**Electric Operations** 



# 2013

# **Emergency Response Plan**

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Prepared/Approved By	Revision Date	Supersedes
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Electric Operations Emergency Management		

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# I. Introduction

The electric emergency response to customer outages caused by weather, including thunderstorms, hurricanes, extreme heat, storm surge and river flooding, is predicated on knowing and understanding the magnitude of the event.

This document provides program guidance to all areas having electric emergency response responsibility. The plan meets the requirements for preparing and filing the Company's Electric Emergency Plan for responding to storms and other storm-like overhead system emergencies in accordance with the New York State Department of Public Service under Part 105 of the NYS Public Service Law and the Incident Command System (ICS) under Con Edison's Corporate Instruction 260-4, "Corporate Response to Incidents and Emergencies". Specific Overhead and Underground emergency response procedures that comply with the guidelines set forth in this plan have been developed and regional differences (i.e. internal and external contact information, mobilization triggers, staffing levels, etc.) included. These and other resource documentation can be found on the Electric Operations Emergency Management (EOEM) page of the Emergency Management intranet site.

Each process area is required to maintain their specific contact information, procedures, checklists and instructions needed to support this plan. All pertinent Electric Operations emergency response documentation will be maintained on the EOEM web page.

# **Emergency Management - Vision**

The Company strives to meet our customers' needs through effective emergency risk assessment, mitigation, preparedness, response and communications. Our goal is to achieve excellence as an industry leader in emergency management performance.

# **Emergency Management - Policy Statement**

Aligned with our commitment to "The Way We Work," the Company strives to utilize effective emergency management principles that enhance the Company's ability to provide safe and reliable energy services and its ability to communicate timely and accurate information to our customers and stakeholders by:

- Conducting effective risk assessments for operating and business functions
- Developing appropriate prevention or risk mitigation strategies
- Implementing comprehensive emergency preparedness programs
- Responding with appropriate resources to address the emergency
- Communicating with customers and other stakeholders timely and accurate information using voice, Internet, media and other appropriate methods
- Recovering from events expeditiously
- Improving continuously



# II. Incident Command System (ICS)

CI 260-4 "Corporate Response to Incidents and Emergencies" establishes guidelines for determining the appropriate level of response and mobilizing the appropriate Company and external resources in a timely manner in response to any incident. It describes the Incident Command System, whose principles are used to manage any incident or emergency and the ICS organizational structure, including the role of the Incident Commander.

The ICS organization is built around five major functions that are applied to effectively manage any incident whether large or small. The ICS affords the ability to fill only those parts of the organization that are required to respond to the event or incident. ICS establishes lines of supervisory authority and formal reporting relationships. It maintains a reasonable span of control in each section of the operation. The following are descriptions of the functional elements of the Command Staff and the four Sections reporting to the Incident Commander. Emergency response assignments are designated through the System Emergency Assignment application and can be viewed via the employee photo system application.

Each person in an ICS staffing position must have completed the required training for Branch Director and higher. The training requirements can be found under CERC on the Emergency Management website.

# Incident Command Staff:

The Incident Command Staff consists of the Incident Commander, EH&S Officer, Information Officer, Liaison Officer/Energy Services Officer and Customer Operations Officer.

# Planning Section:

The Planning Section includes: the Electric Control Center, the Trouble Analysis Situation Unit, the Damage Assessment Situation Unit, Site Safety Unit and the Emergency Information Center. The Planning Section is responsible for the collection, evaluation, and referral of jobs, public safety, the documentation of Incident Action Plans (IAP) and maintaining and disseminating internal information about the status of the restoration effort.

The Planning Section is responsible for ensuring global, regional and localized Estimated Times of Restoration (ETRs) are determined and communicated as required in the ETR Guidelines issued by DPS staff on September 30, 2010. These Guidelines can be found on the EOEM intranet page under Corporate Reference Material.

The Planning Section formulates and documents the Incident Action Plan. The IAP will be distributed to the General and Command Staff. The Plan will be updated and distributed as the situation warrants. The Planning Section:

- Ensures that the System Trouble Analysis and Response (STAR) is placed in storm mode to properly collect data
- Provides ETR data (including revisions) to Emergency Management (Director EOEM or designee) for posting to the company external website (I-Factor) and Media Relations (Storm Central)
- Provides problem analysis, develops solutions that are then communicated to Operations



- Directs Damage Assessment to obtain visual inspection of specified locations to include feeder runs
- Assigns site safety personnel to locations requiring Company presence
- Coordinates with District Operators to restore feeders
- Provides predictive analysis of next contingency and provides solutions to Operations for implementation if that contingency occurs
- Provides status reports of feeders and outages
- Establishes restoration priorities
- Plans transition back to normal operation at the end of the incident
- Provides resources to address public safety concerns

If the Distribution Engineering Situation Room (DESR) is not open, the Planning Section initiates the appropriate notifications, if applicable, as outlined in the PSC Outage Notification Penalty Mechanism.

# **Operations Section:**

The Operations Section is responsible for the construction work that is required to repair incident related damage and to restore electric service in accordance with the recovery priorities as defined in Section "B" of the "Overhead Emergency Response Procedure". The Operations Section utilizes all necessary resources (internal, utility mutual assistance and contractors) to restore reliable service. They direct and perform all field operations required to rectify problems arising from an incident. This includes, but is not limited to:

- Dispatching crews
- Assisting in cut and clear operations in coordination with NYC Downed Tree Task Force and Westchester County municipalities
- Accepting and managing mutual assistance and ladder line crews
- Distributing tools and equipment
- Setting poles
- Clearing obstructions and laying duct
- Performing switching operations
- Splicing primaries, secondaries, and services
- Installing/removing protective grounds (I&A)

The Operations Section is responsible for ensuring outages are restored within the projected global, regional and localized ETRs. The Operations Section will communicate to the Planning Section any requirement to re-evaluate ETRs based on actual field conditions.



# Logistics Section:

 The Logistics Section is responsible for the coordination of logistical planning and logistical response activities. Under the ICS/NIMS structure, Con Edison establishes the Logistics Section comprised of four major functional units; Logistics Operations Control Center (LOCC), Central Field Services (CFS), Purchasing (PUR) and Facilities (FAC). The lead organization for corporate logistics for Con Edison is Central Field Services

The Logistics Section is responsible for:

- Emergency response training of logistical personnel
- Advance planning and preparation of critical resources and vendors
- Maintenance of up-to-date logistics key contacts information
- Active participation in reviews, drills and pre-event meetings
- Inventory of storm kits, emergency material, dry ice, generators and mobile command centers
- Establishing, maintaining, and demobilizing staging areas if deemed necessary
- Support of restoration crew requirements for accommodations, subsistence, and vehicle management and material supplies.
- Arrangements for the procurement of non-stock material and outside services as needed

# Administration/Finance Section:

The Administration/Finance Section is responsible for compiling and reporting all costs related to the restoration effort. They also provide assistance to other organizations in such areas as mutual assistance administration and petty cash disbursements. This section also performs the following functions:

- Tracks costs associated with an incident
- Distributes p-cards and petty cash if necessary
- Investigates and processes claims associated with an incident
- Coordinates and supports mutual assistance crews when needed





# A. Emergency Response Organization - Typical



# B. Incident Commander

## Concept of Operation:

The Incident Commander (IC) is responsible for directing and coordinating the overall storm response. Where applicable, the Incident Commander receives a briefing from the Director, Electric Operations Emergency Management (EOEM), the Control Center Manager or prior shift's Incident Commander summarizing all pre-storm preparations and the response level that is anticipated. The Incident Commander ensures the ICS organization and Incident Command Area (ICA) are established in a timely manner.

#### Organization:

An Incident Management Assistance Team (IMAT) member helps assure that the Incident Command System is used as the sole management system during emergency response events and that communication both within the Company and externally is clear, effective and timely. The IMAT reports to the Incident Commander as part of his/her staff and may be assigned based on the regional Incident Commander's requirements. The following chart depicts the Incident Commander and Command Staff organization.



# Workflow:

The Incident Commander obtains a briefing from the Control Center Manager or prior shift's Incident Commander and from each member of the ICS Command and General staff, including the IMAT, as needed. The IC reviews and approves incident action plans, safety plans, and press releases; disseminates information; and provides direction through periodic update and status meetings.

# C. Environmental, Health & Safety Officer

#### Concept of Operation:

Environmental, health and safety excellence is an integral part of Con Edison's business practices.



The EH&S Officer (EHSO) is a member of the Command Staff and is responsible to develop and recommend measures for personnel safety, to assess and or anticipate hazardous and unsafe situations and ensure that assessment, modeling, surveillance, monitoring and permitting of environmental aspects related to the incident are accomplished. Only one primary EH&S Officer will be assigned to each incident. The EH&S Officer is responsible to ensure the overall EH&S incident objectives and resources necessary to accomplish them are addressed within the operational planning cycle, meetings, and briefings. The EH&S Officer will ensure that a safety orientation is conducted for all mutual assistance and contractor workers prior to being deployed in the field.

Reporting of accidents and injuries to personnel, contractors and members of the public, petroleum and chemical spills and other hazardous releases to the environment will be addressed in accordance with the appropriate Company environmental procedures and reported to the EH&S Desk in the Control Center. The EH&S Desk will make the proper notifications as detailed in the Corporate Environmental Health and Safety Procedures E10.01 – Release Reporting and S8.01 Notification, Reporting and Recording of Accidents, Injuries and Property Damage.

#### Organization:

The following chart depicts a typical EH&S organization.



# Workflow:

The EHSO will correct unsafe acts or conditions through the regular line of authority, and may exercise emergency authority to prevent or stop unsafe acts when immediate action is required. The EHSO maintains awareness of active and developing situations, ensures that a Health And Safety Plan (HASP) is prepared and implemented, and prepares a safety message to be included in each Incident Action Plan.



Electric Operations Emergency Response Plan II- Incident Command System

Only one EHSO will be assigned for each incident, including incidents operating under Unified Command and multi-jurisdiction incidents. The EHSO may have assistants, as necessary, and may also represent assisting agencies or jurisdictions. In cases where both safety and environmental concerns exist, the EH&S Officer may take on a more comprehensive role. The EHSO duties include:

- a) Review of common responsibilities
- b) During initial response, document the hazard analysis process addressing hazard identification, personal protective equipment, control zones and decontamination area
- c) Participate in planning meetings to identify any health and safety concerns inherent in the operations daily work plan
- d) Review the IAPs for environmental and safety implications
- e) Exercise emergency authority to prevent or stop unsafe acts
- f) Investigate accidents that have occurred within the incident area
- g) Ensure preparation and implementation of the Health And Safety Plan (HASP). As required by the Occupational Health and Safety Administration (OSHA), the HASP shall, at a minimum, address, include, or contain the following elements:
  - Health and safety hazard analysis for each site task or operation
  - Comprehensive operations work plan
  - Personnel training requirements
  - PPE selection criteria
  - Site-specific occupational medical monitoring requirements
  - Air monitoring plan: area/personal
  - Site control measures
  - Confined space entry procedures, if needed
  - Pre-entry briefings: initial and as needed (tailgate meetings)
  - Pre-operations health and safety conference for all incident participants
  - Quality assurance of HASP effectiveness
- h) Assign assistants and manage the incident safety organization
- i) Review and approve the Medical Plan
- j) Document all actions in the Unit/Activity Log.

Safety and Environmental information is routed through the EH&S Desk located in the Control Center. The Senior Specialist assigned to the desk keeps the EH&S Officer informed of all safety and environmental incidents. Following is the typical workflow:





# D. Information Officer

# Concept of Operation:

Information Officers are typically representatives from the Company's Public Affairs Department. Public Affairs have overall responsibility for communicating emergency recovery information to external, and sometimes internal, stakeholders including:

- The New York City Office of the Mayor
- Westchester County and New York City media (print, radio, cable TV)
- Westchester County Municipalities
- Community Board District Managers
- The offices of the Borough Presidents
- Con Edison's corporate Media Relations 24-hour duty officer
- Service Area Vice Presidents and other Operating Areas as required

Emergency response communications for the New York City Office of Emergency Management (NYCOEM) and the Westchester County Department of Emergency Services (WCDES) will be delegated to Emergency Management staff. These communications will be in accordance with Corporate Instruction 810-2 – Public Affairs Crisis Communications Plan.

Westchester County has independent local governing municipalities. Communications to these municipalities is facilitated by the Westchester Information Officer. A direct telephone number to the Municipal Liaison Group is provided to achieve effective and direct communication during events.

To facilitate this important communication with the municipalities, the Westchester Public Affairs contact list is reviewed and updated semi-annually to include the current contact information for all elected municipal, county, and state officials and local operations (police, fire, highway, and public works) departments that normally interact with Con Edison personnel during emergencies.



# Organization:

The following chart depicts the Public Affairs organization.



# Workflow:

When mobilized for serious incidents (level 2 and above), press releases that provide information on the Company's preparations and offer tips on weathering a storm will be issued. During the restoration effort, press releases will be issued to coincide with local news cycles or as needed. Information prepared and disseminated may include as appropriate: number of customers interrupted, number of customers remaining out of service, municipalities and districts affected, number of crews assigned, overall estimated restoration time, claims information, locations for "on-site" media opportunities and dry ice distribution sites. Media communications will include some or all of the following:

- A series of storm radio and print advertisements
- Live broadcasts on radio stations and cable TV
- Periodic press releases
- Information regarding dry ice locations, dates, hours and amount to be distributed
- Overall estimated restoration time
- Press conferences, when appropriate

The company also uses social media tools, such as Facebook and Twitter, to disseminate information to wider audiences and interact with the public. Furthermore, the Company monitors social media networks to get a better sense of what's happening on the ground during an incident, improve situational awareness and share information during an emergency.

For full scale events, typically the time periods within which press releases are issued are determined by the number of customers affected and the duration. Time periods range from 2 to 3 hours during normal business hours and 4 to 5 hours on off-hour times, as specified in Cl 810-2: Public Affairs Crisis Communications Plan. Press releases will conform to the requirements set forth in the ETR Guidelines.

Following is a typical workflow:





When storm recovery efforts begin, the Information Officer initiates a proactive approach targeted to specific groups to provide them with information on the status of the overall recovery effort. These groups include the media, governmental officials, and employees.

Con Edison's "Storm Central" Internet site includes information for customers on important storm preparations. It contains extensive information regarding the storm recovery process such as restoration priorities, hazards of downed power lines, importance of customer's report of outages, how to report an outage or dangerous condition, and suggested safe use of portable generators. This information is also issued in the form of bill inserts on a semi-annual basis.

During the restoration effort, an outage information section will be available on the Con Edison website which also will include Estimated Time of Restoration (ETR) information. The Information Officer is responsible for ensuring that all ETR's are communicated in accordance with the ETR Communication Guidelines. The external website (Storm Central) will include the location(s) for dry ice distribution sites and location of Customer Outreach personnel; global, regional and local estimated restoration times; and claims information, including filing, reimbursement and eligibility criteria. Customers can also report electric service problems and check service problem status via the website. Con Edison's print and radio advertisements include a reference to the availability of information on the Company's web site.

The Information Officer initiates notifications to elected officials and community organizations and provides updates on a regular basis. In addition, a daily conference call with Westchester public officials is conducted when the Emergency Response Organization is activated to provide the above information and solicit general concerns from the officials. Daily phone contacts with elected officials in the affected areas may be initiated if a conference call is not feasible.

For events where the restoration period is likely to exceed 72 hours, the Information Officer, in consultation with the Customer Operations Officer and Legal Services, will ensure that a message is included on the Company's website advising customers that Con Edison's restoration efforts are subject to review by the Public Service Commission (PSC) following major storms when restoration of service takes longer than 72 hours. After reviewing our restoration efforts, the PSC may require Con Edison to provide reimbursement for spoilage losses. (See PSC Order in case 06-E-1158 and case 07-E-0742, issued and effective June 19, 2008; and CI-730-2)



# E. Liaison/Energy Services Officer (Municipal Group/Municipal Field Liaison Group)

## Concept of Operations:

Upon declaration of a level 2 or 3 storm event, or a serious or full-scale underground event, the Liaison Officer mobilizes the Field Liaison group and initiates contacts with designated city and municipal officials. This proactive process gives advance notice to the officials and establishes communication protocol via dedicated telephone numbers for their use. The Liaison Officer (or in some instances, the Information Officer) proactively contacts various municipal and governmental officials and maintains open communication with them throughout the emergency recovery effort. The Liaison Officer is responsible to initiate notification and provide outreach activities with city and/or municipal contacts, the State Emergency Management Office, the Department of Public Service, and critical facilities as needed. The Liaison Officer will coordinate with the Information Officer on any information provided to the officials and the public. Notification requirements for events that trigger the Outage Notification Incentive Mechanism (ONIM) are outlined in EOP 5023 – Communication Guidelines in the event of an Electric Emergency.

As needed, dedicated phone lines are established and company liaisons dispatched to the NYCOEM, the WCDES, and Westchester county municipalities. During the recovery of an outage in NYC, for which the ONIM activation criteria has been met for 36 hours and is anticipated to continue for at least an additional 12 hours, the Liaison Officer will make a request to NYCOEM through Emergency Management to establish a mobile telephone bank for the impacted area. The location will be communicated to the Central Information Group (CIG) so that customers can be updated through Customer Service Representatives, the internet and media outlets. (See EOP 5023 for ONIM activation criteria.)

The Energy Services Officer has primary responsibility to mobilize resources that will maintain contact with hospitals and nursing homes and large commercial and/or industrial customers in the event of a serious electric emergency incident. Energy Services personnel interface with customers, either in person or by telephone, and may request load reductions or load shifting in some cases. They may also assist these customers with deployment and connection of mobile generators.

Liaison/Regional Energy Service groups will contact hospitals, nursing homes and large customers and keep them informed of the restoration status. Due to the large numbers of this type of customer, this may be accomplished using the Voice Response Unit (VRU).

#### Westchester County:

The Muni Group is the primary contact for municipal officials and agencies in overhead events. Although not typically mobilized for a level 1 event, the Control Center Unit Shift Manager at his/her discretion may instruct the Liaison Officer to activate the group and receive municipal calls at that stage. In this case, Site Safety may also be activated to relieve municipal first responders until repair crews arrive.

The Muni Group receives and processes calls from municipal officials, police and fire departments. Regular feedback on the status of the recovery effort will be provided.



The Municipal Field Liaison Group is established to develop relationships between Con Edison and local municipal officials to better respond to the needs of municipalities during storms. Each municipality may be assigned a Municipal Field Liaison who is responsible to provide direct on-site assistance during severe storms as appropriate. Municipal Field Liaisons will bring a cell phone and air-card equipped laptop when reporting to their assigned municipality and will provide personal assistance in the prioritization of work to ensure public safety and to facilitate restoration of electric service. They will be directed to phone their office coordinator if network connections are not available. When necessary, restoration field crews will be assigned to work directly with the Municipal Field Liaisons to resolve public health and safety matters.

The Municipal Liaison Group, in consultation with the Information Officer, will be responsible for determining the need for the assignment of Municipal Field Liaisons. This will be based on the severity of damage or the threat to public health, safety, and welfare.

Beginning at a level 2C overhead event, a Liaison Officer will dispatch a Liaison to the Fire Training Center in Valhalla (60 Control). If the County activates its Emergency Operations Center (EOC), the Liaison Officer will dispatch the Liaison there.

#### Organization:

The principal role of the Liaison Officer is to assist all governmental/municipal authorities during a storm recovery. The following chart depicts a typical Liaison Officer organization:





# Workflow:

The Muni Group notifies their municipal contacts and the Municipal Field Liaison Group Coordinator and Information Officer that they are in place to provide services throughout the recovery effort. The Liaison Officer or designee will recommend the priority of the Company's dispatch of resources to incidents and communicate with those affected.

The Muni Group supervisor prioritizes municipal tickets by criteria that address public health and safety, the need to relieve municipal resources, traffic flow, and confers with the municipal planner desk in the electric Control Center to dispatch Company forces in response to these situations. The following diagram depicts a typical Liaison Group workflow:



# F. Customer Operations Officer (Customer Call Center / Communications Management Group (CMG) / Customer Outreach)

# Concept of Operation:

The Customer Call Centers receive and respond to customers calls. During an event, customers can call to report service problems to a Customer Service Representative (CSR) or via the IVR in addition to receiving available information on the recovery effort. CSRs use the Desktop Emergency Application to document information about customers' service problems and to generate a trouble ticket. The Desktop Emergency Application has a standardized script utilized by CSRs when handling emergency related customer calls to ensure needed information is obtained consistently. The Desktop Emergency Application also provides CSRs with System Trouble Analysis and Response system (STAR) information which they provide to customers including: area outage information, estimated number of customers affected, status of jobs, and the estimated time of restoration. Customers that call to report service problems



will receive an outbound call made by the automated system with an ETR when the information is available.

Extraordinarily high volumes of customer calls can be rerouted to various locations including Twenty First Century Communication's (TFCC) High Volume Call Answering (HVCA) service. HVCA services allow customer inbound calls to be handled in TFCC's redundant automated Interactive Voice Response (IVR) system.

The overall corporate goal for answering customer calls is 56% of customer service representative calls within 30 seconds during normal business hours. The call center's Event Preparedness Plan defines staffing levels based on the classification of an event. CSP 2-1-3: Processing Emergency Calls includes a large number of pre-defined call flows and messages that are implemented during emergency events. The Communication Management Group (CMG) monitors inbound customer call traffic and related system alarms around the clock. CMG is equipped with several Real-Time-Displays and call routing tools that enable effective and timely call management.

#### Life Sustaining Equipment Customers:

Prior to storms and other distribution system emergencies, CMG will activate an automated outbound notification campaign to Life Sustaining Equipment, Medical Hardship, and Critical Care customers (hospitals and nursing homes). An appropriate message is selected from a library of notification announcements. The messages advise of the approaching condition and recommend to LSE customers that they consider making plans if service is interrupted by going to a hospital, calling 911 or making other arrangements such as using battery back-up. A priority toll free call back number is also supplied.

When an LSE customer is predicted to be out of service, Call Center personnel will attempt to reach the customer by phone. In cases where there is no answer to the primary, alternate or third-party number, and service is still suspected to be out, a second attempt is made within 30 minutes. If there is no answer on the second call, the name address, apartment number (if applicable), and telephone number of the LSE customer is given to the NYC Office of Emergency Management (OEM) or the appropriate police department in Westchester County. These agencies then dispatch emergency personnel to the customers' premise and provide feedback to Customer Operations on the customer's status. If these agencies are unable to dispatch emergency personnel to the customer's premise once a referral is made to the agency, the Company will dispatch internal resources to the customer's premise when personnel can be dispatched without safety risks from continued severe weather or from field conditions associated with storm damage or other environmental impacts.

As with all other customers, as ETR information becomes available, Con Edison will make an automated outbound ETR call to LSE customers who reported an outage. Similarly, when service is restored, an automated service restoration verification call is made to customers who reported an outage. (Note: An annual outreach program designed to raise the awareness of customers and other affected individuals about the LSE program is also conducted.)

In addition to live customer representatives, customers can utilize self-service technologies, including the Company's self-service trouble website and IVR system, and when necessary the contracted IVR system that can:



- Facilitate the handling of extraordinarily high volume of customer contacts
- Provide customers with the option of reporting a trouble condition, checking the status of a trouble previously reported, or transferring to a Con Edison Customer Service Representative
- Broadcast recovery status messages which are updated as conditions change

When dry ice is distributed, (see Central Field Service's Dry Ice Procedure), CSRs receive information about the location of dry ice distribution centers. Customer Outreach may staff the distribution sites to communicate with customers who accept the dry ice. (Customer Outreach dispatch is in accordance with CI 490-2 – Customer Care Emergency Response Plan).

#### Organization:

The following chart depicts a typical Customer Operations organization:



#### Workflow:

The Customer Call Centers receive customer trouble calls. CSRs supported by self-service technology will handle calls. CSRs input customer's information in the Desktop Emergency Application which creates a trouble ticket in STAR. Outage information, when available, is automatically available to the CSRs as well as the self-service systems for communication with customers. When an estimated restoration time is established the customer is notified by an automated outbound call. After jobs are restored, customers who called in to report a service interruption will be automatically called back. The message advises customers that service has been restored but gives them the option to speak with a representative should a problem still exist. A depiction of a typical Customer Call Center workflow follows.





Customers calling Con Edison's emergency telephone number (1-800-75CONED) receive, as soon as it is available, information about the overall service restoration time, job specific restoration times, dry ice distribution sites and location of Customer Outreach Advocates when dispatched to service outage locations, claims eligibility and safety tips. Information about the location of the Customer Operations Customer Information Center van(s) and location of Customer Operations personnel and dry ice distribution will be provided on the Company's internet site, in information provided to CSRs handling calls, to public officials in event-information communications and conference calls, and in press releases. When appropriate during outages, the ACD Auto Attendant will advise customer Outreach Advocates and safety tips. Customer contact during electric emergency events is done in accordance with CSP 2-0-1 – Corporate Event Customer Response Plan, and CSP 2-1-3 – Processing Emergency Calls.

For events where the restoration period is likely to exceed 72 hours, the Customer Operations Officer, in consultation with the Information Officer and Legal Services, will develop an implementation plan to provide information to customers regarding spoilage claims. (See PSC Order in case 06-E-1158 and case 07-E-0742, issued and effective June 19, 2008; and CI-730-2)

# G. Planning Section

# Concept of Operation:

The Planning Section is responsible for managing information, including the collection, evaluation, dissemination and use of information regarding the status of the incident and its resources. The Planning Section Chief reports directly to the Incident Commander and will:

- Obtain a briefing from the Incident Commander
- Assess the situation and provide recommendations for response and contingency analysis



- Review incident goals, objectives, strategies and the accuracy of ETR's
- Establish the Planning organization
- Conduct initial Planning Status Meeting

Once the IC has stated the event objectives, the Planning Section Chief will prepare an eventspecific Incident Action Plan.

#### Organization:

The following chart depicts a typical ICS structure for the Planning Section:



When the Corporate Emergency Response Center (CERC) is activated, the Distribution Engineering Situation Room (DESR) will report to the CERC Planning Section Chief.

# H. Control Center

# Concept of Operation:

The Electric Distribution Control Center is responsible for directing and coordinating switching operations and feeder processing for the restoration of customer outages. For those Control



Centers having operating jurisdiction for the overhead system, the Control Center is responsible for the safe operation of the electrical distribution system during the restoration effort.

The Electric Control Center Shift Manager is responsible for all outage restoration efforts on a daily basis The Shift Manager coordinates with System Operations when the need arises to transfer operating jurisdiction for feeder breakers at 4 kV Unit Substations that are not ordinarily under the Shift Manager's jurisdiction.

Control Center Operations receives information of abnormal system conditions from a number of sources including:

- Virtual Data Acquisition Management System (VDAMS)
- Net Reports
- Network Data Visualization Display (NetDVD)
- Network Trouble Indicator (NTI)
- Heads-Up Display (HUD)
- Contingency Analysis Program (CAP)
- Distribution Information System (DIS)
- Network Remote Monitoring System (RMS)
- Distribution system telemetry (SCADA)
- Troubleshooters in the field
- Trouble Analysis / Damage Assessment Units
- System Trouble Analysis and Response (STAR)
- Outage Management Dashboard

During underground events the Control Center designates a "feeder boss" to oversee feeder processing, make necessary notifications, and maintain contact with Field Operations crews and the District Operator for the safe and timely restoration of feeders. In the event of multiple feeder contingencies beyond design limits, the Control Center Unit Leader in consultation with the Planning Chief and the Incident Commander will review and implement appropriate actions in accordance with EO-4095, "Distribution System Operation Under Contingency Conditions".

# Organization:

Control Center Operations is typically comprised of:

- Control Center Unit Leader
- Shift Manager
- Feeder Control Representative
- Emergency Operating General Supervisor Operating Authority
- Operating Authority Analysis Cell STAR Cell
- Field and Substation Operations Operating General Supervisor
- Environmental Supervisor
- Dispatchers



- Troubleshooters
- Clerical Support

Following is a typical Control Center Operations organization:



# Workflow:

The Electric Control Center Shift Manager is responsible for monitoring and reporting major weather alerts. When a region identifies a potential incident they will notify EOEM who will initiate an inter-regional conference call.<sup>1</sup> If conditions warrant a category 1 storm response or Serious Underground response, the Shift Manager will determine the overall staffing requirements to respond effectively to any possible related damage. Participants on the inter-regional call will:

- Review the forecast
- · Identify the anticipated response category
- Determine the time frame for declaring an alert
- Determine an appropriate time for starting storm mode in STAR

<sup>&</sup>lt;sup>1</sup> The Standard Inter-regional conference call agenda can be found under Corporate Reference Material on the EOEM web page.



- Determine the time frame for convening a pre-event meeting
- Determine inter-regional crew and contractor availability

See section III – Overhead and section V – Underground for more detailed information for Control Center Operations.

# I. Emergency Information Center

The Emergency Information Center (EIC) is generally established for storm levels 2 and 3 and underground serious and full-scale events. The Information, Customer Service, and Liaison Officers and/or staff convene in the EIC to ensure all internal and external communications are consistent and complete.

The Outage Management Dashboard (OMD), residing in the Company Intranet, captures data from STAR and is the prime source of information on storm status. The feeder board and Distribution Information System capture feeder loads, ratings and processing information. These systems are readily available to all areas of the company.

Documentation and dissemination of information not contained in the OMD and other systems is handled by the scribe assigned to the Incident Command Area. This can include environmental and safety information and incident staffing levels.

# J. Trouble Analysis

#### Concept of Operation:

The Trouble Analysis Situation Unit (TAU) determines the impact of the event on the distribution system and issues jobs to Operations and the Control Center. The TAU analyzes overhead trouble, and underground network and non-network feeders, and transformers and produce "next worst case" scenario reports for the Incident Commander and Staff. The TAU interfaces with all other storm recovery organizations to monitor job status to enhance timely repairs. Information is gathered from a variety of sources including:

- Customer information via STAR
- Damage Assessors
- Municipal Liaison Group
- Distribution System Telemetry (SCADA)
- Other field Operations groups

The TAU will operate in cells and will work closely with Damage Assessment. A cell is responsible for the analysis and the coordination of the inspection efforts for a predetermined group of feeders. The severity of the storm damage will determine the number of cells and appropriate staffing levels.



In overhead events the TAU will issue cut in the clear jobs as the highest initial priority to expedite the clearing of downed wires. In order to expedite this process, both overhead crews and Troubleshooters may perform this function. This unit is also responsible for the mobilization of the Customer Count Team (CCT) for secondary and underground network events.

## Organization:

The Trouble Analysis Situation Unit (TAU) is composed of the following functional groups:

- Network and Non-network feeder analysis
- Transformer and 4kV analysis
- Damage Assessment dispatch
- Operations support/job packaging
- Customer Count Team

The following chart depicts a typical Trouble Analysis Situation Unit Organization:



The Customer Count Team (CCT) analyzes secondary system problems, determines customer impact and dispatches Customer Assessment Teams (CAT) to field areas where additional impact information is required. The CCT interfaces with other storm management organizations to monitor job status and ensure timely repairs.



For large scale events, defined as 5,000 metered customers or greater out of service within a specific network, the CCT will develop global estimated time of restoration (ETR) projection using the "Global Estimated Time of Restoration Projections" spreadsheet and other operating tools within twenty-four hours after the trigger of such events. The CCT will also monitor and update regional and localized ETRs as required by the ETR Guidelines.

The Underground Contingency Response Procedures (on the EOEM page of the Emergency Management intranet site) contains a detailed description of the Customer Count Team and Customer Assessment Team.

#### Workflow:

Trouble tickets, damage assessment information and distribution system "SCADA" information is communicated to Trouble Analysis Situation Unit.

The Trouble Analysis Situation Unit:

- Associates related tickets or un-associates un-related tickets that have been autogrouped by STAR
- Issues a request for and receives back information from Damage Assessment
- Verifies the probable cause of each outage
- Issues an appropriate job to the field restoration organizations a safety cut request ("cut in the clear" job) or a permanent restoration job package
- Monitors feeders, networks and load areas
- Analyzes feeder overloads and potential customer impacts
- Prepares and disseminates "next worst case" analysis reports
- Determines accurate customer impacts due to secondary and non-network outages
- Dispatches the Customer Assessment Team when needed

The following chart depicts a typical Trouble Analysis Situation Unit workflow.





# K. Damage Assessment

# Concept of Operations:

The primary purpose of Field Damage Assessment is to identify and provide detailed visual reports of damages to our overhead distribution system as directed by the Trouble Analysis Unit. A standardized procedure for Damage Assessment is provided in the Construction Response and Recovery Guide: Damage Assessment, which can be found on the EOEM page of the Emergency Management intranet site.

See section III – Overhead Plan for a detailed description of the Damage Assessment Unit.

# L. Site Safety

# Concept of Operations:

Site Safety's primary concern is to ensure the safety of the public after a storm has damaged the overhead distribution system. Site Safety Representatives are dispatched to reported wire down locations to restrict access to the area and remain on site until repair crews arrive.

See section III – Overhead Plan for a detailed description of the Site Safety Unit.

# M. Operations

# Concept of Operations:

The Operations Section is responsible to repair damage to the distribution system and restore service to customers. Depending on the incident category, Company resources may be



deployed to assist other operating areas with appropriate field supervision, clerks and planners that will be incorporated into the existing operations. In large storms, a Manager(s) and Site Safety Rep(s) could also be required from the other Electric areas. Non-Company mutual assistance field crews will be managed by an Operations Branch Director and may be assigned a Company Crew Guide.

This plan recognizes public safety as a primary concern. Recognizing that expeditious restoration of customers is the mission, circuits with most customers out and requiring minimal effort (such as cut in clear and or switching) is the most efficient and practical approach in prioritizing work. Insofar as practical, the Control Center, Trouble Analysis, and the Operations Section should prioritize overhead and underground work considering the following conditions:

- Energized wires down / manhole fires
- Clearing downed wires blocking priority roadways (priority to be determined in coordination with local authorities)
- Transmission lines
- Substations
- LSE and critical care customers
- Distribution feeders (main runs)
- Other primary lines and spurs
- Transformers, secondary circuits and services
- Individual services

Underground feeder processing is managed under the direction of the Control Center Unit.

#### Organization:

Operations will operate under one of two organizational structures:

When mobilized for overhead events, Operations consists of Overhead construction crews, Ladder Line crews for house service work, the NYC Downed Tree Task force if activated, and Line Clearance crews assigned to either the regional Control Center or the Overhead Branch Director.

For underground events, the Underground Operations Branch Director is responsible for the: Cable & Splicing, Installation & Apparatus, 4kV Maintenance and Environmental Operations. The Construction Management Branch is responsible for oversight of field excavation work and ensuring either hand digging or curtailment of excavation near affected feeders when required.



The following chart depicts a typical ICS structure for Electric Construction within the Operations Section.



# Work Flow:

The Operations Section is responsible to promptly repair storm-related damage to the overhead distribution system and to restore service to customers. The Operations Section follows the direction of Control Center Operations for the restoration of underground feeders. When a catastrophic event with large scale outages occur, the company streamlines the customer restoration process by simplifying the certification process. An electric certificate is required for addition, alteration, installation, maintenance, reconnection, replacement or repair of any electric wires and wiring apparatus and other appliances used or to be used for the transmission of electricity for light, heat and or power. The company streamlined the certification and restoration process as follows:

- Have a licensed electrician certify that the customers system is safe
- Customers electrician files certification with an electric inspection company authorized by the customer's municipality in Westchester and by Con Edison
- Con Edison schedules a turn-on



The Overhead Emergency Response Procedure and Underground Contingency Heat Event Response Procedures (found on the EOEM page of the Emergency Management intranet site) contain more detailed descriptions of the Operations Section.

# N. Operational Philosophy

a) Energy systems will operate to maintain essential services until continued service is imminently threatened by storm and system conditions. When it is apparent that continued operation will result in significant damage to facilities and equipment and / or potentially compromise the safety of the public or our employees, actions will be taken to remove those facilities from service.

b) When the Company determines it is no longer safe to maintain operating personnel at field locations due to wind or storm surge, the personnel will be evacuated.

c) Generally, transmission stations shall not be de-energized on a pre-emptive basis.

d) Overhead systems shall be operated throughout the storm, unless shutdown occurs as a result of de-energizing a substation supply for the reasons indicated above.

e) Given a forecast of gale force winds, the Company may elect to place its overhead distribution system into radial mode. Operating in this mode will contribute to public safety, limit damage to overhead and URD equipment and provide for a more expeditious restoration of the system.

If the forecast calls for extensive flooding, the Company may elect to de-energize portions of its underground distribution system. The decision shall be made by the Senior System Operator in consultation with the Regional Vice President or Incident Commander and the Chief Distribution Engineer.

The operational goal will be to preemptively de-energize equipment that is at risk of failing catastrophically based on the forecasted flooding. The preemptive action is designed to protect both Company and customer equipment. The company will evaluate if the number of feeders that are required to be removed from service to achieve this goal places any particular network in jeopardy of failing, then that network will be shutdown preemptively as well.

When feasible, the company will coordinate with local, city and state emergency management personnel. Furthermore, the Company will communicate the planned shutdown with those customers that will be impacted through mass media outlets.

Following a partial or full system shutdown, and after an evaluation of the transmission and distribution system, the Senior System Operator in consultation with the Regional Vice President or Incident Commander and the Chief Distribution Engineer shall decide on the timetable to re-energize the affected areas.



Prior to re-energizing the Company will inspect and make safe any known company equipment that is damaged and cannot be safely re-energized such as below grade 460 volt network compartments located in flood areas. The company will coordinate with governmental authorities having jurisdiction regarding the isolation of damaged buildings and /or customer electrical equipment. Consideration will be given to customer requests to isolate specific buildings prior to restoration of the distribution system.

f) All substations will be operated in accordance with established procedures based on actual conditions.

g) Where installed, substation flood level indicators and / or on-site reports will be communicated to System Operation for use in determining the need for a station shutdown and when to begin restoration.

h) If, due to the predicted severity of the coastal storm, planned outages are anticipated, the Liaison Officer will notify the New York City Office of Emergency Management (NYCOEM) and/or the Westchester Department of Emergency Services. Additionally, the Information Officer shall be informed of the Company's intent and ensure that the proper public message is coordinated through the NYCOEM's Joint Information Center (JIC) and through Westchester County's Emergency Operations Center (EOC).

i) Customer Operations, as part of their normal procedures for major storm events, will reach out to LSE, Medical Hardship, and Critical Care (nursing homes and hospitals) customers.

j) Energy Services, as part of their normal procedures for major storm events, will reach out to critical customers.

k) Pre-storm activities will focus on advising customers of the potential impact of the storm on the Company's energy systems, the possible shutdown of selected systems, and an overview of restoration operations. Customers will also be informed of how to contact the Company to report power problems, and what to do around downed power lines.

I) Human Resources will initiate and communicate policy to ensure that employees are released and required to return to work according to their role in the storm plan and consistent with the principles set forth in this document.

m) The Corporate logistic operation will be supported by Central Field Services, Purchasing, and Facilities. Representatives from each of these areas will maintain the necessary staffing levels at CERC and the LOCC throughout the event and provide logistics support for the Company prior to, during, and after the storm. The LOCC may be relocated to remain operational.

n) The Logistics Section has developed site-specific workout location evacuation plans for those locations deemed at risk due to storm surge or flooding. These plans provide instruction as to what measures need to be employed to safeguard storm riders, materials, supplies,



vehicles, equipment, fuel stations, storerooms, and garages. For "at risk" workout locations, nearby evacuation sites have been selected for the safeguarding of vehicles and equipment and sheltering storm riders. Vehicles and equipment to be moved have been identified. Logistics will coordinate this movement with the various operating groups who will load the necessary equipment into vehicles and then drive the vehicles to the designated evacuation site under the direction of CFS site managers. Once vehicle and equipment moves have been completed, any remaining storm riders can seek shelter at the designated NYC or Westchester County shelters, or other designated Company facilities. Once the CERC is established, all coordination will flow through the CERC Planning Section. The Logistics Section will continue to maintain normal services until continued operation poses safety risk or adversely impacts the ability to respond to post-storm recovery / restoration efforts.

o) Corporate EH&S will work closely with the operating groups to ensure their EH&S staffs are actively engaged in pre-event planning and implementation. EH&S will work closely with the applicable regulatory agencies to keep them advised and seek their support of any needed emergency relief or regulatory discretion. In coordination with local organizations, EH&S will work to support the continued protection of employees and the public while minimizing any adverse impacts on the environment. EH&S will maintain normal services, including operation of the ChemLab, until continued operation poses a safety risk or adversely impacts the ability to respond to post-storm recovery / restoration efforts.

p) Security will strategically integrate security protocols to protect the physical, fiscal, and personnel assets of the Company without adversely affecting the Company's emergency response operation.

q) Information Resources (IR) will maintain essential business applications and communications services until failure or their continued operations poses a personnel safety risk or adversely impacts the ability to restore service.

r) Based upon the forecasted storm category, IR may declare a disaster and initiate the process of migrating mainframe operations, located at 4 Irving Place, to SunGard facilities.

For more detailed instructions see the respective Corporate Coastal Storm Plan for each department and/or organization.

# O. Logistics Section

# Concept of Operations:

The Logistics Section provides the logistical and field support required to enable Operations personnel to concentrate on restoration of service.

Under the ICS/NIMS structure the Logistics Section is comprised of four major functional units; Logistics Operations Control Center (LOCC), Central Field Services (CFS), Facilities (FAC) and Purchasing (PUR).



Routine and Upgraded incidents/events are managed by the locally affected region coordinating with the three components of logistics (CFS, FAC and PUR) as required. The corporate logistics organization will be established to augment local/regional organizations for Serious and Full Scale incidents/events to effectively support the restoration efforts. For all classifications of incidents/events CFS, PUR and FAC will conduct their respective normal responsibilities as well as those additional responsibilities noted in this and other specific emergency plans (e.g. Coastal Storm Plan, Relocation Plans, Business Continuity Plans, etc.).

During Serious and Full Scale incidents/events the LOCC is staffed and is responsible for managing the overall logistical response effort and activities reporting directly to the Logistics Section Chief (LSC) at the CERC. During non-CERC incidents/events the LSC is located at the LOCC and coordinates support requirements with the affected operating region. The CFS Emergency Operations Section manages and staffs the LOCC which is located in the Astoria Complex in Queens.

The Logistics Section will ensure emergency logistical support, control and coordination is accomplished by augmenting operating organizations. The following are activities and functions managed and coordinated by logistics:

- Maintenance of company facilities during an incident
- Coordination of food/catering for crews when directed, including the use of company facility cafeterias when required to support the incident
- Provision of materials such as barriers, fences, guards, checkpoints, etc. to ensure security of company facilities and assets
- Verification and maintenance of inventory of pre-defined emergency restoration tools and supplies, incident kits, cable coils, poles and transformers
- Staff for regional and central storerooms and garages as per appropriate storm matrix or special request
- Assignment of local material coordinators for category 2C and above incidents
- Periodic review of inventory or as needed to schedule additional vendor and field deliveries
- Monitoring Materials Management System (MMS) to order or re-order stock materials as required
- Purchase of non-stock material and service requirements through an Emergency Buyer
- Establish administration and mobilization of vendor contracts for recovery related supplies and services (examples include on site fueling for diesel trucks, bus rental, portable sanitary facilities, and janitorial services)
- Pre-load, stage, and staff Mobile Supply Units (MSU) at designated sites units will contain required material for use by repair crews
- Development and managing transportation plans where required
- Organize trucking operations to move materials, supplies and provide courier services
- Dispatch and manage the Mobile Command Center (MCC) vehicles when required



- Coordination and deployment of mobile generators and other specialized equipment in accordance with Corporate Instructions 330-1: Use of Mobile Generators and Associated Equipment and 330-8: Mobile Electric Generators
- Oversee the establishment, operation, maintenance and demobilization of assembly and staging areas
- Arrange crew lodging, crew transportation, and vendor services for maintenance of dormitory style lodging facility if utilized

During emergency restorations that are projected to last more than 48 hours, the Incident Commander, in consultation with his Incident Command and General Staff, will determine the location(s) for delivery and amount of dry ice that should be obtained for distribution to customers. (Approximately one 5 to 7 pound block of ice per customer affected). The Logistics section will coordinate the purchase and delivery of the dry ice. (See the CFS Dry Ice Procedure).

# Organization:

The following chart depicts a typical Logistics Section in ICS:



#### Workflow:

Upon notification that an emergency response has been declared, the Logistics Section will mobilize to the level based upon the declaring area's stated requirements. All logistical support, material supply, and transportation-related needs will be coordinated through the Logistics Section Chief. Additional logistical personnel will be assigned staffing positions based upon the declared incident level by both the regional electric organization and the corporate logistics organization. All facilities-related needs will be coordinated through the



local facilities management group; during serious and full-scale incidents all facility-related needs will be coordinated through the Facilities Unit Leader at the CERC/LOCC.

Logistical planning for de-escalation/de-mobilization will begin at the start of the emergency response effort. Logistics may be de-mobilized when:

- All resources are accounted for and returned to their original location/organization (company or vendor)
- All logistics personnel are returned to their normal job assignments, and
- Lessons learned have been documented and submitted to Emergency Management.

# P. Administration/Finance Section

#### Concept of Operations:

The Administration/Finance Section has overall responsibility for managing all financial and administrative functions such that the other sections are not burdened by these functions. Logistical, geographical, and technical assistance is provided to maximize crew productivity.

#### Organization:

The following chart depicts a typical Administration/Finance Section in ICS:



#### Workflow:

The Administration/Finance section provides administrative support for the overall emergency response. The Time/Cost Unit is mobilized in category 2 and 3 storms and serious underground events. Besides tracking costs of the emergency response effort, this Unit is primarily responsible to ensure adequate petty cash funds and/or procurement cards are available and that they are distributed properly.

The Mutual Assistance Unit is mobilized in category 2 and 3 events when crews from other service areas or other utilities are required to augment the restoration effort. The Mutual


Assistance Unit Leader will work closely with the Operations Branch Director (Mutual Assistance) and assist with any administrative requirements related to mutual assistance.

### The Mutual Assistance Unit:

- Ensures arriving crews are directed to appropriate assembly or staging areas and roster information is accurate
- Distributes updated roster information to Logistics (see NYMAG Crew Transfer Form in the "Deployment" folder for standard roster information)
- Issues petty cash and p-cards to Crew Leaders / Crew Guides
- Keeps Admin/Finance Section Chief and Logistics Section Chief informed of mutual assistance crew status
- Ensures Crew Leaders and Crew Guides know where lodging and meal arrangements are available for mutual assistance crews

## **Q. Mutual Assistance Process Overview**

The Mutual Assistance Unit may be activated when the Incident Command and General Staff deem it appropriate to request mutual assistance from other utilities for Overhead or Underground events. This is typically required for Full Scale incidents but may be utilized during lower level events.

The Planning Section Chief, in consultation with the Operations Section Chief and Incident Commander, determine the number and type of mutual assistance crews and equipment required. The Incident Commander or designee will alert the Director, Electric Operations Emergency Management (EOEM), when mutual assistance crews are required. EOEM will serve as the primary contact for the Edison Electric Institute (EEI) Mutual Assistance Program and will initiate a Regional Mutual Assistance Group conference call to determine availability of crews and obtain commitments. The EEI Mutual Assistance Agreement and Guidelines and other forms and instructions can be found on the EOEM page of the Emergency Management intranet site. Additional mutual assistance acquisition procedures can also be found here.

Mutual Assistance crews are deployed, monitored, reassigned and released according to the same process as company and contractor crews and the same process whether under a centralized or de-centralized command. See Section III. Operations – Workflow for a description of company and contractor crew.

# R. Distribution Engineering Situation Room (DESR)

The Distribution Engineering Situation Room will mobilize per established procedures (see EOP 5035 - Distribution Engineering Situation Room Operating Guide) and in periods of system emergencies and/or adverse weather conditions and will house the incident or event Regional Situation Unit and Resource Unit. Should a Regional Electric Control Center declare a local Condition Yellow/Alert or Red/Emergency, the Incident Commander or any Section Chief will notify the office of the Chief Distribution Engineer. The region will also notify EOEM staff to initiate and lead an inter-regional conference call if necessary.

When the DESR is mobilized, it will be responsible for the following:



- Conducting situation briefings
- Collecting, processing, and organizing overall system status
  - o Monitoring distribution system conditions
  - Monitoring overall system status
- Communicating with the regional Emergency Management Centers (EMCs) and CIG as appropriate
- Communicating system status to company executives as required
- Communicating system status and any special requirements of the Company to Emergency Management Operations Services so they may inform NYCOEM, NYPD, or company NYCOEM liaison
- Communicating system status to PSC staff
- Providing system status and assistance to Central Public Affairs and Central Customer Operations
- If applicable, calling CIG to initiate the PSC Outage Notification Penalty Mechanism.
- Communicating with Distribution Engineering staff located at OEM and NYPD Emergency Operations Centers, if activated
- Issuing regular status reports
- Coordinating and assembling report information
- Review, establish priorities and approve all requests for mobile generators
- EOP 5023 Communication Guidelines in the Event of an Electric Emergency provides guidelines and assigns responsibility for communications when a serious, non-storm emergency occurs or is imminent

The Distribution Engineering Situation Room is a central location that can:

- Provide a place for Distribution Engineering's Technical Specialists to provide engineering support and technical expertise and to communicate the results of their technical analysis
- Provide information required by Media Relations for news releases
- Assist the regional operating areas in formulating appropriate corrective actions, when required
- Provide system updates and reports on system conditions
- When required, call CIG to initiate the PSC Outage Notification Penalty Mechanism

### **DESR** Activation Criteria:

The office of the Chief Distribution Engineer will send an email notification to a public distribution list when the DESR will be activated for any of the following conditions:



- Heat related events as defined in EOP 5025, "Guidelines for Summer Operation of Distribution System".
- When the National Weather Service predicts within the next 12 hours a Heat Index (HI) equal to, or greater than 103 degrees F (equal to an average wet/dry temperature of 86 degrees F) for more than three hours per day for two consecutive days, or for two consecutive days CECONY predicted daily peak system load exceeds 95% of the maximum system daily peak load estimate for that year the function of the DESR will be transitioned to the Planning Section in the CERC.



### III. Overhead Plan

### A. Process Description

The provision for this plan as required by Part 105 of the NYS Public Service Law is set forth in Customer Service Procedure 5-0-2 Electric Operations - Overhead System Emergency Plan. The overhead emergency response process begins with an evaluation of system conditions that trigger an alert. Criteria may include weather forecasts, number of customers projected to be out of service, estimated number of jobs, estimated recovery time subsequent to a storm's end, and Public Service Commission established storm classifications. A Storm Classification Matrix is used to determine the level of emergency response, mobilization of the Emergency Response Organization (ERO) and associated human resource requirements including mutual assistance support. A typical Storm Classification Matrix can be found in Section III.C of this document. Region-specific matrices along with human resource requirements can be found in the Electric Operations Overhead Emergency Response Procedure.

The Electric Control Center Shift Manager or designee monitors weather forecasts.

Trouble calls from customers are received and trouble tickets are generated and processed for analysis. Trouble Analysis requests damage assessment of portions of feeders and groups tickets to develop jobs for Operations crews. Operations Branch Directors dispatch jobs to the appropriate restoration crew. Downed and/or burning wires will be cut in the clear when required. The mission of safe and rapid restoration of service may be accomplished via temporary measures where possible.

The scope and time associated with restoration work is determined by many factors including: crewing, extent and type of damage, and weather conditions. Jobs continue to be dispatched to Operations while logistical support teams assist restoration crews. Repairs to the distribution system are made and associated restoration actions are documented in the System Trouble Analysis and Response (STAR) outage management system.

In anticipation of and in response to a storm, even if the Company is not expected to be affected by the associated storm, at least one Company representative will participate in all mutual assistance (NYMAG, NEMAG, and MAMA) conference calls to which we are invited.<sup>2</sup>

When the extent of damage to the transmission and distribution systems reach catastrophic levels, the Corporate Coastal Storm Plan (CCSP) will be implemented. Under the CCSP, conventional storm restoration efforts may no longer apply and resources may be directed toward rebuilding the transmission and distribution systems from the source of supply.

Restoration progress will be managed through updates to STAR and the use of outage management reporting systems. If these systems are unavailable due to the nature of the calamity, back-up manual processes will be used and periodic conference calls will be scheduled to manage restoration progress. Ordinarily however, summary information on the overall recovery effort will be available on the intranet and published for both internal and external parties; these include customers, the media, municipal officials, and the Public

<sup>&</sup>lt;sup>2</sup> As required by DPS Staff's Report on Utility Performance in the October and December 2008 Winter Storms affecting National Grid, NYSEG and Central Hudson.



Service Commission. External information will be communicated as outlined in Part II.D, E and F of this plan.

Prior to the end of a storm (and up to 12 hours after it ends), job specific estimated times of restoration are provided as restoration crews are dispatched. In order to ensure compliance with the ETR Guidelines, a global ETR<sup>3</sup> will be issued as soon as possible, but no later than 12 hours after the end of storms where the restoration period is expected to last 48 hours or less. For restoration periods greater than 2 and up to 5 days, a global ETR will be issued as soon as possible but no later than 36 hours of the end of the storm. For restoration periods that are expected to exceed 5 days a Global ETR will be issued as soon as possible but not later than 48 hours after the end of the storm. The Incident Commander is responsible for adherence to the ETR Guidelines.

Within 24 hours of the end of the storm, a broad preliminary assessment will be made and more detailed information will be obtained within 48 hours when necessary. Concurrently, a look-ahead process is utilized to issue individual ETRs for all remaining unassigned jobs. In addition to direct communication with Con Edison representatives via phone or field contact, recorded voice response unit messages offer general as well as customer-specific information. The company's external website will also provide customer estimated times of restoration.

# **B.** Control Center

## Concept of Operation:

The Electric Control Center is responsible for directing and coordinating switching operations and feeder processing. Having operating jurisdiction for the overhead system, the Control Center is responsible for the safe operation of the electrical distribution system during the restoration effort.

In a category 1 storm, all restoration efforts are directed and managed by the Control Center. Control Center personnel; possibly augmented by engineering technicians, municipal representatives and damage assessors; analyze abnormal system conditions. Troubleshooters are dispatched on a priority basis to clear downed wires and perform quick restoration work. Larger jobs involving the installation of poles, transformers, switches and wire are normally referred to Overhead Construction for follow-up. Control Center personnel provide all statistics related to restoration efforts. The Shift Manager is responsible for staffing a category 1 storm response.

In the event mobilization is requested for a category 2 or 3 storm, Control Center Operations focus primarily on public safety, clearing downed wires and restoring large blocks of customers via switching operations. The Shift Manager may request operational jurisdiction of feeder breakers at 4 kV Unit substations from System Operations as described in CSP 5-2-4: Delegation of Authority by System Operations to Electric Operations Customer Service.

Control Center Operations will work closely with Trouble Analysis to prioritize response to specific system conditions, such as:

<sup>&</sup>lt;sup>3</sup> Global, Regional and Local ETRs are defined as restoration of service to at least 90% of customers impacted. 37 of 78



- Unidentified wires down and burning
- Large area outages with unknown causes

During the initial phase of a category 2 or 3 storm, Troubleshooters will be dispatched on a priority basis to address public safety, clear downed wires and perform rapid restoration work via switching. Overhead crews will support the Control Center to perform cut-in-the-clear operations, primarily in Westchester for municipal tickets and as per the NYC Downed Tree Protocol if so activated. The Electric Control Center will direct switching activities on the distribution system, as required. When Troubleshooters or Overhead crews complete each cut-in-the-clear job, they must report to the Control Room the extent of the damage on the job.

All personnel will comply with the "General Instructions Governing Work on System Electrical Equipment" which provides guidelines to ensure safety to personnel, continuity of service to customers and the prevention of damage to equipment and EO 4095 – Distribution System Operation under Contingency Conditions.

Control Center Operations will maintain a gap list (sections of wires cut-in-the-clear) that will include gap information provided by Operations crews. Associated STAR tickets will be updated to include a description of the work performed, partial restoration counts if any and the restoration work remaining. They will then be referred to Operations to restore the remaining outage as prioritized by the Planning Section for the event.

#### Organization:

Control Center Operations will operate under two general organizational structures. In the first structure, for a category 1 storm, Control Center Operations is responsible for managing all aspects of storm response. In the second structure, for a category 2 or 3 storm, Control Center Operations directs a workforce to cut and clear downed wires and prioritizes the effort to make areas safe for the public. Operating Authority Analysis cells will be opened to handle the initial influx of work and those jobs not requiring additional information from the field. (These will be referred to the Trouble Analysis Situation Unit.) This effort will be aligned with the need for quick restoration by restoring large numbers of customers via switching.

#### Workflow:

The Electric Control Center Shift Manager is responsible for monitoring and reporting major weather alerts. The Shift Manager discusses weather alerts with the Control Center Department Manager who, if a level 2 or higher event is imminent, will notify EOEM so they can initiate an inter-regional conference call. If conditions warrant a category 1 storm response or Serious Event Underground response, the Shift Manager will determine the overall staffing requirements to respond effectively to related damage. On the inter-regional call the participants will:

- Review the forecast
- Identify the anticipated response category
- Determine the time frame for declaring an alert
- Determine an appropriate time for starting storm mode
- Determine the time frame for convening a pre-event meeting



- Determine inter-regional crew and contractor availability
- Evaluate the need for dry Ice

During normal workdays specific individuals will be notified via phone calls that they are expected to report for a level 1 storm response. In the event of an unanticipated level 1 storm when personnel are required to be called in from home, the Electric Control Center Shift Manager will notify the weekly Duty Incident Commander. The Duty Incident Commander will, in turn, initiate the telephone pyramid of duty Supervisors with assistance from the Electric Control Center Shift Manager.

In the event of a level 2 or 3 storms, the Electric Control Center Shift Manager or his designee, will put current shift personnel on alert that a major storm is approaching and all Control Center employees will be required for duty. Employees with scheduled days off will be called and notified of the time they are expected to report to work. In the event key positions cannot be filled due to vacation or sickness, alternates will be notified.

At the outset of a storm, the Shift Manager coordinates with System Operations to transfer operating jurisdiction for all feeder breakers at 4 kV Unit Substations where appropriate. This is done in accordance with CSP 5-2-4, "Delegation of Authority by System Operation to the Regional Distribution Control Center".

The Field and Substation Operations Supervisor or a designated Control Center Operator will be responsible for switching 4 kV feeder breakers to support the overall restoration effort. No 4 kV feeder breaker will be closed until the designated Control Center Operator has verified that all personnel on that feeder circuit are clear. Control Center Operators will document all switching operations.

For a level 3 storm the Electric Control Center may divide the distribution system by feeder or group of feeders. When an operation involves a piece of equipment common to several distribution system subdivisions, both subdivision Operating Authorities will communicate with each other with only one assuming authority for the change in status of the common piece of equipment.

In the event of a system shutdown, coupled with a major storm, System Operations will coordinate with the Electric Control Center to establish restoration procedures in accordance with CSP 5-0-1 - System Restoration Plan.

#### Switching Function and Process:

All crews will sign on and discuss operations with the appropriate Control Center Operating Authority obtaining permission before performing switching or wire cuts on any feeder. These crews must receive approval from the Operating Authority before changing the status of any switching device.

In cases when non-company overhead crews do not perform required switching, and when not accompanied by a Company overhead crew or qualified switching authority, the Control Center Troubleshooter Dispatcher will dispatch a Troubleshooter to make the necessary switch moves through coordination with the appropriate Control Center Operating Authority.







#### Storm Category 1:

In the event of a category 1 storm, the Electric Control Center Shift Manager is responsible for maintaining information related to the latest weather conditions and specific storm statistics. Should weather conditions change and projected storm damage exceed original estimates; the Shift Manager will notify the Control Center Department Manager, the Emergency Duty Incident Commander, the Electric General Managers, and the Director, Electric Operations Emergency Management. Collectively a decision will be made to call in additional resources or consider initiating a category 2 or 3 storm response.

The Control Center will place STAR in storm mode, receive data from distribution system telemetry sources, municipal calls, and STAR tickets. STAR receives some telemetry information via wireless network. The information from monitoring systems that are not linked to OMS is manually entered as it is received. The Control Center Operating Authority will review incoming data associated with known feeders out of service and prioritize response based on municipal reports of wires down and large customer outages.



Trouble Analysis support, working in conjunction with Control Center Operating Authorities, will analyze the STAR models, grouping individual tickets to system jobs as appropriate.

Any damage causing environmental concerns will be discussed with the Shift Manager and the Duty Environmental Desk Senior Specialist. The Duty Environmental Desk Senior Specialist will ensure that response and agency notifications are expedited. They will also track the progress of the clean-up throughout the storm.

Overhead construction crews may be deployed and directed by Control Center personnel as needed to handle individual service problems or large construction jobs to facilitate outage restoration. This practice is consistent with normal daily operations. Such crew deployment is meant to augment Control Center staffing. Should storm damage greatly exceed expected levels, support staff will be deployed to handle the increased workload and construction crews will be directed by the Operations Section management.

All recovery information in a category 1 storm is maintained by the Electric Control Center Shift Manager and provided to the Central Information Group, municipal and district contacts, the Westchester County and New York City Offices of Emergency Management and appropriate municipal officials as needed.

#### Storm Category 2 and 3:

The Control Center will clear downed wires by cutting the wire at a pole, or switching to deenergize the wire. Site Safety will dispatch representatives to reports of wires down. Trouble Analysis will request Damage Assessment as needed. Jobs with known high customer counts, as indicated by SCADA and STAR, may be referred by Control Center representatives to themselves for fielding and possible switching and cutting in the clear to quickly restore as many customers as possible. When this is done, the troubleshooters must report back to the Control Center all damage, gaps and restoration work remaining. The Control Center will manage the following ticket types:

- Municipal tickets
- High priority wires down
- Environmental issues

All restoration crews will perform switching operations through the Control Center. In the judgment of the Control Center Operating Authority, if quick restoration of customers is possible via switching after wires down have been cleared, the crew will be assigned to restore outages prior to receiving the next wires down job. In the cases where installation of new wire, poles or transformers is required, the job will be referred to the Operations Section to restore the outage.

Control Center Dispatchers will enter all STAR job status updates received from Troubleshooters, including damage information and the type of work completed. As jobs are completed, a customer list for automatic Voice Response Unit callback will be produced.

Any damage causing environmental concerns will be discussed with the Shift Manager and the Duty Environmental Supervisor. The Duty Environmental Supervisors will ensure that response and notifications are expedited. If required, an Incident Commander will be assigned to coordinate field activities related to the clean-up. Company forces or an environmental



contractor will be dispatched to provide full clean up. Inquiries received by the Municipal Contact Group will be directed to the Duty Environmental Supervisors.

### **Restoration Information and Statistics**

The responsibility of maintaining and communicating recovery information during category 2 and 3 storms resides with the regional Incident Commander and General Staff unless the DESR is activated.

# C. Trouble Analysis Situation Unit (TAU)

#### Concept of Operations:

The Trouble Analysis Situation Unit is established to determine the most likely cause of primary and secondary outages and refer job information to the Operations section. Trouble Analysis interfaces with all other storm recovery organizations to monitor job status and ensure timely repairs.

Trouble Analysis receives information from a variety of sources including:

- Customer information via STAR
- Damage Assessors
- Municipal/OEM Group
- Municipal Liaison Group
- Distribution System Telemetry (SCADA)

### Organization:

During overhead events, the Trouble Analysis and Damage Assessment Situation Units will work together throughout the recovery event. The TAU will typically consist of four functional units.

- One will co-locate with the Damage Assessment Unit to help coordinate the inspection efforts. The unit will include Analysis Technicians and Damage Assessment Coordinators
- One will analyze incoming trouble calls, particularly single reports of no lights, to determine if there need be any manual overrides to the STAR grouping function and modify mapping data
- One will be responsible for the determination of and input of localized ETRs and job specific look-ahead ETRs
- One will provide technical support to the Operations section

### Workflow

Trouble Analysis will divide the work along geographic / feeder boundaries. Analysis Technicians utilize the STAR work agenda and map viewer to assess the potential trouble and will request dispatch of field damage assessment for visual confirmation of the probable cause of the outage. When the information is received from the Damage Assessor (they may speak directly to the Assessor for further clarification), the Analysis Technician will incorporate all



information received, ensure the information is input on the job and refer the job to the appropriate field repair crew. The TAU can refer to the Electric Emergency Management Guide: Overhead Trouble Analysis when responding to overhead emergencies.

## D. Damage Assessment

#### **Concept of Operations**

Field Damage Assessment provides detailed visual reports of damage to our overhead distribution system. Damage reports are entered into STAR and used by the Trouble Analysis Situation Unit to establish jobs for Operations. Troubleshooters, construction crews, supervisors and other responding employees, as well as designated Damage Assessors will provide broad preliminary assessments of damages within 24 hours of the end of a storm. Damage Assessors will provide more detailed information within 48 hours of the end of the storm, as needed. Field Damage Assessment will be conducted in accordance with the Construction Response and Recovery Guide: Damage Assessment.

#### **Organization**

The Damage Assessment Unit is primarily mobilized when a storm classification level 2 or 3 is declared. Damage Assessment forces will be mobilized via telephone pyramid from any of the various workout locations. A Damage Assessment Unit Leader, Coordinators, Administrative Support Staff and Damage Assessors (as well as a Damage Assessment Logistics Coordinator responsible for equipping and directing Assessors at remote assembly locations) will staff the locations utilized.

The following chart depicts a typical Field Damage Assessment Situation Unit and its relationship to the Trouble Analysis.





### Workflow:

Damage Assessors respond to jobs at the request of Trouble Analysis to assess associated damage conditions, and then report these conditions via ticket update. Assessors are assigned "storm kits" which contain all material and equipment necessary to survey damages and secure locations for safe and efficient restoration.

Damage Assessment Coordinators maintain communications with field personnel. They direct Assessors to potential damage locations, receive and record field-verified information, and capture this information in STAR so it can be integrated with damage information from other sources in order to facilitate appropriate deployment of crews and development of ETRs. Troubleshooters, construction crews, supervisors and other responding employees, as well as designated Damage Assessors report their findings which are then recorded in STAR.

Damage Assessment may be called upon to coordinate with Operations as part of the Downed Tree Task force if activated to assess the extent of tree jobs, to verify service wires down or to further assess jobs already referred to Operations.

Following is a depiction of a typical Damage Assessment Situation Unit workflow:







# E. Site Safety

### Concept of Operations:

The Site Safety Unit addresses the safety of the public by restricting access and standing by locations with reports of downed wires.

### Organization:

The Site Safety Unit is primarily mobilized when a storm classification level 2 or 3 is declared. Site Safety forces will be mobilized from any of the various workout locations. Site Safety Representatives and Site Safety Supervisors along with clerical personnel as appropriate will staff the locations.

#### Workflow:

Site Safety representatives respond to reports of "wires down". Site Safety Representatives will be dispatched to wire down locations and remain there until the appropriate crews arrive to either cut clear and make safe or restore, ensuring the safety of the public and relieving police and/or fire department crews if necessary.

The following chart depicts a typical Site Safety Unit workflow:





# F. Operations

### Concept of Operations:

The Operations Section is responsible to repair damage to the distribution system and restore service to customers in accordance with restoration priorities. Organization –

Operations will operate under one of two organizational structures:

- When mobilized for a category 1 storm, Operations consists of Overhead construction crews and Line Clearance crews assigned to the regional Control Center
- For category 2 and 3 events, Operations may consist of Overhead Construction crews, Ladder Line crews, the NYC Downed Tree Task Force, and Line Clearance crews being managed from local service centers
- If the Downed tree Task Force is activated to facilitate clearing blocked roadways Damage Assessors may be utilized to pre-field jobs.

#### Work Flow:

Initially, overhead restoration crews will perform cut-in-the-clear work and effect quick restoration whenever possible. Mutual assistance crews will be assigned construction work as they arrive, while Company forces address public safety concerns. In Westchester, dedicated crews are assigned to rapidly respond to municipal trouble calls and, when requested, municipalities where a Liaison is stationed. As cut-in the-clear work and municipal calls diminish, crews move to more labor-intensive construction work. Once all customers are restored to service, permanent repairs to the distribution system will be made. (See EOEM Guides in the Acquisition folder: Operations OH Mutual Assistance Unit for Out of Company Crews).

Operations Branch Directors (typically Field Operations Planners) determine the resources needed to repair storm related damage by reviewing each job package. Jobs requiring tree-trimming or removal work are referred to the Line Clearance group. House service jobs are directly referred to the Ladder Line group.

Each group dispatches jobs to field crews via radio or cell phone. As restoration crews are dispatched, ETRs are assigned to those jobs that do not already have an ETR. Recording of accurate dispatch times is emphasized with the dispatchers. Jobs will be dispatched based upon the job priority, crew location, crew capability and workload.

Company-assigned escorts, also known as Crew Guides, will be teamed with non-company crews to minimize travel time between jobs, help facilitate procurement of supplies, handle administrative matters, and work to maximize field crew productivity throughout the storm.

Dispatchers will work closely with Crew Guides and crews via cellular phone. Jobs will be dispatched based upon the job priority, crew location, crew capability, and workload.

Line Clearance crews will be used to clear trees on wires or trees obstructing overhead crews from completing work necessary to restore customers. These are contracted crews.



Crews are assigned jobs and are prompted for feedback on job progress including estimated time of restoration. When appropriate, temporary repairs are made to expedite restoration. Permanent repairs are deferred, where practical, until all customers have been restored. Job progress, changes in estimated time of restoration, work accomplished, and work remaining for permanent repairs will be entered to STAR.

Once they have completed their primary functions, Trouble Analysis and Damage Assessment personnel are made available to Operations to assist assessing, analyzing, and prioritizing work.

Trouble Analysis / Control **Customer Assistance** Center Center Updates Updates (via ECS/ STAR) Jobs Operations Material Updates Updates Updates Updates reas Poles & other select jobs Logistics Phone Service Tree Company Defined Major Jobs Jobs Jobs Material Ladder Line Line Clearance OH Construction Crews Crews (Tree) Crews

The following chart depicts a typical Operations workflow:

# G. Emergency Classification

The Storm Classification Matrix is an important tool used by the Electric General Managers, the Director, Electric Operations Emergency Management, and the Chief Distribution Engineer to determine the storm recovery plan to be followed by all Overhead Emergency Response participants.



The matrix relates forecasted weather conditions with other parameters such as:

- Estimated recovery time subsequent to the end of a storm
- Estimated number of anticipated jobs
- Public Service Commission restoration categories
- Other variables such as foliage condition or ground saturation

# H. Typical Overhead Storm Emergency Classification Matrix

Storm Category	Weather Conditions	# Customers Projected Out of Service		
UPGRADED 1 Internal Regional Resources	<ul> <li>Isolated heavy thunderstorms, rain and moving front</li> <li>Winds: Sustained 25-30 mph/ frequent gusts 35 mph</li> <li>Conditions short to mid term</li> <li>Light to moderate damage to electric system</li> <li>Up to 6" of heavy wet snow</li> </ul>	Up to 7,000		
SERIOUS 2 Resources From Throughout Company	<ul> <li>Scattered heavy thunderstorms, rain, moderate lightning</li> <li>Winds: Sustained up to 40 mph/ frequent gusts 45-50 mph</li> <li>Conditions exist for several hours</li> <li>Up to 12" of heavy wet snow</li> </ul>	Up to 20,000		
FULL SCALE – 3A Mutual Aid / Contractor Support	<ul> <li>Severe thunderstorms, extremely heavy rains, nor'easter type storms and tropical depressions</li> <li>Winds: Sustained up to 50 mph/ frequent gusts 60 mph</li> <li>Conditions exist for 12-18 hours or longer</li> <li>Extensive damage to electric system</li> <li>Greater than 15" of heavy wet snow</li> </ul>	Up to 40,000		
FULL SCALE - 3B Mutual Aid / Contractor Support	<ul> <li>Tropical Depression/Tropical Storm</li> <li>Greater than 25% damage to OH distribution system</li> <li>Conditions exist for 18 hours or longer</li> </ul>	40,000 – 100,000		
CORPORATE COASTAL STORM PLAN	<ul> <li>Hurricane Categories 1 - 5 Sustained Winds of 74 mph to 155 mph plus</li> <li>50 % damage to OH distribution system</li> </ul>	Greater Than 100,000		
For events where the Company fails to meet the restoration time set in the ERP, the PSC Order in Case 06-E- 1158 and Case 07-E-0742 requires that the Company's website include a message advising customers that although Con Edison is not paying claims for spoilage losses because the loss of power resulted from conditions beyond its control the Company's restoration efforts are subject to review by the PSC. After reviewing our restoration efforts, the PSC may require Con Edison to provide reimbursement for spoilage losses.				



Each region maintains a Minimum Staffing Matrix with the suggested minimum staffing levels for each emergency response classification.

### I. Pre-Storm and Restoration Flowchart

Productivity and communication are essential ingredients to the success of the overhead emergency response effort. Below is a typical depiction of the overall steps taken and the decisions made in the restoration process.



The Electric General Managers, Director, Electric Operations Emergency Management, Department Managers and Section Managers-Electric Control Center, and the Electric Control Center Shift Managers will meet/teleconference for an inter-regional call to:

- Review the weather forecast
- Identify the anticipated storm classification or storm surge category
- Determine the timeframe for declaring an alert

Upon review of the system conditions and other pertinent factors, and possible consultation with the Chief Distribution Engineer, the responsible Electric Operations General Manager, Control Center Department Manager, or designee will declare the appropriate storm classification.

### J. System-wide Electric Events

Upon declaration of an overhead storm emergency affecting more than one region, the Chief Distribution Engineer (or designee) will establish a Distribution Engineering Situation Room at 4 Irving Place, corporate headquarters, typically 6-12 hours before the storms arrival.



The DESR will notify the regional Electric Control Centers in each Customer Service area, the Central Information Group (CIG), the Gas Dispatcher, Central Field Services, Information Resources, Public Affairs, PSC staff, New York City's Office of Emergency Management and Westchester County Department of Emergency Services when it becomes operational and when discontinued.

The responsibility for declaring an alert and associated recovery plan is dependent upon whether the adverse weather or event is forecast to impact only one region or Con Edison's entire service area. There are two system conditions that can be declared by the Chief Distribution Engineer, the Regional Vice President or their designees as indicated in the following table:

Overhead System	Description
Alert	Indicates that a major storm is following a trajectory projected to cause widespread outages in our service area. An Alert is usually declared 12-24 hours before the adverse weather's arrival and may require partial to full mobilization of Con Edison resources. A Serious or Full Scale Event is projected.
Emergency	Indicates that widespread outages are imminent. An Emergency is usually declared 6-12 hours before the adverse weather's arrival and will require partial to full mobilization of Con Edison and possibly non-Con Edison resources. A Serious or Full Scale Event is projected and imminent.

# K. Mobilization

The determination made at the classification meeting will affect the level of mobilization of resources based on the estimated impact of the adverse weather or event. A pre-storm meeting will be held by each affected region as soon as practical after declaration of a System Alert. The Alert Preparations Checklist for Overhead System Preparations can be used at this juncture. The purpose of the pre-storm meeting is to:

- Notify all emergency response organizations
- Review the appropriate response plan
- Initiate all preparatory actions as outlined in the Pre-storm Checklist for Overhead System Preparations

Checklists can be found on the EOEM page of the Emergency Management intranet site.

An Emergency Duty (Storm) Roster will be maintained and updated semi-annually by each regional organization. A list of key responders is maintained by each regional Control Center. Each organization will ensure adequate staffing for the designated adverse weather or event classification and associated recovery plan. Each organization will notify their personnel to report to their emergency response assignments at the time decided upon in the pre-event



meeting. This can be accomplished either through a telephone notification pyramid or automated notification system.

The Corporate Notification System (CNS), maintained by the Central Information Group, makes emergency notifications to key response personnel. EOEM may remotely activate several notification scenarios utilizing the Con Edison CNS Remote Activation by Phone instruction found under Emergency Management Guides on the EOEM page of the Emergency Management intranet site.

# L. Pre-storm Preparations

When there is a reasonable probability that a major storm could impact Con Edison's service territory, including Orange & Rockland Utilities, Inc., Electric Operations Emergency Management will initiate an inter-regional conference call utilizing the Standard Inter-regional Conference Call Agenda (the agenda may be found under Corporate Reference Material on the EOEM page of the Emergency Management intranet site) to discuss each region's preparations.

This call is chaired by Electric Operations Emergency Management personnel following a standard agenda. The purpose of the call is to discuss each region's weather data, anticipated system impacts (if any), anticipated event classification, available resources and initial resource allocations. In order to make optimal use of field crews from other regions, internal mutual assistance will be coordinated by Chief Distribution Engineer or his designee.

### M. Minimum Staffing Matrix

For overhead storm events, the appropriate minimum level of human resources is determined by the categories in the Storm Response Classification Matrix. The employees who work in each region represent the core group who respond to storms affecting the overhead distribution system within that region. Each regional plan delineates in a human resource matrix the minimum staffing level for an emergency response classification.

### N. Work Flow

Trouble related calls or internet-based trouble reports are documented and trouble tickets are generated. STAR automatically analyzes these tickets as they relate to feeder circuits. There are five general ticket types that represent the overwhelming majority of tickets received during a storm:

- Wires down
- No light (area or individual)
- Municipal problems
- Wires burning
- Tree on wires

Ticket flow is directed by the Electric Control Center and the Trouble Analysis Situation Unit based on levels of priority. The first level of priority is the safety of the public. Some jobs are referred to the Damage Assessment Situation Unit for visual inspection.



The primary objective of the Control Center and the Trouble Analysis Situation Unit is to compile individual trouble tickets into well-defined jobs that can be referred to the Operations Section for repairs. As jobs are completed and job status entered into STAR, customer callback lists are generated automatically by identifying all trouble tickets related to the system job and callbacks are automatically initiated via the Voice Response Unit. The VRU will give customers the option to speak with a representative in the event they are still without service.

A Storm Ticket Flow with relationships among the various operating groups is contained in the Overhead Emergency Response Procedure.

When Mutual Assistance utility crews are required, Electric Operations Emergency Management is the designated acquisition contact. Once crews are secured, crew transfer sheets with all pertinent information are distributed to the Mutual Assistance Unit Leader, the Operations Branch Director (Mutual Assistance), the Logistics Chief and the Operations and Planning Chiefs. The Operations Branch Director/Mutual Assistance will maintain contact with all mutual assistance crews while they are en-route to the Con Edison service territory, ensure appropriate support staff, assign Crew Leaders / Guides, and manage job packaging for mutual assistance crews. The Admin/Finance Mutual Assistance Unit Leader will work closely with the Operations Branch Director and the Logistics Chief and assist with any administrative requirements related to mutual assistance including, but not limited to assembly area locations, lodging, petty cash requirements and expeditious delivery of job packages to all outside crews.

### O. De-escalation/De-mobilization

The Incident Commander is responsible to initiate the De-escalation/De-mobilization of the Emergency Response Organization (ERO). Planning for de-escalation/de-mobilization is an on-going process that begins as soon as the response begins. Tracking resource requirements and releasing those resources that are no longer required to support the response is essential for accountability and control. This assists in reducing the misplacement of resources, reducing operating costs and ensuring resources are available for other activities and assignments as needed. The ERO may be fully demobilized when:

- All storm-related jobs are assigned
- The vast majority of storm-related customer outages have been restored



# **IV. Underground Contingency Plan**

# A. Process Description

This plan provides guidance for the mobilization of the Regional Emergency Response Organization (ERO) and the activation of the Emergency Management Center (EMC) during underground contingencies. It specifies the basis and guidelines for declaring a Regional incident, establishes the required organization and responsibilities of Company personnel responding to a declared incident affecting the underground distribution system.

#### **Guiding Principles:**

Guiding principles help us manage resources necessary to expedite restoration of service to our customers. These include:

- Have one approach to the management of a major electric emergency event which is scalable to match the magnitude of the event and allow for a reasonable restoration time
- Establish an independent Customer Count Team (CCT) to proactively monitor trouble on the secondary system. The CCT can refer to the Electric Emergency Management Guide: Customer Count Team (CCT) during underground system emergencies
- When necessary, the Customer Assessment Team (CAT) will be dispatched by the CCT to rapidly and accurately determine the number of customers affected by an event on the system. The CAT can refer to the Customer Assessment Teams Checklist to assist them when performing this function
- Ensure that when the NYC OEM dispatches a Power Outage Response Team (PORT), a Con Edison PORT Liaison is dispatched to assist them
- Convey timely and reliable information pertaining to customer outages and restoration times to our customers and elected officials
- Use existing processes where applicable to measure the extent of the damage to both the secondary and primary networks
- At the outset of the event and when there is a clear understanding of the magnitude of the damage, set a formal restoration target
- Identify additional resource requirements beyond the Region's current staffing levels to meet the prescribed target

All personnel will comply with the "General Instructions Governing Work on System Electrical Equipment" which provides guidelines to ensure safety to personnel, continuity of service to customers and the prevention of damage to equipment and EO 4095 – Distribution System Operation under Contingency Conditions.



## **B. Underground Triggers**

Underground triggers are defined separately for the winter and summer period, as summer storms tend to be related to feeder contingencies during high load periods, while winter storms tend to relate to snow melt / rain after street salting, which results in higher volumes of manhole events and underground service problems. Mutual assistance resources may be required as conditions warrant based on actual damage to feeders and/or secondary system.

## C. Estimating Time of Restoration for Underground Events

During normal operations STAR automatically assigns a job-specific ETR to each outage upon receipt. During heat events, each region will utilize the Electric Emergency Management Guide: ETRs for Underground Network Events to calculate a global ETR for events that impact 5,000 or more metered customers within a network.

The Trouble Analysis group will monitor ETRs and determine regional and localized ETRs as required by the ETR Guidelines. These documents can be found on the EOEM page of the Emergency Management intranet site. ETRs for underground winter events can be found in the regional classification matrices in the Winter Related Underground Contingency Procedure.

## D. Summer Heat Event Classification

Under most conditions, loss of primary feeders in a network does not directly cause customer outages. Mobilization is based on the potential for cascading outages that could result in the loss of secondary supply feeders or a network outage that would affect large numbers of customers. As indicated in EOP 5025 – Guidelines for Summer Operations of the Distribution System, all feeders out of service will be worked continuously to expedite restoration of the feeders to service.

Following are the system conditions that will identify the declared heat classifications. For underground events, the geographic scope of the work is typically defined by the boundaries of feeders within networks and the number of networks that may be affected. Note that regional ICS level can be upgraded at the discretion of regional management at any time.



### Note: Regional ICS level can be upgraded at the discretion of regional management at any time.

	SYSTEM-WIDE	SYSTEM-WIDE Pre-emptive Action	
Level ROUTINE (No ICS Mobilization -Shift Manager is the IC)	Pre-emptive Action *Today's temperature variable predicted to be < 80° F	(after second ≥ 84 ° F TV non-consecutive day) *Today's temperature variable predicted to be < 84° F	Regional Conditions o significantly adverse conditions
UPGRADED (Limited ICS Mobilization - Shift Manager, Section Mgr or Dept Mgr is the IC)	<ul> <li>WEEKDAY temperature variable predicted to be ≥ 80° F</li> <li>WEEKEND temperature variable predicted to be ≥ 82° F</li> </ul>	<ul> <li>WEEKDAY temperature variable predicted to be &gt; 84° F for TWO consecutive weekdays</li> <li>WEEKEND temperature variable predicted to be &gt; 84° F for TWO consecutive weekend days</li> </ul>	No significantly adverse conditions
SERIOUS (Full ICS Mobilization - Dept Manager or GM level is the IC)	<ul> <li>WEEKDAY temperature variable predicted to be ≥ 82°F</li> <li>WEEKEND temperature variable predicted to be ≥ 82°F for TWO consecutive weekend days</li> </ul>	<ul> <li>WEEKDAY temperature variable predicted to be &gt; 86° F</li> <li>WEEKEND temperature variable predicted to be &gt; 86° F for TWO consecutive weekend days</li> </ul>	<ul> <li>WEEKDAY temperature variable predicted to be ≥ 84° F TWO consecutive weekdays</li> <li>WEEKEND temperature variable predicted to be ≥ 84° F for TWO consecutive weekend days</li> <li><u>AND either of the following conditions exist</u></li> <li>Three or more feeders out in any one second contingency network or load area</li> <li>Two feeders out in first contingency load area</li> </ul>
FULL SCALE (Full ICS Mobilization -Local IC GM or VP level)	<ul> <li>Severe Heat CERC Activated (in accordance with CI-260-4)</li> <li>NWS forecasted Heat Index ≥103 ° F (equal to 86 ° F. wet/dry bulb) for more than three hours for two or more consecutive days,</li> <li>or an integrated hour-ending system load exceeding 95% of the predicted maximum 2013 summer peak load of 13,200 MW (95% = 12,540) for two consecutive days</li> <li>or it may be preemptively declared at the discretion of the Senior Vice President, Electric Operations, when warranted by the circumstances and in concurrence with the Vice President of Emergency Management and the SSO.</li> </ul>	<ul> <li>Severe Heat CERC Activated (in accordance with CI-260-4)</li> <li>NWS forecasted Heat Index ≥103 ° F (equal to 86 ° F. wet/dry bulb) for more than three hours for two or more consecutive days,</li> <li><u>or</u> an integrated hour-ending system load exceeding 95% of the predicted maximum 2013 summer peak load of 13,200 MW (95% = 12,540 for two consecutive days)</li> <li><u>or</u> it may be preemptively declared at the discretion of the Senior Vice President, Electric Operations, when warranted by the circumstances and in concurrence with the Vice President of Emergency Management and the SSO.</li> </ul>	AND • Three or more feeders out in more than two networks or load areas • Two feeders out in more than two first contingency load area

To calculate global ETRs, see the Electric Emergency Management Guide: ETRs for Underground Network Events

A decision matrix for each level can be found in the Underground Contingency Heat Response Procedure.\*The temperature variable as determined by the morning System Operations report.



## E. Underground Winter Matrix (typical):

Following are the system conditions that will identify the declared Winter Storm Classifications. Note that regional ICS level can be upgraded at the discretion of regional management at any time.

Winter Storm Classification Matrix (typical)					
Storm Category	Weather And System Conditions	# Customers Projected Out of Service	Estimated Time To Restoration		
ROUTINE Local Staffing	Fair weather Some Ice/Snow Melt Off due to deicing with < 6 " accumulation.	Up to 99	6 to 12 Hours		
UPGRADED Resources From Other Regions	Potential for Active Melt-Off resulting from de-icing of greater than 6" snow.	Up to 100 To 500	13 to 24 Hours		
SERIOUS Resources From Throughout Company	Active Ice/Snow Melt-Off Current or anticipated backlog of "Unvisited" Manhole Events 20 to 50	Up to 501 to 1000	25 to 48 Hours		
FULL SCALE Mutual Aid / Contractor Support	Active Ice/Snow Melt-Off Current or anticipated backlog of "Unvisited" Manhole Events Exceeds 50	Exceeds 1000	Greater Than 48 Hours		

Note: Potential customer impacts for each classification can be found in the regional classification matrices in the Winter Related Underground Contingency Procedure.

\*To calculate global ETRs, see the Electric Emergency Management Guide: ETRs for Underground Network Events.

For events where customer outages exceed 72 hours, and where a customer claim for reimbursement is denied, customers who have submitted claims for reimbursement will be notified to retain their documentation and a message will be posted on the Company's internet site that the Company's claim of exception under the tariff is subject to review by the PSC.



# F. Mobilization

Notification of Extreme Weather Criteria / Major Electric Emergency Event -The Control Center Manager in consultation with the Regional Control Center Shift Manager (or designee) will be responsible to initiate mobilization of the EMC in response to a system or weather event anticipated to impact the underground system.

# G. Notification

Upon reviewing the event triggers, and determining the potential for customer interruptions, the Control Center Shift Manager along with the Control Center Department/Section Manager, the Electric Operations General Manager(s) and the Director, Electric Operations Emergency Management will determine the incident level. The Shift Manager will immediately initiate the Corporate Notification System (CNS), Distribution Notification System (DNS), or other local notification system to all key contacts informing them of the network contingency and the level of response. Prior to mobilizing a full ERO, time permitting, the Shift Manager will initiate a notification to conduct an initial update meeting.

When a Heat Event Upgraded level is declared, the regional Control Centers will designate a Communicator to handle all further notifications until the incident is over. For Serious incidents, a "Feeder Boss" will also be designated to focus on processing all out of service feeders.

Network Contingency Notification Requirements -The Shift Manager should refer to the regional notification matrix and the region specific decision matrix.

Full mobilization will be initiated when a Serious or Full Scale incident is declared. The Control Center Communicator will notify the Incident Commander and will initiate an electronic notification informing Key Contacts personnel of the current declared condition. At the discretion of the Shift Manager, a Serious or Full Scale condition may be declared based on the system conditions even if an extreme weather criteria or heat index condition has not been declared.

As required by the EOP 5023 - Communications Guidelines during System Emergencies, relevant information will be prepared by the Incident Command Organization for media and other communications through the Information Officer.

In the event of a bulk power system emergency or a complete system shutdown, System Operations will coordinate with the Electric Control Center to establish restoration procedures in accordance with CSP 5-0-1 - System Restoration Plan.

### EMC Protocol:

During regional distribution system incidents, an EMC is established with an Incident Commander as well as an Operations, Planning, Logistics and Finance Chief.

In addition, the Incident Commander has a staff established including an EH&S Officer, Liaison Officer, Information Officer and Customer Operations Officer. An IMAT may also be assigned based on the regional Incident Commander's requirements. This Incident Command and General Staff are responsible for the overall coordination of the incident. This group coordinates all strategic planning and this group makes all final decisions.



#### Minimum Staffing Matrix:

Each region's Minimum Staffing Matrix with the suggested minimum staffing level for each emergency response classification can be found in the Underground Heat and/or Winter Contingency Response Procedures. Mutual Assistance and contractor crews may be necessary during Full Scale events and will be acquired and managed as in Overhead events and in accordance with the EOEM Guides: Operations UG Mutual Assistance Unit for Out of Company Crews.



# V. Coastal Storm Plan

#### Process Description:

Energy systems will operate to maintain essential services until continued service is imminently threatened by storm and system conditions. When it is apparent that continued operation will result in significant damage to facilities and equipment and / or compromise the safety of the public or our employees, actions will be taken to remove those facilities from service. Employees will be evacuated before being subjected to hazardous conditions. Operating philosophies guide organizations' actions during and immediately prior to a significant coastal storm.

Each operating and non-operating entity will implement plans to support this philosophy.

Electric Operations will implement the Electric Operations Emergency Response Plan. The ERP will be implemented as warranted by system conditions and forecasted weather conditions due to predicted catastrophic damage to electric distribution equipment, electric distribution facilities, and customer facilities.

When regional electric management personnel determine it is no longer safe to maintain operating personnel at field locations due to wind or storm surge the personnel will be evacuated.

In general the overhead system will be operated through the coastal storm event since it is designed to operate to failure; however, prior to the arrival of gale force winds the overhead system may be placed in its first contingency design mode. It is anticipated that operating in first contingency design will help to ensure public safety, limit damage to overhead and URD equipment and provide for the rapid restoration of the system.

For detailed descriptions of the planning, response and restoration activities for coastal storms, see the Corporate Coastal Storm Plan.



# VI. Program Review

The regional Engineering Department Manager and Emergency Management representative or designee will review the Electric Operations Emergency Response Plan and any associated Process Guides annually. (See the EOEM page of the Emergency Management intranet site.) Electric Operations Emergency Management will then incorporate any changes into the corporate filing to the Public Service Commission by April 1 each year.

At least semi-annually, each area will review and update its list of contacts. These will include:

- All utility personnel assigned to emergency response
- Mutual assistance companies and contractors
- Life support and other special needs customers
- Human Service agencies
- Print and broadcast media
- Operators and managers of lodging facilities and restaurants
- State, County and local elected officials
- Law enforcement and other emergency response personnel
- Medical facilities
- Pertinent vendors (including mutual assistance contactors)

Emergency response participants will review their checklists at least annually and update them as necessary. This and all other supporting documentation, including but not limited to Overhead and Underground procedures, process guides, instructions, etc., will be reviewed and amended as needed, at least annually by all departments Any known changes to these plans will be communicated to emergency response personnel at least semi-annually. In the event significant changes are made during the year, Electric Operations Emergency Management will ensure that those employees with electric emergency response functions receive a timely briefing on the changes.

At least annually, Electric Operations Emergency Management will analyze past storms to review the criteria and assumptions used as the basis for this Plan, including staffing levels.

The Director, Electric Operation Emergency Management will sign the submittal of the Electric Operations Emergency Response Plan and is responsible for managing and evaluating the effectiveness of this plan.



# VII. Training and Drills

In order for employees with emergency responsibilities to be ready to respond and able to follow this plan, periodic training and drills are conducted. Training requirements have been designed that permit all emergency response participants to be effective in performing their assigned duties. Another key to effective emergency response is the application of such training, if not for actual response, during emergency drills.

# A. Training Requirements

As required by the Public Service Commission's Order Implementing Outage Recommendations issued and effective July 20, 2007, Con Edison will certify annually that "...each employee in a position in the emergency response organization receive[d] training, to a level commensurate to the position occupied, in the Incident Command System and National Incident Management System." As such, all participants who assume the roles of Incident Commander, Officers, Section Chiefs and Branch Directors will be trained to the levels specified in the "ICS Training by Position Required – ERP" which can be found on the EOEM page of the Emergency Management intranet site. A continuous effort will be placed on maintaining the effectiveness of the people, the training, and the logistical preparations. Scheduled drills will exercise emergency recovery preparedness.

As outlined in CI 260-4 – Corporate Response to Incidents and Emergencies, the Vice Presidents of each organization are responsible for establishing functional qualifications and formal training requirements for their employees to cover the operational portion of the responses to incidents and emergencies that could occur within their areas of responsibility. The Director of The Learning Center will establish and conduct courses of ICS training to Company employees who may participate in responses to incidents and emergencies.

Initial Training - Emergency Response Overview Module:

Employees assigned to participate in an overhead emergency response will complete the online course KWL0012 – Storm Process Overview. This orientation will help them better understanding the process of overhead emergency response efforts and their role on the team.

### Functional Training:

Some employees receive customized functional training, taking into account their level of knowledge in the area to which they are assigned. Operating areas perform a periodic review of emergency procedures to identify changes that impact training, and communicate these to the Learning Center so that training courses may be brought up to date.

### Municipal Electric Hazard Awareness Training:

Con Edison has an established program that provides electrical hazard awareness training to local municipal organizations including fire, police, and public works, in Westchester County. Training sessions are tailored to the nature of the organization taking the training, i.e., a presentation for fire departments, a presentation for police departments, and a presentation for public works administrators.



This training is available to municipal organizations upon request. Con Edison notifies the municipalities annually to encourage their participation in this program and provide scheduling information.

# B. Drills and Exercises

#### <u>Drills</u>:

While response restoration skills may be taught in training classes, the application of this knowledge takes place and is enhanced during actual events and drills. Emergency Management will inform the PSC Staff a minimum of two weeks prior to a drill scheduled to meet the annual requirement. As required by Corporate Instruction, CI 260-4, Emergency Management will coordinate an annual system exercise.

Electric Operations will utilize the company's Exercise Drill Development and Evaluation Guide (see EOEM intranet site) to assist in the development, conduct and review of emergency response drills. Periodic exercises/drills are designed to:

- Test and evaluate Company plans, policies, and procedures
- Reveal any plan weaknesses
- Identify any resource gaps that may be present
- Improve performance, communication, and coordination
- Train personnel and clarify roles and responsibilities
- Satisfy regulatory requirements

The exercise/drill program involves numerous organizations ranging from Con Edison operating departments involved directly in an emergency incident to Company support organizations. The program can also involve outside agencies such as fire, law enforcement and emergency management. When appropriate, other agencies such as local public health, public safety, Red Cross, regulatory agencies and others may participate. Exercises/drills are designed and carefully planned to achieve goals that result in improving the Company's preparedness for emergencies.

### Drill Evaluation:

Lessons learned during drills are valuable in improving the readiness of company forces to meet service restoration goals. Observers evaluate the performance of each participating organization. Debriefing sessions with key personnel are held immediately following emergency drills. Any major difficulties encountered will be addressed and drill procedures and script scenarios modified accordingly. Problems identified during drills and training exercises must be corrected in a timely manner.



# VIII. Self Assessment/Lessons Learned

For serious or full-scale events upon declaration that the emergency recovery is over, and as soon as practical, a post-emergency debrief meeting will be conducted by the Incident Commander or designee to identify lessons learned from the event. The finalized notes from the debrief meeting will be provided to Electric Operations Emergency Management who will summarize the aggregated information on a quarterly basis and communicate the same to the Emergency Response Organization. As necessary, EOEM will conduct meetings to disseminate the information. The meeting provides an opportunity to:

- Assign responsibility for follow up activities that were not immediately addressed
- Identify potential emergency response modifications, as necessary
- Debrief the recovery organizations involved
- Discuss the successes and lessons learned
- Share employee and customer feedback
- Evaluate media response
- Prepare lessons learned report, as necessary

Representatives from all organizations involved in the emergency recovery may attend the post-emergency debrief meeting. These can include:

- Regional Vice President
- Regional General Managers
- Electric Engineering
- Electric Construction
- Control Center Operations
- Customer Operations
- Energy Services
- EH&S
- Public Affairs
- Construction
- Central Field Services
- Facilities
- Operations Services / Financial Planning
- Emergency Management



# IX. Definitions

**Alert Condition** - Indicates that a major storm is following a trajectory projected to cause widespread outages in our service area. An Overhead System Alert is usually declared 12-24 hours before the storm's arrival and may require partial to full mobilization of Con Edison resources. A Serious or Full Scale Event is projected.

**Blizzard Warnings** - Issue when a considerable accumulation of snow is combined with sustained wind gusts of 35 MPH or greater, low visibility, usually less than 1/4 miles and dangerous high winds and temperature less than 22 degrees Fahrenheit.

**Branch** - A branch can be a single phase, two phase, or three phase open wire circuit connected to the main run of the feeder.

**Condition Red** - Some equipment is loaded above emergency ratings, part of the System is in voltage reduction due to problems on the Con Edison system or more than 15,000 customers have been interrupted due to one event. An event for which the electrical system condition is classified as a "condition red" will normally correspond to, at minimum, a level 3 event and may correspond to a level 4 event as identified in the Corporate "Incident Command System" procedure.

**Condition Yellow** - The next contingency (excluding breaker failure) either will result in an outage to more than 15,000 customers or will result in some equipment being loaded above emergency ratings, and methods to relieve the overloads will impact the general public: voltage reduction, customer appeals to reduce load, or load shedding. An event for which the electrical system condition is classified as "condition yellow" will normally correspond to a level 2 event as defined in the Corporate "Incident Command System Procedure".

**Contingency Analysis Program (CAP)** – The Contingency Analysis application presents an automated and integrated seamless display of current and next worst conditions of distribution networks. The display is accessed by the contingency drill down from the Heads up Display application. Contingency cases are presented to the operator in the priority order by severity within the context of a load area or the entire network. Current impact cases are of the highest priority to the operators. All contingencies are visible by continuous seamless scroll down within the Contingency Analysis display.

**Corporate Coastal Storm Plan** - The Con Edison Corporate Coastal Storm Plan (CCSP) provides a comprehensive overview that attempts to identify the potential effects of a Category 1 or higher hurricane, prepare strategies to mitigate these identified risks, and guides the subsequent corporate response to such an event.

**Crew Guide** - A Crew Guide escorts restoration field crews to work locations. Crew Guides meet crews at prearranged locations and then provides such crew support as fuel, food and lodging coordination.

**Critical Customer** – A Critical Customer is defined as hospitals, prisons, nursing homes, water and sewage treatment plants, government agencies, research institutions, transportation systems and those locations deemed critical by the NY City Office of Emergency Management.



**Customer Assessment Team (CAT)** – The CAT responds to impacted areas and provides information back to the CCT that will assist in determining accurate customer counts, the geographical boundaries of outages, and first responders and agencies currently on location responding to the emergency.

**Customer Count Team (CCT)** – The CCT is a joint Engineering and Operations unit, which analyzes secondary system problems, determines customer impact, dispatches Customer Assessment Team (CAT) to suspect areas, develops global, regional and localized estimated time of restorations (ETR) for large scale events.

**Customer Information System (CIS)** – CIS is a system used to interrogate and display customer-account and billing information stored on a computerized mainframe database. It is through CIS that customer calls are processed generating trouble tickets.

**Cut in the Clear** - This is the standard terminology for cutting overhead wires that have been knocked down during a storm. These wires are cut to eliminate public health and safety hazards.

**Distribution Engineering Situation Room (DESR) Activation** - The Distribution Engineering Situation Room will mobilize per established procedures and in periods of system emergencies and/or adverse weather conditions and will house the incident or event Regional Situation Unit and Resource Unit.

**Downed Trees Emergency Protocol (DTEP) -** a New York City protocol that describes the City's response to a severe weather event that results in a large number of downed trees

**EEI Mutual Assistance** - The Edison Electric Institute Mutual Assistance Program allows for the exchange of crews among participating companies during storms. Utilities that participate in this program are able to provide field crew assistance, based on their own status, to other participating utilities that request assistance in repairing overhead transmission and distribution systems and underground networks to restore customers.

**Emergency Condition** - Indicates that widespread outages are imminent. An electric system emergency is usually declared 6-12 hours before the storm's arrival and will require partial to full mobilization of Con Edison and possibly non-Con Edison resources. A Serious or Full Scale Event is projected and imminent.

**Emergency Control System (ECS)** – ECS is a mainframe-based computer system used to capture trouble reports received from customers and other sources.

**Emergency Information Reporting System (EIRS)** – This is the electronic system used by Central Information Group (CIG) to make required notifications to the DS staff.

**Emergency Information Center (EIC)** – The Information, Customer Operations and Liaison Officer (or designees) staff this area to gather and distribute incident related information to the media, customers, CIG, governmental agencies and employees. They will also respond to internal requests for information as needed.

**Emergency Management Center (EMC)** – The Emergency Management Center refers to all of the following contiguous areas: the Incident Command Area, Emergency Information Center, Control Center and the Engineering & Planning Area.



**Emergency Operations Reporting System (EORS)** – When activated by the NY State Emergency Management Office (NY SEMO), this electronic system is used by Distribution Engineering to report outage information.

**Engineering & Planning Area (EPA)** – The Engineering & Planning Area will generally be located adjacent to the Electric Control Center. It is here that members of the Planning group (Trouble Analysis) will work with members of the Operations group, and possibly, Logistics and Finance/Administration, to plan the recovery effort.

**Emergency Response Organization (ERO)** – Any or all of the organizations indicated on the ICS organization chart.

**End of Storm (EOS)** aka Start of Restoration - the point in time when field personnel are able to be dispatched without unacceptable safety risks from continued severe weather-related conditions and the potential additional damage to the electric system from a storm would be low in proportion to the expected level of damage already sustained.

## ETR (Global, Regional, Local)

Global– The estimated time to restore at least 90% of the customers interrupted company wide

Regional – The estimated time to restore at least 90% of the customers interrupted in a region (i.e. Bronx/Westchester)

Local - The estimated time to restore at least 90% of the customers interrupted in a Municipality, load area or network.

**Extreme Weather (Summer Period)** – For underground events, whenever the projected system peak load is expected to be greater than or equal to12,500 megawatts (MW), or forecasted weather is expected to meet or exceed 82 degrees F temperature variable for two consecutive days. (Refer to EOP-5025 and SO 17-8-20).

**Extreme Weather (Non-Summer Period)** – For underground events, whenever the contracted weather service predicts an average daily dry bulb temperature to be 20 degrees Fahrenheit or lower for two or more consecutive days (not including weekends or holidays), or after a major winter ice / snow melt where municipalities have used salt. (Refer to SO 17-8-20).

**Gap or Gap List** – Gaps exist when electrical wires are cut down from pole to pole along a continuous run of high or low voltage overhead cable and are not immediately replaced. This sometimes occurs during cut in the clear operations. A listing of gaps is maintained to ensure that permanent repairs are made after storm work has been completed.

**Heads-Up Display (HUD)** – Heads up Display is a map based graphics tool that displays the real time status of primary and secondary network components. This new tool provides users with an integrated, layered approach to viewing real-time information about most components of the distribution system. The application provides visual alerts to notify users of existing or potential problems or events. The application integrates data from multiple sources to reflect the real time status of all the networks across the Con Edison distribution system.

**Heat Alert State** - Is defined as a period of severe weather where the forecasted weather conditions and the resulting increase in load are anticipated to place additional stress on the



distribution system and its components. The Chief Distribution Engineer or designee is responsible for the declaration of the "Heat Alert State". The Heat Alert condition is defined as when meteorological forecasts predict heat indices of 100 degrees F or higher for more than two days, and/or a heat advisory or warning is issued by the National Weather Service.

**Heavy Snow Warning** -- Issue when between 6 inches or more can be expected to accumulate within the next 12 hours.

**Ice Storm Warning** -- Issue when damaging accumulations of ice, generally ½ inches or more is expected to produce significant damage to trees, and power lines and travel becomes treacherous

**Incident Command Area (ICA)** – The ICA is established by the Incident Commander. It is typically established for level 2 or greater storms, and is usually located in an area near the Electric Control Center. The Incident Commander and staff will usually convene in this location for the duration of the recovery effort.

**Incident Command System (ICS)** - The ICS establishes lines of supervisory authority and formal reporting relationships. There is a complete unity of command as each position and person within the system has a designated supervisor. Direction and supervision follows established organizational lines at all times.

**Ladder Line Crew** –Typically a two-person crew assigned to restore individual customer electric services.

**Life Sustaining Equipment (LSE)** – "LSE" is a classification used to identify customers who have electrically powered equipment required for life support as defined in Customer Service Procedure 3-1-8.

**Line Clearance** - The organization and activity associated with cutting/trimming branches and trees to allow storm recovery participants and restoration field crew access to the overhead system.

**Logistics Operations Command Center (LOCC)** –The LOCC is staffed during Serious and Full Scale incidents/events and is responsible for managing the overall logistical response effort and activities for affected operating regions.

Main-Run - The 3 phase open wire portions of 4 kV and 13 kV distribution feeders and loops.

**Municipal Agencies** - Usually the Police, Fire Department, Department of Public Works, Department of Water or Department of Environmental Protection within a municipality or borough that report problems during a storm.

**NCI** - No Company Interest (i.e. a "wire down" job which, when field checked, turns out to be a telephone or cable television wire).

**NetDVD** – Network Data Visualization Display is a map-based graphics tool that will display the status of secondary network components and the locations of reported electrical problems.

NetRMS – Network Remote Monitoring System is the tabular display of NetDVD.


**NTI** – Network Trouble Indicator is a feature of the Distribution Information System that highlights potential for customer impacts and possible number of customer outages on a network.

**New York City Office of Emergency Management (NYCOEM)** – This office responds to and coordinates emergency responses within the confines of New York City.

**Outage Management Dashboard** - This is a web-based reporting tool that captures data from STAR and is expected to be the primary source of general emergency status information by mid-year 2009.

**Open Main** – Open Main exist when electrical wires are cut underground manhole-tomanhole along a continuous run of secondary voltage underground cable and are not immediately replaced. A database of open mains is maintained to ensure that permanent repairs are made after emergency work has been completed.

**Operating Authority** – An Operating Authority is an employee who is trained and qualified to issue operating orders to an authorized person to perform switching moves on the distribution system.

**Outage Management Dashboard (OMD)** - This is a web-based reporting tool that captures data from STAR and is the primary source of storm status information.

**Overhead Feeder** - The overhead wires connected electrically to a substation circuit breaker or electrical isolating device. The voltage range of Bronx-Westchester overhead distribution feeders is from 4,000 to 13,000 volts.

**PORT Liaison** – A PORT Liaison is a representative of Con Edison who will interface with the NYC Power Outage Response Team (PORT) which is comprised of representatives of various NYC agencies and generally dispatched when 1,000 or more residents are impacted by an outage.

Snow Advisory - Issued when 2–5 inches of snow is expected to accumulate.

**SystemTrouble Analysis and Response (STAR)** – is a system that analyzes trouble and tracks jobs on the electric distribution system. It receives information from both customer calls and telemeter field equipment, and displays it on control center maps. By analyzing the information, STAR identifies the causes of system trouble, creates jobs for corrective work, and allows operators to prioritize and track jobs to completion. STAR can quickly identify the number and names of customer affected by outages.

## Start of Restoration Period (SOR) – See End of Storm (EOS)

**Storm Emergency Kit** – These kits contain material needed to perform storm duties. They contain equipment such as wire, connectors, tape, maps, and safety items. Different kits are made available based on need.

**Storm Surge** – is water that is pushed toward the shore by powerful hurricane winds. A storm surge can strike land five hours before the hurricane itself.

**Strategic Planning Area (SPA)** - Engineering Support - Members of the Trouble Analysis Unit typically will staff this area. Other subject matter experts from various organizations may also be included to monitor and respond to changing incident status.



Supervisory Control and Data Acquisition (SCADA), (Distribution System Telemetry) – SCADA electronic monitoring equipment reports the status of distribution equipment. In some cases, the remote control of that equipment is possible.

**System Job** – The result of the process whereby Trouble Analysis groups trouble reports that relate to a single problem into a single job.

**Trouble Ticket** – Trouble tickets are printed reports of STAR records. They detail location, name, phone number and trouble type (among other information) associated with a report.

**USA (Unit Substation Automation)** - An electronic monitoring system, USA provides an alarm when distribution feeder breakers or transformer circuit breakers change their current status in a 4 kV Unit Substation.

Virtual Data Acquisition Management System (VDAMS) – A map-based graphics tool that will display the status of network components and the locations of reported electrical problems.

**Voice Response Unit (VRU)** - A VRU is an electronic means of answering and handling phone calls. VRUs enable customers to initiate a trouble ticket and will automatically call customers back when the ticket is updated to indicate that service has been restored.

**Watch** - means that severe weather is possible within the designated watch area. Be alert! Watches are issued up to 36 hours in advance.

**Warning** - means that severe weather has been reported or is imminent. Take necessary precautions! Warnings are issued up to 24 hours in advance.

**Westchester County Office Department of Emergency Services (WCDES)** – This department assists the local communities in the coordination of emergency management efforts and is comprised of four divisions: Office of Emergency Management (OEM), Fire Services, Emergency Medical Services (EMS) and Emergency Communications Center (60 Control).

**Winter Weather Warnings** - Warnings are issued for much larger area than Severe Weather Warnings and for much longer period of time, usually for 6 to 12 hours but occasionally up to 24 hours.

## X. Glossary

- ACD Automatic Call Distributor
- ATS Automatic Transfer Switch
- CAP Contingency Analysis Program
- CAT Customer Assessment Team
- CC Control Center
- CIG Central Information Group
- CCSP Corporate Coastal Storm Plan
- CCT Customer Count Team
- CFS Central Field Services
- CM Construction Management
- CMG Communication Management Group
- CNS Corporate Notification System
- CPM Customer Project Manager
- DESR Distribution Engineering Situation Room
- DIS Distribution Information System
- DO District Operator
- DTEP Downed Trees Emergency Protocol
- ECS Emergency Control System
- EIC Emergency Information Center
- EIRS Emergency Information Reporting System
- EPA Engineering & Planning Area
- EORS Emergency Operations Reporting System
- EMC Emergency Management Center
- EOS End of Storm
- ERG Emergency Response Group
- ERO Emergency Response Organization
- ESA Engineering Support Area
- ETR Estimated Time of Restoration

- FCR Feeder Control Representative
- FOB Field Operators Bureau
- FOD Field Operations Department
- HUD Heads-Up Display
- I&A Installation and Apparatus
- IAP Incident Action Plan
- IC Incident Commander
- ICA Incident Command Area
- ICS Incident Command System
- LEC Live End Cap
- LSE Life Sustaining Equipment
- LOCC Logistics Operations Control Center
- M&S Mains and Services Plate
- MCC Manhattan Control Center
- MCC Mobile Command Center
- NTI Network Trouble Indicator
- NetDVD Network Data Visualization Display
- NETRMS Network Remote Monitoring Systems
- NWP Network Protector
- OEM Office of Emergency Management (Mayor's Office)
- OH Overhead
- PORT Power Outage Response Team
- PSC Public Service Commission
- RMS Remote Monitoring System
- SM Shift Manager
- SOR Start of Restoration
- SSO Substation Operations
- TOMS Transformer Overload Monitoring System
- UG Underground

- VDAMS Virtual Data Acquisition Management System
- VRU Voice Response Unit
- WOLF WorldClass Online Load Flow

## XI. REFERENCES

#### EOEM Procedures, Guides, Instructions and References:

The following reference documents, procedures, guides, and instructions can be found on the Electric Operations Emergency Management page of the Emergency Management intranet site. This can be found by following the Emergency Management hot sites link on @ConEdison.

#### OVERHEAD EMERGENCY RESPONSE PROCEDURE

This procedure details the basis and guidelines for declaring a regional overhead system emergency. It specifies the process, organization and responsibilities of company personnel responding to overhead emergencies.

## UNDERGROUND CONTINGENCY HEAT EVENT RESPONSE PROCEDURE

This procedure specifies the basis and guidelines for declaring a regional distribution system heat related emergency. It specifies the process, organization and responsibilities of company personnel responding to underground heat emergencies in a network or load area.

## WINTER RELATED UNDERGROUND CONTINGENCY PROCEDURE

This procedure specifies the basis and guidelines for declaring a Regional distribution system winter related emergency and establishes the required organization and responsibilities of Company personnel responding to a declared winter related emergency.

## CFS PROCEDURE: DRY ICE DISTRIBUTION

This procedure provides guidance for the distribution of dry ice to customers who lose electric service, and are expected to be without service for 48 hours or more, as a result of weather-related events or system emergencies.

## DOWNED TREE EMERGENCY PROTOCOL (DTEP)

A New York City protocol that describes the City's response to a severe weather event that results in a large number of downed trees.

## EOEM GUIDE: CUSTOMER COUNT TEAM (CCT)

The purpose of this guide is to specify the concept, organization and workflow of the Customer Count Team. The CCT will utilize Customer Assessment Teams (CAT) to respond to impacted areas and provide information back to the CCT that will assist in determining accurate customer counts, the geographical boundaries of outages, and first responders and agencies currently on location responding to the emergency.

## EOEM GUIDE: OVERHEAD TROUBLE ANALYSIS

The purpose of this document is to provide standardized procedures for Trouble Analysis Units when mobilized to respond to electric system overhead emergencies.

#### CONSTRUCTION RESPONSE AND RECOVERY GUIDE: DAMAGE ASSESSMENT

This guide provides standardized procedures to Damage Assessment Units who assess and report damage to the overhead system after a storm event. Electric Operations uses this information to determine the appropriate materials and crews necessary to expedite customer restoration.

## EOEM GUIDES: OPERATIONS OH MUTUAL ASSISTANCE UNIT FOR OUT OF COMPANY CREWS

This guide establishes a local procedure for managing out-of-company mutual assistance crews during a storm or system emergency.

EOEM GUIDES: OPERATIONS UG MUTUAL ASSISTANCE UNIT FOR OUT OF COMPANY CREWS

This guide establishes a local procedure for managing out-of-company mutual assistance crews during an underground system emergency.

ELECTRIC EMERGENCY MANAGEMENT GUIDE: UNDERGROUND GLOBAL ESTIMATED TIMES OF RESTORATION (ETRs)

This guide will assist electric operations in the development of Estimated Times of Restoration (ETRs) for customers whose service is interrupted due to underground system contingencies.

# ICS STRUCTURE AND TRAINING LEVELS FOR ALL CERP FIELD/CONTROL ROOM APPLICATIONS

This document defines the training requirements for the Incident Commander Command and General Staff and Branch Directors who fill positions in the ERP organizations.

Other reference materials:

- Overhead Storm Emergency Material List
- Pre-storm Checklist for Overhead System Preparations
- Alert Preparations Checklist for Overhead System
- Customer Assessment Teams Checklist
- Instructions For Initiating Or Participating In Inter-Regional Conference Calls
- Standard Interregional Conference Call Agenda
- CNS Remote Activation by Phone Instruction
- EEI Mutual Assistance Agreement and Guidelines
- Estimated Time of Restoration Guidelines

## **Emergency Management Operations Services:**

The following can be found on the Emergency page of the Emergency Management intranet site. This can be found by following the Emergency Management hot sites link on @ConEdison.

## CORPORATE COASTAL STORM PLAN

The Corporate Coastal Storm Plan (CCSP) of Consolidated Edison Company of New York, Inc. provides a comprehensive overview that attempts to identify the potential effects of a severe tropical storm and/or hurricane, prepare strategies to mitigate these identified risks, and guides the

subsequent corporate response to such an event. This guide focuses on ensuring public and employee safety while maintaining and restoring the integrity of our energy delivery services.

## EXERCISE DRILL DEVELOPMENT AND EVALUATION GUIDE

The purpose of this guide is to provide a common exercise/drill policy and program guidance that constitutes a Company standard for exercises/drills.

## Corporate Policies, Procedures and Instructions:

The following corporate procedures can be found in Outlook Public Folders.

## CI 260-4: CORPORATE RESPONSE TO INCIDENTS AND EMERGENCIES

This instruction establishes the process and defines the organizational structure used to prepare for, plan, and respond to incident conditions within the Consolidated Edison Company of New York, Inc. It establishes guidelines for determining the appropriate level of response and mobilizing the appropriate Company and external resources in a timely manner in response to any incident. It describes the Incident Command System (ICS) whose principles are used to manage any incident or emergency and the ICS organizational structure.

## GENERAL INSTRUCTIONS GOVERNING WORK ON SYSTEM ELECTRICAL EQUIPMENT

These instructions pertain to the operating requirements associated with construction, maintenance, testing and repair work on system electrical equipment in order to attain personnel safety, continuity of service to customers and to prevent damage to equipment.

## EOP 5025: GUIDELINES FOR SUMMER OPERATIONS OF THE DISTRIBUTION SYSTEM

This procedure provides guidelines for work on electric distribution facilities during the summer period. The summer period is defined as beginning June 1 through August 31. If extreme weather condition occurs outside of this period, the applicability of this procedure will be determined by the Chief Distribution Engineer (CDE) or designee.

## EO 4095: DISTRIBUTION SYSTEM OPERATION UNDER CONTINGENCY CONDITIONS

This specification provides guidance for actions to be taken and activities to be pursued by the Electric Operations, System Operation and Substation Operations when unusual operating conditions such as multiple contingencies above the design criteria and/or elevated system loading arise on the distribution system.

## CSP 5-2-4: ELECTRIC OPERATIONS – DISTRIBUTION SERVICES – DELEGATION OF AUTHORITY BY SYSTEM OPERATIONS TO ELECTRIC OPERATIONS CUSTOMER SERVICE

This procedure describes the transfer of overhead electric distribution system responsibilities from System Operations to Electric Operations Customer Service. It gives clear guidelines for the jurisdictional responsibilities of the District Operator at System Operations and the Electric Operations Customer Service Area's Control Center. Included in the delegation of authority is operation of 4 kV feeder breakers at Unit Substations.

Electric Operations Emergency Response Plan XI – References

## CPS 330-1 USE OF MOBILE GENERATORS AND ASSOCIATED EQUIPMENT

This instruction establishes policy for the deployment of Company-owned, leased, or rental mobile generators and associated equipment.

## CI 330-8 MOBILE ELECTRIC GENERATORS (MEGS)

This instruction establishes procedures to manage the deployment of mobile electric generators (MEGs), in accordance with the provisions of CI 330-1.

## EOP 5035: DISTRIBUTION ENGINEERING SITUATION ROOM OPERATING GUIDE

The purpose of this procedure is to provide a comprehensive guide of the Distribution Engineering Situation Room (DESR) staffing requirements, position responsibilities, activation criteria, mobilization, and operations.

## EOP 5023: COMMUNICATION GUIDELINES IN THE EVENT OF AN ELECTRIC EMERGENCY

This plan provides guidelines and assigns responsibility for communication with appropriate Company personnel, media, municipal and government agencies, elected officials and community organizations when a serious, non-storm, electric system emergency occurs or is imminent.

## CI 490-2 CUSTOMER CARE EMERGENCY RESPONSE PLAN

The purpose of this Instruction is to establish and describe guidelines for the readiness and prompt action to coordinate efforts that will provide assistance ("Customer Care") when deemed necessary by the Incident Commander (IC) to those inconvenienced by an electric, gas, or steam incident.

## CSP 2-0-1: CUSTOMER OPERATIONS – GENERAL Corporate Event Customer Response Plan

This procedure describes the Customer Operations actions to ensure that customers and contact Customer Service Representatives receive consistent, timely and accurate information during the course of a corporate event. It outlines preparatory communications and procedures for contacting LSE and other special needs customers.

## CSP 2-1-3: CUSTOMER OPERATIONS – GENERAL Processing Emergency Calls

This procedure provides guidelines for answering, documenting, and responding to emergency calls. Emergency calls will be answered promptly, documented, and responded to as quickly as possible.

## CI 810-2 PUBLIC AFFAIRS CRISIS COMMUNICATIONS PLAN

The purpose of this policy statement is to provide timely and accurate information through the news media to the public, elected officials, and community organizations on system events or issues that could or have affected electric, gas and/or steam service, disrupt municipal services, have an impact on the environment, or otherwise have an impact on customers in the CECONY service territory.

CEHSP E10.01: CORPORATE ENVIRONMENTAL HEALTH AND SAFETY PROCEDURE – RELEASE REPORTING

This procedure describes the steps that Con Edison personnel must follow to provide CIG and the ERT with the information necessary to complete required immediate and follow-up release reporting.

CEHSP S08.00 – NOTIFICATION, REPORTING AND RECORDING OF ACCIDENTS, INJURIES AND PROPERTY DAMAGE

## CUSTOMER ASSISTANCE: EVENT PREPAREDNESS PLAN

This plan provides planning guidance and direction for the Customer Assistance response to distribution system emergencies. It covers event classification, assessment, mobilization of appropriate resources and employee notifications.

# XII. Cross Reference to PSC PART 105

	Part 105.4 Content of Electric Emergency Plans.	2013 ERP
1	Table of Contents	Table of Contents
2	Introduction	Section I. pg 1
3	Emergency classifications	Section III. G pg. 48
		Section IV. D pg. 56, and E pg 57
4	Emergency response training program.	
	a. State the corporation's program to provide emergency response training for those	Section VII. pg 62
	personnel assigned service restoration responsibilities that are different from their	ICS Structure and Training Levels
	normal duties.	
	b. Identify person(s) responsible for managing and evaluating the effectiveness of	Section VI. pg 61
	the program.	
	c. Include procedures for conducting a minimum of one annual storm drill simulating	Section VII. pg 63
	a response to either a storm or other storm-like electric emergency that would be	CI: 260-4 Corporate Response to Incidents and
	classified at the highest or next highest level of severity.	Emergencies
		Exercise Drill Development and Evaluation Guide
	d. State extent to which any personnel outside the company may be involved in a	Section VII. pg 63
	storm drill. Include provisions for critiquing the drill procedures and for giving staff a minimum of two weeks' advance notice of a scheduled drill.	
5	Advance planning and preparation.	
5	a. Specify on-going actions the corporation expects to take throughout each year to	Section VI. pg 61
	plan and prepare for an electrical emergency.	Throughout the plan
	b. State the corporation's procedures to update at least semiannually its lists of	Filing Letter
	contact persons, with titles, addresses, phone numbers and other pertinent data for	Section II. pg 8-12
	the following:	Section II. pg 15
	All utility personnel assigned service restoration responsibilities;	Section III.K pg 51
	<ul> <li>Mutual assistance companies and contractors;</li> </ul>	Section VI. pg 61
	<ul> <li>All life support and other special needs customers;</li> </ul>	
	<ul> <li>Human service agencies;</li> </ul>	
	<ul> <li>Print and broadcast media;</li> </ul>	
	<ul> <li>Operators/managers of motels. Restaurants and dormitories, etc.;</li> </ul>	
	<ul> <li>State, county and local elected officials, law enforcement officials, and</li> </ul>	
	emergency management and response personnel;	
	<ul> <li>Medical facilities; and</li> </ul>	
	Vendors	
	c. At least annually verify that all of the preceding data are current.	Section IV. pg 56

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	d. At least semiannually, issue updated lists of known changes to its employees that have plan implementation responsibilities.	Section VI. pg 61
	e. Include plans to stockpile emergency restoration tools and supplies in loose or kit form.	Section II.O pg 30
	f. State provisions for the preparation and distribution of literature or other forms of communication with information on customer storm preparations.	Sections II.D pg 10 Section II.F pgs 14-15 Section II.E pgs 12-13 CI: 810-2 Public Affairs Crisis Communications Plan CI: 490-2 Customer Care Emergency Response Plan CSP: 2-0-1 Customer Operations – Corporate Event Customer Response Plan and CSP: 2-1-3 Customer Operations – Processing Emergency Calls
6	Emergency anticipation.	
	a. Identify the preparatory measures management would implement in anticipation of a potential system emergency expected to affect the service territory within hours or days.	Sections III.A pgs 32-37 Sections III.D, III.E, III.F pgs 43-48 Sections IV.D, IV.E, IV.F, IV.G pgs 55-58 Pre-Storm, and Alert Preparations Checklists for Overhead System EOEM Guides: Overhead Emergency Response Procedure, Underground Contingency Heat Event Response Procedure, and Winter Related Underground Contingency Procedure
	b. Identify the criteria under which key personnel with service restoration responsibilities would either be notified of an impending emergency or deployed to assigned areas.	Section III. pgs 36-42 Sections III.C, D, E, F pgs 42-48 Sections IV.F, IV.G pgs 58 EOEM Guides: Overhead Emergency Response Procedure, Underground Contingency Heat Event Response Procedure, and Winter Related Underground Contingency Procedure
7	Service restoration procedures.	
	a. Provide procedures for mobilizing its personnel, materials and equipment in order to survey system damage.	Section III.D. pgs 43-45 Construction Response and Recovery Guide: Damage Assessment
	b. The procedures need to identify restoration priorities to ensure that restoration time is minimized, while ensuring critical customers' needs are met.	Section II.M pg 25

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	<ul> <li>c. Identify criteria for determining when centralized versus decentralized control is appropriate.</li> </ul>	Sections II, III, IV Throughout the plan CSP 5-0-1 Electric Operations – System Restoration Plan Corporate Coastal Storm Plan
	d. 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.	Section III.D pgs 43-45 Construction Response and Recovery Guide: Damage Assessment Electric Emergency Management Guides: Overhead Emergency Response Procedure Sections II, III, IV
	e. Describe how field reports of system damage will be integrated with damage reports or indicators from other sources, such as customer call-ins	Sections II, III, IV Throughout the plan Construction Response and Recovery Guide: Damage Assessment Electric Emergency Management Guides: Overhead Emergency Response Procedure
	f. Provide the procedures for deploying company and mutual assistance crews to work assignment areas, monitoring crew activity, reassigning crews as necessary and releasing crews.	Section II.Q pg 33 Sections III.B pgs 37-42 Electric Emergency Management Guides: Operations OH Mutual Assistance Unit for Out of Company Crews and Operations UG Mutual Assistance Unit for Out of Company Crews
	g. Describe the methods and means that will be used to communicate with damage survey crews and service restoration crews,	Sections II, III, IV Throughout the plan Construction Response and Recovery Guide: Damage Assessment Electric Emergency Management Guides: Overhead Emergency Response Procedure
	h. Identify the procedures for coordinating company restoration procedures with those of other utilities' restoration efforts.	Sections II, III, IV Throughout the plan EEI Mutual Assistance Agreement and Guidelines
8	Personnel responsibilities.	

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	a. Provide a narrative and chart of the organization and operational assignments of personnel to be mobilized for each emergency classification identified. Include the procedures for contacting and managing all personnel assigned duties under the emergency restoration plan at both the corporate and operating division level.	Sections II, III,IV Throughout the plan
9	Customer contacts.	
	a. Provide procedures and facilities for handling the extraordinary volume of customer calls.	Section II.F pgs 14-17 CSP: 2-1-3 Customer Operations – Processing Emergency Calls
	b. Include description of the type of messages that may be given to call-in customers regarding projections of service restoration or other pertinent info.	Section II.F pgs 14-17 CSP: 2-1-3 Customer Operations – Processing Emergency Calls
	c. State 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	Section II.F pgs 14-17 CSP: 2-1-3 Customer Operations – Processing Emergency Calls Customer Assistance: Event Preparedness Plan CSP: 2-0-1 Customer Operations – Corporate Event Customer Response Plan
	d. State the procedures for contacting within 24 hours, and policies for responding to the needs of, life support customers during an electric emergency.	Section II.F pgs 14-17 CSP: 2-1-3 Customer Operations – Processing Emergency Calls CI: 490-2 Customer Care Emergency Response Plan CSP: 2-0-1 Customer Operations – Corporate Event Customer Response Plan
	e. 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.	Section II.E pgs 12-14 Section II.F pg 14-17 CSP: 2-1-3 Customer Operations – Processing Emergency Calls CI: 490-2 Customer Care Emergency Response Plan
	f. 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.	Section II.O pg 29-32 Central Field Services 339-315: Dry Ice Procedure

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	g. 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 II.D pgs 9-11 Section II.F pgs 14-17 CI: 810-2 Public Affairs Crisis Communications Plan CI: 490-2 Customer Care Emergency Response Plan CSP: 2-0-1 Customer Operations – Corporate Event Customer Response Plan and CSP: 2-1-3 Customer Operations – Processing Emergency Calls
10	Communications	
	a. 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 identification of any dedicated phone lines, 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.	Sections II.D, II.E, II.F pgs 9-17 CI: 810-2 Public Affairs Crisis Communications Plan CI: 490-2 Customer Care Emergency Response Plan CSP: 2-0-1 Customer Operations – Corporate Event Customer Response Plan and CSP: 2-1-3 Customer Operations – Processing Emergency Calls
11	Outside assistance.	
	State corporate policy and criteria governing conditions under which requests for service restoration assistance from other utilities, contractors, government agencies or others would be made and the procedures to be followed in obtaining outside assistance.	Section II.Q pg 33 Sections III.F pgs 47-48 EEI Mutual Assistance Agreement and Guidelines
12	Support Services.	
	Describe actions that will be taken, and who will be responsible for implementing them to sustain and support restoration crew activities. These will include vehicle mgmt, foreign crew accommodations, and distribution of warehouse supplies	Sections II.N, II.O,II.P,II.Q pgs 27-33