of global ETR in accordance with ETR protocol	Director, Corporate Communications
	Publication of Regional/County ETRs in accordance with ETR protocol	
	Publication of Local/Municipal ETRs in accordance with ETR protocol	

Figure J.2 – Draft Emergency Response Performance Measures: Operational Procedure

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	Division Managers, Electric
	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.	Director, External Affairs
County EOC Coordination	Coordination with County EOCs	Manager, Emergency Preparedness
Utility Coordination	Electric utility coordination with other utilities (electric, gas, communications, water)	Division Managers, Electric
Safety	Measure of any employee or contractor serious injury doing hazard work during storm/outage and restoration	Director, T&D Services
Mutual Assistance	Crew requests made through all sources of mutual assistance	Division Managers, Electric
Restoration Times	Time it takes utility to restore power to 90% of customers affected	Division Managers, Electric

Figure J.2 (continued) – Draft Emergency Response Performance Measures: Operational Procedure

COMMUNICATIONS (30% of total – 300 points)		
Area of interest	**Metric**	**Owner**
Call Answer Rates	Customer calls answered by properly staffing call centers	Director, Customer Contact and Billing
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	Director, External Affairs
Web availability	Company's web site must be available around the clock, and must be updated at least hourly, until restoration is complete	Director, Corporate Communications
LSE Customers	LSE customer contact	Director, Revenue Operations
PSC Reporting	Provide storm event information to PSC in accordance with 4-hour PSC Situation Report guideline requirements	Manager, Emergency Preparedness
Customer Communications	Press releases/social media to customers	Director, Corporate Communications
Outgoing message on telephone line	Recorded messages providing callers with outage information is updated within one hour of communication releases	Director, Customer Contact and Billing
PSC complaints Customer Communications	Number of storm/outage related PSC complaints received Text messaging/emails	Director, Customer Experience and Utility Marketing

Figure J.3 – Draft Emergency Response Performance Measures: Communication

PSEG Long Island has taken steps to appropriately address the aforementioned Scorecard metrics and associated targeted performance levels by building processes and procedures into its ERP that aim to position the company to successfully deliver against these metrics.

Appendix K – Tropical Cyclone 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 Watchers: 50-100 Auxiliary Damage Assessment: 0 **Number of Off- system assistance can vary based on forecasted sustained wind velocities.**	High ***Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory*** ***Wind probability >80%***	Commit to available crewing: No Reserve Hotel Rooms: 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 camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes 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 ***Centerline of cone area within 100 miles of PSEG Long Island operational service territory*** ***Wind probability 40% - 80%***	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel Rooms availability: No Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: No Reserve Hotel Rooms: 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 Re-evaluate and assess if decisions require escalation or de-escalation
	Low ***Centerline of cone within 160 miles of PSEG Long Island operational service territory*** ***Wind probability <40%***	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: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel availability: Yes Re-evaluate and assess if decisions require escalation or de-escalation
As wind speed forecasts, duration, and probabilities increase, consideration should be given to moving to the next level matrix.					
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources, support timeline for Logistics Contractor, and the effect of Long Island evacuations on hotel availability.					

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 Watchers: 100-250 Auxiliary Damage Assessment: 0 **If damage from flooding is anticipated, consider acquiring workforce to support substation equipment repairs (technicians, mechanics, etc.)**	High ***Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory*** ***Wind probability >80%***	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 75% of crew target Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camps with sleeping arrangements for balance Mobilize 2-3 staging areas total	Commit to available crewing: Yes Reserve / book Hotel rooms for all remaining crew target Re-evaluate and assess if decisions require escalation or de-escalation. Authorize 1-3 staging areas if required
	Medium ***Centerline of cone area within 100 miles of PSEG Long Island operational service territory*** ***Wind probability 40% - 80%***	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel 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 75% of crew target Mobilize base camps with sleeping arrangements for balance Mobilize 1-2 staging areas total	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Re-evaluate and assess if decisions require escalation or de-escalation
	Low ***Centerline of cone within 160 miles of PSEG Long Island operational service territory*** ***Wind probability <40%***	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: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to ¼ – ½ of minimum crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to ¼ – ½ of minimum crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold
As wind speed forecasts, duration, and probabilities increase, consideration should be given to moving to the next level matrix.					
<u>Factors to consider:</u> Restoration events in other parts of the country influencing availability of line workers/tree trim resources, support timeline for Logistics Contractor, and the effect of Long Island evacuations on hotel availability.					

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 Watchers: 250-400 Auxiliary Damage Assessment: 0 **If damage from flooding is anticipated, consider acquiring workforce to support substation equipment repairs (technicians, mechanics, etc.)**	High ***Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory*** ***Wind probability >80%***	Commit to available crewing: Yes Reserve Hotel rooms for 50% of crew target Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel rooms for 75% of crew target Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camps with 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 ***Centerline of cone area within 100 miles of PSEG Long Island operational service territory*** ***Wind probability 40% - 80%***	Commit to available crewing: Yes Reserve Hotel Rooms for available crews: No Check Hotel 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 camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camps with sleeping arrangements for balance Mobilize 2-3 staging areas total	Re-evaluate and assess if decisions require escalation or de-escalation
	Low ***Centerline of cone within 160 miles of PSEG Long Island operational service territory*** ***Wind probability <40%***	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: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to ¼ – ½ of minimum crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to ¼ – ½ of minimum crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold
As wind speed forecasts, duration, and probabilities increase, consideration should be given to moving to the next level matrix.					
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources, support timeline for Logistics Contractor, and the effect of Long Island evacuations on hotel availability.					

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 Watchers: 350-500 Auxiliary Damage Assessment: 160-320 **If damage from flooding is anticipated, consider acquiring workforce to support substation equipment repairs (technicians, mechanics, etc.)**	High ***Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory*** ***Wind probability*** ***>80%***	Commit to available crewing: Yes Reserve Hotel rooms for 75% of crew target Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel rooms for 100% of crew target Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camps with 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 ***Centerline of cone area within 100 miles of PSEG Long Island operational service territory*** ***Wind probability*** ***40% - 80%***	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 75% of crew target Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camps with sleeping arrangements for balance Mobilize3-5 staging areas total	Re-evaluate and assess if decisions require escalation or de-escalation
	Low ***Centerline of cone within 160 miles of PSEG Long Island operational service territory*** ***Wind probability <40%***	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: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to ¼ – ½ of minimum crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to ¼ – ½ of minimum crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold
As wind speed forecasts, duration, and probabilities increase, consideration should be given to moving to the next level matrix.					
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources, support timeline for Logistics Contractor, and the effect of Long Island evacuations on hotel availability.					

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 is likely to 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 Watchers: 400-600 Auxiliary Damage Assessment: 320-480 **Acquire workforce to support substation equipment repairs (technicians, mechanics, etc.)**	High ***Centerline of cone area over, or within 30 miles of PSEG Long Island operational service territory*** ***Wind probability >80%***	Commit to available crewing: Yes Reserve Hotel rooms for 75% of crew target Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel rooms for 100% of crew target Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel rooms for 100% of crew target Mobilize base camps with sleeping arrangements for balance Mobilize 6-8 staging areas	Book all reserved rooms Re-evaluate and assess if decisions require escalation or de-escalation
	Medium ***Centerline of cone area within 100 miles of PSEG Long Island operational service territory*** ***Wind probability 40% - 80%***	Commit to available crewing: Yes Reserve Hotel Rooms for 50% crew target 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 camps with sleeping arrangements for balance SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 100% of crew target Mobilize base camps with sleeping arrangements for balance Mobilize 5-7 staging areas total	Re-evaluate and assess if decisions require escalation or de-escalation
	Low ***Centerline of cone within 160 miles of PSEG Long Island operational service territory*** ***Wind probability <40%***	Commit to available crewing: No Reserve Hotel Rooms: No Check Hotel availability: Yes Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to available crewing: Yes Reserve Hotel Rooms for 50% crew target Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to ¼ – ½ of minimum crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camp sleeping arrangements: On Hold SA Mobilization: On Hold	Commit to ¼ – ½ of minimum crew compliment if available Reserve Hotel Rooms for available crews Mobilize base camps with sleeping arrangements for balance SA Mobilization: On Hold
As wind speed forecasts, duration, and probabilities increase, consideration should be given to moving to the next level matrix.					
Factors to consider: Restoration events in other parts of the country influencing availability of line workers/tree trim resources, support timeline for Logistics Contractor, and the effect of Long Island evacuations on hotel availability.					

Figure K.1 – Tropical Cyclone Resource Matrix Guide

Appendix L – Acronyms and Abbreviations

ACRONYM/ABBREVIATION	DEFINITION
AAR(s)	After-Action Review(s)
ACC	Alternate Control Center
ACR	Automatic Circuit Reclosers
ADA	Area Dispatch Authority
Admin	Administration
AHC	All Hazards Consortium
AMI	Advanced Meter Infrastructure
ASA	Average Speed of Answer
Asst.	Assistant
ASU	Automatic Sectionalizing Units
BI	Business Intelligence
CAC	Customer Assistance Center
CAIDI	Customer Average Interruption Duration Index
CAS	Customer Accounting System
Cat.	Category
CaTVCo	Cable Television Company
CEDAR	Code Enforcement Disaster Assistance Response
CEO	Chief Executive Officer
CF	Critical Facilities
CIC	Console Information Coordinators
CNI	Critical National Infrastructure
Comms.	Communications
Conf.	Conference
COO	Chief Operating Officer
Coord(s)	Coordinator(s)
Corp.	Corporate
COTS	Commercial Off The Shelf
CSR(s)	Customer Service Representative(s)
Cust.	Customer
DA	Distribution Automation
DHS	Department of Homeland Security
DHSES	Division of Homeland Security and Emergency Services
Dir.	Director

ACRONYM/ABBREVIATION	DEFINITION
DM	District Manager
DOT	Department of Transportation
DPS	Department of Public Service
DPW	Department of Public Works
DTN	Data Transmission Network
ECNE	Energy Council of the Northeast
EEI	Edison Electric Institute
EIRS	Electric Information Reporting System
EOC(s)	Emergency Operations Center(s)
EP	Emergency Preparedness
ERIP(s)	Emergency Response Implementation Procedure(s)
ERP	Emergency Restoration Plan
ESB	Enterprise Service Bus
ETR(s)	Estimated Time(s) of Restoration
FAQ(s)	Frequently Asked Question(s)
FCP	Foreign Crew Processing
FD	Fire Department
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
HSEEP	Homeland Security Exercise and Evaluation Program
HVAC	Heating, Ventilation, and Air Conditioning
HVCA	High Volume Call Application
ICS	Incident Command System
IMS	Incident Management System
IT	Information Technology
IV	Intravenous
IVR	Interactive Voice Response
LCS	Large Customer Support
LI	Long Island
LICA	Long Island Control Area

ACRONYM/ABBREVIATION	DEFINITION
LIPA	Long Island Power Authority
LIRR	Long Island Rail Road
LO	Lockout
LSC	Logistics Support Center
LSE	Life Support Equipment
MAC(s)	Mutual Assistance Coordinator(s)
MDT(s)	Mobile Data Terminal(s)
MEUA	Municipal Electric Utilities Association
MPH	Miles Per Hour
MSTC	Make Safe to Clear
Muni	Municipal
NAMAG	North Atlantic Mutual Assistance Group
NEPPA	New England Public Power Association
NGCS	National Guard Civil Support
NGDO	National Guard Domestic Operations
NIMS	National Incident Management System
NMART	National Mutual Assistance Resource Team
NRE	National Response Event
NREC	National Response Executive Committee
NWS	National Weather Service
NYAPP	New York Association of Public Power
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
PD	Police Department
PDF	Portable Document Format
PI	Process Intelligence
PIO	Public Information Officer
PPE	Personal Protective Equipment
PRC	Primary Control

ACRONYM/ABBREVIATION	DEFINITION
PSAP	Public Safety Access Point
PSC	Public Service Commission
PSE&G	Public Service Electric & Gas
PSL	Public Service Law
R&D	Research & Development
RASIC	Responsible, Accountable, Supported, Informed, and Consulted
RCA	Remote Configuration Authority
RDA	Remote Dispatch Authority
RMAG(s)	Regional Mutual Assistance Group(s)
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SCADA	Supervisory Control and Data Acquisition
SDA	Survey/Damage Assessment
SHE	Safety, Health and Environmental
SLR	Snow to Liquid Ratio
SME(s)	Subject Matter Expert(s)
SOP(s)	Standard Operating Procedure(s)
SPIA	Sperry-Piltz Ice Accumulation
SPT	Substation, Protection, and Telecom
SUNY	State University of New York
SVL	Service Level
T&D	Transmission & Distribution
TelCo	Telephone Company
TSO	Transmission System Operator
TV	Television
UPS	Uninterruptible Power Source
VA	Visual Analytics
VP(s)	Vice President(s)

Figure L.1 – Acronyms and Abbreviations

Appendix M – Supplemental ERP Contact Sheet

As of December 10, 2024

Incident Command System (ICS) Roles, Responsibilities and Contact Information				
ROLE	CATEGORY	RESPONSIBILITY	E-MAIL ADDRESS	PHONE NUMBER*
[redacted]				

Incident Command System (ICS) Roles, Responsibilities and Contact Information				
ROLE	CATEGORY	RESPONSIBILITY	E-MAIL ADDRESS	PHONE NUMBER*
[redacted]				

Figure M.1 – Supplemental ERP Contact Sheet

*Phone numbers are available for 24/7 contact in the case of a restoration emergency

Appendix N – 4-Hour PSC Situation Report Data

NEW YORK STATE | Department of Public Service

ELECTRIC SYSTEM STATUS REPORT

Utility Company	
Incident Classification Level	
Report Date	
Report Time	

WEATHER

Current Weather	
Forecasted Weather	

SUMMARY OF OUTAGES

Division / Operating District	Total Customers in the Division / Operating District	Peak Customer Outages	Current Customer Outages	Total Customers Restored to Date*	Total Customers Impacted to Date**
Total					

Customize table to reflect Company Divisions, Operating District, etc.

* 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 (OMS) and is subject to change.

** Total Customers Impacted to Date is the total of Current Customer Outages and Total Customers Restored to Date. Based on Note 1, this number may exceed the Total Customers in the Division.

19-E-0742 ETR PROTOCOL STATUS REPORT LAST UPDATED: August 2024

SYNOPSIS

Brief bulleted summary of major damage experienced, significant events since last report including restoration progress, work plans for restoration, any additional impacts, anticipated challenges, etc. All information should be new since the last report. Do not carry old information forward unless it is pertinent for an update.

- Bullet 1
- Bullet 2
- Bullet 3
- Bullet 4, etc.

Estimated Time of Restorations (ETRs)

Global ETR	
Time Global ETR Published	

ETRs for the [Division/Operating District] are as follows:

Region	Start of Event	Start of Restoration	Time ETR Published	ETR

ETRs for the [Division/Operating District] are as follows:

Region	Start of Event	Start of Restoration	Time ETR Published	ETR

ETRs for the [Division/Operating District] are as follows:

Region	Start of Event	Start of Restoration	Time ETR Published	ETR

Customize/add tables for each impacted Region as applicable

RESOURCE SUMMARY NARRATIVE

Bulleted summary of mobilization plan, resource movements, and resource request status as applicable.

- Bullet 1
- Bullet 2
- Bullet 3
- Bullet 4
- Bullet 5

Critical Facility and Life Support Equipment Customer Impacts

Critical Facility Customers	
Division / Operating District	# of Critical Facilities
Division / Operating District	
Division / Operating District	
Division / Operating District	
Total Critical Facilities Impacted Currently	

Customize table to reflect Company Divisions, Operating District, etc.

Life Support Equipment (LSE) Customers	
Division / Operating District	# of LSE customers
Division / Operating District	
Division / Operating District	
Division / Operating District	
Total LSE Impacted Currently	

Customize table to reflect Company Divisions, Operating District, etc.

DRY-ICE DISTRIBUTION ACTIVITIES

Division / Operating District	Location or Site Name	County	Address	Dates and Hours of Operation	Item(s) Available (Dry Ice, Bottled Water, Wet Ice)

Attached to E-Mail for this submission are the Following Documents (*check those that apply*)

- ☐ Resource Status Summary Spreadsheet
- ☐ Critical Facility Spreadsheet
- ☐ Other:

Figure N.1 – DPS Electric System Status Report

EORS Reporting Data Requirements 3 Times per day (Run on Demand)					
Data Entry Prompts:					
Report Start Date/Time:					
Report End Date/Time:					

SUMMARY OF OUTAGES

Division / Operating District	Total Customers in the Division / Operating District	Peak Customer Outages	Current Customer Outages	Total Customers Restored to Date*	Total Customers Impacted to Date**
Queens Nassau					
Central					
Western Suffolk					
Eastern Suffolk					
Total					

Estimated Time of Restorations (ETRs)

Global ETR	
Time ETR Published	

ETRs for the [Division/Operating District] are as follows:

Region	Start of Event	Start of Restoration	Time ETR Published	ETR
Queens Nassau				
Central				
Western Suffolk				
Eastern Suffolk				

Critical Facility and Life Support Equipment Customer Impacts

Critical Facility Customers	
Queens Nassau	# of Critical Facilities Out
Central	
Western Suffolk	
Eastern Suffolk	
Total Critical Facilities Impacted Currently	

Customize table to reflect Company Divisions, Operating District, etc.

Life Support Equipment (LSE) Customers	
Queens Nassau	# of LSE customers Out
Central	
Western Suffolk	
Eastern Suffolk	
Total LSE Impacted Currently	

Figure N.2 – Electric System Status Reporting Data Requirements

New York State Department of Public Service - Electric System Status Report (ESSR)
Critical Facilities Report

Utility	
Date:	
Time:	

Total Level 1:	0
Total Level 2:	0
Total Level 3:	0
Total:	0

District/Division/Region	County	Town	Name of Facility	Address	Phone	Circuit	Type of Facility	Level	Backup Generator	ETR

Figure N.3 – Electric System Status Report (ESSR) Critical Facilities Report

Appendix O – PSEG Long Island Storm Preparation and Safety Videos

Figure O.1 – Our Storm Restoration Process

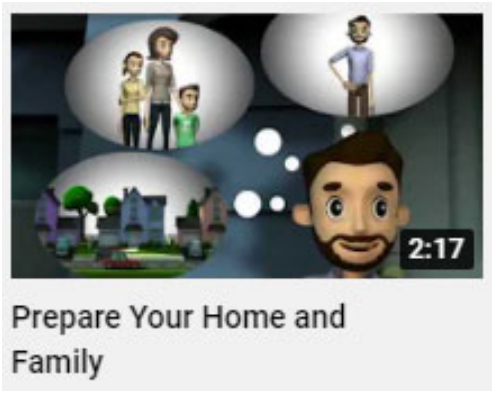


Figure O.2 – Prepare Your Home and Family

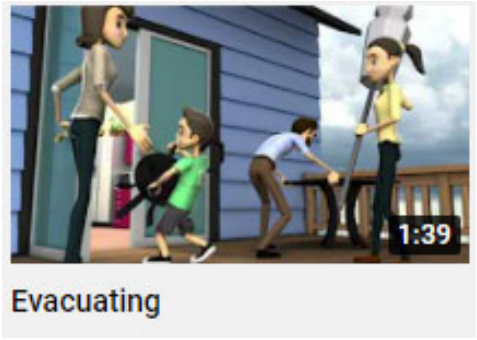


Figure O.3 – Evacuating

Stay In Touch with PSEG Long Island

Figure O.4 – Stay in Touch with PSEG Long Island

Storm Hardening - Stronger Poles

Figure O.5 – Storm Hardening – Stronger Poles

Outage Tracker - PSEG Long Island App

Figure O.6 – Outage Tracker – PSEG Long Island App

Storm Hardening - Smart Switches

Figure O.7 – Storm Hardening – Smart Switches

Storm Hardening - Narrow Profile

Figure O.8 – Storm Hardening – Narrow Profile

Know the Symptoms, Prevent Hazards

Figure O.9 – Know the Symptoms, Prevent Hazards

Have A Safe Holiday Season with PSEG Long Island

Figure O.10 – Have A Safe Holiday Season with PSEG Long Island

Aerial Transmission and Vegetation Inspection with...

Figure O.11 – Aerial Transmission and Vegetation Inspection with PSEG Long Island

Are You Ready For Winter?

Figure O.12 – Are You Ready For Winter?

Appendix P – Exercise and Training Schedules

EXERCISE	DESCRIPTION	TARGET AUDIENCE	TARGETED TIME FRAME
Survey/Damage Assessment Staging Area – Drill	Drill activation of the Survey/Damage Assessment Staging Area under simulated conditions to prepare employees for a major restoration event	SDA Leadership SDA Staging Site Team	1st Quarter
Restoration Flooding – Functional Exercise	Functionally exercise plans for responding to and managing flood operations (e.g., homes and businesses) during restoration events. Exercise to include a defined focus area, simulated assessments, and procedural walk through	Flood Team and associated supporting organizations (i.e., Metering, BRS, Back Office Billing, etc.)	1st Quarter
Alternate Control Center (ACC) – Drill	Drill activation of the ACC in response to an emergency at main Control Center	Transmission Control Center personnel	2nd Quarter
Annual Hurricane – Tabletop Exercise	The Annual Hurricane Tabletop Exercise (TTX) will simulate PSEG Long Island's response to a large-scale hurricane event and demonstrate effectiveness of restoration plans and command structure The TTX will focus on the coordination, integration, and interaction of PSEG Long Island's policies, procedures, roles, and responsibilities before, during, or after the simulated event	PSEG Long Island Command and General Staff and other storm process leads; Additional participation from external entities including partner utilities, emergency response organizations, NYS DPS, and LIPA	2nd Quarter
Division Operations – Functional Exercises	The Division Operations Functional Exercises (DivOpsFE) will assess preparedness and evaluate the capability of the Operations Section divisional organization to respond to an event The FE will test multiple functions of the PSEGLI Emergency Restoration Plan (ERP) by simulating the actions performed within Operations at the division level and below, by demonstrating the ability to activate, prepare, implement and perform Divisional Damage Assessment, Primary Control, and Decentralized Dispatching as they correspond to the collection and reporting of damage/repair information	PSEG Long Island Operations Section personnel assigned to the division who would respond to this event in either a leadership capacity or as part of the Primary Control (PRC) unit, Survey Console, or one of the Decentralized Dispatch Areas	2nd Quarter

EXERCISE	DESCRIPTION	TARGET AUDIENCE	TARGETED TIME FRAME
Restoration Contingency – Functional Exercise	Exercise activities related to restoration contingency procedures in the event of critical system failure. Exercise to functionally demonstrate key plans and procedures during storm events with the loss of critical system functionality. (For example, loss of OMS or communications into the call center)	PSEG Long Island Command and General Staff with additional participation from contingency plan process leads and supporting personnel	2nd Quarter
Communications – Tabletop Exercise	Exercise activities related to the activation of the Communications Organization and its supporting units.	Communications personnel	2nd Quarter
Logistics – Tabletop Exercise	Review and exercise all logistical units and associated activities during a major restoration event.	Logistics leadership and all unit leaders	3rd Quarter
Foreign Crew Processing – Functional/Tabletop (Hybrid) Exercise	Review and exercise all FCP units and associated activities during a major restoration event.	Foreign Crew Processing Branch Leadership and Unit Leaders	3rd Quarter

Figure P.1 – 2025 Exercise Schedule

TRAINING	DESCRIPTION	TARGET AUDIENCE	TRAINING METHOD / PLATFORM	FREQUENCY
Emergency Restoration Plan (ERP)	Initial/Refresher	All Employees (MAST and Union)	Self-Study / Online via Learning Management System (LMS)	Annually
Incident Command System (ICS)	Initial/Refresher	All Employees (MAST and Union)	Self-Study / Online via LMS	Annually
T&D Damage Assessment Dispatch Operations *(Operational Refresher)*	Initial/Refresher	T&D Damage Assessment Coordination Personnel	Instructor-Led / Classroom *Virtual*	Annually
Primary Control (PRC) Operations *(Operational Refresher)*	Initial/Refresher	PRC Coordination Personnel	Instructor-Led / Classroom *Virtual*	Annually
Dispatch Area Operations *(Operational Refresher)*	Initial/Refresher	Dispatch Area Personnel	Instructor-Led / Classroom *Virtual*	Annually
Tag Holder/Local Circuit Control	Initial/Refresher	Tag Holder Personnel and Restoration Field Coordinators	Instructor-Led / Classroom	Annually
Crew Guide	Initial and Refresher	Internal Crew Guides	Instructor-Led / Classroom	Annually
Transmission and Distribution Survey	Initial	New Transmission and Distribution Survey Field Personnel	Instructor-Led / Classroom and Field	Once
	Refresher	Incumbent Transmission and Distribution Survey Field Personnel	Instructor-Led / Classroom	Every 3 Years
2-Person Restoration	Initial	New 2-Person Field Crews	Instructor-Led / Classroom and Field	Once
	Refresher	Incumbent 2-Person Field Crews	Instructor-Led / Classroom	Every 2 Years
Staging Site Operations	Initial and Refresher	Internal Staging Site Managers	Instructor Led / Classroom	Annually

TRAINING	DESCRIPTION	TARGET AUDIENCE	TRAINING METHOD / PLATFORM	FREQUENCY
Customer Service Storm Operations	Initial/Refresher	Communications Personnel	Instructor-Led / Classroom	Annually
Console Information Coordinator (CIC) & Escalation Processing	Initial/Refresher	CIC and Escalation Personnel	Instructor-Led / Classroom	Annually
Emergency Operations Center (EOC) & Municipal Liaison	Initial/Refresher	EOC & Municipal Liaisons	Instructor-Led / Classroom	Annually
OMS Storm Training	Initial/Refresher	T&D SDA Personnel PRC Personnel Dispatch Area Personnel Communications Personnel (i.e. Major Accounts)	Instructor-Led / Classroom *Virtual*	Annually

Figure P.2 – 2025 Training Schedule (Non-Traditional Roles)

Appendix Q – Roster Sheet Samples

PSEG LI- Electric Crew Transfer Sheet — Copy Data — **RoD Team #**

Responding Companies - Complete All Fields Shaded in Green

Revision 1 - Sum of Crew Members only includes names; order of upload changed; color changed to light green; changes to signature area

Number of Hotel Rooms (Singles): 0
Number of Hotel Rooms (Doubles): N/A
Single Room Eligibility: GF/Supervisor, Safety, Female

Number of Qualified Crews: 0 — Today's Date: 11/14/2022

FROM		*DEPARTURE (From Home HQ)*	
Team/Contractor Co.		Date/Time	MM/DD/YY hh:mm (Military)
Subcontractor			
Union/Non-Union			
HQ, Yard, Barn			
HQ/District Contact Name		*ESTIMATED ARRIVAL (BETHPAGE STAGING AREA)*	
Company Telephone #		Date/Time	MM/DD/YY hh:mm (Military)
GF/Superintendent			
Superintendent Telephone #		*CREW AVAILABILITY*	
dent Commander -if assigned		◉ Available to Work on Arrival ○ Requires Rest on Arrival	
Incident Commander Tele #			

Comments

		Last Name	First Name	Gender	Storm Role	Cell #	Home HQ	Require Lodging?	Vehicle ID	Vehicle Description	Tow Behind Equipment	Crew Capabilities	Hotel Room #	Safety Brief - Yes/No
General Foreman - Safety - Mechanic - Misc. Support														
Crew 1	Foreman											☐ Transmission ☐ OH Distribution ☐ Underground ☐ Rear Property ☐ Forestry ☐ Other		
	Crew Members - Lineman / Apprentice													
Crew 2	Foreman											☐ Transmission ☐ OH Distribution ☐ Underground ☐ Rear Property ☐ Forestry ☐ Other		
	Crew Members - Lineman / Apprentice													
Crew 3	Foreman											☐ Transmission ☐ OH Distribution ☐ Underground ☐ Rear Property ☐ Forestry ☐ Other		
	Crew Members - Lineman / Apprentice													

Figure Q.1 – Electric Crew Roster Sheet

PSEG LI- Damage Assessor/Wire Watcher Crew Transfer Sheet — **RoD Team #**

Responding Companies - Complete All Fields Shaded in Blue

Revision 8 - Added the storm role; color changed to light green; changes to signature area

Copy Data

Number of Hotel Rooms (Singles): 0
Number of Hotel Rooms (Doubles): N/A
Single Room Eligibility: GF/Supervisor, Safety, Female

Number of Qualified Crews: 0 — Today's Date: 11/14/2022

FROM		*DEPARTURE* (From Home HQ)	
Team/Contractor Co.		Date/Time	MM/DD/YY hh:mm (Military)
Subcontractor			
Union/Non-Union			
HQ, Yard, Barn		*ESTIMATED ARRIVAL* (BETHPAGE STAGING AREA)	
HQ/District Contact Name		Date/Time	MM/DD/YY hh:mm (Military)
Company Telephone #			
GF/Superintendent		*CREW AVAILABILITY*	
/ Superintendent Telephone #		(•) Available to Work on Arrival	
ident Commander -if assigned		( ) Requires Rest on Arrival	
Incident Commander Tele #			

Crew Type

Wire Watcher

Last Name	First Name	Gender	Storm Role	Cell #	Home HQ	Require Lodging?	Vehicle ID	Vehicle Description	Tow Behind Equipment	Hotel Room #	Safety Brief - Yes/No

Figure Q.2 – Damage Assessor/Wire Watcher Roster Sheet

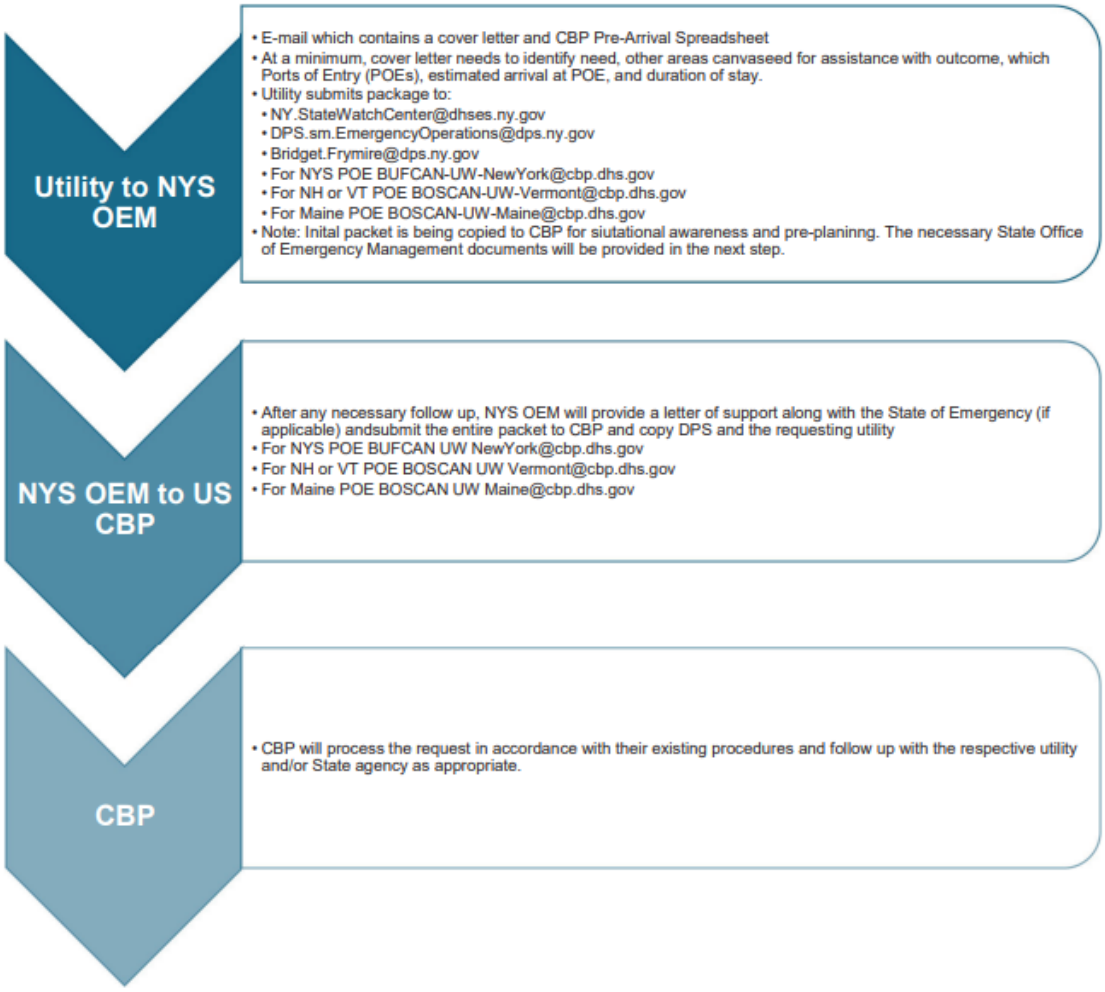
Appendix R – List of Contracted Damage Assessors

- Asplundh Construction Corporation
- Haugland Energy Group, LLC
- Elecnor Hawkeye LLC

Appendix S – NYS Border Crossing Protocols

New York State Procedure for
NY Based Utilities Activating Canadian Utility Contractor Assistance During Extended Power Outage Events
January 2025

To ensure compliance with U.S. Customs and Border Protection Guidelines for Activating Canadian Utility Contract Assistance for the Buffalo and New England (dated October 2018 and May 2018 respectively and attached below), the following procedures will be used by utilities within New York State. These procedures have been reviewed by the New York State Office of Emergency Management and the New York State Public Service Commission. For further details, please see U.S. Customs and Border Protection Guidelines in Attachment 2 and 3.



Important Notes:

1. CBP recommends using staggered arrival times and several ports of entry for large movements of crews in order to expedite processing.

2. The New York utility company who reassigns any previously paroled Canadian utility company crew is responsible for notifying the original paroling Port of Entry of their assignment location and a roster of the employees being reassigned AND notify the New York State Watch center of the re-assignment.

3. If a Canadian Utility Crew that was originally requested by a New York utility company is released and then reassigned to any other utility either within New York State or outside NYS, then the "receiving" NY utility company must seek an additional letter of support from that receiving State's Emergency Management Director and the accompanying declaration of a State of Emergency from that State.

Contact Information:

Agency	Phone Number	E-Mail
New York State		
New York State Office of Emergency Management	[redacted]	[redacted]
New York State Dept of Motor Vehicles	[redacted]	
CBP Buffalo Area of Responsibility		
CBP Buffalo Field Office	[redacted]	[redacted]
Buffalo, NY Area Port	[redacted]	[redacted]
Alexandria Bay, NY Area Port	[redacted]	[redacted]
Champlain, NY Area Port	[redacted]	[redacted]
CBP Vermont Area of Responsibility		
CBP Vermont Field Office		[redacted]
New Hampshire Homeland Security and Emergency Management	[redacted]	[redacted]
New Hampshire State Police Commercial Vehicle Unit	[redacted]	
New Hampshire Bureau of Motor Vehicles	[redacted]	
Vermont Emergency Management Agency	[redacted]	[redacted]
Vermont Bureau of Motor Vehicles	[redacted]	
St. Albans, VT Area Port	[redacted]	
CBP Maine Area of Responsibility		
CBP Maine Field Office		[redacted]
Maine Emergency Management Agency	[redacted]	[redacted]
Maine State Police Commercial Vehicle Unit	[redacted]	
Maine Bureau of Motor Vehicles	[redacted]	
Portland, ME Area Port	[redacted]	

For any questions, please contact the NYS Office of Emergency Management at 518-292-2200.

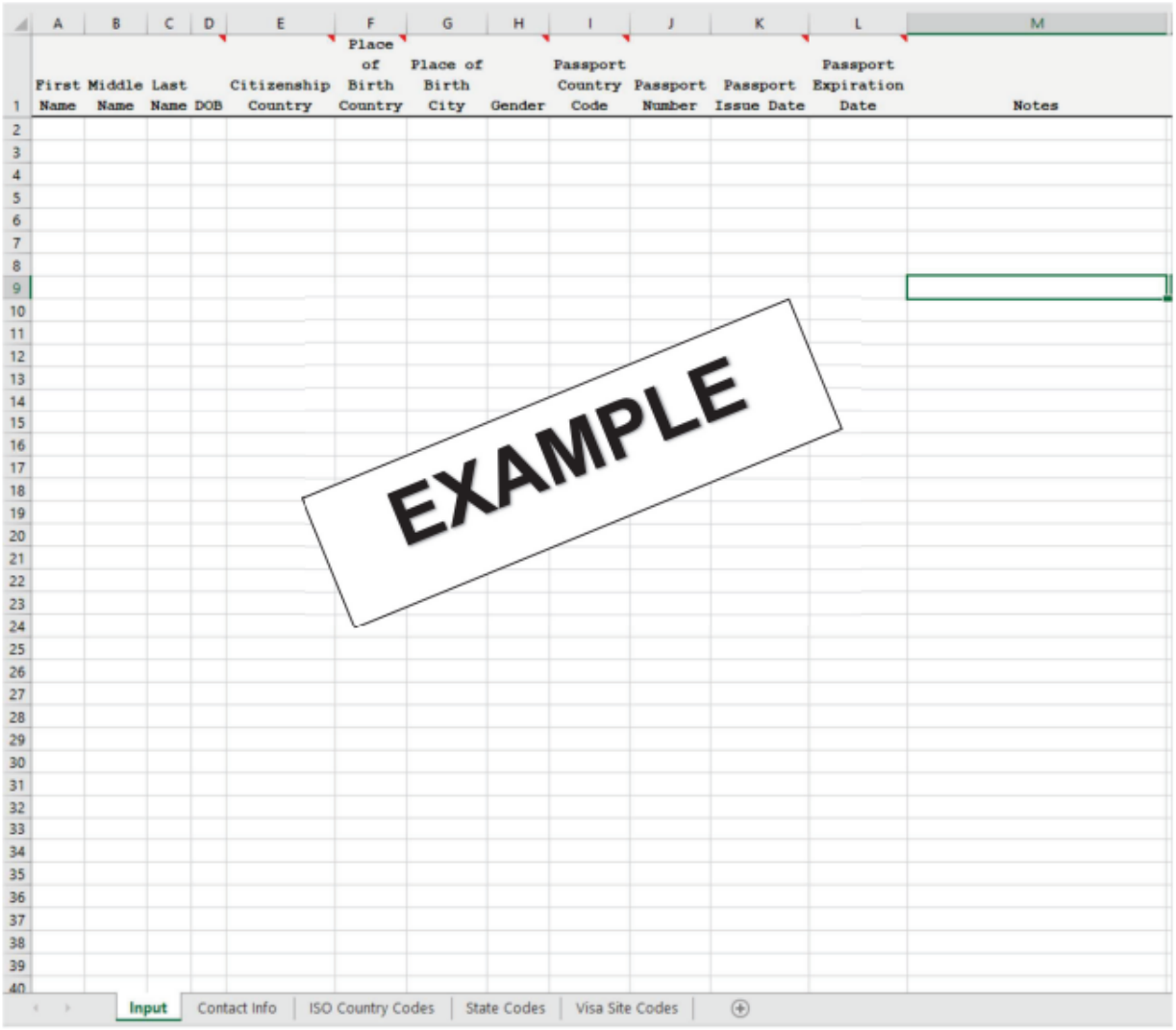
Attachments:

1. CBP Pre-Arrival Spreadsheet (Example)

2. U.S. Customs and Border Protection Guidelines for Activating Canadian Utility Contract Assistance for Buffalo

3. U.S. Customs and Border Protection Guidelines for Activating Canadian Utility Contract

CBP Pre-Arrival Spreadsheet (Example)



Guidelines for Activating Canadian Utility Contractor Assistance

During Extended Power Outage Events

Buffalo Field Office

December 2019

United States utility companies, such as National Grid, NYSEG etc., routinely contract for additional workers and equipment assets from Canadian companies when weather conditions indicate a possible large-scale or long duration, power outage. This is done on a contractual basis between private entities; however, state and federal agencies are notified and take steps to help facilitate the deployment of Canadian resources into the United States.

When a specific utility company recognizes the need for supplemental crews and requests assistance from Canadian contractors, the process for providing advance notice of Canadian utility crews coming into the United States should be as follows:

1. The utility company which is requesting Canadian crews or to pre stage personnel and equipment in response to a specific emergency situation sends a letter of request to the State Emergency Management Director (EMA) and the Area Port Director at the Port of Entry at which they propose to have crews enter the U.S. The letter should identify a need for foreign utility workers and equipment to enter the United States and the letter should state the specific period of time for which assistance is needed.

2. The request should include the following information and it should be entered on the CBP Pre-Arrival-Name List spreadsheet.

   On the Contact Info tab enter:

   a. Utility Company Name;
   b. Contact Person;
   c. Contact Phone Number;
   d. Event Reason;
   e. Date;
   f. Port of Entry at which processing is requested;
   g. Requested time of arrival at the Port of Entry. Note: the Port of Entry will confirm the time of arrival. CBP recommends utilizing staggered arrival times and several ports of entry for large movements of crews in order to expedite processing.

On the Input tab enter for each subject:

a. First and last name;
b. Date of birth (MM-DD-YYYY)
c. Two letter code for the person's country of citizenship (There is a searchable list of country codes on the spreadsheet)
d. Gender

3. The request should be sent via email using the address which corresponds to the state in which the Port of Entry is located

State of New York:

[redacted]

- This email is monitored twenty four hours a day for all ports within the Buffalo Field Office.
  - Port of Buffalo
  - Area Port of Alexandria Bay
  - Area Port of Champlain

4. Prior to CBP making a determination whether the workers will be allowed to enter, Emergency Management Directors must forward documentation to CBP in support of the utility's request. Acceptable documentation includes either a State of emergency (SOE) for the impending weather/event or a letter from the respective State's Emergency Management Director on behalf of the Governor. This letter will indicate that the U.S. utility company requesting the Canadian utility workers has canvassed a reasonable area and is unable to locate sufficient US workers to support their backfill requirements.

   a. The Governor of the State requesting Canadian utility workers may or may not have declared a State of Emergency (SOE) for the impending weather/event.
   b. If declared, the SOE may only waive the US Federal Motor Carrier Safety Administration rules on Hours of Service, or may waive additional restrictions if explicitly noted in the SOE text.
   c. The SOE will never waive regulations on subjects such as CDL requirements, drug/alcohol, hazardous materials, size/weight limitations, federal registration/taxes, etc.
   d. If a SOE has been declared in a specific state, the contractor is generally required to keep a copy of the SOE text in the vehicle at all times to prove

the vehicle/personnel are responding in direct support to the State's declared emergency.

e. If the contractor is responding to assist a State for which they are being processed, then it is recommended that each vehicle keep a copy of the requesting State's SOE to prove the vehicle/personnel are responding in direct support to that State's declared emergency
f. This SOE does not negate any Federal Laws or Regulations enforced by CBP.
g. If a Canadian Utility Crew that was originally requested by a U.S. utility company is released and then reassigned to another State or to another U.S. utility company located in another State, then an additional letter of support must be obtained from that receiving states Emergency Management Director or a declaration of a SOE from that State. The U.S. Utility Company who reassigns any previously paroled Canadian utility company crew is responsible to notify the paroling Port of Entry of their assignment location and a roster of the employees being reassigned.

5. The Area Port Director or respective Port Director will make a determination on the request to allow foreign workers to operate in the US for the specified length of time. In order to provide sufficient time for this determination, the United States utility company is encouraged to make the request with as much advance notice to CBP as possible.

6. Canadian utility workers and vehicles must carry appropriate documentation when they arrive at the US Port of Entry.

a) For **individuals**, a passport, NEXUS card or other Western Hemisphere Travel Initiative compliant travel document is required.
b) For **vehicles**, it is strongly recommended that vehicles be registered with the International Registration Plan (IRP) and carry appropriate International Fuel Tax Agreement (IFTA) licensing.
c) Other arrangements for temporary permitting of vehicles may be made through the specific State Police Commercial Vehicle Unit and the Bureau of Motor Vehicles, however this is time consuming and more difficult to procure outside of normal business hours or on holidays.

Helpful Reference Information:

[redacted]

7. Other CBP Contacts.

Below are contact emails and telephone numbers for our surrounding areas of responsibility. Please be advised that ports outside of the Buffalo Field Office may have different processing procedures and that this document only pertains to ports within the Buffalo Field Office.

State of Maine:

[redacted]

States of Vermont and New Hampshire:

[redacted]

State of Michigan

[redacted]

Guidelines for Activating Canadian Utility Contractor Assistance During Extended Power Outage Events

May 2018

United States utility companies, such as National Grid, Ensource, Green Mountain Power, Vermont Electric, CMP and Emera, routinely contract for additional workers and equipment assets from Canadian companies when weather conditions indicate a possible large-scale or long duration, power outage. This is done on a contractual basis between private entities; however, state and federal agencies are notified and take steps to help facilitate the deployment of Canadian resources into the United States.

When a specific utility company recognizes the need for supplemental crews and requests assistance from Canadian contractors, the process for providing advance notice of Canadian utility crews coming into the United States should be as follows:

1. The utility company which is requesting Canadian crews or to pre stage personnel and equipment in response to a specific emergency situation sends a letter of request to the State Emergency Management Director (EMA) and the Area Port Director at the Port of Entry at which they propose to have crews enter the U.S. The letter should identify a need for foreign utility workers and equipment to enter the United States and the letter should state the specific period of time for which assistance is needed.

2. The request should include the following information and it should be entered on the CBP Pre-Arrival-Name List spreadsheet.

   On the Coversheet tab enter:

   a. Utility Company Name;
   b. Contact Person;
   c. Contact Phone Number;
   d. Event Reason;
   e. Date;
   f. Port of Entry at which processing is requested;
   g. Requested time of arrival at the Port of Entry. Note: the Port of Entry will confirm the time of arrival. CBP recommends utilizing staggered arrival times and several ports of entry for large movements of crews in order to expedite processing.

   On the Input tab enter for each subject:

   a. First and last name;

b. Date of birth (MM-DD-YYYY)
c. Two letter code for the person's country of citizenship (There is a searchable list of country codes on the spreadsheet)
d. Gender

3. The request should be sent via email using the address which corresponds to **the state in which the Port of Entry is located**

   State of Maine:

   [redacted]

   States of New Hampshire and Vermont:

   [redacted]

4. Prior to CBP making a determination whether the workers will be allowed to enter, Emergency Management Directors must forward documentation to CBP in support of the utility's request. Acceptable documentation includes either a State of emergency (SOE) for the impending weather/event or a letter from the respective State's Emergency Management Director on behalf of the Governor. This letter will indicate that the U.S. utility company requesting the Canadian utility workers has canvassed a reasonable area and is unable to locate sufficient US workers to support their backfill requirements.

   a. The Governor of the State requesting Canadian utility workers may or may not have declared a State of Emergency (SOE) for the impending weather/event.
   b. If declared, the SOE may only waive the US Federal Motor Carrier Safety Administration rules on Hours of Service, or may waive additional restrictions if explicitly noted in the SOE text.
   c. The SOE will never waive regulations on subjects such as CDL requirements, drug/alcohol, hazardous materials, size/weight limitations, federal registration/taxes, etc
   d. If a SOE has been declared in a specific state, the contractor is generally required to keep a copy of the SOE text in the vehicle at all times to prove the vehicle/personnel are responding in direct support to the State's declared emergency.
   e. If the contractor is responding to assist a State for which they are being processed, then it is recommended that each vehicle keep a copy of the

requesting State's SOE to prove the vehicle/personnel are responding in direct support to that State's declared emergency

f. This SOE does not negate any Federal Laws or Regulations enforced by CBP.

g. A SOE must be enacted in order for these utility companies and contractors to be in compliance with federal immigration laws.

h. If a Canadian Utility Crew that was originally requested by a U.S. utility company is released and then reassigned to another State or to another U.S. utility company located in another State, then an additional letter of support must be obtained from that receiving states Emergency Management Director or a declaration of a SOE from that State.

5. The Area Port Director or respective Port Director will make a determination on the request to allow foreign workers to operate in the US for the specified length of time. In order to provide sufficient time for this determination, the United States utility company is encouraged to make the request with as much advance notice to CBP as possible.

6. **Canadian utility workers and vehicles must carry appropriate documentation when they arrive at the US Port of Entry.**

   a) For **individuals**, a passport, NEXUS card or other Western Hemisphere Travel Initiative compliant travel document is required.
   b) The POE may make exceptions in unique circumstances; however this should not be expected and will also delay the crossing of people and equipment through the border.
   c) For **vehicles**, it is strongly recommended that vehicles be registered with the International Registration Plan (IRP) and carry appropriate International Fuel Tax Agreement (IFTA) licensing.
   d) Other arrangements for temporary permitting of vehicles may be made through the specific State Police Commercial Vehicle Unit and the Bureau of Motor Vehicles, however this is time consuming and more difficult to procure outside of normal business hours or on holidays.

Helpful Reference Information:

[redacted]

Figure S.1 – New York State Procedure for NY Based Utilities Activating Canadian Utility Contractor Assistance During Extended Power Outage Events

First Name Last Name
Title, PSEG Long Island

Address
City, New York ZIP
PHONE
firstname.lastname@pseg.com

PSEG LONG ISLAND

[Date]

Jennifer Wacha, Deputy Director
New York State Office of Emergency Management
1220 Washington Avenue
Building 22, Suite 101
Albany, NY, 12226-2251

(Via Electronic Mail)

Re : Request for Assistance in Facilitating Border Crossing

Dear Deputy Director Wacha,

Example :
PSEG Long Island is currently preparing for the [Type of Event] expected to begin [Month Day, Year]. As part of our preparation efforts to ensure we are able to quickly address anticipated power outages, we are seeking the assistance of electrical workers from Canada. [Contractor] is crossing at [Point of Entry] on the [State] border and will be working in PSEG Long Island's [Identify service location or divisions]. We have determined that the nearest available US electical workers reside in states further away and/or are not readily available to support the power restoration effort.

PSEG Long Island requests the New York Emergency Management Agency to contact US Customs and Border Protection and request that they allow entry of these Canadian electrical workers into the US for the mutual assistance support of PSEG Long Island in New York. Attached is the CBP Pre-Arrival spreadsheet. It is expected that the electrical workers will be crossing the border between [Time] and [Time] on [Month Day, Year]. It is also our expectation that the Canadian electrical workers will assist in storm restoration efforts, ending their assignment by [Month Day, Year] or earlier.

Sincerely,

[Name and title of signatory]

CC :
Bridget Frymire: Bridget.Frymire@dps.ny.gov
Melissa Nussbaum: Melissa.Nussbaum@dhses.ny.gov
State Watch Center: NY.StateWatchCenter@dhses.ny.gov
Dps.sm.EmergencyOperations@dps.ny.gov

Figure S.2 – Facilitation of Border Crossing Letter

Appendix T – Outage Management System (OMS)

1. OVERVIEW

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, CAD (Computer Aided Dispatch), mobile applications, Geographic Information System (GIS) integration, Enterprise Reporting, and Business Intelligence (BI) and interfaces to external systems.

The OMS is used for outage restoration and responding to customer emergency calls during normal blue sky day operations with centralized processes in each of the four main Divisional Operations Centers (and their satellite yard reporting locations). Divisional break down is discussed in Section 1.4.2 Operating Divisions.

During normal operations, all of the key processes related to outage restoration such as: incident management (call and/or event triage and prioritization), dispatching, damage assessment, outage repair, follow up asset replacement and referrals are coordinated thru the main Distribution Operations Control Room for each of the four Operating Divisions. See Figure T.1

For a major restoration event as outlined in this Emergency Restoration Plan document, the OMS functions undergo both a geographic and process/functional de-centralization that allows the response to scale to meet the increased storm or event related volume of activity.

Geographic segregations that split the four Divisions into sub-areas referred to as color consoles are discussed in Section 1.4.3 Console Areas. OMS applications during storm and/or major events support this geographic filtering based on the sixteen color consoles within the major OMS components. Other filtering options at substation and/or distribution circuit level are also available.

Restoration strategy related to Decentralized Dispatch is outlined in Section 10.2.3 Tiered Restoration.

Figure T.1 details the OMS flow chart and how it interrelates with its operational system tools and features. The diagram specifies the informational flow and its corresponding inputs, outputs, and operators. Diagram depicts a centralized call taking function interacting with the assessment, dispatching, repair and referral for one division. On a Blue Sky day, all functions depicted except the call taking are occurring in each of the four operating divisions. Normal blue sky and minor storm operating condition volumes are supported by Company and local on Island contractor employees without the need for additional outside resources and additional decentralized locations.

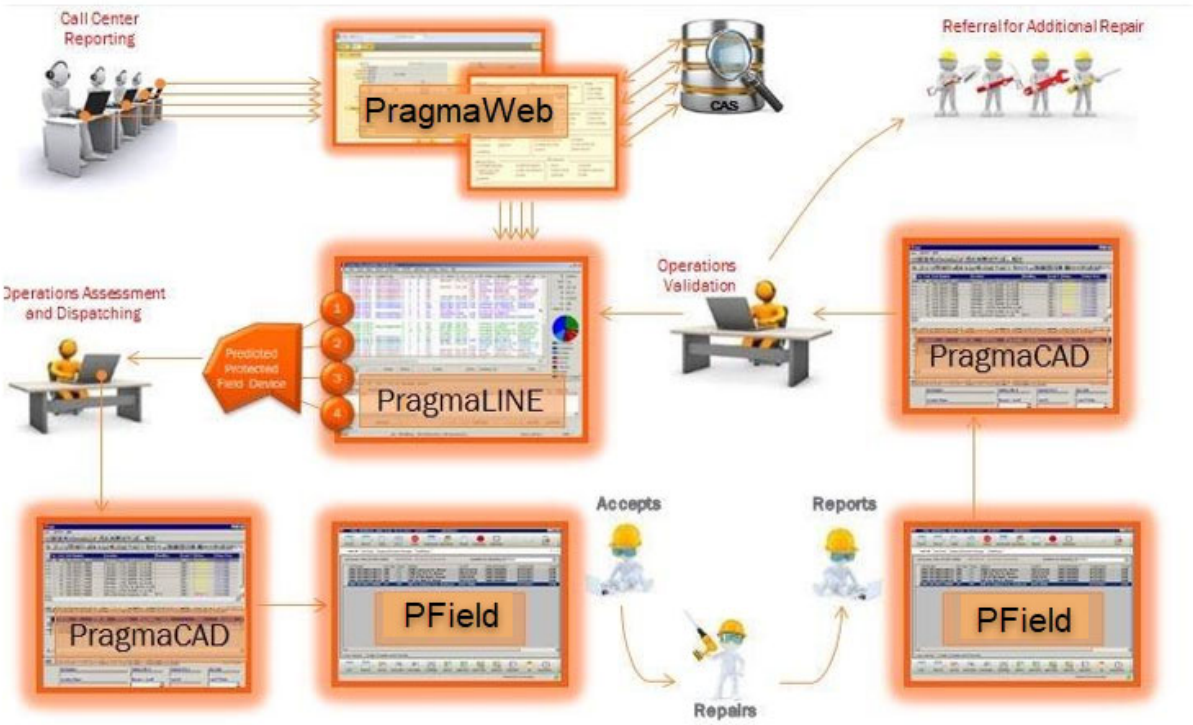


Figure T.1 – OMS Flow Chart – Blue Sky for One (Typical) Division

The diagram depicts different users performing certain functions in the different modules of OMS. OMS and CAD IT administrators grant users access to certain roles that contain privileges as to what they are allowed to do in the systems. For example, Call Takers have different access and privileges from someone dispatching repair crews, or a field worker with a mobile data terminal (MDT) in the trucks. There is a mapping between day to day job functions and storm roles and what role is given to the users. Company employees and local Contractors (as needed) are onboarded with view only access in both OMS and CAD and then request access based on their day to day and/or Storm assignments. Each storm assignment has a minimum OMS and CAD role assigned to it. Once approved, the user gets access to the system applications via Citrix (remote applications) or web browser (PWEB and PFIELD). Approved OMS/CAD access also allows users to view the SAS reports related to OMS data during blue sky and storm events.

The number of users actively signed on to OMS/CAD is actively monitored by IT during a major restoration event in order to ensure performance is not adversely impacted. Citrix based applications are most critical for Control Room Operators, Router/Gaters, and Dispatchers of Survey and Repair Crews. The web browser based applications are most critical for Call Takers, and Field crews utilizing Mobile Data Terminals (MDTs).

Figure T.2 details normal blue sky operations with the OMS/CAD related systems and functions shown for the 4 main Operating Divisions, across the WEST and EAST Regions (2 Divisions per Region).

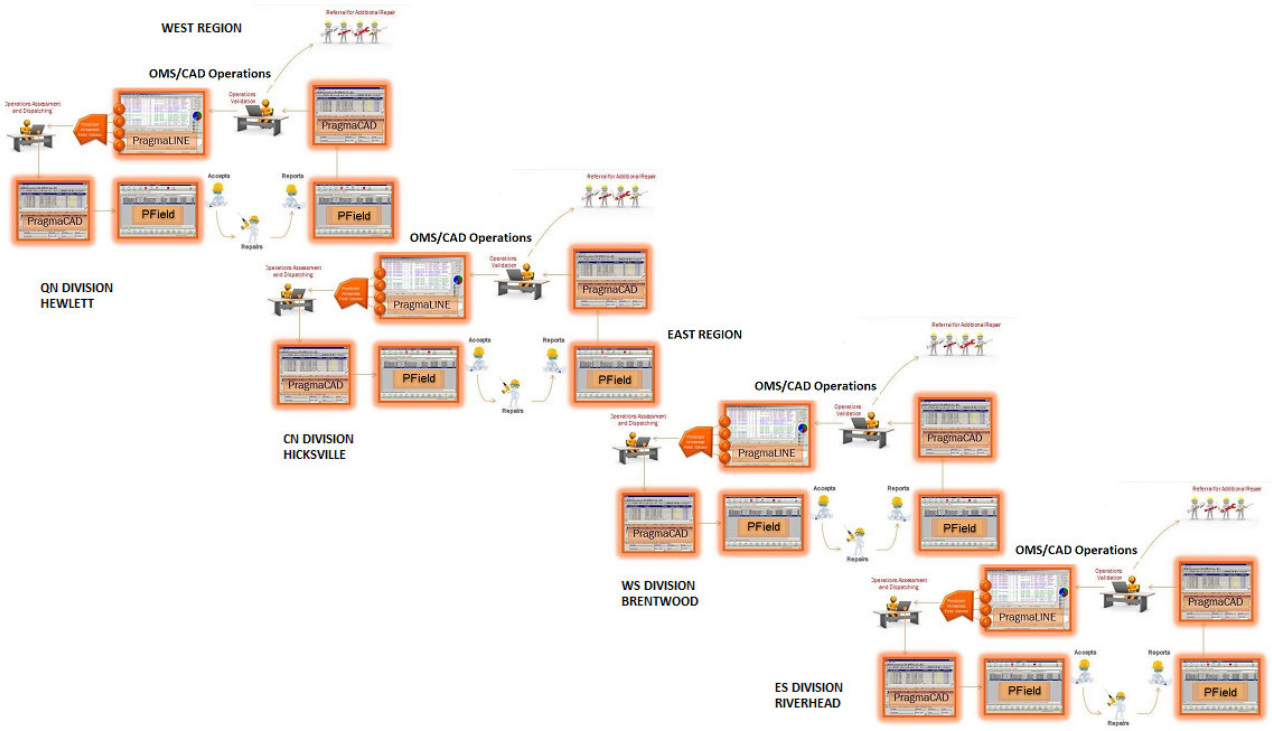


Figure T.2 – OMS Flow Chart – Blue Sky for System – 2 Regions, 4 Divisions

As the Tiered Restoration Approach restoration strategy is invoked per the decision matrix of Section 10.2.3, OMS and its related components have the ability to filter and segregate the outage and emergency incidents to assign incidents to certain Decentralized Dispatch functions by both geographic area, and specific restoration process function such as: Damage Assessment (Survey-Lookup), Road Debris Clearing (Make Safe To Clear – MSTC), and repair functions – also segregated by High Voltage/Low Voltage resource/function of the specific decentralized dispatch function.

Figure T.3 depicts the differences between the Blue Sky Day to Day process at the top, and the storm outage restoration process in the lower part of the diagram. The additional boxes represent de-centralized operations based on function and will be described in more detail along with the various OMS components later in this Section.

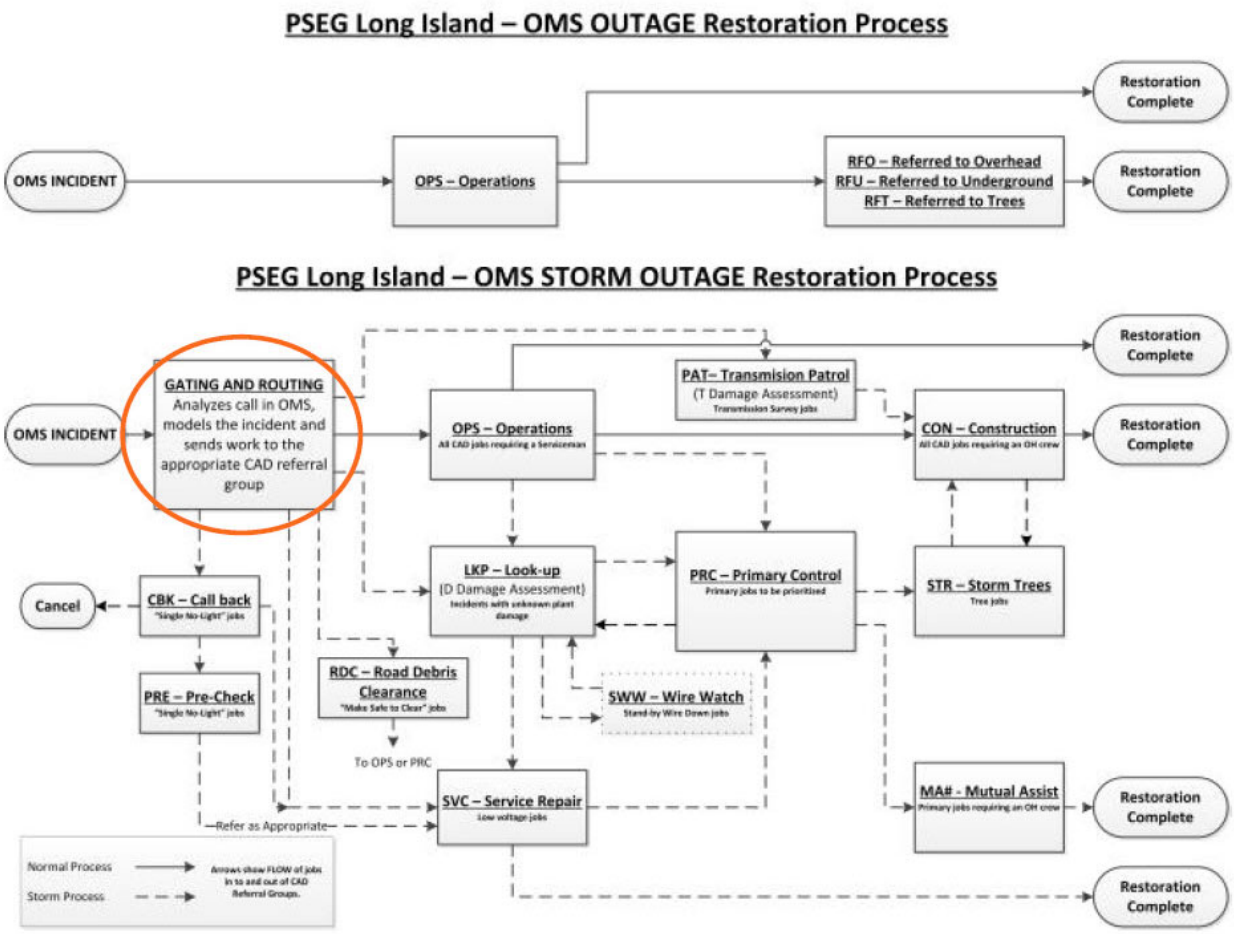


Figure T.3 – Storm Outage Restoration Process – Impacts on OMS

The selection and use of filters in OMS Incident Manager, and queries in CAD Job and Crew Lists are the major differences when a major restoration event de-centralized process is invoked.

For the normal day operation, the divisional Distribution Operations person is looking at all incidents for their entire Division.

For the storm outage restoration process, once a Tiered Restoration Approach / Restoration Strategy is determined, that information is conveyed to the Restoration Organization via the Storm Event Operations Matrix (reference ERIP-PLN-004 7.2.1 Planning Protocols – Situation Status) and the Router/Gater becomes aware of what activated functions they can refer (route) work to. They will also be informed if any specific geographic area incidents should be referred to a specific Dispatch Area. For example, if the Greenlawn Dispatch Area is activated in Western Suffolk Division, they may be instructed to route Western Suffolk Division 3 “Red Console” (Township of Huntington) incidents to the Dispatch Area dispatching crews that are staged in that geographic area.

2. PRAGMALINE

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

Incident Manager

This module provides intelligent analysis of call and incident information received from customer information and digital channel (IVR, Web, Text, Mobile App) call taking systems, as well as telemetry data from other sources such as PSEGLI SCADA system. This includes Supervisory Control and Data Acquisition (SCADA) from substation distribution feeder breakers and Distribution Automation Supervisory Switches, such as ASU/ASUVs and ACR/ACRVs. AMI Power Outage Notifications (PONs) are also received and processed in this module.

During storm restoration, a specific Incident Manager filter is used by the Router/Gater and others performing incident analysis to look at all incidents (OUTAGE and EMERGENCY) in their Division. This filter excludes all other routine Customer work that is not storm related. System Filters are set up for each Division to filter to OUT and EMER call type work only.

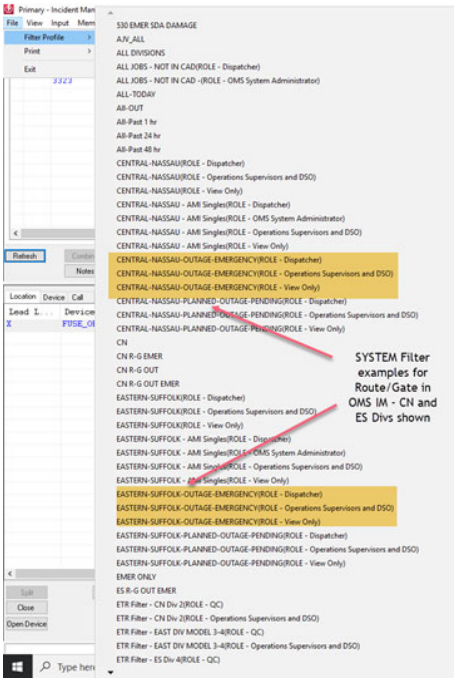


Figure T.4 – Main Incident Manager Filters for Routing/Gating During Storms

While the Incident Manager tabular view contains all the outage and emergency incident information (for the entire SYSTEM or one specific Division if filtered), and summarizes outage information on the sidebar (See Figure T.5), it should not be considered as the main tool for situational awareness and decision making. Incident Manager data is fed to other SAS Reporting tools that help to aggregate and summarize the data at the Regional or Divisional level as well as by geographic area of County/Township/Village level data. During storms, these reports are generated as hourly summaries and distributed by automated emails and available as part of the SAS Storm Dashboard. See SAS Reporting section below. For an overall geographical view of where outages, emergencies, and damage may be occurring on the system, the OMS PragmaGeo or PGEO component will also be discussed later.

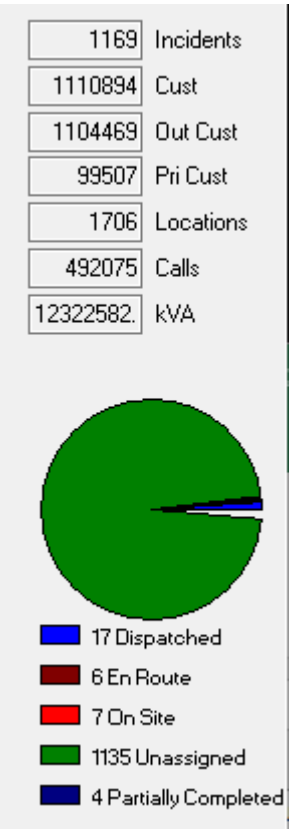


Figure T.5 – Main Incident Manager Summary Statistics – Data Input to SAS Reporting Tools for Situational Status Awareness and Decision Making

To achieve the Routing and Gating functions using OMS Incident Manager, the Router/Gater and/or person(s) performing outage incident analysis must assign the work to the Referral Groups that are activated for the event.

Specific incidents are assigned to activated referral groups such shown in Figure T.3. This can be done on an incident specific basis, or via bulk editing of multi selected incidents that meet the conditions.

Routing is accomplished by assigning the Referral Group to the incidents. As we will see below in the CAD section, the individual dispatchers working in: for example a Damage Assessment (LKP) or Mutual Assistance Dispatch Area such as (MA7) have their CAD dispatch screens set to a specific query – that will only show them the incidents assigned to their area.

This is the concept of “Gating” the incidents. While the Router/Gater personnel has visibility into all the outage and emergency incidents pending, they can control how many, and more importantly which incidents get assigned to an area. This helps maintain the prioritization of the incidents and helps keep the resources working towards achieving the multi-day circuit level work plan.

In a minor storm event, a Router/Gater may be directed to route all non Priority 1 (P1) Has Power wire down reports to the LKP referral group for damage assessment survey. They may also be instructed that a Dispatch Area such as MA7 has 20 crews and can handle 40 branch line fuse jobs initially at the start of a restoration event. If the Division currently has 100 branch line fuse jobs pending, then the balance of 60 jobs are considered “gated” until resources become available and they are directed to route them to MA7 or another area that may have resources available or be getting resources later in the day or to support next day work plan.

In a major restoration event that has progressed to Circuit Sweep as a restoration strategy, the MA# designation will be determined to represent a team of resources working specifically on a specific distribution circuit. So MA29 may represent a specific circuit. All known incidents at the time of activation will be routed to MA29, and a task force of Tag Holder, Crew Guides, Damage Assessment resources, and Mutual Assist Repair Crews will be dedicated to the full restoration of that circuit. The Router/Gater will monitor and push any new work to the assigned circuit sweep team MA# as it comes in.

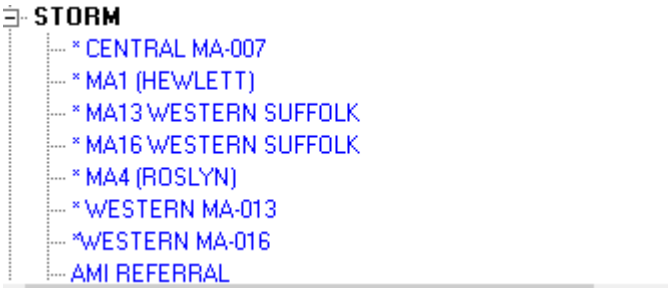
This is a high level summary of how routing and gating is used in conjunction with the OMS Incident Manager filters and referral groups during storms. It is not intended to be a complete discussion of the de-centralized restoration process outlined in other sections of this document or the subsequent ERIPs referenced.

3. PRAGMACAD

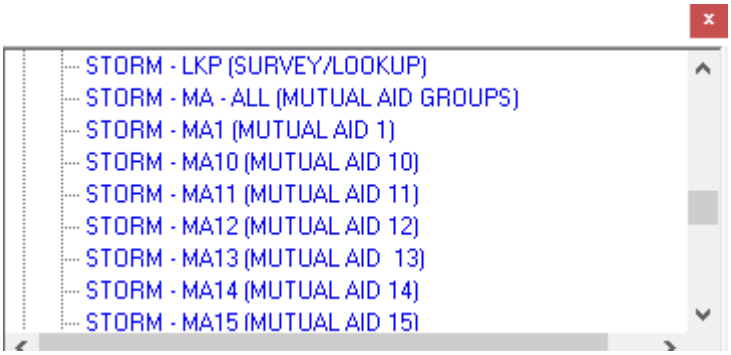
De-Centralized Dispatch During Major Restoration Event

During a major restoration event, the different functions of the restoration process from Figure T.3 above each use CAD to: process, dispatch, and complete the specific incidents that they have been assigned by the Router/Gater function.

Similar to the OMS discussion above related to: a “Filter” for different views of the OMS Incident Manager data, CAD has the concept of SYSTEM and User “Queries” on its 3 main working lists known as: Job List, Crew List, Assignment List



Partial list – under + STORM – scrollable…



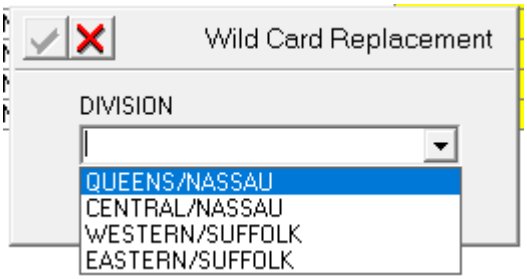


Figure T.6 – CAD SYSTEM STORM Queries Drop-Down selection (top) and Division Wildcard filter (bottom)

Using the STORM CAD Queries shown in blue text in Figure T.6, anyone assigned to a particular storm function such as Damage Assessment, or Dispatching High Voltage (HV) repair crews would select the correct queries (filters) for the Job and Crew Lists.

Examples:

- A Damage Assessment dispatcher would select STORM-LKP(SURVEY/LOOKUP) and then the Division Wild Card Replacement for the Division – QUEENS/NASSAU. They would then be ready to receive the jobs that are routed to them from the Router/Gater and dispatch them to the Survey Damage Assessment resources
- A Dispatcher dispatching High Voltage Repair crews in the Dispatch Area MA10 in WESTERN/SUFFOLK would select – STORM – MA10 (MUTUAL AID10) and WESTERN/SUFFOLK for the Division. They would then be ready to receive the jobs that are routed to them from the Router/Gater and dispatch them to the repair crew resources for their assigned areas.
- Above query selection process is the same for the Job List (The Work to Dispatch) and the Crew List (The crew resources assigned to their specific function/area (geographic area, circuit sweep circuit)

4. PRAGMAWEB (ALSO REFERRED TO AS PWEB)

Web-based call taking is utilized by Customer Service Representatives (CSRs) accessing the system via an intranet web browser. CSRs and other employees can submit customer outage and emergency calls, inquire about status for existing calls (ETRs, power restored, etc.), and search incidents with a 'view-only' version of the PragmaLINE Incident Manager (see Figure T.7). Note: PWEB supports routine customer service requests as well, but during a storm event the emphasis is on outage and emergency calls only. CSRs are receiving calls re-directed from Interactive Voice Response (IVR) and High Volume Call Application (HVCA). The process is designed to allow customers to speak to a CSR when they need to report details on wire down or hazard condition. Customers are informed to call back at a later date / time to report a routine customer service condition during high activity storm and restoration events.

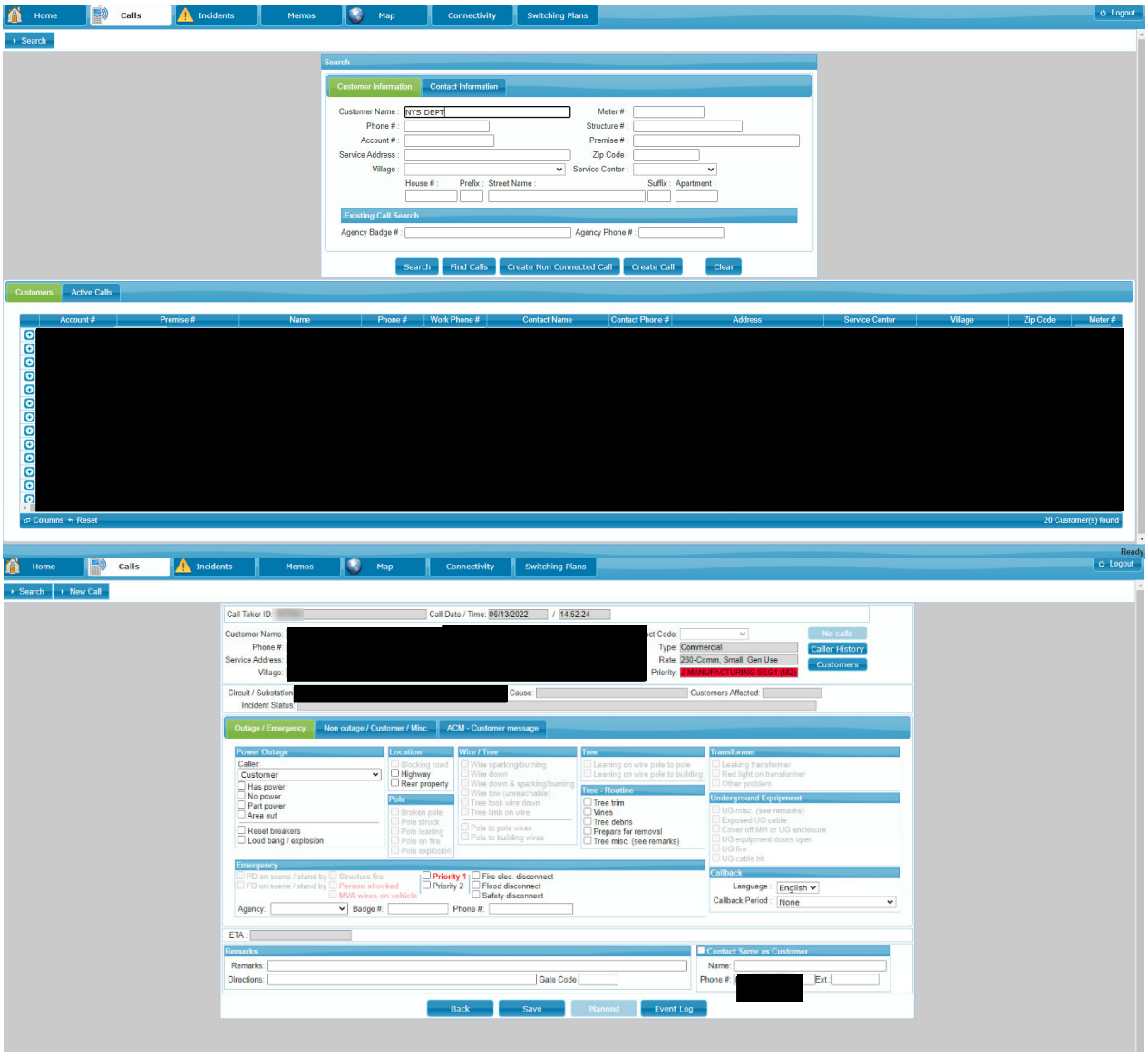


Figure T.7 – PragmaWeb Call Taking Module (Top: Search Screen; Bottom: Call Taking Screen)

5. PRAGMAGEO (PGEO) MAP VIEWS

1) Geospatial Displays

This module provides digital representations of real-world network conditions to help identify and quickly respond to outages and emergency calls. 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.

As mentioned above, when there are many outage and emergency incidents from a major restoration event, the tabular view is not ideal for visualizing the extent and the magnitude of the damage and outage areas. OMS PragmaGeo or PGEO component provides a map of Long Island service territory to help visualize for situational awareness when zoomed out at the Long Island (System) or Divisional level.

Normally, PGEO is used to zoom in close to the incident under analysis and provide the detail of the customer and AMI outage calls, as well as the distribution equipment (conductors, poles, switches, fuses, and transformer devices, service points), crews in area, damage reports from Survey/LKP crews, etc… This is a localized incident based situational awareness that allows the Router/Gater or Operator analyzing the incident to become of aware of what is going on in the area of the incident. This local situational awareness is often used to combine incidents and reduce duplicate incidents and truck rolls.

PGEO also contains pre-saved Global Favorite views of the entire System (Long Island View) or approximate geographic areas for the four (4) Operating Divisions. These larger views allow a quick geographic view for larger situational status awareness to visualize the hardest hit areas of Long Island with respect to outage incidents.

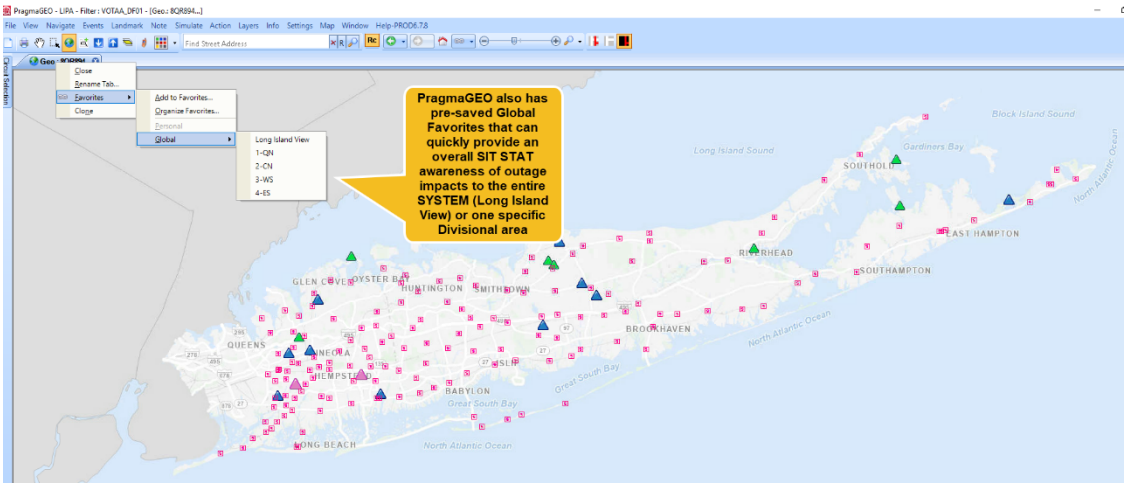


Figure T.8 – PragmaGeo Geographic Map View with Divisional and System View Favorites

6. PRAGMAFIELD (PFIELD)

The PragmaCAD Mobile Data Terminals (MDTs) are currently deployed in the Electric Service Department's Emergency Service personnel single bucket trucks. These vehicles are equipped with MDTs running the web browser based PragmaField (also referred to as PField) software application. PragmaField is used by the 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.

PSEG Long Island's Meter Services Department also utilizes MDT equipped vehicles with PField. Meter Services uses the terminals for daily normal operations and can utilize them during minor and major restoration events for roles that can include: transmission inspections, system surveys, flood response and low voltage service repair. In addition to the PField application, the MDTs have access to many of the same OMS tools available to office personnel, such as the GIS Viewer and PragmaWeb.

Users from the OH/UG Lines and SPT departments utilize MDTs and Pfield for outage restoration work. During major restoration events these additional crews handle outage and emergency work instead of their normal blue sky day to day work.

7. OTHER OMS RELATED APPLICATIONS

In addition to the CGI suite 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 VA Reporting and BI tools.

7.1 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.

The GIS Viewer supports the following electric network model layers:

- Transmission
- Primary
- Secondary
- Underground

The GIS Map Viewer (see Figure T.9) 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 a section or area of land)
- PSEG Long Island land base (static layer with equipment (e.g., poles))
- A Wetlands layer – which indicates environmentally sensitive wetland areas

The GIS Viewer supports the following base maps:

- Streets
- Imagery (aerial photos)
- Gray canvas (map with light gray background color for increased contrast for viewing overlays)

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 Job Completion Reports, via standard Windows' Operating System "Cut/Paste" operations.

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. These internal maps are ultimately used for dispatching crews, work planning, and managing outages overall. Major restoration event functionality is similar to blue sky day usage. There is just a larger volume of users and activity during a major restoration event.

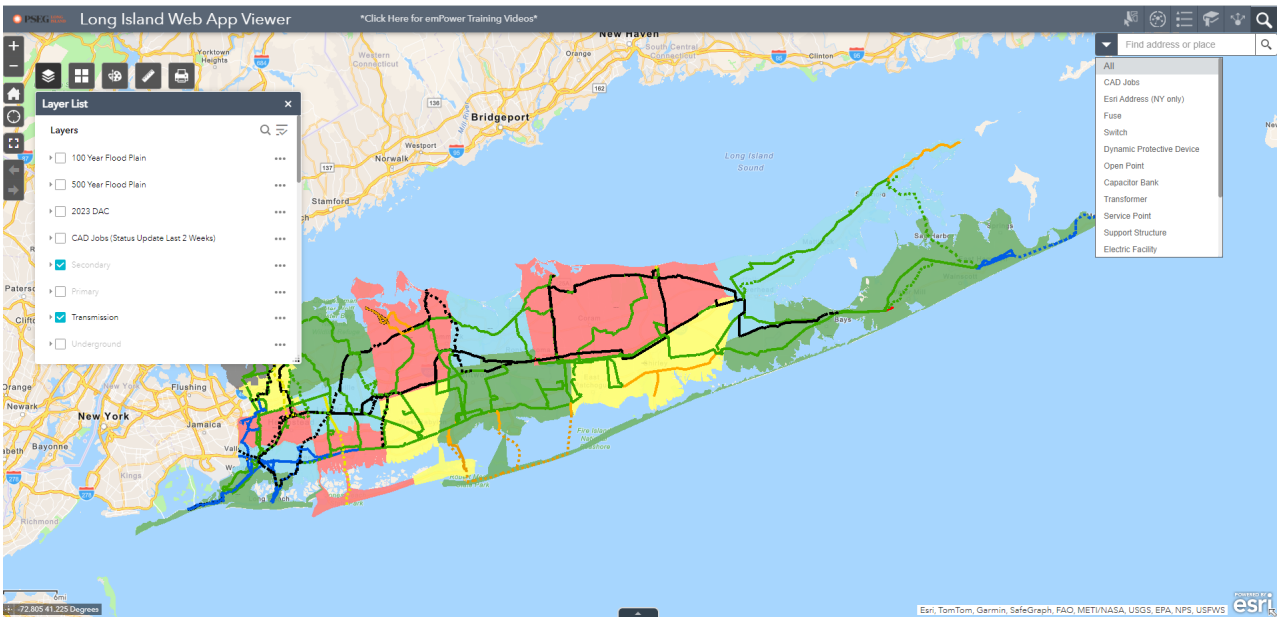


Figure T.9 – GIS Map Viewer

7.2 SAS Reporting Platform – Components and Storm Reports

Reporting and Business Intelligence (BI) for the OMS is provided by the SAS suite of products during normal Blue Sky days and major restoration event. This includes BASE SAS reports (used for scheduled email reports), SAS Stored Process reports (user requested and parameterized report options) , and SAS Visual Analytics reports (formatted and ad-hoc options). The SAS reports are available to OMS/CAD users and other key stakeholders throughout PSEG Long Island. They can be accessed via automated emails or an intranet web browser and are available to authorized users. Most OMS/CAD users and company employees can access 'view-only' versions of the OMS reports after requested access is approved.

While the platform and the data for reporting are the same between normal Blue Sky day and major restoration event, the types, frequencies, and audiences for the major restoration event reports are very different from what serves the Business users on a normal day. This balance of the is section highlights the key storm related reports.

7.2.1 Hourly Storm Reports – Automated Emails and Storm Dashboard

During a major restoration event for a planned event, a storm start Date and Time is declared. This is a triggering event to transition to automate Hourly Storm Reporting. The declared Start Date/Time is also the start of data collection for the storm reporting period, so all reported outage counts for customers affected, incidents, and other statistics will be from the declared start Date and Time.

Once initiated automated hourly storm reporting will continue until a declared Storm End Date and Time is also entered into the SAS Stored Process "SET_STORM_REPORT_DATETIME_OMS67" input parameter screen.

From the starting date and time, at the top of each hour a standardized HTML formatted report is emailed to the internal distribution list of recipients intended to receive the hourly storm statistics emails.

The Hourly Storm Report has a standardized format that begins with the Start Date Time

The is a Summary Table of Contents with links to allow the report viewer to view:

Overall (System Level Data)

Or a link to detail for any of the 4 specific Operating Divisions

Queens

Central Nassau

Western Suffolk

Eastern Suffolk

All the Sections contain the same data points – so they will just be discussed for the System Level – each Division's drill-down data will have the same sub-report sections – the data will just be filtered for the Division level only.

The report also includes a link to view the data on the SAS Visual Analytics Storm Dashboard (for those with VPN and SAS access – and a device capable of viewing the web browser version). This is the Storm Dashboard link at the bottom of the first section.

Components of the Hourly Storm Report – Overall (System) Level

- Total Affected Customers Total Affected Jobs
- Total Restored Customers Total Restored Jobs
- Total Remaining Customers Total Remaining Jobs
- Dispatch Status of Remaining Jobs
- Outage Jobs By Priority
- Dispatch Status By Referral Group
- Peak Customers/Jobs Out
- Incoming Rate of Outage Jobs (Thru Last 8 Completed Hours) – Line Graph
- Top 5 Oldest Jobs Out
- Top 10 Impacted Areas Currently Out – Village – Customers – Jobs

Above report sections are then repeated with a subset of data for each of the 4 Operating Divisions – with links to jump to the Division.

7.2.2 PSEGLI PRIORITY INCIDENTS HOURLY SUMMARY

The Priority Incidents Hourly Storm Report has a standardized format that begins with the Start Date Time

From the starting date and time, at the top of each hour a standardized HTML formatted report is emailed to the internal distribution list of storm personnel involved with Priority / Escalated Jobs.

The Priority Categories included in the report include: P1and P2 FD/PFD calls, FD/PD Wiredown, Muni Portal/MSTC, Escalated Jobs, and Customer reported Wiredown calls.

A tabular view summarizes since the start of the event the stroke counts for: Completed, Assigned, Cleared, and Not Assigned job counts for each category.

An additional detailed section of the report is included for any FD/PD Category that includes an FD/PD job greater than 12 hours old that has not yet been made safe.

The report also includes a link to view the data on the SAS Visual Analytics Storm Dashboard (for those with VPN and SAS access – and a device capable of viewing the web browser version). This is the Priority Jobs Dashboard link at the bottom of the report.

7.2.3 *Announcement* - Divisional Storm Damage Assessment/Global ETR Settings

This automated email is triggered when changes are made to the Status of Storm Damage Assessment/Global ETR Settings by Division. At the initial start a of major restoration event, invoking the NULL Damage Assessment Global ETR may be the initial status update from this automated email report. Subsequent updates are also sent when any changes are made to the Global ETR for any of the four operating divisions.

This automated email report is sent to a combination of internal distribution lists as well as a LIPAStorm_emergencylist email address which represents a distribution list maintained by LIPA.

7.2.4 Other Key Reports to Support Outage Management During Major Restoration Event

Some of the key reports available to be run on demand as needed from the SAS Stored Process Web Server are:

- Outage Job Priority Matrix and Listings (summary of outages by outage priority/customers out)
- Storm Tracker (summary of incoming jobs and customers out by hour and rolling 24 hour period counts – for last 7 days)
- Customer Calls by Call type (summary of calls for outages broken down by call taking channel e.g. Customer Service Representative, IVR (internal and High Volume external), Web, Text, Mobile App) for a given Date / Time Range
- Asset Reports – Replace Forms (Damaged Assets), As Built Forms (Newly Installed Assets)

Some of the key reports available during major restoration events from the SAS VA Hub Reporting Tool are:

- Storm Dashboard Reports – Hourly updates at top of hour aligned with storm email hourly reporting (Outage, Emergency, ETRs)
- Priority Jobs Tracker (P1, P2, FD/PD / Customer Wire Down) – Hourly
- County/Town/Village Outage Report (summary of outages and ETRs by geographic area) – On demand (15-30 minutes updates aligned with Outage Map and DPS reporting)
- Key Customer Outage (report of outages affecting Critical Facility and Major Account customers, as well as Life Support Equipment (LSE) customers On demand (15-30 minutes updates aligned with Outage Map and DPS reporting)

8. EXTERNAL SYSTEM INTERFACES

Key interfaces of external systems that exchange data either into and/or out of OMS are described below. Where applicable, if the functionality or overall use of the interface differs between normal blue sky day use and during a major restoration event, those differences are called out in each section below.

8.1 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)
- AMI Meter Flag – indicating whether or not the customer's meter has been AMI enabled

The OMS was bulk-loaded with all customer account data upon initial deployment, and a daily interface maintains nightly updates of the delta changes in account information as customers move in/move out or new accounts are added.

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 workday.

During a high activity storm restoration event, when various IT applications are normally suspended, this CAS to OMS daily interface may be temporarily suspended so as to not adversely impact mainframe system performance.

8.2 Geographic Information System (GIS)

The distribution circuit data used by OMS is received via an interface to the ESRI GIS. Active distribution feeders serving customer load 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 day are extracted and reprocessed back to the OMS to reflect the updates in OMS on a daily scheduled basis.

The GIS to OMS interface supports the ability to extract a feeder "on demand," known as an immediate update. This allows critical updates impacting connectivity and connected customers to be made in a timely manner.

On a quarterly basis, 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. Weekly CAS to GIS customer data load in conjunction with an OMS update premise script also keeps the customer account changes synchronized between the GIS, CAS, OMS, and Kubra Outage Map and DPS reports.

During a high activity storm restoration event, it is not typical to continue to import GIS changes into OMS. This GIS to OMS daily and/or weekly interface may be temporarily suspended so as to not adversely impact system performance.

8.3 Employee Personnel

All relevant day to day and/or storm role related PSEG Long Island employees are included in the OMS system for the purpose of being able to be assigned to a repair or survey crew. Basic employee data (e.g. name, employee number, crew type, work location) are available in the OMS Crew Management function.

Employee personnel data was initially bulk-loaded into OMS, via an SAP upload. The SAP system utilized is the database of record for all employee personnel data. Periodic updates are conducted, as needed, to reconcile employee data and to ensure all relevant PSEG Long Island personnel are properly represented in OMS for the purposes of Crew Management, if necessary.

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 restoration events, the system is equipped to handle Foreign Mutual Aid Crews, via the Crew Management function as well. The information is currently manually entered into CAD based upon the planned activation of foreign crew resources that are received via mutual aid rosters as personnel are onboarded at Foreign Crew Processing.

8.4 Interactive Voice Response (IVR), Web, Text, Customer Mobile Application

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. All 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.

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. A customer facing mobile application is now available for outage reporting and status updates.

The OMS is interfaced to the Kubra - iNotifi system. Customers that register for this service can report power outages and receive status updates, via text messages, on their mobile devices. An “outage detected” notification is sent to all customers that are affected by a sustained power outage, even if they have not yet called to report it. Additional communications are provided to the customers on change of ETR or addition of cause code data. “Power on” verification calls are made to those users that reported the outage. Depending on forecasted severity of the event, the OMS proactive communication features may be turned off and other targeted communications channels would be available during storm events.

During a high activity storm restoration event, it is typical to place these digital call taking channels and the Enterprise Service Bus (ESB) MuleSoft Integration layer to OMS in “Storm Mode”. Storm mode is designed to disable or hide routine day to day processing for bill payment / inquires and allow a streamlined and performant IT environment focused on outage reporting within the web and mobile applications. The integration layer between the digital channel call taking front end applications utilizes an asynchronous queue to help filter out duplicate outage reports from getting to OMS in order to reduce call processing and optimize the outage analysis and grouping functions within the OMS.

8.5 Supervisory Control And Data Acquisition (SCADA)

PSEG Long Island has near 100 percent SCADA coverage for its 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 OSI (vendor Open Systems International) DSCADA system, and any changes in the state of the SCADA devices are immediately upon confirmation of a switch position change, an energized momentary or a sustained outage event conveyed to the OMS, by way of the OSI DSCADA – OMS Multispeak interface. This interface allows the OMS to become aware of large area outages affecting hundreds to thousands of customers within approximately one minute of the SCADA devices operating. This allows the OMS to group subsequent outage calls and reported power outage notification (PON) messages behind / downstream of these SCADA devices, and helps the outage call grouping algorithms of the OMS perform more efficiently.

During a high activity storm restoration event, this SCADA interface is actively monitored for performance concerns by IT personnel. This interface is also stress tested as part of the twice yearly OMS stress testing. While the intent is to always keep this interface in service, there are manual contingency plans detailed within Section 15.6 and ERIP-GEN-004 if this mission critical interface were to experience degraded performance and/or failure.

8.6 Outage (Operational) Historian (OH) / OUTAGEHUB Views

All current and completed job data, from the OMS, is stored in a corporate reporting database referred to as OH. The OMS makes available outage data via database views into OH on a scheduled or on demand basis. These views 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, cause code (when provided by the Crew), and the status of the job (pending, dispatched, crew en route, crew onsite, and/or restored (energized)).

These outage records in the views are sent to OH are then available to be retrieved by the OMS SAS reports on a typical 5-15 minute delay. For Kubra outage map on the PSEG Long Island Storm Center website, digital channels: (IVR Web, Mobile app, Text), iNotifi a direct database call into the OUTAGEHUB schema of the OMS database is used. For digital channel get status processing, the calls are real-time via database stored procedure calls from the ESB MuleSoft, while the outage map updates are delayed 15 minutes (up to 30 minutes during peak storm periods)

8.7 AMI Interface

AMI equipped meters support a last gasp power outage detected function. When an AMI meter loses power, it will transmit the Power Outage Notification (PON) message back to the AMI headend. The Meter Data Management (MDM) component processes these messages from the meters and after a six minute delay (to account for momentary outages) , via MuleSoft Integration Layer, feeds the outage detected data to OMS for use in its outage analysis grouping algorithms. This message is treated in the same manner as a customer reported no power report. Upon return of power, the meter transmits a Power Restored Notification (PRN) message (sent immediately with no delay), which is also forwarded to the OMS via the interface. These power restored messages help the OMS to know which outages have been restored and at what time they were restored. A meter ping capability is also available from the OMS to allow an Operator/Dispatcher using OMS Incident Manager to send a ping request to an AMI meter. Manually pinging meters from the OMS after a known outage has been reported as restored helps the OMS Operators to confirm full power restoration in an area or more readily detect an embedded outage when a storm condition may have resulted in multiple damage locations in an area.

During a high activity storm restoration event, this AMI interface is actively monitored for performance concerns by IT personnel. This interface is also stress tested as part of the twice yearly OMS stress testing. While the intent is to always keep this interface in service, there are manual contingency plans detailed within Section 15.6 and ERIP-GEN-004 if this mission critical interface were to experience degraded performance and/or failure. OMS has an automatic disable function that will temporarily disable the AMI processing if the amount of messages exceeds a threshold. Normal processing returns when the activity level falls back below the preset threshold. Since the high AMI PON activity is often in conjunction with a SCADA event, this is an acceptable practice, as we typically know about the outage via the SCADA device operation and can handle a loss of some AMI PON events at this time. Between the AMI head-end, the integration layer, and OMS, there are other manual methods to disable the AMI to OMS interface if the need arises.

8.8 Kubra Outage Map

The PSEG Long Island website utilizes an industry standard outage map on its Storm Center page (see Figure T.10). This outage map is provided by a third party, Kubra. The outage data from the OMS that is stored in the OUTAGEHUB schema of the OMS database and is regularly queried to provide approximately 15 minutes (normal day) - 30 minutes (high activity storm periods) 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 the crew status (pending, dispatched, enroute, onsite, etc.) and outage cause. A hardhat icon is used to indicate jobs that have crews assigned to them. A weather radar layer view option is also available on the public outage map. The user of the map has the option to turn on/off the weather radar layer and play back the radar view in a loop as well.

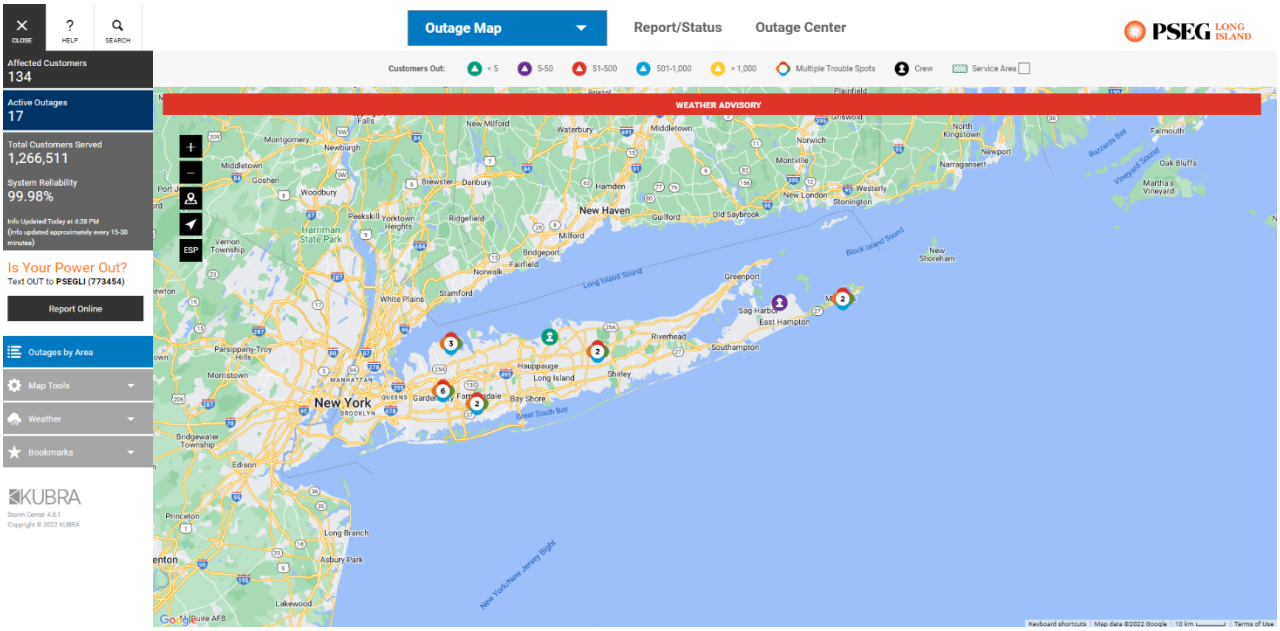


Figure T.10 – PSEG Long Island Storm Center Outage Map

The outage map also has tabular summaries of outages by County, Township, and Village (see Figure T.11). During major restoration event 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 Assessing Conditions (Null ETR), Global, Regional/County, and Local/Municipal ETRs, in accordance with ETR protocol dictated by the NYS DPS.

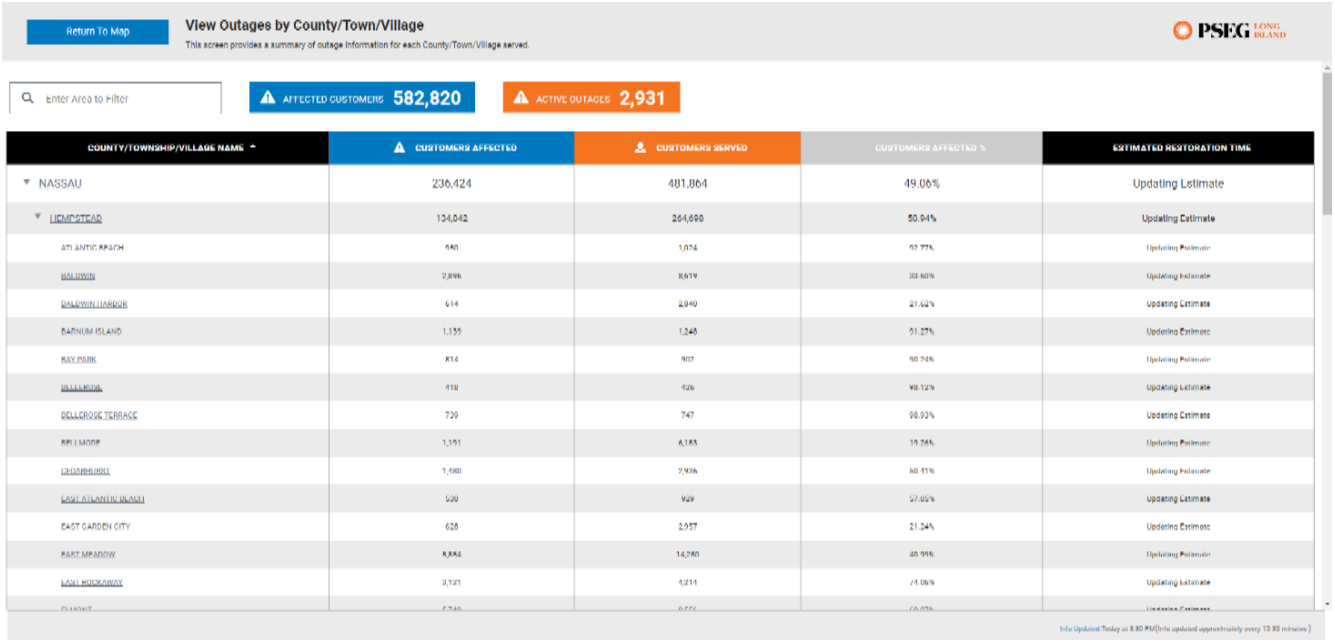


Figure T.11 – PSEG Long Island Storm Center Outage Map Tabular View

The outage map also has a message board function, which 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 major 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.

At the initial onset 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 "up to 10 days," if a major hurricane is approaching. In the initial stage of the storm, the banner may indicate PSEG Long Island is in the damage assessment phase (Null ETR). Once the storm passes and initial assessment is completed, a global ETR is routinely provided.

As the storm progresses, the table shown within Figure T.11 is updated to provide the Regional/County ETR (ETRs for Nassau, Suffolk, and/or Rockaway Peninsula).

As the storm restoration progresses into the second/third day, the local/municipal ETRs would begin to be provided on the Village view drill down of the table shown within Figure T.11.

8.9 External Interface to New York State Department of Public Service Electric Utility's Electric System Status Report (ESSR) Data

The OMS SAS reporting system provides ½-hour updates, via File Transfer Protocol (FTP) to the NYS DPS ESSR Mapping system. This data consists of outage data for the 351 geographic village polygons used in the PSEG Long Island GIS and OMS. These records include: a NYS DPS specific geocode referencing the village, the number of customers served in that geographic area, the number of customers affected, and the date and time of the latest estimated restoration for outages in that village.

A sample file format is as follows:

GEOCODE, CUST SERVED, CUST AFFECTED, ETR DATE, ETR TIME

04913.0, 3703, 0, 0, 0

05034.0, 2790, 0, 0, 0

05617.0, 2493, 7, 102315, 1515

05672.0, 319, 0, 0, 0

05738.0, 6235, 1, 102315, 1340

PSEG Long Island has worked with the DPS and implemented a new API for transfer of outage data to the NYS DPS for their Utility Events Dashboard which includes additional data fields. Data transfer is live as of 2021 and is still being tested by the DPS with the intent of retiring the above FTP process.

In Q1 2024, we began to provide DPS weekly updates for customers served per village along with Region (WEST and EAST), Township and County descriptors that allow for aggregation. This data is now aligned with what we provide to the Kubra outage map on a weekly basis as well.

A sample record from the json file format is as follows:


```
[
 {
   "utilityId": "2066",
   "municipality": "SOUTHAMPTON - SOUTHAMPTON",
   "customersServedInMunicipalityCount": "577",
   "county": "SUFFOLK",
   "operatingDivisionName": "East Region"
 },
```

8.10 External Interface – Municipal Portal

The Municipal Portal is a geographical based map portal that provides government and municipal officials with another tool to view outage and emergency jobs similar to the Kubra Outage Map. In addition to viewing data concerning outage and emergency jobs, the Portal also allows registered users to submit reports about wires and/or poles that are down and are blocking roadways. These are referred to as “make safe to clear” (MSTC) jobs and require expedited utility crew response in order to work jointly with Municipal Highway Departments. Registered users can also report outages related to critical facilities in their jurisdiction and provide input on the prioritization of repair of these facilities. For both critical facility outages and MSTC requests, the Municipal Portal allows users to sign up for status notifications related to specific jobs in their areas.

For details on OMS monitoring protocols and stress test plans, please see Appendix U - Information Technology Protocols.

For details on restoration contingency plans due to an OMS failure and/or performance issue, please see Section 15 Restoration Contingency Plan.

Appendix U – Information Technology Protocols

1. OVERVIEW AND PLAN METHODOLOGY

The IT Section plays a key role in the execution of PSEG Long Island's storm restoration goals and strategy efforts. The IT Section is responsible for the management of PSEG Long Island's voice and data systems, mission critical systems, software applications and/or infrastructure; pre-activation preparations, testing and continuous system monitoring throughout the restoration event; And reviewing whether PSEG Long Island work locations and support sites have the equipment and connectivity to support operational plans.

Moreover, the IT/Communications Unit reviews that key company software applications (e.g., OMS, SAS, SAP), websites, programs, and support equipment are in proper working order to meet the demands of the restoration event. An inventory of key IT/Communications hardware and software is reviewed and maintained for operational readiness and availability, as restoration needs require.

2. ROLES AND RESPONSIBILITIES

The IT section organizes and responds to restoration events in alignment with their ICS structure detailed within Section 2 – Roles and Responsibilities of the Emergency Restoration Plan. The IT Organization is divided up into smaller groups according to system oversight responsibilities. There are three levels of IT support during restoration events:

- Level 1 Support – Helpdesk – the first call resolution
- Level 2 Support – SME support to triage any issues that Level 1 support couldn't resolve
- Level 3 Support – Engage product technical support to resolve any issues that Level 2 support couldn't resolve

The key roles and areas of responsibility for the IT Organization during restoration events includes the following:

2.1 Chief Technology Officer

- Oversees Information Technology Section and personnel
- Provides status and communications updates to key internal and external stakeholders
- Provides oversight for operational readiness and day-to-day management of critical sites, infrastructure and applications

2.2 IT Support Manager

- Manages corresponding Information Technology areas and personnel
- Coordinates and communicates with cross-functional teams and business groups

2.3 Network Support

- Provides level 1, 2, and 3 support for all network equipment and systems
- Includes Telephony, Internet, Corporate and SCADA network support

2.4 Network Operations Center (NOC) Support

- Provides monitoring and alerting for mission critical systems

2.5 Mainframe Support

- Provides level 1, 2, and 3 support for all mainframe equipment and systems
- Includes Customer System and job scheduling support

2.6 Infrastructure Support

- Provides level 1, 2, and 3 support for all infrastructure equipment and systems
- Includes datacenter, server, storage and database support

2.7 Digital Channels

- Provides level 1, 2, and 3 support for customer channel systems
- Includes Public and My Account Website, Municipal Portal, Outage Map, Texting, Mobile App, Interactive Voice Response and High Call Volume Answering service

2.8 Middleware & App Support

- Provides level 1, 2, and 3 support for Middleware and Applications
- Includes SharePoint, Fire Shares/Shared Drives, Enterprise Service Bus and MessageWay

2.9 Grid Support

- Provides level 1, 2, and 3 support for Grid applications and systems
- Includes Outage Management System & Computer Aided Dispatch, Energy Management System, Distribution SCADA, PI Historian and SAS

2.10 Salesforce Support

- Provided by PSE&G NJ IT Support – arranged thru PSEG Long Island IT Support Manager – see 2.2 above
- Provides level 1 and 2 support for Salesforce communications channels
- Includes Customer chat & email

2.11 Data Analytics

- Provides level 1, 2, and 3 support for Data Analytics systems
- Includes AMI Outage Reporting and BCP Storm Reporting

2.12 GIS Support

- Provides level 1, 2, and 3 support for GIS systems
- Includes GIS applications and associated integrations

2.13 AMI & Customer Facing Technology

- Provides level 1 and 2 support for AMI and Customer Facing Technologies
- Includes AMI/MDM and Customer Digital Channels

2.14 PSEG Corporate Systems

- Provides level 1, 2, and 3 support for Corporate Systems
- Includes E-Mail system and SAP

2.15 Logistics Event Support

- The IT Section supports the technology needs of PSEG Long Island employees when activated during restoration events. The IT Section will set up and support work locations and/or supplemental sites with IT equipment and/or resources, as necessary. The IT Section will work closely with the Logistics Section to respond to and support restoration IT needs.

3. OMS AND RELATED CRITICAL SYSTEMS MONITORING AND MITIGATION

In anticipation of storm events, PSEG Long Island Information Technology (IT) enacts its pre-storm checklist to verify personnel availability, system and critical site readiness. A high level summary of these checks included:

- Establishing shift support and coverage for 24x7 infrastructure and application monitoring
- Performing critical system health checks for applications, networks, servers and databases leading up to and during the storm
- Reviewing and suspending all changes not related to storm
- Confirming 3rd party vendor support with proactive communication
- Verifying critical facility and datacenter power and generator status
- Setup of requested critical sites and dispatch areas
- Establishing an incident management bridge for the duration of the event

Once pre-storm checks are completed the IT teams transition to monitoring the critical applications and infrastructure throughout the storm event. Any high priority incidents that are detected or reported are triaged using IT's incident management process. This process includes:

- Overseeing that the incident is logged and business impact is assessed appropriately
- Engaging the proper internal teams and vendors to triage and resolve the incident (vendor escalations are made as needed)
- Performing and capturing changes performed for resolution
- Communicating with business users and executive management to promote proper awareness
- Closing the incident once proper resolution is validated

Given the critical nature of the OMS and the ancillary systems that support and interface to OMS, system monitoring and automatic error alerting is necessary on a day-to-day basis and this monitoring activity becomes even more important during high volume storm events. There are processes and tools in place to perform system monitoring, health checks, and automatic alerts for the OMS and its critical interfaces. As part of storm preparations, once notified, IT activates the enhanced storm monitoring procedure, performs health checks on a checklist of key items, and periodically reports results back to the business. If any of these health checks, or any other issues identified by Operations, IT, EP, etc., determine degraded performance or unavailability of customer facing channels to report power outages, the PSEG Long Island Customer Technology Team will activate alerts on the outage map banner and all other available customer communication channels with alternative methods to report and obtain outage information.

For additional details on IT's mission critical systems, plans, and the associated notifications and communications, please see Section 15 – Restoration Contingency Plan Procedures.

For additional details on OMS protocols during restoration events, please see Appendix T – Outage Management System.

4. CRITICAL SYSTEM STRESS TESTING

4.1 OMS

PSEG Long Island IT OMS Support Manager, or designee, will design, plan, and execute an OMS stress test semiannually, which will occur in a test environment, prior to June 1 ahead of hurricane season and December 1, even if there are no system updates to be performed.

A significant or major system change to the OMS after June 1, will require a second stress test within 90 calendar days of the major system change implementation.

Stress testing will simulate the peak trouble order volume that would occur during a hypothetical storm that affects 90% of customers over a 24-hour period on the overhead distribution system and a 5-12 hour duration based on TS Isaias levels which encompasses a worst case scenario associated with an extraordinary high customer call volume.

PSEG Long Island will submit a report, within 20 business days of the stress test, to the DPS Director of the Office of Resilience and Emergency Preparedness (OREP) and to LIPA, which details the results of the stress test. PSEG Long Island will also develop and provide a remediation plan to the DPS Director of OREP within 30 calendar days and retest within 90 calendar days of any failed stress test. Finally, PSEG Long Island will notify the DPS Director of OREP if it is unable to complete the retest within 90 days.

4.2 Critical Call Center Applications

PSEG Long Island IT Product Manager in conjunction with Call Center Management, will plan and execute a semi-annual capacity test for critical call center and related back-up call center functions including phone line, IVR and HVCA components.

Within ten days of each test, the PSEG Long Island Emergency Preparedness Manager will file a report with the DPS Director of the Office of Resilience and Emergency Preparedness, or designee, that contains the detailed results that support whether the success criteria has been met. If the success criteria is not met, the PSEG Long Island Emergency Preparedness Manager will notify the DPS Director of the Office of Resilience and Emergency Preparedness, or designee, within ten days and produce a plan of action with measures that will be taken until such time as a permanent resolution to the root cause(s) has been implemented.

With each test failure, the Companies will provide a rescheduled test date within 30 days from the initial test. Call Center Director, or designee will also notify the DPS Director of the Office of Resilience and Emergency Preparedness, or designee of any call center impacts during storm events.

Appendix V – Legal Protocols

1. OVERALL APPROACH AND GENERAL STRATEGIES

The primary function of the Legal Section is to provide legal guidance and support to the Incident Commander and staff. The Legal Section reviews plans, policies, procedures and directives, as needed for consistency with Federal, State, and Local law. The Legal Section assists with compliance agreements and protocols, including mutual assistance arrangements with Edison Electric Institute (EEI) partner utilities and external agencies. The Legal Section also coordinates emergency legal requests with Federal, State, and Local officials and works closely with the Documentation Unit of the Planning Section to provide guidance on maintaining records in accordance with all applicable laws and regulations. Finally, the Legal Officer advises on compliance with 16 NYCRR Rules and Regulations of the PSC, as applicable.

2. EMERGENCY ORDERS AND/OR ACTIONS

The Legal Section oversees emergency orders and/or actions pertaining to PSEG Long Island protocols utilized during restoration operations. The Legal Section may also issue emergency briefs in support of planned restoration actions.

2.1 Coordination

The Legal Section oversees all PSEG Long Island legal matters as they pertain to Federal, State, and Local laws and regulations. The Legal Section reviews and advises the Incident Commander and staff on the potential legal implications of proposed restoration plans.

The Legal Section also assists with coordination between Federal, State, and Local authorities, including NYS DPS. The Legal Section assists with coordinating restoration plans where Federal, State, and Local laws and regulations may delay restoration plans. For example, the Legal Section may assist with NYS mandated travel restrictions during storm events, potential road closures and/or emergency requests.

2.2 Documentation Processes and Protocols

The Legal Section oversees the documentation processes utilized during restoration operations to provide advice supporting record keeping compliance in accordance with Federal, State, and Local rules and regulations. The Legal Section provides FEMA compliant language for inclusion in all relevant restoration contracts and assists with review of procurement and contract administration protocols to support adherence with FEMA guidelines.

3. OFFICE OF GOVERNMENT FUNDS COMPLIANCE

The Office of Government Funds Compliance (OGFC) initiates FEMA compliant storm services contracts as needed during storm events and performs quality assurance reviews to monitor and confirm that all relevant supporting documentation for storm expenditures is requested, obtained, and verified both during and after storm events. Additionally, OGFC issues Notices to Proceed (NTPs) activates FEMA compliant storm services contracts, tracks storm contract Purchase Orders (POs) and contract balances, reviews all storm contract actions for compliance with FEMA rules and regulations, and responds to internal and external inquiries concerning contract requirements and procedural protocols. OGFC also works together with PSEG Long Island Finance to create and submit FEMA reimbursement packages for LIPA.

See Section 14 – Finance/Administration for additional details on reimbursement protocols.

Appendix W – Safety, Health, And Environmental (She) Protocols

1. OVERVIEW

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, even further heighten the company's focus on safety. This is driven by the need to address increased personnel levels supporting restoration efforts in sometimes non-traditional roles, unique and hazardous working conditions, public exposure to hazardous conditions (including downed wires, storm debris, and oil spills), and mutual assistance resources unfamiliar with PSEG Long Island's service territory.

During major events, PSEG Long Island's Compliance Manager – Utility Health and Safety is assigned to serve as the SHE Officer and reports directly to the Incident Commander during emergency activations. The Company's safety response includes a multitude of safety professionals and safety advocates with varying roles. PSEG Long Island's SHE Unit is broken up into the three main areas of concentration:

- Safety
- Health
- Environmental

Each of these segment areas perform vital roles during restoration operations with specific preparatory and response actions. The details below highlight the actions taken by PSEG Long Island SHE personnel during restoration operations.

2. SAFETY

The safety of our employees and contractors is of the utmost importance during restoration operations. PSEG Long Island's safety professionals are responsible for assessing, coordinating, and managing the various safety conditions faced by Company employees and support personnel upon activation of restoration operations. PSEG Long Island safety professionals aim to anticipate and identify potential problems, rather than simply react to existing ones. They utilize a variety of tools and initiatives to better prepare relevant employees and support personnel before, during, and immediately following an emergency activation.

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

- Support and guidance
- Safety briefings and communications (internal)
- Safety communications before, during, and after a storm (external)
- Safety education, training, and exercises
- Personal Protective Equipment (PPE) distribution
- Pre-storm safety planning and equipment staging
- Site safety plan development
- Site surveys and evaluations
- Incident reporting and tracking
- Assessments of hazardous and unsafe conditions
- Monitoring and requiring compliance with safety procedures
- Investigation and management of accidents
- Support local, state, and federal agencies regarding safety incidents

These important initiatives assist in ensuring safe work practices are conducted at all PSEG Long Island work locations, including operations centers, staging areas, crew housing facilities, fueling locations, and Foreign Crew reception site. Additional safety resources may be assigned to work locations throughout the duration of the storm restoration process, depending on the scale and severity of the event.

The communication of safety initiatives and messaging 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.

Foreign Crews working with PSEG Long Island during restoration operations receive additional safety information, due to their unfamiliarity with the company, its systems, equipment, and landscape. All Foreign Crew supervision receive safety briefings delivered by PSEG Long Island Safety Coordinators, upon arrival to the service territory. Additionally, all Foreign Crew personnel are provided a safety briefing before leaving the staging area and upon re-entry, as warranted.

All incidents, including accidents, near misses, and personnel injuries to the public, employees, contractors, and foreign restoration crews are reported, investigated, and tracked. Incident occurrences are communicated to internal personnel, NYS DPS and LIPA staff through the PSEG Long Island Incident Management System (IMS) notification process. All incidents are addressed, in accordance with the appropriate PSEG Long Island safety procedures, as well as state and federal guidelines. Incident summaries are reported to PSEG Long Island's senior leadership team during regular briefings and are communicated across the restoration organization through daily safety messages.

PSEG Long Island safety professionals, along with Contractor and Foreign Crew safety personnel, participate in daily status calls and/or planning meetings throughout restoration operations, as appropriate. Additional safety protocols and work practices pertaining to mutual assistance crews can be found in Appendix G, Section 3.

3. HEALTH

The Occupational Health Coordinator is responsible for the development and implementation of recommended measures assuring employee health, as well as to assess and/or anticipate hazardous and unhealthy conditions to PSEG Long Island employees and support personnel. They are the primary point of contact for local, state, and federal agency matters related to health concerns and conditions.

The Occupational Health Unit provides medical services for locations used for housing, feeding, or staging of large numbers of crews, as required. Additionally, all staging sites and lodging sites are equipped with fire extinguishers and first aid and eyewash kits.

The Occupational Health Coordinator investigates, documents, and addresses any reported health concern with the appropriate party and/or agency. Health related issues are also reviewed and discussed daily, as applicable, during storm update calls.

4. ENVIRONMENTAL

The Environmental Response Coordinator is responsible for the coordination and oversight of environmental operations for all PSEG Long Island personnel and support staff, along with company facilities and planned work locations. They are the primary point of contact for local, state, and federal agency matters relating to environmental issues and ensure compliance with mandated regulations.

PSEG Long Island takes a proactive approach regarding environmental safety by communicating with environmental contractors and vendors, pre-storm, to confirm availability with anticipated restoration activities. Environmental site plans and services (including spill response, clean-up, material handling, waste disposal) are pre-established and environmental kits are distributed, pre-storm, to all staging sites in the event an incident occurs.

The Environmental Response Coordinator and staff will investigate, document, and address any reported environmental incident or potential occurrence with the appropriate party and/or agency. Environmental related issues are also reviewed and discussed daily, if applicable, during storm update calls.

Appendix X – Table of Figures