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A. PURPOSE

This Emergency Plan provides for an emergency response that will minimize the hazard resulting from an electric emergency and will:

- Receive, identify and classify notices of events which require immediate response.
- Establish and maintain adequate means of communication with appropriate fire, police and other public officials.
- Promptly respond and make safe any actual or potential hazard to life or property related to the Liberty Utilities (LU) electric system.
- Protect people first and then property.
- Manage outages caused by storms, other natural disasters, civil unrest, major equipment failure, or other events.
- Restore electric service to customers affected by the emergency and minimize any additional interruption of service caused by repair activities.
- Notify the NHPUC and other government agencies of the emergency situation in accordance with local, state, and federal regulations.
- Inform the public, government officials, and the news media of the emergency situation.

The operational and organizational concepts that will achieve these actions are described below and are implemented in an accompanying series of operating procedures.

This Plan has been developed to comply with regulations relevant to electric operation emergency preparedness that are contained in the New Hampshire Code of Administrative Rules and the Occupational Safety & Health Administration Standards.

LU relies upon local public emergency response personnel to have plans and procedures that minimize the effect of the emergency on the public. These plans normally include: systems for warning the population, plans for notifying municipal resources and the establishment of rapid and efficient communication.

For the purposes of this Plan, consider the terms Emergency Plan, Emergency Response Plan and Emergency Management Plan as interchangeable.

B. STATEMENT OF POLICY

The highest priority of the Company in an emergency is to protect the general public first, then to minimize property damage, and then to maintain and restore electric service to customers, if necessary. The principal objective of the Emergency Plan is to establish procedures and practices for prompt and effective response to emergencies.

Response to different types of emergencies is dependent on the judgment and experience of different levels of Company Authority. The proper level of Authority, commensurate with the seriousness of the situation, shall be notified in accordance with the Emergency Plan.

Any significant incident or event capable of causing interruptions to electric service, or other potential hazards shall be considered an emergency until a determination has been made by a Company Authority that an emergency does not exist. All emergencies shall require a prompt and effective investigation as to determine the severity of the situation and protect the public.

Most emergencies require trained and/or qualified personnel to perform routine operations and utilize safe working practices, including the use of appropriate clothing and protective equipment required by the Company.

C. PLAN SUMMARY

The Categories of emergency Events that can potentially affect Liberty Utilities electric facilities are:

- Sub-transmission outages that impact one or more substations
- Thunderstorms with high winds and severe lightning
- Snow or ice storms
- Fire located near or directly involving an electric facility
- Explosion occurring near or directly involving an electric facility
- Unplanned supply interruptions
- Other emergency events related to electric operations (i.e. Terrorism, Civil Disturbances)

Liberty Utilities emergency response capabilities must be able to rapidly assist the actual and potential hazard associated with an emergency event and mobilize the appropriate response resources.

1. Emergency Guidelines

The Emergency Classification Guidelines provide:

- A mechanism for rapidly activating specific facilities and personnel based upon the known aspects of an incident or event.
- Notification of the seriousness of the emergency internally and to appropriate outside agencies not directly involved with the incident or event so that they can prioritize their actions accordingly.

These guidelines group the potential emergency events into event Categories. The Events within each category are then graduated by level of significance into 5 emergency Classifications.

The lower two emergency classification levels, “Type 5 Small Impact Event” and “Type 4 Moderate Impact Event” provide for heightened awareness of the situation by company personnel. The highest emergency classification, “Type 1 Catastrophic Impact Event” provides for the activation of additional facilities and personnel as needed.

It is important to note that these classifications and the associated level of response actions are only guidelines that can be adjusted at any time during the emergency.

2. Receiving, Identifying and Classifying Events

The Emergency Dispatch organization will have the responsibility for classifying an event and performing the initial notifications. Emergency Dispatch follows its own set of written procedures that are external and separate from this Plan.

The Emergency Dispatch Supervisor is responsible for events involving electric field operations and for notifying Electric Control of major electric outages or other incidents. The Emergency Dispatch Supervisor who classifies the incident would make emergency notifications to LU, the NHPUC, and local emergency response organizations, if appropriate. The Director of Electric Operations or their designee would assume the role of the Incident Commander for the incident. If the Director of Electric Operations cannot be contacted, then the On Call Supervisor would be notified and assumes the responsibility of the Incident Commander.

The Field Supervisors or other designated personnel are on a duty rotation as the On Call Supervisor. This ensures that a qualified individual is always available to respond to an emergency event. The Incident Commander has the responsibility of assessing the situation and determining the appropriate level of response, e.g., whether to activate an Electric Emergency Operations Center and/or activate an On Scene Command Center.

3. Establish and Maintain Communication

In the event of an Electric Emergency in which an Emergency Operations Center (EOC) needs to be opened, the coordination of the emergency response will be centralized at that location. Upon arrival at the EOC, the Incident Commander is in command and control of the emergency response. The Operations Vice President of LU or designee will continue to have oversight responsibility for all electric operations. The Incident Commander designates an On Scene Incident Commander who is responsible for coordinating LU activities and for interfacing with Police, Fire Department and NHPUC personnel responding to the scene. The On Scene Incident Commander must establish and maintain adequate means of communication with the appropriate Fire, Police and other Public Officials.

Events classified as an Emergency may require an On Scene response of LU Media, Government & Community Relations, Customer Care, Risk Management, and possibly other Liberty Utilities organizations. The mobilization of these LU personnel to the scene will be coordinated with the Incident Commander. In order to coordinate the flow of information and the activities of personnel, Liberty Utilities management personnel are provided periodic updates.

The interface with city, town officials remains with the Liberty Utilities Government & Community Relations organization that will have an ongoing relationship with these localities.

4. Prompt Response and Restoration

Once an emergency has been declared and while the above steps are in progress, Electric Operations will follow the investigation, repair procedures, and restoration guidelines in accordance with its Electric Operating Procedures. These documents are available on the LU Engineering community site.

See **Appendix I** of this Plan for the Restoration of Service priority.

5. Weather Reports

It is of great importance that the weather be monitored closely, particularly during periods of impending adverse conditions. Forecasts will be obtained from various weather service providers prior to a storm event and several times daily during the storm event. Weather reports, as well as severity and tracking, will be communicated by Dispatch & Control to Emergency Management, Electric Operations and the Incident Commander when appointed.

Liberty Utilities has contracts for meteorological services with Schneider Electric (Telvent DTN). The Energy Event Index is sent twice daily at 8:00 AM and 4:00 PM. The forecast contains Wind Speed, Wind Gust and Confidence Levels over a 10 day period for four separate regions in New Hampshire. Montauk NY is included in the report as an early warning of storms moving west to east which are typical for New Hampshire. (See **Appendix A**.) Dispatch & Control also has the ability to ask for more specific information from a staff meteorologist at Telvent by using the Consulting Module on MxVision Weather Sentry Online.

6. Lebanon and Salem Regions

The two regions generally operate as independent control areas. There are no electric system interconnections between the two regions. Due to the independent configuration of the regions; they operate individually during most emergencies. National Grid and Trans Canada supply energy to the Company in the Lebanon Region while National Grid is the only supplier of energy to the Salem Region. Transmission level control is administered through the National Grid Transmission System Control Center.

D. SCOPE OF THE EMERGENCY PLAN

The Emergency Plan provides:

- for the classification of emergencies;
- the mobilization, organization, and responsibilities of Company personnel and the Company's agents during an emergency;
- notification procedures; and
- general guidelines to assist personnel in the performance of their duties during an emergency.

This Plan details LU response actions to emergency events involving its electric operations. These actions may include:

- classification of the event;
- notification and updates of LU and other response organizations;
- activation of appropriate LU facilities and personnel;
- assignment of LU emergency response organization responsibilities;
- coordination of LU emergency response;
- requests for mutual assistance through regional groups;
- pre-staging of crews; and
- recovery implementation.

This Plan also describes the provisions made by LU to effectively coordinate its activities with other response groups both internal and external to Liberty Utilities. The specific detail of the response to be provided by these groups should be contained within their own plans and procedures.

1. Other offices and departments within Liberty Utilities which could have an emergency response function, include:

   Customer Care (Media, and Community Relations) - Responsible for providing information to customers and media representatives.

   Emergency Management - Responsible for assisting with the emergency response and evaluating the adequacy of LU emergency response efforts.

   Energy Procurement - Responsible for coordinating with Electric Control in the procuring of necessary supplies of electricity as required by the emergency.

   Engineering - Responsible for assessing the impact of a given situation on the distribution systems and identifying possible courses of action to remedy and/or restore the systems to safe and reliable operation. This could include emergency shutdown and reduction in any section of the LU system necessary to minimize hazards to life or property. Response frequently involves interaction with one or more of the following groups: Field Operations, Electric Control and Emergency Dispatch.

   Environmental - Responsible for advising cleanup operations and interfacing with regulatory agencies in response to an oil spill and hazardous material releases.

   Electric Control - Responsible for providing data to Engineering and the Director of Operations to aid in diagnosing the problem and for coordinating the operations during the emergency. Will assure adjustments to system operations as needed are made during the emergency.

   Government & Community Relations - Responsible for providing information to government officials.

   Human Resources - Responsible for providing information and assistance in resolving any employee/union issue as a result of the emergency.

   Procurement - Responsible for securing and providing materials and logistics.

   Safety - Responsible for job site compliance to the Occupational Safety & Health Administration (OSHA) and other safety related regulations.

Security - Responsible for interfacing with the Police Department for events involving vandalism, bomb threats, and similar situations.

Risk Management Services - Responsible for coordinating corporate liability and claims as a result of the emergency.

2. Organizations outside of Liberty Utilities that could be involved in the emergency response and with whom LU may need to interface include:

   Fire Department (city/local/county)

   Police Department (local/county)

   Municipal Public Works Department

   Municipal Wiring / Building Inspectors

   Municipal Government Officials

   New Hampshire Public Utilities Commission (NHPUC) Safety Division

   New Hampshire Division of Emergency Management

   New Hampshire Department of Environmental Services

   New Hampshire Department of Transportation

   Operators of Electric Systems and other Utilities

   Occupational Safety and Health Administration

3. LU emergency response capability must be able to rapidly assess the actual and potential hazards associated with an emergency event and mobilize the appropriate response resources.

E. REVISION HISTORY

Date	Revision Number	Section	Revision	Author
1/1/2016	4	Various Red Text Throughout Section C.5 Section J.11 Appendix A.2 Appendix A.4 Appendix E Appendix E Appendix I Appendix H	Updated per the NHPUC Thanksgiving Storm 2014 After Action Report requirements. Added Language: Weather Reports Holiday Periods Trouble – Definition Energy Event Index (EEI) Table Historical Outage Table Electric Utilities in NH Summary Pre-Staging Crews Revised Forms: Meeting Agenda – Prior To Event Meeting Agenda – During Event Meeting Agenda – Post Event	L. Cody
7/1/2015	3	Entire Document	Edits Throughout	L. Cody
7/1/2014	2	101, 105, 109, 110, 118	Updated per NHPUC 300 Rules	T. Deppmeyer
7/1/2013	1	101, 110, 113, 121	Increased Storm Levels from 3 to 5. Updated per the October 2011 Snowstorm Report	T. Deppmeyer
7/3/2012		Entire Document	Original Filing	T. Deppmeyer

F. CLASSIFICATION AND NOTIFICATION OF EMERGENCIES

The Emergency Classification Guidelines provide a formalized means to systematically classify the severity of an event or incident involving electric facilities and/or electric personnel. The Guidelines provide:

- A mechanism for rapidly activating specific facilities and personnel based upon the known aspects of an incident or event.
- Notification of the seriousness of the emergency internally and to appropriate outside agencies not directly involved with the incident or event so that they can prioritize their actions accordingly.

These Event Levels group the potential emergency events into common event Categories.

1. **Fire or Explosion**
2. **Natural Disaster**
3. **Unplanned Supply Interruption**
4. **Other: Terrorism, Breach of Security, Newsworthy Event**

The Events within each Category are then graduated by level of significance into five emergency Classifications:

Type 5 Small Impact Event *(Localized Response Condition / Normal Operations)*

Type 4 Moderate Impact Event *(Heightened Alert)*

Type 3 Serious Impact Event *(Enhanced Support)*

Type 2 Major Impact Event *(Comprehensive Support)*

Type 1 Catastrophic Impact Event *(Emergency Support)*

The lower two emergency classification levels, “Small Impact Event” and “Moderate Impact Event” provide for heightened awareness of the situation by company personnel. The highest emergency classification, “Catastrophic Impact Event” provides for the activation of additional facilities and personnel as needed.

It is important to note that these classifications and the associated level of response actions are only guidelines that can be adjusted at any time during the emergency.

Whenever a significant incident capable of causing interruptions to electric service does or is anticipated to occur, the Incident Commander, with support from Emergency Management, will determine the necessary level of the Company’s response as dictated by established Operating Conditions. The classification of an emergency is generally based on the number of customers interrupted and the estimated duration of the restoration activities and is not necessarily dependent upon how geographically widespread the emergency. The event classification also does not stipulate a mandated level of response organization activation. The determination of response level activation and staffing is at the discretion of the Director of Electric Operations, Vice President of Operations, or the Incident Commander when appointed.

The Director of Electric Operations, Vice President of Operations, or the Incident Commander when appointed is responsible for establishing and/or changing the Classification Type as needed based on factors including, but not limited to, extent of damage, type of damage, availability of supplemental resources, and/or level of command required to direct restoration efforts.

The transition from one level to another, either higher or lower, is accomplished solely at the discretion of the Director of Electric Operations, Vice President of Operations, or the Incident Commander when appointed, based on the recommendations of the Electric Operations Team, Dispatch & Control Center, and other key staff.

Collectively, they should assess:

- Current Operational Situation (number of outages, resources, supplies, etc.)
- Current weather conditions
- Forecasted weather conditions
- Damage assessments
- Restoration priorities
- Forecasted resource requirements
- Forecasted Operational Tempo
- Other situational specific factors

Once established or changed, the Classification Level will be communicated to all leaders and organizations currently engaged in or anticipated to be engaging in restoration or support activities.

Reports or calls of emergencies shall be received by, or directly referred to, the Emergency Dispatch Center. Emergency Dispatch in Londonderry is staffed on a 24-hour basis. Each report or call of an emergency received by Emergency Dispatch shall be addressed, based on the information available.

If An Employee Discovers The Emergency:

It is the responsibility of the employee at the scene to determine the nature of the emergency, take reasonable steps to make the area safe, and to provide information and assistance to other emergency responders to protect people and/or property. This factual information should immediately be relayed to Emergency Dispatch and the Field Supervisor/Manager on duty or in his absence, to the appropriate management personnel.

If An Employee Receives Information Concerning An Emergency From An Outside Source:

Any employee receiving a report of (or discovering an emergency) should attempt to gather and record the following information, if available:

- Calling party, phone number and address.
- Exact time reported and location of emergency (intersecting street and/or pole number).
- Nature of emergency.

See Emergency Dispatch and **Appendix A** for more information on the classification of events and the corresponding notifications to internal personnel at Liberty Utilities.

Telephonic Reporting Requirements

There are state regulations concerning the immediate notification of certain Incidents and Events.
See **Appendix B** for more information on immediate telephone notice to the NHPUC.

Written Report Requirements

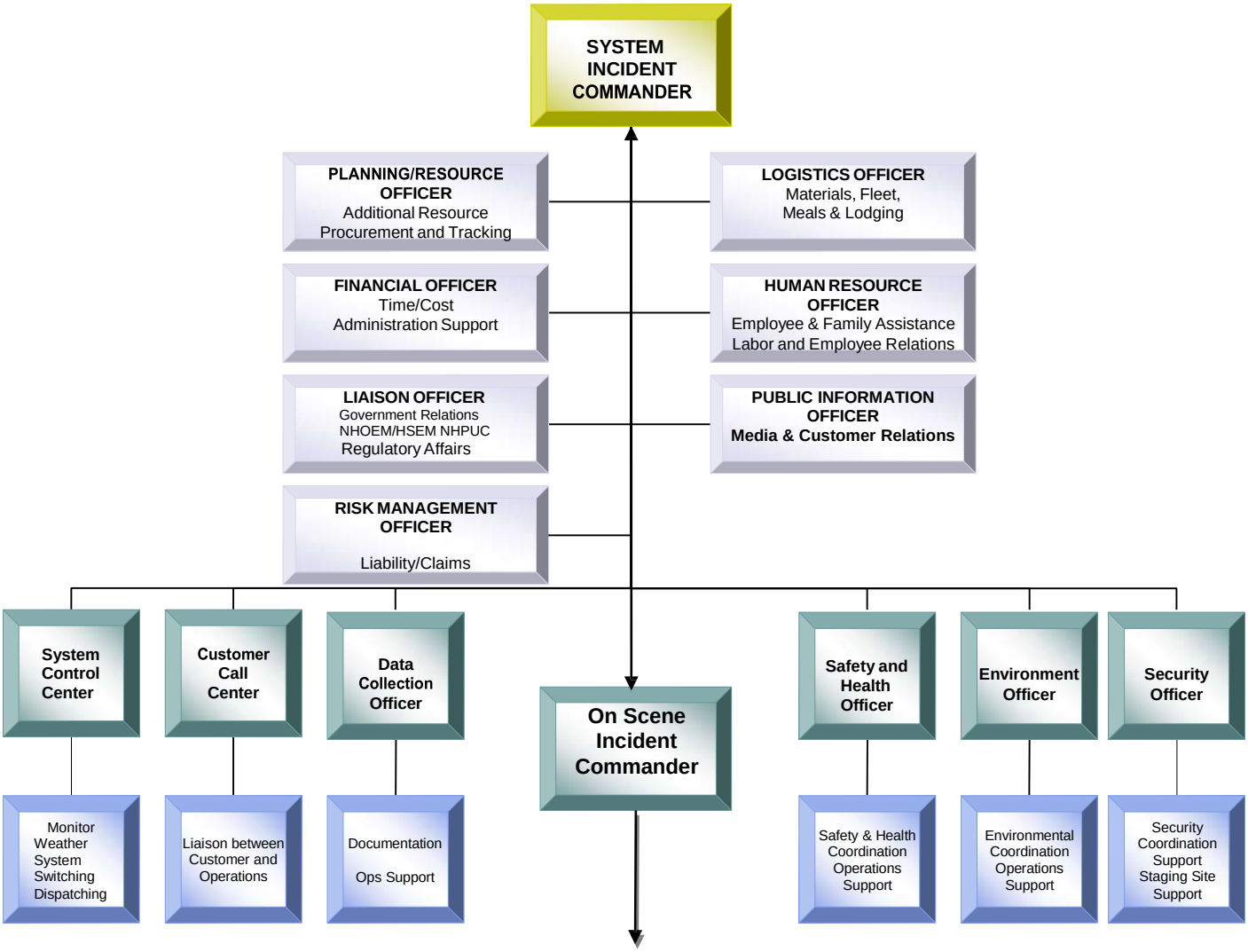
There are state regulations concerning the follow up written reports of certain Incidents and Events.
There are also internal company requirements.
See **Appendix C** for more information on the required written reports.

G. EMERGENCY ORGANIZATION CHARTS

The Plan aligns with the principles of the National Incident Management System (NIMS) and parallels the Incident Command System (ICS), which Liberty Utilities employs to manage Emergency Events or Incidents. The Plan also employs the ICS organizational structure to support the On Scene Incident Command. Most of these positions are filled within the state. On occasion, there may be a dual position at the corporate level.

See the CQ&EM site for the ICS forms and the ICS Position Checklists.

ICS Organization

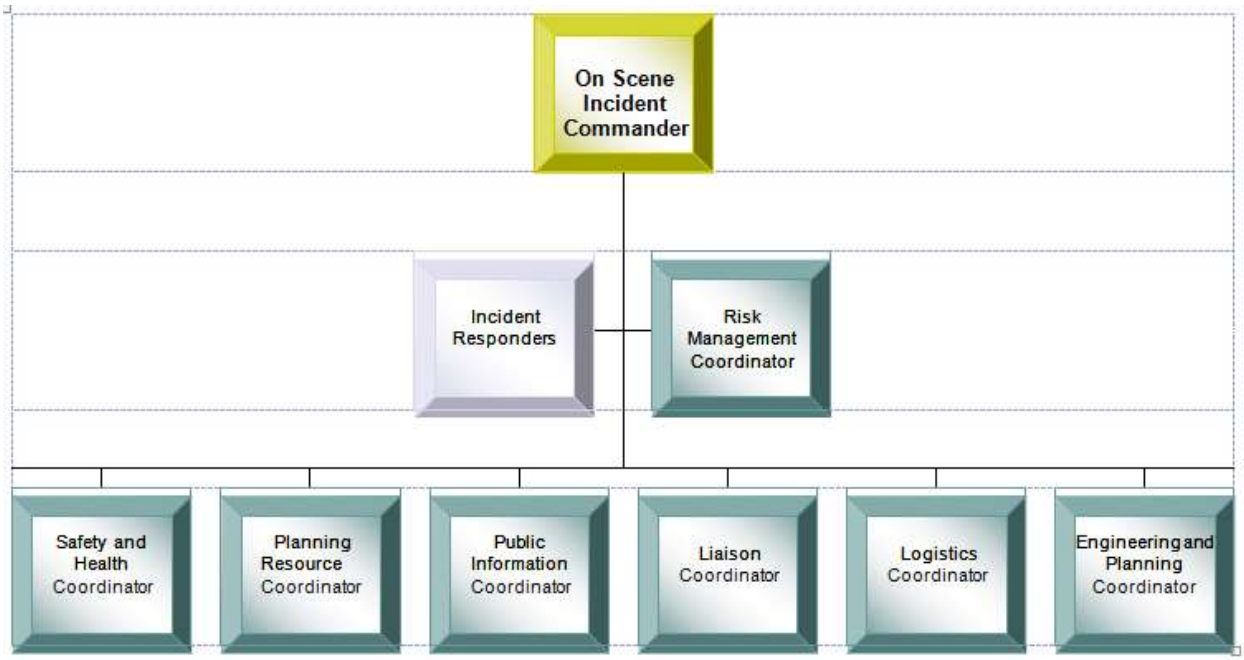


Note: in accordance with ICS, the activation of any of these positions is at the discretion of the Incident Commander in consideration of the level of response required for each event.

On Call Supervisor Roster

The established On-Call Supervisor Roster ensures availability during an electric emergency. Personnel selected as On-Call Supervisors serve in this capacity on a rotating basis. The On-Call Supervisor must be able to arrive at any of the established EOCs within a reasonable time of notification. The On-Call Supervisor roster and schedule will be maintained by Electric Operations and issued by Dispatch.

On Scene Organization



Note: in accordance with ICS, the activation of any of these positions is at the discretion of the Incident Commander in consideration of the level of response required for each event. Other emergency response positions will include the supervisor of electric operations, damage prevention and the on-call supervisor.

Typically, there will be scheduled conference calls and meetings during the incident or event and a meeting template and organization chart specific to the incident or event would be followed.

See **Appendix H** for the Liberty Utilities Event Meeting Agenda and the Event Organization Chart. These documents are prepared and distributed by CQ&EM.

H. RESPONSIBILITIES AND EMERGENCY ORGANIZATION POSITIONS

During an electric emergency, the magnitude of the response and the response organization required to direct and resolve the incident is based on the emergency event and its classification. The Emergency Classification Guidelines facilitate the decision as to whether full or partial activation of the Incident Command System (ICS) is necessary.

Electric incidents which are classified as “Small Impact Events” or “Moderate Impact Events” are handled by the normal day to day assigned personnel or designated on-call personnel. Mobilization of all or a portion of the ICS may be required by all events classified in the event classification guidelines.
If multiple electric incidents occur, then an On Scene emergency organization may be established at each incident site.

The ICS positions described in this section will be mobilized as needed by the emergency situation. This organization is a framework that can be expanded or contracted as needed. There are two electric operation centers in NH (Salem and Lebanon). Personnel from these operation facilities will be prepared to provide mutual assistance when an electric emergency occurs.

LU personnel are assigned to emergency positions corresponding to their functions within their normal operating organization. Training of personnel assigned to the ICS is discussed elsewhere in this Plan.

During an Emergency, the ICS may require a corporate response from personnel assigned to other Liberty Utilities Organizations (e.g. Finance, Customer Care, Media Services, Government & Community Relations, etc.,) based on the type and severity of the incident. These Liberty Utilities personnel would coordinate the actions of the ICS with their respective departments.

RESPONSIBILITY

- The Vice President of Operations, his/her appointed designee, or the Incident Commander when appointed, is primarily responsible for establishing the projected and/or actual Incident Classification Type.
- Dispatch & Control Center Operations is primarily responsible for monitoring all weather events and evaluating their potential severity and impact on the system.
- Emergency Management will also monitor weather and other incidents and events that might adversely impact the system.

Any incident or event that poses a potential significant risk will be immediately communicated to the Director of Electric Operations, VP of Operations and to the President of Liberty Utilities.

1. Vice President, Operations

The Vice President of LU Operations has authority and oversight of all LU gas and electric operations. If the Vice President is unavailable, this position may be filled by the Incident Commander. The responsibilities of the Vice President include:

- Authority to unilaterally initiate any emergency action
- Authority to assume command and control of the emergency from the Incident Commander
- Commitment of corporate resources beyond existing policies
- Maintenance of corporate profile and public image
- Official liaison and dialogues with key business and government leaders affected by emergency
- Approval of requests for foreign electric crews (also known as Mutual Aid)
- Approval of press releases
- Protection of shareholder interests
- Protection of corporate assets
- Response to financial community

2. Incident Commander

Upon classification of an emergency, the Incident Commander notifies the Vice President Operations, and assumes overall direction and control of the emergency situation. This position is typically filled by the Director of Electric Operations. If the Director of Electric Operations is unavailable, this position may be filled by the Director of Engineering, the Manager of Electric Operations or an On Call Supervisor. The Incident Commander's responsibilities include:

- Obtaining a briefing from the prior Incident Commander and/or assessing the situation
- Managing the emergency response on-site or from the Electric EOC
- Designating an On Scene Incident Commander
- Approving and implementing the Electric Emergency Plan and Incident Action Plan
- Determining if the emergency warrants activation of the ICS staff
- Determining incident objectives and strategy
- Overall management and accountability for resolution of the emergency
- Ensuring the VP Operations is provided timely updates on status of the electric emergency
- Ensuring that Government and Community Relations provide State and Municipal Emergency Managers with a daily report noting number of customers affected, status of the restoration efforts and expected return of service to all customers
- Coordination of response activities with emergency responders and civil authorities
- Managing planning meetings as required
- Review of press releases for technical content
- Authorizing the release of information to the news media
- Approving requests for additional resources or for the release of resources
- Ensuring compliance with the drug and alcohol testing regulatory requirements
- Ordering demobilization of the incident when appropriate

3. Planning / Resource Officer

The Planning/Resource Officer is responsible for coordinating requests from the On Scene Personnel and Resource Coordinator for additional LU personnel or other utility personnel. If the magnitude of the emergency exceeds LU ability to provide electric crews, the Planning/Resource Coordinator requests other utilities to provide Mutual Aid and coordinates the registration and tracking of these crews. No request for foreign crews will be made without the prior approval of the LU Vice President of Operations. The Planning/Resource Officer will administer the process that communicates with external utilities to obtain appropriate support from other utilities. Responsibilities of the Planning/Resource Officer include:

- Collect and manage all incident relevant operational data
- Supervise the preparation of the Incident Action Plan
- Procure additional resources as requested
- Track and report all employees and foreign crews assigned to the incident
- Compile and display incident status information
- Establish information requirements and reporting schedules
- Participate in the planning meetings

4. Logistics Officer

The Logistics Officer is responsible for coordinating and expediting requests for lodging, materials, transportation, stores, and food service support. The Logistics Officer is responsible for providing:

- Materials Management
- Meal coordination
- Lodging coordination

- Fleet Management
- Additional support requests
- Participate in the planning meetings

5. Liaison Officer

The Liaison Officer or designee will interface with the Incident Commander and the On Scene Incident Commander during emergency response incidents. The Liaison Officer's responsibilities include:

- Responding to concerns and requests by non-Liberty Utilities personnel and agencies
- Informing LU of signification actions being planned by non-LU personnel and agencies
- Establish information requirements and reporting schedules for Government and Municipal agencies
- Participate in the planning meetings

6. Public Information Officer

The Public Information Officer has a significant role as a major interface with the affected town and customer. They are responsible for collaborating with the EOC and On Scene personnel at the incident location to provide support for customer issues regarding emergency restoration efforts. The Public Information Officer responsibilities include:

- Implement coordinated actions for special needs accounts with the Incident Commander
- Determine, with direction from the Incident Commander, any limits on information release
- Develop accurate, accessible, and timely information for use in press/media briefings
- Develop and obtain the Incident Commander's approval of news releases
- Conduct periodic media briefings
- Arrange for tours and other interviews or briefings that may be required
- Monitor and forward media information that may be useful to incident planning
- Maintain current information, summaries, and/or display in the incident
- Make information about the incident available to incident personnel
- Participate in the planning meetings

7. Finance Officer

The Finance Officer is responsible for all financial and cost analysis aspects of the incident and for coordinating the delivery of financial information with members of the Liberty Finance organization. Specific responsibilities include:

- Tracking of incident costs and reimbursement accounting
- Providing advice on financial implications based on planned course(s) of action
- Providing assistance with obtaining contracting/purchasing approvals
- Attending planning meetings (as required)
- Management of all financial aspects of an incident
- Providing financial and cost analysis information (as requested)
- Gathering pertinent information as defined during incident meetings
- Maintain continuous contact with the Incident Commander or designee on financial matters
- Providing financial input to planning of the incident demobilization
- Briefing appropriate Liberty personnel on incident related financial issues as well as issues that will require follow up actions

8. Electric Engineering Coordinator

The Electric Engineering Coordinator provides technical assistance to the EOC and On Scene Command Center. This support includes any required reviews and analysis of the electric transmission and distribution systems and facilities.

9. On Scene Liaison Coordinator

The On Scene Liaison Coordinator reports to the On Scene Incident Commander and is the Liaison Officer's principal point of contact for all communications from the incident site to various Liberty Utilities organizations. The On Scene Incident Commander maintains a log of all communications to include individuals/organizations called or communicated with and the type of communication provided.

10. On Scene Incident Commander

The On Scene Incident Commander reports to the Incident Commander and is responsible for directing the repair and corrective actions at each incident scene. These responsibilities include:

- Reporting to the incident scene, assessing the situation, and providing a status as appropriate to Emergency Dispatch/Electric Control
- Mobilizing one or more crews and establishing a company demark zone of site location
- Serving as initial representative to the Fire or Police Departments, the designated Incident Coordinator, or other civil authorities at the scene until arrival of the On Scene Liaison Coordinator
- Directs repair activities with other mutual aid company crews assigned to the site

11. On Scene Logistics Coordinator

The On Scene Logistics Coordinator is responsible for coordinating all requests for materials, transportation items, stores, and food service from the various Coordinators at each incident scene. The On Scene Logistics Coordinator works with the Logistics Officer in the EOC in expediting these requests.

12. On Scene Planning/Resource Coordinator

The On Scene Planning/Resource Coordinator is responsible for identifying the need for additional Liberty Utilities personnel at the incident scene. The On Scene Planning/Resource Coordinator coordinates with the Planning/Resource Officer in the EOC to obtain support and maintains a roster of all LU personnel working at the scene.

13. Incident Responders

The Incident Responders are Liberty Utilities personnel responsible for assessment, corrective actions, and repairs at the incident scene. These responders are primarily from within Liberty Utilities Operations. Other incident responders could include personnel from other Liberty Utilities departments and retirees.

14. Environmental

Advise and assist the Incident Commander with any environmental abatement matter. As much as possible, utilize established environmental abatement policies and plans in mitigating an incident.

15. Health and Safety

Expedite post-accident testing of employees in accordance with the Anti-Drug program and Alcohol Misuse Prevention Plan. Advise and assist the Incident Commander regarding personnel safety during any declared electric emergency.
Investigate the injury of any company employee that may occur during the emergency.

Assist Legal Department regarding reports made to OSHA, and the investigation of fatalities and in-patient hospitalizations of employees, which may have occurred as a result of the emergency.

16. Security

Advise and assist the Incident Commander regarding personnel, facilities and company security during any declared electric emergency.

I. RESPONSIBILITIES FOR THE SUPPORT ORGANIZATIONS

This section briefly describes responsibilities of organizations that may be called upon to provide additional support based on the type of emergency.

1. Sales and Marketing

- Maintain a current list of large-volume customers by city, town or subdivision, including telephone numbers and names of customers to contact in an emergency.
- Act as liaison to large-volume customers in the event of an emergency situation that requires a planned shutdown or load curtailment.
- Coordinate compliance of customer load curtailment with Electric Control.

2. Electric Control

- Receive notifications at Electric Control regarding an actual or potential emergency involving electric supply.
- Notify Emergency Dispatch of an actual or potential emergency involving electric supply.
- Provide and coordinate the response of Electric Operations personnel in accordance with the requests of the Incident Commander.
- Coordinate activities with Emergency Dispatch and Damage Prevention or assume or designate responsibility in case of leadership absence.
- Provide assistance to the Incident Commander or serve as an alternate, when necessary.

3. Information Technology

- Notify and mobilize departmental personnel to assist in an emergency.
- Provide IT equipment and program support to be used in an emergency.

4. Damage Prevention

- Mobilize mark-out personnel to assist in locating company facilities, as directed by the On Scene Incident Commander.
- Gather Dig Safe documentation and work orders for the area of the incident. Inform the On Scene Incident Commander of any foreign excavation activity that could be contributory to the emergency.
- Take photographs of the mark-out activities for foreign excavations in the area of the emergency.
- Notify the Incident Commander of any excavation activity that could be contributory to the emergency or would require regulatory notification.

5. Risk Management

- Advise and assist the Incident Commander with any large-scale damage assessment or investigations as may be found in a declared electric emergency.
- Assess damage and provide any necessary documentation for use in legal and regulatory reporting.
- Under the direction of the Incident Commander, interview witnesses, public officials, and Company personnel.
- Document the incident with photographs, statements, and records.
- Gather, salvage, and protect evidentiary exhibits.
- Obtain services of experts and consultants.
- Assist Company Authorities as a liaison with public officials.
- Assist Customer Care as a liaison with the news media.
- Assist the Director of Electric Operations with written reporting of incidents to the NHPUC
- Provide information acquired from the investigation of the incident, which may prevent similar incidents from recurring, to the Incident Commander.

6. Operations Compliance

- Act as a liaison to the NHPUC personnel responding to the emergency.
- Advise and assist the Incident Commander, Risk Management, Legal and other company representatives regarding regulations, compliance issues, and incident investigation and assessment.
- Assist the Incident Commander, Emergency Dispatch Supervisor or the Legal Department, with both telephonic and written reports of incidents to the NHPUC.

J. EMERGENCY RESPONSE

This section describes how this Plan is implemented for LU electric emergencies. This section is purposely written to cover general situations. For specific situations such as widespread outages, fires, explosions, floods, civil disobedience, earthquakes, multiple simultaneous events, etc. a customized response would be prepared.

See **Appendix E** for a list of specific operating procedures of use during an emergency.

See **Appendix I** for information on the Restoration of Service.

EMERGENCY PHASES

The Company's emergency planning and response is broken down into four time periods (phases) as follows:

Blue Sky:	Time period where there are no Emergency Events ether anticipated or ongoing. This phase covers all periods up to the time when an incident is identified (long or short-notice incident) or occurs (no-notice incident). Activities performed during this phase include annual preparation such as training, drills, and meetings.
Incident Anticipation:	(Prior-Event Stage) Time period when an Emergency Event is identified through when it causes damage significant enough to cause disruptions to the electrical system. This phase may last greater than 72 hours (long-notice event), less than 72 hours (short-notice event), or may not occur (no-notice event) depending on the nature of the incident. Activities performed during this phase include conference calls and completion of checklists.
Incident Response:	(During-Event Stage) Time period commencing when the first Emergency Event caused system damage resulting in electric service interruptions and concluding with restoration of all customers. Activities during this phase include all restoration, support, and reporting activities.
Post-Incident	(Post-Event Stage) Time following the termination of an Emergency Event when the various functional groups involved prepare a report on the incident, the problems encountered, best practices and procedural changes which will be implemented to prevent recurrence in future incidents. This phase concludes with the filing of applicable reports.

DISPATCH & CONTROL

The Dispatch & Control Center located in Liberty Utilities Londonderry facility will be staffed 24 hours. The Center is the home for Controllers of the distribution systems during non-emergency periods. During events, controllership for some portions of the Electric Distribution system may be delegated to the Regional Storm Rooms in Lebanon or Salem as jointly determined necessary by the Director of Electric Operations, Dispatch & Control, Incident Commander or designee.

Typically, the Region will manage trouble orders and be delegated controllership of un-fused radial and single-phase or three-phase laterals while the Dispatch & Control will retain three-phase mainline controllership and maintain the Outage Management System. However, other arrangements, such as the delegation of controllership for an entire feeder to the Regional Storm Room, are permissible depending on the severity of the emergency.

The Dispatch & Control Center will retain responsibility for controllership and operation of the substations within the respective Region(s). During an emergency event, Dispatch & Control will be responsible for the restoration of these systems in coordination with the Regional Storm Rooms.

TRANSMISSION NETWORK OPERATIONS

The National Grid Transmission Network Operations Center is staffed 24 hours. During an Emergency event, this Center will be responsible for communications and the coordination of restoration of National Grid's bulk power system interconnections with Liberty Utilities. This Center is located in Northborough, Massachusetts.

Transmission (NE): Northborough, MA

No Power Calls: 800-465-1212

EMERGENCY COMMUNICATIONS

a. Electric Facilities
An incident at one of the LU electric facilities initiates a set of internal and external notifications. When the incident is discovered, the LU person observing the emergency condition notifies Emergency Dispatch and takes mitigating action as dictated by procedure.

Upon receipt of a call from the site, the Emergency Dispatcher makes any immediate notifications to local emergency response personnel and facility managers. Upon completion of these immediate notifications, the Emergency Dispatcher classifies the emergency, using the Emergency Classification Guidelines. For Emergencies, the Director of Electrical Operations is contacted and assumes the role as the Incident Commander for the incident. If the Emergency Dispatcher is not able to contact this Director, the assigned On Call Supervisor is contacted and assumes the responsibilities of the Incident Commander.

b. Electric Distribution System
When electric emergency calls are received by Electric Dispatch or the Customer Service Center personnel from Fire or Police Department personnel (or other credible officials) indicating an electric emergency, one or more Field Operations personnel will be immediately dispatched and appropriate notifications are initiated.

If electric emergency calls are received from customers, a Field Operations person is dispatched to the scene. Upon arrival, the Field Operations person reports the conditions found to the Emergency Dispatch Supervisor who then assesses the incident and implements any immediate notifications necessary to local Police or Fire Departments.

Upon completion of the notification, the Emergency Dispatch Supervisor classifies the emergency using the Emergency Classification Guidelines and contacts the Director of Electric Operations who assumes the role of the Incident Commander for the incident. If the Emergency Dispatch Supervisor is not able to contact the Director of Electric Operations, the assigned On Call Supervisor is contacted and assumes the responsibilities of the Incident Commander. During off-hours, the Emergency Dispatch Supervisor's responsibilities may be performed by the Emergency Dispatcher.

EMERGENCY RESPONSE

1. Mobilization of Personnel and Activation of Facilities

For incidents classified as a "Small Impact Event" or "Moderate Impact Event", an Incident Commander may not be appointed and the response is limited to routine notifications and is handled by the normal operating organization or the on-call personnel.

When notified of an Electric Emergency, the Incident Commander, if appointed, approves the classification and assesses the level of corporate response required.

For incidents classified as an Electric Emergency, the Incident Commander makes three decisions:

- Whether the Electric EOC needs to be activated?
- Whether an Incident Command Staff is required?
- Who will be the On Scene Incident Commander?

Emergency Dispatch and Electric Control may provide the coordination of emergency response in the event of an electric emergency until an Incident Commander is named.

The EOC is activated by the Incident Commander when it is expected that the level of activity of emergency response personnel will interfere with normal Emergency Dispatch/Electric Control operations. When the EOC is activated, Electric Dispatch and Control continues to have control of all system decisions and communicates these directions directly to the emergency scene. The Operations Manager, Operations Supervisor, On Call Supervisor or other qualified individual would be designated as the On Scene Incident Commander.

After the Emergency Dispatch Coordinator/Electric Control Operator and the Incident Commander confer, they are each responsible for making additional notifications as dictated by their procedures. These notifications inform personnel of the emergency event and of any response actions being taken. The Incident Commander notifies the LU Vice President, and other management personnel in Customer Care, Government & Community Relations and Operations as appropriate. The Incident Commander also ensures that additional notifications are made to include the initial notification and continuous updates, if necessary.

The Electric Control Operator or the Emergency Dispatch Supervisor initiates the notifications for the activation of the required facilities.

2. Emergency Coordination

This section describes how the fully activated Incident Command System would function.

The main Liberty Utilities Emergency Operations Center (EOC) is located in Londonderry. The Incident Commander is responsible for ensuring that needed resources are committed to supporting the emergency response and maintaining an awareness of Police and Fire Department emergency response efforts.

Personnel from Customer Care Media group, Government & Community Relations obtain the latest information on the status of the emergency and rapidly and accurately relay this information to the media, government officials, and Liberty Utilities customers. If personnel from the Customer Care Media group respond to the scene, their counterparts in the EOC will act as their liaisons to ensure that they are aware of LU activities and all statements to the press are approved.

The On Scene Incident Commander should ensure that the activities of utility and public emergency response personnel are coordinated so that the emergency conditions are quickly and safely mitigated. In order to focus on the overall coordination of on scene activities, the On Scene Incident Commander primarily remains at the On Scene Command Center during the emergency. Accurate records and logs of emergency events are maintained by the EOC. The On Scene Incident Commander maintains contact with the LU Liaisons dispatched to the Fire, Police Department or Incident Command Post(s) and with any Liberty Utilities personnel responding to the scene.

LU Incident Responders are those personnel directly responsible for manipulating systems and equipment to make the situation safe. The On Scene Incident Commander supervises the Incident Responders and maintains contact with the Incident Commander if appointed. The regional Field Operations offices provide personnel and supplies to the scene. This support is requested either directly from the On Scene command post or via the EOC as appropriate.

3. On Scene Emergency Coordination and Interface

LU procedures provide for the initial notification of public emergency response personnel. These procedures also provide for follow-up communication with responding Police and Fire personnel to determine the location of a Command Post, if one has been established.

When responding to an emergency related electric incident, LU personnel will report to and will cooperate with the designated Fire Department Official. If the Incident Command System is activated in response to the emergency situation, LU personnel will immediately report to the On Scene Incident Commander upon arriving at the incident site and will offer assistance.

Upon arrival at the scene, the local emergency responders may establish a Command Post based on municipal organization requirements that are jointly manned by Police and Fire personnel. This Command Post may be an emergency bus/van or a group of response

vehicles parked together.

The Police Commanding Officer and the local Fire Chief are jointly in charge of their respective functions.

The City/County/Local personnel may establish a two-zone perimeter around the emergency scene. Within these two-zone perimeters, the inner perimeter, or hot zone, is the area immediately around the incident scene in which only personnel actively involved in responding to the incident are allowed. The outer perimeter, or warm zone, is a staging area from which nonessential people may be evacuated and where Fire, Police and other emergency response personnel conduct their operations. The Command Post is normally established within this outer perimeter.

4. Emergency Operations Center (EOC)

An electric emergency which would require the activation of the LU Incident Command System (ICS) EOC will be principally located in Londonderry. There may also be regional EOCs and on scene EOCs.

Electric Operations personnel are responsible for maintaining the supplies and equipment stored in the Salem and Lebanon EOCs.

The EOC is staffed by personnel in accordance with the Incident Command System with specific responsibilities for directing or coordinating the response to the electric emergency. Facilities Management and Information Technology personnel are responsible for the activation of all EOC equipment.

Upon notification that an EOC is to be activated, the Incident Commander or designee will:

- Contact Facilities Management and Security, if required, and request support of EOC activities.
- Contact Information Technology and request support, setup and activation of EOC computers if necessary.

If more than one Region is impacted by an emergency, a System EOC may be activated, coordinating activities across the impacted Regions. During Regional Emergency events the EOC will:

- Monitor customer interruptions
- Assess the Regional operating status and assess the damage to the Transmission and Distribution systems
- Provide information on customer interruptions, issue periodic status updates on the ongoing restoration to senior management, Media Affairs (i.e. Media Relations, Internal Communications, and Regulatory Affairs), and applicable regulatory agencies
- Allocate resources for the restoration effort, including Company crews, tree crews, contract crews, and crews from foreign utilities
- Provide status update reports at pre-designated intervals to applicable functional groups

The operation of the EOC is the responsibility of the Incident Commander or designee for a Regional and/or a System emergency. The position is assumed initially by the Incident Commander contacted by the Region experiencing the emergency.
.
The hours of operation of the EOC will be based upon the circumstances associated with the severity of the emergency and the Operating Condition and Classification Type.

5. Communications System

The primary means of communications is through the use of telephones. The EOC is equipped with separate phone lines. The telephones allow communications between the EOC and the cellular phones.
Backup means of communication in Dispatch and Control include radio and cellular phones.
Dispatch Cellular Phone: 603-475-6411
Control Cellular Phone: 603-327-4679

- Upon request, install additional telephones or equipment. Check each telephone for dial tone.
- Activate any additional computers and equipment.
- If any computer equipment is non-operational, the "Help Desk" personnel should be informed.

6. Mutual Assistance

In the event of major Incidents, natural disasters or other emergencies, the Incident Commander or designee may require assistance from employees, contractors, or another operator.

Refer to **Appendix L** and the CQ&EM Community site for additional information on securing Mutual Assistance.

7. Meals & Lodging

The Logistics Officer is responsible for crew lodging and attaining the resources to support this function.

The procurement and booking of rooms will be made by the Logistics Team. Crew transfer sheets will be used to track the number of crews per hotel and to communicate with the hotel for accurate crews per room data.

- Consider advance booking of a block of rooms on a contingency basis as soon as requests for outside crews are made by the Incident Commander. Individuals assigned to arrange for crew accommodations should coordinate reservations with Procurement. Procurement has pre-established rates and terms on a number of hotels/motels. Where rates and terms are not prearranged, Procurement will negotiate to establish the same. Individuals assigned to accommodations should become familiar with the pre-established terms developed by Procurement to help avoid over-committing the Company.
- Prepare and update a list of all incoming crews - their normal work headquarters, travel route, and expected time of arrival.
- Work with the Planning Resource Officer to arrange for a guide to meet the incoming crews, if unfamiliar with the Region, at prearranged locations and lead the crews to their assigned work locations or headquarters. If practicable, the same guide should be assigned to the same crew each day. This may necessitate the lodging of the guide at the same motel as the crew.
- Register, upon arrival and departure, all incoming and outgoing crews. It is extremely important that all foreign utility and contractor employees are tracked.
- Arrange for lodging accommodations as close to the crews' work location as possible. Generally, 2 persons will be assigned to a room.
- Distribute lists of available meal locations, preferably those which have prearranged credit available. In the event of a large-scale emergency, it may be necessary to send crews to prearranged locations, such as banquet halls, fire halls, etc. where catering services are available. The Meals & Lodging Lead or designee will have the responsibility of updating lists of restaurants, catering services, and halls. Procurement will maintain purchase orders with approved vendors.
- Maintain the listing of all motels and hotels in the Regions. The listing will be by Region and show capacities, quality of service, rates, phone numbers, and seasonal availability. The data will be updated by Procurement as new POs are

executed.

8. Safety and Health

The Safety and Health Officer is responsible for the implementation of items within this section of the Plan.

- Whenever there is a declared electric emergency event, the appropriate Safety and Health personnel will be notified and mobilized in accordance with the classification of the emergency. The Incident Commander and the Manager of Environmental, Health, Safety and Security will, if appropriate, determine the scope of the emergency and will immediately assign Safety and Health personnel to work in locations affected by the emergency.
- Safety will monitor work activities on a local basis and respond accordingly.
- The Incident Commander will contact the Manger of Safety and Health for assistance outside the Region from which manpower will be used to help with restoration efforts.
- Safety will work with local supervision regarding the restoration effort and will conduct field observations/audits, incident analyses, and training as needed.
- Safety will act as a liaison concerning any safety-related activity or situation.
- The Manager of Environmental, Health, Safety and Security will arrange to provide dedicated Safety and Health staff for designated and specified work locations. This dedicated staff will be available for field sites and other staging locations as needed.

9. Security

Liberty Utilities Dispatch Center will be the contact for all security incidents.

Dispatch Center 24 Hour contact number is (603) 216-3620 or 1-855-349-9455

Whenever severe damage is sustained to the Electric System, the Incident Commander may deem that assistance from the Security organization is required. In this event, the Incident Commander will contact the EHSS Officer to appoint a Security Officer.

The Security Officer will determine the scope of the emergency and will, if appropriate, assign a Security Investigator to the scene or location of the emergency.

This Investigator will assist Electric Operations in the execution of their Emergency Plan as follows:

- Act as a liaison between EOC and local law enforcement concerning any emergency- related activity or situation.
- Arrange to provide dedicated Security. This dedicated assignment coverage will be available for field sites as well as motel areas and other staging locations.
- Conduct investigations as may be necessary.
- Provide On Scene Security photographic services as may be necessary to secure evidence, etc.
- Assist and support other Company resources during the emergency with the gathering of visual and documented data for post-emergency claims and asset recovery purposes.

See **Appendix G** for information on Incident Investigation Procedures.

10. Material Management

The Logistics Officer is responsible for implementing items within this section of the plan.

Whenever additional quantities of materials are required for restoration efforts, Inventory Management personnel should be called in to operate storerooms. Emergencies of long duration may require 24 hour operations. Additional storeroom personnel can be dispatched to assist, when necessary, at crew locations.

Discussions between the Incident Commander, Planning/Resource Officer, Logistics Officer and Field Operations personnel - Storeroom Operations will take place to determine needs.

Box Trucks, stake trucks, or pickup trucks can be used to transport quantities of materials from local and other storerooms to the affected Regions.
Traveling stores trucks can also be set up at any location as an emergency storeroom.

When material is in short supply, storeroom personnel will provide Procurement with additional requirements. Supplier emergency phone numbers are maintained by Procurement and emergency purchase orders will be issued to suppliers and other utilities.

11. Holiday Periods

The timing of a Storm Event could impact the contacting, securing and the arrival of internal and external crews and support staff. The potential lag time due to a major holiday period must be considered. In planning for Storm Events occurring during Major Holiday periods, there may be a need to enhance / anticipate the pre-planning and pre-staging of line crews, to cancel vacations or to have available the full internal crew capability. The intent is to maximize the availability of crews while recognizing the reality that even with pre-planning, some employees are unavailable due to sickness, injury, or travel.

See the list below for Liberty Utilities Holidays.

HOLIDAY SCHEDULE 2016 NEW HAMPSHIRE	Date	Management	Electric Operations	Gas Operations	Customer Service
New Year's Day	January 1	x	x	x	x
MLK Day	January 18	x		x	x
President's Day	February 15	x	x	x	x
Memorial Day	May 30	x	x	x	x
Independence Day	July 4	x	x	x	x
Labor Day	September 5	x	x	x	x
Veteran's Day	November 11	x	x		x
Thanksgiving Day	November 24	x	x	x	x
Day After Thanksgiving	November 25	x	x	x	x
Christmas Eve Day	December 24		x		
Christmas Day	December 25	x	x	x	x

K. PLAN MAINTENANCE AND ADMINISTRATION

The Emergency Plan is maintained through initial training, periodic drills and exercises, record maintenance, and the review and update of the Plan. The methods of maintaining the Plan are described in this section.

In order for the Incident Command staff to be prepared to successfully implement this Plan, personnel assigned to the ICS must be familiar with their job position, associated procedures, and equipment. This preparedness is achieved and maintained using a combination of initial training, drills, and exercises.

- **Training**

  All personnel potentially filling a position in this Plan should be familiar with this Plan. The initial training simply consists of reading the Plan. There is no substitute for reading the Plan and asking questions.

  An individual's assignment to an Emergency organization position is associated with the person's current job position within the normal organization. ICS Position descriptions and checklists are located on the CQ&EM site. Also, on the Learning and Development site, there are PowerPoint presentations prepared by Electric Training covering damage assessment, wires down and electric hazards.

- **Drills and Exercises**

  Drills are conducted to ensure effectiveness of the Plan and to keep personnel aware of their responsibility should an actual emergency situation arise. Actual events may substitute for the drills and exercises. These drills verify the ability of LU personnel to perform initial notifications and classify emergencies. The Emergency Plan drill may be combined with other required drills.

  If necessary, one ICS exercise may be conducted annually at one of the company facilities. This exercise is an event that tests the integrated capability of LU to respond to a significant electric emergency. The exercise comprehensively evaluates the ability of the ICS to implement the emergency response plan and coordinate response activities with other organizations. The exercise may involve activation of an Emergency Operations Center and the use of an On Scene Command Post. The exercise scenario is structured so as to allow free play for decision making as much as possible, provided that the basic objectives of the exercise are satisfied.

  NH Puc 306.09 9(e) states that each Plan shall provide that one full readiness exercise and one table top exercise be conducted annually. The utilities shall invite applicable state agencies and commission staff to participate in such exercises.

  The results of each drill and exercise are documented and a Self-Assessment Report is prepared. The report includes observations and recommendations of the effectiveness of the emergency response.

- **Periodic Reviews**

  The Emergency Plan must be reviewed by CQ&EM at intervals not exceeding 15 months, but at least once each calendar year, and updated as necessary, to reflect technical, administrative, or regulatory changes.

L. LIAISON WITH FIRE, POLICE, PUBLIC OFFICIALS AND OTHER UTILITIES

Liberty Utilities and its local emergency responders have to be prepared for many different events that could occur in the electric distribution system. The Company and the emergency responders must be prepared for different scenarios.

Liberty Utilities shall establish liaison with other utilities within its area of operation in order to preplan and coordinate response to emergencies.

The information provided to emergency responders should be comprehensive enough to give them the knowledge needed to address specific hazards that may be present and it should not include unnecessary information. Emergency responders have indicated that the information provided should be kept as short and simple as possible.

Liberty Utilities does not agree with any requirement for operators to share their actual emergency response plans with local emergency responders. These plans are far more detailed than what is needed by emergency responders and they contain confidential corporate information that could easily be used against the interests of public safety if lost or stolen. Sensitive information showing the exact location of critical facilities is information that must be in the direct control of the utility and shared only with those who have an operational responsibility in the event of an emergency.

See **Appendix D** and NH Puc 306.09(f) for more information on Liaison.

APPENDIX A

ELECTRIC EMERGENCY CLASSIFICATION AND NOTIFICATION PLAN

1. Responsibility

The purpose of this procedure is to provide detailed information, as well as guidance regarding the actions to be taken for internal and external notifications that are to be made by the Liberty Utilities Dispatch & Control organization upon occurrence of an electric system interruption, incident or other events.

The Vice President of Operations, his/her appointed designee, or the Incident Commander when appointed, is primarily responsible for establishing the projected and/or actual Incident Classification Type. Dispatch & Control Center Operations is primarily responsible for monitoring all weather events and evaluating their potential severity and impact on the system. Emergency Management will also monitor weather and other incidents and events that might adversely impact the system. Any incident or event that poses a potential significant risk will be immediately communicated to the Director of Electric Operations, VP of Operations and to the President of Liberty Utilities.

2. Definitions

Critical Facility: A location or facility where the loss of electrical service would interrupt vital services to the public, e.g. hospitals.

Company: An investor-owned electric distribution or transmission company conducting business in New Hampshire.

Emergency Event: An event where widespread outages or service interruptions have occurred in the service area due to storms or other causes beyond the control of the company. An Emergency event is classified as Type 5, 4, 3, 2 or 1.

Emergency Operations Center (EOC): The physical location at which the coordination of information and resources to support incident management activities takes place.

Incident Anticipation Phase: (Prior to Event Stage) The period of time between when (1) an impending Emergency event is first identified, and (2) the Emergency event first causes damage to the system resulting in service interruptions.

Incident Commander (IC): The individual who has overall responsibility for the company's response in an Emergency event.

Incident Command System (ICS): The coordinated and collaborative incident management construct specifically designed and made a part of the National Incident Management System ("NIMS") under the Federal Emergency Management Agency. ICS enables effective, efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents.

Incident Response Phase: (During-Event Stage) The period of time between when an Emergency event first causes damage to the system resulting in service interruptions and the time when service is restored to all customers.

Life Support Customers (LSCs): Those customers who have provided documentation of their medical conditions necessitating electric service.

Mutual Assistance Agreement: An agreement among a utilities, both inside and outside the state, that details specifics for obtaining or lending resources, including, but not limited to, material, equipment, and trained personnel, when internal resources are not sufficient to ensure the safe and reasonably prompt restoration of service during an Emergency event.

Post Incident Phase: (Post-Event Stage) The period of time immediately following restoration of service to all customers after an Emergency event.

Region Level: Level of response that involves the control and coordination of restoration efforts in Lebanon and/or Salem.

Service Interruption: The loss of service to one or more customers connected to an electric distribution system.

Trouble: Specific damage to the system, such as downed wires, a broken pole or blown fuse, a single "trouble Ticket" could result in an outage affecting one customer or multiple customers.

Wide-Scale Emergency: An event which results in, or is expected to result in:
(a) A sustained interruption of electric service to 10% or more of the utility's customers, or 40,000 of the utility's customers, whichever is less and restoration of electric service to any of these customers takes more than 24 hours; or
(b) The federal, state or local government declaring and official state of emergency in the utility's service territory and the emergency involves and interruption of electric service.

3. Classification of Events

The following are guidelines to determine the severity of Emergencies and their Operating Conditions for the Company.
The guidelines are intended to be consistent with Table 306-1 in NH Puc 306.09:
Emergency Response Standards and Electrical Outage Restoration

Type 5 Small Impact Event *(Localized Response Condition / Normal Operations)* - System activity is normal with response coordinated with local on-call personnel. Incident Command Structure not activated.
(0 - 840 customers)

Type 4 Moderate Impact Event *(Heightened Alert)* - The severity within a Region(s) is (are) such that restoration activities are generally accomplished within a 24 hour period. This may require assistance from another Region or contractors. Incident Command Structure may be activated at the Region level.
(841 - 2100 customers)

Type 3 Serious Impact Event *(Enhanced Support)* - The severity within a Region(s) is (are) such that restoration activities are generally accomplished with assistance from other Regions and contractors within 24 to 48 hour period. Incident Command structure activated at the Regional level.
(2100 - 4200 customers)

Type 2 Major Impact Event *(Comprehensive Support)* – The severity within the Region (s) is (are) such that restoration activities are generally accomplished with assistance from other Regions and contractors within a 48 to 144 hour period. This may require mutual assistance from other utilities. Incident Command Structure activated at the Regional level and may be activated at the System level.
(4200 - 8400 customers)

Type 1 Catastrophic Impact Event *(Emergency Support)* – The severity within a Region(s) is (are) such that restoration activities are accomplished with assistance from other Regions, contactors and require mutual assistance from other utilities. Restoration activities will generally require 48 to 240 hour period. The Incident Command Structure will be activated at the Regional and System levels.
(>8400 customer)

See below.

Emergency Classification Guidelines with Event Levels

Type 5 – Small Impact Event (Localized Response Condition) Emergencies include:	
Viewpoint	Type 5 events represent normal operating conditions and any events will be managed by Liberty Utilities' Dispatch & Control Center, which is staffed 24/7. DCC uses Responder as the primary tool to identify the magnitude of customers interrupted and the most probable protective device that operated. For small outages, DCC will dispatch crews designated as trouble resources to repair the outage. If upon arrival the crew determines additional resources are needed, a supervisor is assigned and will manage the repairs in concert with DCC. DCC performs all routine reporting requirements. Customer Care will retain all municipal responsibilities.
Event Characteristics	• System activity is normal • ≤ 2 % Customers out (840) • <12 Hrs. Outage Duration • Typically <10 Locations of Trouble
Response Organization	• ICS Command and general staff positions are not activated
Resource Activation	• Local supervision • Local crews (< 5)
Communication	• Dispatch & Control - Internal notification with Electric Operations only • A written Incident Action Plan is not required (IAP)
Corporate Communication	
✓ Crisis Attracts little or no attention	
✓ Public and/or media are virtually unaware	

Type 4 – Moderate Impact Event (Heightened Alert) Emergencies include:	
Viewpoint	Type 4 events include (but are not limited to): sub-transmission outages that impact one or more substations: thunderstorms with high winds and frequent and/or severe lightning: small to moderate winter storms: and unanticipated transmission events. These events are managed by the Dispatch & Control Center in conjunction with local management often sharing responsibilities. Operations management will staff in a partial decentralized mode, using some of the ICS structure to support restoration. DCC performs all routine reporting. Customer Care will retain
Event Characteristics	• >2 ≤ 5 % Customers out (840 – 2100) • 0 – 24 Hrs. Outage Duration • Typically 10 – 50 Locations of Trouble • This type of event typically occurs less than 15 times a year • The event is usually limited to one operational period
Response Organization	• Regional Incident Command Structure may be activated in the affected regions • Command staff and general staff functions are activated only if needed • System Level Incident Command Structure is not activated
Resource Activation	• Restoration is generally accomplished with local resources • Additional contract distribution line and forestry resources may be required • Contract distribution line resources may be between 5 – 10 crews • Contract forestry resources may be between 0 – 5 crews • Wires Down and Damage Assessment functions are typically not activated

Communication	• Electric Operations may have briefings or conference calls to ensure the complexity of the event is fully communicated to management and that response staff receive the appropriate level of support required for the situation
	• Dispatch & Control
	  ▪ Storm planning report may be required
	  ▪ Storm summary report may be required
	  ▪ Courtesy planning report may be sent to the NHPUC

Corporate Communication	
✓ Crisis situation may/may not have occurred; the situation is attracting slow but steady media coverage	
✓ The public at large is aware of the situation/event but is attracting very little attention	

Type 3 – Serious Impact Event(Enhanced Support) Emergencies include:	
Viewpoint	Type 3 events represent the greatest range of uncertainty often due to a severe event being forecasted but may have a medium to high confidence level. This may result in either limited activity or could be escalated to a Type 2 event. The approach is to prepare for the event by activating the ICS structure in one or more of the regions that may be impacted. Weather forecasts, institutional knowledge of the system's performance and forecasted confidence levels are used to determine a pre-event approach. Storm Conference calls are used to determine the response actions and level of employee mobilization. The Incident Commander is ultimately responsible for the final decisions with
Event Characteristics	• >5 ≤ 10 % Customers out (2100 – 4200) • 24 – 48 Hrs. Outage Duration • Typically 50 – 100 Locations of Trouble • This type of event typically occurs less than 10 times a year • This event may extend into multiple operational periods
Response Organization	• Incident Command Structure is activated at the Regional level to match the complexity of the event • Regional EOC established • Some or all of the command and general staff positions may be activated • Additional restoration support functions such as wires down, damage assessment, storm room personnel may be established as directed by the Incident Commander • Municipal rooms may be opened to support additional local involvement and prioritization with communities • Community Liaisons may be activated to communities with the highest
Resource Activation	• Typically requires assistance from contractors or employees from another region • Contract distribution line resources may be between 10 – 20 crews • Contract forestry resources may be between 5 – 10 crews

Communication	• Electric Operations will have briefings/conference calls to ensure the complexity of the event is fully communicated to management and that response staff receive the appropriate level of support required for the situation
	• Dispatch & Control
	  ▪ Storm planning report may be required
	  ▪ Storm summary report may be required
	  ▪ Planning reports sent to the NHPUC as requested
	• A written Incident Action Plan may be required (IAP)

Corporate Communication	
✓ Crisis causes growing attention from local and regional media	
✓ Affected and potentially affected parties threaten to talk to the media	
✓ Email notification to 911@algonquinpower.com	

Type 2 – Major Impact Event (Comprehensive Support) Emergencies include:	
Viewpoint	Type 2 events result from a severe forecasted event, which has historically resulted in significant damage to the electric system. For these events, both regional EOCs are open in advance of the event. If it is expected that the event will be particularly high profile, the System level EOC will also be open. The event is coordinated through twice daily conference calls to coordinate activities using a predefined meeting check list. Meetings and conference calls usually begin days in advance of the forecasted impact date. Communication protocols are activated and extended discussion with local municipals occurs. The Incident Commander and his/her direct staff is responsible to make the appropriate preparations and manage the restoration.
Event Characteristics	• >10 ≤ 20 % Customers out (4200 – 8400) • 48 – 144 Hrs. Outage Duration • Typically 100 – 200 Locations of Trouble • This type of event typically likely occurs less than 5 times a year This event will extend into multiple operational periods
Response Organization	• Incident Command Structure is activated at the Regional level to match the complexity of the event. ICS may be activated at System level • One or both Regional EOCs established • System level EOC may be established • Most or all of the command and general staff positions are activated • Additional restoration support functions such as wires down, damage assessment, storm room personnel will be established as directed by the Incident Commander • Decentralized Substation Operations may be activated in the most severely impacted areas at the discretion of the Incident Commander • Municipal rooms are opened to support additional local involvement and prioritization with communities • Community Liaisons are activated • EOC Liaison is activated if State EOC is opened
Resource Activation	• Requires assistance from contractors or employees from another region • Contract distribution line resources may be between 20 – 30 crews • Contract forestry resources may be between 10 – 20 crews • Wires Down and Damage Assessment functions are activated • Support Functions are staffed by company personnel

Communication	• Electric Operations will have briefings/conference calls to ensure the complexity of the event is fully communicated to management and that response staff receive the appropriate level of support required for the situation
	• Dispatch & Control
	  ▪ Storm planning report is required
	  ▪ Storm summary report is required
	  ▪ Planning reports sent to the NHPUC
	• A written Incident Action Plan is required (IAP)
	• An After Action Review is required

Corporate Communication	
✓ Media are reaching out to employees and non-communication staff for information about the crisis	
✓ Broadcast and print media are on-site for live coverage	
✓ In addition to the media, stakeholders and community partners are present as site	
✓ Email notification to 911@algonquinpower.com, with phone call per protocol to confirm receipt	

Type 1- Catastrophic Impact Event (Emergency Support) **Emergencies include:**	
Viewpoint	Type 1 events result from a catastrophic forecasted event which has historically resulted in significant damage to the electric system. Type 1 events are infrequent. For Type 1 events, both Regional EOCs and a System EOC are open in advance of the event. This is a full implementation of the Incident Command System. The event is coordinated through twice daily conference calls to coordinate activities using a predefined meeting check list. Meetings and conference calls usually begin days in advance of the forecasted impact date. Communication protocols are activated and extended discussion with local municipals occurs. The Incident Commander and his/her direct staff is responsible to make the appropriate preparations and manage the restoration.
Event Characteristics	• > 20 % Customers out (> 8400) • 48 – 240 Hrs. Outage Duration • Typically > 200 Locations of Trouble • This type of event occurs infrequently This event will extend into multiple operational periods
Response Organization	• Incident Command Structure is activated at the Regional level to match the complexity of the event. ICS may be activated at System level • One or both Regional EOCs established • System level EOC may be established • Most or all of the command and general staff positions are activated • Additional restoration support functions such as wires down, damage assessment, storm room personnel will be established as directed by the Incident Commander • Decentralized Substation Operations may be activated in the most severely impacted areas at the discretion of the Incident Commander • Municipal rooms are opened to support additional local involvement and prioritization with communities • Community Liaisons are activated • EOC Liaison is activated if State EOC is opened
Resource Activation	• Requires assistance from contractors or employees from another region • Contract distribution line resources may be between >30 crews • Contract forestry resources may be between >20 crews • Wires Down and Damage Assessment functions are activated • Support Functions are staffed by company personnel

Communication	• Electric Operations will have briefings/conference calls to ensure the complexity of the event is fully communicated to management and that response staff receive the appropriate level of support required for the situation
	• Dispatch & Control
	  ▪ Storm planning report is required
	  ▪ Storm summary report is required
	  ▪ Planning reports sent to the NHPUC
	• Pre-Event outreach to municipalities, Regulators, Government Officials and customers
	• A written Incident Action Plan is required (IAP)
	• An After Action Review is required

Corporate Communication
✓ Public health & safety is concerned
✓ National or international media are covering as major news
✓ Major government attention is present
✓ There is real or potential environmental harm
✓ One or more groups are expressing anger or outrage
✓ Email notification to 911@algonquin power.com, with phone call per protocol to confirm receipt

4. Determination of Storm Resource Requirements

The above Section 3 titled Classification of Events is used to predict the potential impacts on the Liberty Utilities electrical distribution system and customer base. For a discussion on Pre-Storm Restoration Prediction Models, see the NHPUC After Action Report of the November 26, 2014 Thanksgiving Snowstorm (page 22).

Prior to the onset of a forecasted weather event, factors embedded into the weather forecasting service, accompanied with a confidence level, combine to generate a predicted Energy Event Index (EEI) Level. See the Table below.

Be aware that an EEI Level of 1, 2, 3, 4, or 5 is not the same as a Liberty Utilities Type 5, 4, 3, 2, or 1.

Energy Event Index Definition

No Leaves (Oct 1 - Mar 31) (winter override)

Energy Index Liberty

See

	Wind Speed	Wind/ Gust	Snow	Ice
EEI 1	< 40 mph	< 45 mph	< 6 in.	< 1/10 in.
EEI 2	>= 40 mph	>= 45 mph	>= 6 in.	>= 1/10 in.
EEI 3	>= 50 mph	>= 55 mph	>= 8 in.	>= 3/8 in.
EEI 4	>= 60 mph	>= 70 mph	>= 12 in.	>= 1/2 in.
EEI 5	>= 70 mph	>= 85 mph	>= 24 in.	>= 1 in.

Confidence Level	
Low	< 30% chance
Medium	>= 30% to < 60% chance
High	>= 60% chance

Event Table – Utilities

...\Thanksgiving\Energy Event Index (EEI) Table.docx

Also, see below.

Energy Event Index Table from Telvent
Go to the CQ&EM Community Site Electric Emergency Management folder for a full size document.

Liberty Utilities	CLASSIFICATION OF EMERGENCIES	Revision No.	3
		Issue Date:	12/31/2015
		Supersedes Date:	07/01/2015
Based on Energy Event Index Table from Telvent (Some values deviate slightly.)			
		L. Cody	

Storm Event Type	Potential Outages and Duration	Operating Conditions	Anticipated Line Crew Levels	Weather Indices (may include one or more of these factors)					
				Wet Snow (Inches)	Ice Accretion (inches)	Tree Foliage (Leaves On)	Tree Foliage (Leaves Off)	Wind Impact (mph)	Wind Gusts (mph)
5 Small Impact Event (Normal Operations)	0 – 840 Customers < 12 Hours	Type 5 Events represent normal operating conditions. The Event is managed by Liberty Utilities' Dispatch & Control Center (DCC), which is staffed 24/7. DCC uses Responder as the primary tool to identify the magnitude of customers interrupted and the most probable protective device that operated. For small outages, DCC will dispatch crews designated as trouble resources to repair the outage. If upon arrival the crew determines additional resources are needed, a supervisor is assigned and will manage the repairs in concert with DCC. DCC performs all routine reporting requirements. Customer Care will retain all municipal responsibilities.	Company = <13 Contractor = 4 Plus NAMAG = 0	< 8"	< 0.1		✓	< 40	< 45
				< 4"	< 0.1	✓		< 30	< 35
4 Moderate Impact Event (Heightened Alert)	840 – 2100 Customers 0 to 24 Hours	Type 4 Events include sub-transmission outages that impact one or more substations, thunderstorms with high winds and frequent and/or severe lightning, small to moderate winter storms, and unanticipated transmission events. The Event is managed by the Dispatch & Control Center (DCC) in conjunction with local management often sharing responsibilities. Operations management will staff in a partial decentralized mode, using some of the ICS structure to support restoration. DCC performs all routine reporting. Customer Care will retain municipal responsibilities.	Company = <13 Contractor = 4 Plus NAMAG = 0	8" to 8"	0.1 to 0.375		✓	45 to 60	45 to 55
				4" to 8"	0.1 to 0.25	✓		30 to 45	35 to 50
3 Serious Impact Event (Enhanced Support)	2100 – 4200 Customers 24 to 48 Hours	Type 3 Events represent the greatest range of uncertainty often due to a severe Event being forecasted but may have a medium to high confidence level. This may result in either limited activity or could be escalated to a Type 2 Event. The approach is to prepare for the Event by activating the ICS structure in one or more of the regions that may be impacted. Weather forecasts, institutional knowledge of the system's performance and forecasted confidence levels are used to determine a pre-Event approach. Storm Conference Calls are used to determine the response actions and level of employee mobilization. The Incident Commander is ultimately responsible for the final decisions with input from their direct staff.	Company = <13 Contractor = 4 Plus NAMAG/Additional Contractor Crews = 10 to 20	8" to 12"	0.375 to 0.5		✓	50 to 60	55 to 65
				6" to 8"	0.25 - 0.375	✓		45 to 55	50 to 60
2 Major Impact Event (Comprehensive Support)	4200 – 8400 Customers 48 to 144 Hours	Type 2 Events result from a severe forecasted event which has historically seen significant damage to the electric system. Both regional EOCs are open in advance of the Event. If it is expected that the Event will be particularly high profile, the System level SOC will also be open. The Event is coordinated through twice daily Conference Calls to coordinate activities using a predefined meeting check list. Meetings and Conference Calls usually begin days in advance of the forecasted impact date. Communication protocols are activated and extended discussion with local municipals occurs. The Incident Commander and his/her direct staff are responsible to make the appropriate preparations and manage the restoration.	Company = 13 Contractor = 4 Plus NAMAG/Additional Contractor Crews = 20 to 30	12" to 15"	0.5 to 0.625		✓	60 to 65	65 to 70
				8" to 12"	0.375 to .5	✓		55 to 60	60 to 65
1 Catastrophic Impact Event (Emergency Support)	> 8400 Customers 48 to 240 Hours	Type 1 Events result from a catastrophic forecasted Event which has historically seen significant damage to the electric system. Type 1 Events are infrequent. Both Regional EOCs and a System SOC are open in advance of the Event. This is a full implementation of the Incident Command System. The Event is coordinated through twice daily Conference Calls to coordinate activities using a predefined meeting check list. Meetings and Conference Calls usually begin days in advance of the forecasted impact date. Communication protocols are activated and extended discussion with local municipals occurs. The Incident Commander and his/her direct staff are responsible to make the appropriate preparations and manage the restoration.	Company = 13 Contractor = 4 Plus NAMAG/Additional Contractor Crews = > 30	> 15"	> 0.625		✓	> 65	> 70
				> 12"	> 0.5	✓		> 60	> 65

Note: Typically, of the 13 Company Crews, 7 report to Lebanon and 6 report to Salem.

APPENDIX B

IMMEDIATE NOTIFICATION BY TELEPHONE

Copied below are the state regulations concerning the immediate notice by telephone following an event or incident.

Refer to the most current NHPUC Emergency/Accident Notification Protocol Roster for additional instructions.

Emergency Dispatch shall give the telephonic notice in accordance with its written procedures.

Puc 306.06 Notification of Accidents and Property Damage.

(a) A utility shall notify the commission in the event of accidents and significant events in accordance with subparts (c) – (f), except during wide scale emergencies as required by this rule.

(b) The commission shall provide a protocol roster to the utilities updated as necessary which:

(1) Lists commission representatives with their after work hours telephone contact numbers, email addresses and text contact information; and

(2) Lists the general commission telephone number.

(c) A utility shall notify the commission by telephone, automated telephone notification or electronic means as soon as possible, but no later than 2 hours after becoming aware of an outage event that interrupts service to more than 2,000 customers for more than 5 minutes.

(1) The notification shall include:

a. The name of the utility;

b. The name of the person initiating the notification and a telephone number for call back;

c. A brief description of the event location;

d. Estimated number of customers affected; and

e. Estimated duration of outage or service restoration time; and

(2) Notification shall be to all commission representatives on the protocol roster, described in (b) above through automated telephone notification, email or text.

(d) A utility shall notify the commission by telephone as soon as possible, but no later than 2 hours after becoming aware of an accident or event that:

(1) Results in serious injury or fatality;

(2) Involves a breach of security or threat against the utility's facilities addressed in section 306.10;

(3) Involves aircraft, trains or commercial boats;

(4) Results in closure of a state highway; or

(5) Is not covered in this section but has been or is anticipated to be reported publicly via major commercial news outlets.

(e) When an accident or event occurs as described in (d) above, the utility shall notify the commission as follows:

(1) Attempt to contact the appropriate commission representative listed on the protocol roster, described in (b) above, either at the commission telephone number during regular commission hours or at the after-hours number outside of regular commission hours;

(2) Proceed sequentially through the roster attempting to contact a commission representative;

(3) If a utility is unable to reach a commission representative after (2) above, the utility shall notify the commission as follows:

a. Call the commission general telephone listing, provided in the protocol roster, and leave a voice mail message:

1. Identifying the utility and the name and return telephone number of the

individual attempting to report; and

2. Stating that an accident or event requiring notification has occurred and will be reported when the commission next opens; and

b. As soon as possible during regular commission hours, contact the appropriate commission representative listed on the protocol roster, described in (b) above, and proceed sequentially through the roster; and

(4) When the utility is first able to speak to a commission representative listed on the protocol roster as required by this section, the utility shall notify the representative of the following:

a. The name of the utility;

b. The name of the person making the report and the telephone number at which they can be called back;

c. A brief description of the accident or event and location;

d. A description of any known fatalities, personal injuries and damage;

e. Any other known information relevant to the cause of the accident or event and the extent of the damage; and

f. The time at which:

1. The accident or event occurred; and

2. The utility was first notified or the accident or event.

APPENDIX C

REQUIRED WRITTEN REPORTS

Copied below are the state regulations concerning the required written reports following an event or an emergency. Electric Operations, Engineering, Legal and CQ&EM should assist in the preparation of the written reports. Regulatory Compliance should coordinate the filing of these reports as well as the Event Driven Report. Also listed are the required internal reports.

Puc 306.06 Notification of Accidents and Property Damage.

(f) Each utility shall report in writing any accident or event requiring notification pursuant to (d) above, by completing and submitting to the commission:

(1) Form E-5E, within 10 business days of notification of the accident or event; and

(2) If requested by the commission, a more detailed written report, referencing the original E-5E report number, containing any additional supportive documentation not provided in the original E- 5E report, within 60 days of notification of the accident or event.

(g) If a utility is requested to file a report pursuant to Puc 306.02(f)(2) and the accident or event involves a utility's pole or anchors located within the public way, the utility shall include in its report whether the poles or anchors were licensed and whether the poles or anchors were properly located according to that license.

Puc 306.09 Emergency Response Standards and Electrical Outage Restoration.

(a) On an annual basis, each utility shall file with the commission one original and one electronic copy of an emergency response plan (ERP).

(b) ERPs shall incorporate the incident command system and follow the framework established in the National Incident Management System.

(c) Utilities shall review and update plans at least once every calendar year.

(d) Each ERP shall include a clear description of the responsibilities and policies of senior management during an emergency.

(e) Each ERP shall provide that one full readiness exercise and one table top exercise be conducted annually. The utilities shall invite applicable state agencies and commission staff to participate in such exercises.

(f) At least annually, the utility shall request to meet with municipal emergency response personnel to assure the accuracy of emergency response contact information is shared between the two parties, and to validate or revise the municipalities' critical infrastructure listing.

(g) Each ERP shall incorporate projected event levels consistent with Table 306-1.

Table 306-1			
Utility	**ERP Event Level**	**% Customers Out**	**Outage Duration (Hrs.)**
	5	≤2	<12
	4	>2≤5	0-24
	3	>5 ≤10	24-48
	2	>10≤20	48-144
	1	>20	48-240

Puc 307.08 Reporting During Wide Scale Emergencies

(a) Distribution crew reports shall be submitted electronically 4 times per day at 6 am, 10 am, 2 pm and 8 pm using Form E-33 pursuant to Puc 308.15.

(b) Transmission crew reports shall be submitted electronically 4 times per day at 6 am, 10 am, 2 pm and 8 pm using Form E-34 pursuant to Puc 308.16.

(c) In the event that commission staff anticipates the occurrence of a wide-scale emergency, staff shall notify the utilities and the utilities shall file crew reports prior to the onset of the wide-scale emergency. Event names shall be determined by the commission and made known to each of the utilities required to report.

(d) Crew reporting shall consist of only those crews which are physically located within the state boundaries regardless of what their work status is such as sleeping, resting, eating, restoration of circuits and shall reflect the crews which are available for restoration at the time of the report.
(e) Crew reporting shall be completed for front line, field assessment and public safety functions and as described in Forms E-33 and E-34.
(f) Electric utility outage reports shall be submitted to the commission using applicable Forms E-36a, E-36b, and E-36c any time outage information is not publicly available on utility websites during wide scale emergencies pursuant to Puc 308.17.
(g) Electric utility outage reports as described (f) above shall be submitted at the same times as required in (a) and (b) above or upon request of commission.

NHPUC After Action Review (Sec. 5.2) – December 2008 Ice Storm
Each affected utility shall file self-assessments following any State-declared emergency event that implicates utility services.
[Note: See Sec. 5.2 on page 65 of the report.]
CFID: 3695

Annual Storm Fund Report
Settlement Agreement, DG 06-107, Order 24,777.
CFID: 1748

Liberty Utilities After Action Review
Liberty Utilities may, on its own, conduct an internal review of its preparation and response to an electric emergency event. Typically, the Incident Commander would request the review and coordinate the review with Emergency Management.

Topics to discuss in the After Action Meeting include:
- a chronology of events
- a review of all applicable operating procedures and plans
- a review of what worked well
- a review of what needs improvement
- an action plan for correcting deficiencies and making improvements

Other items to consider are contained in the document copied below entitled:
Attachment 4 – Final Event Reporting Requirements (Table B)
The source of this document is a National Grid Emergency Plan.

TYPICAL NHPUC DATA REQUEST
1) Peak # of Customers Affected (simultaneously or coincidently)
2) Peak % of Customers Affected (simultaneously or coincidently)
3) Date and Time of Peak # of Customers Affected
4) Time of First Outage
5) Peak # of Restoration Crews on system over time (excluding Tree Crews and Damage Assessors)
6) Wire Reattached / Replaced (ft.)
7) # of Transformers Replaced
8) # of Poles Set
9) # of Cross-arms Replaced
10) Total Preliminary Estimated Cost
11) Outage data by town, hour by hour, throughout the period.
12) Timeline of outages along with crew reports.

Storm Planning Report
Prepared by Emergency Dispatch.

Storm Summary Report
Prepared by Emergency Dispatch.

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
DISTRIBUTION CREW REPORT
(In compliance with Puc 308.14)

	EVENT NAME						
	DATE REPORT SUBMITTED:			TIME - DATA EXTRACTED:			
	Submitted by:						
	Company:						

Quantity of Field Personnel

					Prior to Event[A]	During Event	Incremental
			FRONT LINE				
1	**Distribution** 69 KV and Less includes Subtransmission 46kv, 34.5kv,22kv, 13kv, 7.5 kv, 4kv, 2kv and below	Line	Company Line Crews restoring Distribution Circuits		0	0	0
			Affiliate Co Line Crews restoring Distribution Circuits		0	0	0
			Contractor Line Crews restoring Distribution Circuits		0	0	0
			Foreign Utility Line Crews restoring Distribution Circuits		0	0	0
		Service	Company Line Crews restoring Service		0	0	0
			Contractors restoring Service *includes Electricans*		0	0	0
		Pole[B]	Pole Setting/Digging Operations *includes Co, Foreign Uitlity, Contractor*		0	0	0
		Tree	Contractor Tree Clearing - Working on Distribution Circuits		0	0	0
			Foreign Utility Tree Clearing - Working on Distribution Circuits		0	0	0
				SUBTOTAL	0	0	0
			FIELD ASSESSMENT				
2	Distribution *see above*	Line[C]	Company Damage Assessment Personnel		0	0	0
				SUBTOTAL	0	0	0
			PUBLIC SAFETY				
3	Wires Down Appraiser Field Guides Other Support	Line	Company Personnel		0	0	0
			Bird Dogs, Location Guides		6	0	0
			includes contractors			0	0
				SUBTOTAL	0	0	0
				GRAND TOTAL	0	0	0

A Includes "business as usual"crews, crews physically present, crews signed into work, and crews off road and on road.
Example: if Monday through Friday there are 5 line crews and 4 contractor tree crews, the 'Prior to Event' column will contain 5 line crews and 4 contractor tree crews, no matter what day the event occurs. Typically these numbers will be consistent from event to event unless crews have been dispatched elsewhere or eliminated. During the event, crews will include the "prior to event" crews and additional crews that have arrived "boot on the ground". Numbers should be all inclusive and should not reflect rest time or crews that have yet to arrive.

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

C Does not include line crews who are also doing assessment.

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

ELECTRIC UTILITY OUTAGE REPORT

(In compliance with Puc 308.16)

EVENT

DATE: **TIME - DATA EXTRACT:**

GRANITE STATE ELECTRIC CO. d/b/a LIBERTY

Submitted by:

Town Name	***Liberty Total Customers***	***Liberty Customers without Power***	***Liberty % Out of Power***	**Comment/ Additional Information**
Acworth			0%	
Alstead			0%	
Bath			0%	
Canaan			0%	
Charlestown			0%	
Cornish			0%	
Derry			0%	
Enfield			0%	
Grafton			0%	
Hanover			0%	
Langdon			0%	
Lebanon			0%	
Marlow			0%	
Monroe			0%	
Orange			0%	
Pelham			0%	
Plainfield			0%	
Salem			0%	
Surry			0%	
Walpole			0%	
Windham			0%	

Attachment 4 - Final Event Reporting Requirements (Table B)

Each Company shall include the information listed below in its Final Event Report.

1	▪ Weather
	• Actual weather
	• Maximum winds experienced
	• Duration of incident
	• Duration of emergency/storm restoration
2	▪ Transmission Lines
	• List of transmission lines that became inoperative
	• Repairs made
	• Estimate for repairs
	• Switching necessary to re-route power with adequate sectionalizing points
3	▪ Substations
	• List of substations which incurred damage
	• List of equipment damaged
	• Estimate of repairs
	• Were stations properly alarmed
4	▪ Distribution Feeders
	• List of feeders affected
	• List of feeders locked out
	• Was backup to feeders sufficient
5	▪ Trouble Order System
	• Total Number of Customer Outages
	• Number of trouble orders
	• Did the system function as it was designed
	• Was there sufficient manpower available to operate the system
	• If de-centralization occurred did the system function as it was designed
6	▪ Wire Down Operations
	• Total number of Priority wire down calls
	• Number of wire down trouble calls
	• Did the system function as it was designed
	• If de-centralization occurred did the system function as it was designed
7	▪ Pole Damage
	• Number of broken pole trouble calls
	• Number of broken poles replaced by location size and age of the old pole
8	▪ Wire Damage
	• Number of feet, type, and size of primary and secondary conductors replaced
	• Number of feet, type, and size of follow-up reconductoring to be done

9	▪ Transformers damaged
	• Listing by size, type and age of damaged transformer
	• Availability of replacements
10	▪ Crew Supplements
	• Total number of Company crews and from which locations
	• Number and type of crews from outside the Company
	• Availability and use of wire down appraisers
	• Availability and use of damage appraisers
11	▪ Food and Lodging
	• Listing of lodging and number of rooms and meals
	• Was food available and adequate
	• Was there provisions for noon meals at the job sites
12	▪ Equipment
	• Number and type of vehicles used
	• Type and number of equipment breakdowns
	• Type of equipment rented
	• How were repairs handled for company and foreign vehicles
13	▪ Helicopter
	• Were helicopters available
	• How were the helicopters used
14	▪ Media
	• Was the Media kept updated and informed
15	▪ Public Officials
	• Was contact and cooperation maintained with municipal and state officials
16	▪ Stock/Materials
	• Was material adequate and readily available to make repairs
	• Were stock rooms properly equipped and staffed
	• Were provisions made for stock delivery to crews in the field
17	▪ Vegetation Management
	• Were crews readily available and properly equipped
	• Numbers crews used by type, company and community
	• Were the vegetation trouble calls handled by highest priority
18	▪ Communication
	• Was communication follow smooth, detailed, accurate and timely
	• Were there adequate, communication methods: radios, frequencies and cell phones
	• Was the communication with external resources adequate, timely, and detailed

Source: National Grid Emergency Plan

STORM PLANNING REPORT

DATE: Click here to enter a date.

	Lebanon	Salem	Charlestown	Comments
Weather Forecast				
Anticipated EERP Event Level	Choose an item.	Choose an item.	Choose an item.	
Resources				**Totals**
Internal Crews				
Contractor Crews				
Total Line Crews				
Tree Crews				
Wires Down				
Other Support				
EOC/Storm Room Status	Open/not open / date and time. Personnel standing by etc....			
Municipal Room Status	Open/not open / date and time. Personnel standing by etc....			
Customer Outage Count				**Total**
Estimated Date/Time for Total Restoration	Click here to enter a date. Choose an item.	Click here to enter a date. Choose an item.	Click here to enter a date. Choose an item.	
Planned Storm Conference Calls				
Notifications with Regulators. NHPUC/NH OEM				
EII Event Index & Storm Accounting				

Description	GP Expense Job	GP Capital Job	GP VM Job

STORM SUMMARY REPORT

DATE: Click here to enter a date.

	Lebanon	Salem	Charlestown	Comments
Weather Accuracy				
Actual EERP Event Level	Level 2	Level 2	Level 2	
Resources				**Totals**
Internal Crews				
Contractor Crews				
Total Line Crews				
Tree Crews				
Wires Down				
Other Support				
EOC/Storm Room Status	Open/not open / date and time. Personnel standing by etc....			
Municipal Room Status	Open/not open / date and time. Personnel standing by etc....			
Customer Outage Count at Peak				**Total**
Date/Time of Total Restoration				
Storm Conference Calls				
Notifications with Regulators. NHPUC/NH OEM				
EII Event Index & Storm Accounting				
Storm Expenses Recoverable	YES ☐ NO ☐			

Description	GP Expense Job	GP Capital Job	GP VM Job

APPENDIX D

LIAISON

Puc 306.09 Emergency Response Standards and Electrical Outage Restoration.

(h) At least annually, the utility shall request to meet with municipal emergency response personnel to assure the accuracy of emergency response contact information is shared between the two parties, and to validate or revise the municipalities' critical infrastructure listing.

Note: See CQ&EM for information on the Liberty Utilities meetings held in the years 2013, 2014 & 2015.

Listed Below are examples of information that may be considered for inclusion in communications with Fire, Police and Municipal Officials.

- Company Contact Information
- Service Restoration Priority
- Life Support Customers
- Pole Ownership
- Pole Attachments
- Company Municipal Room
- Electric System Distribution Maps
- Emergency Dispatch and Control Center
- Tree Trimming Program

Also, consider providing the following information (see attached):

- OSHA Quick Card on Electrical Safety
- OSHA Fact Sheet on Working Safely Around Downed Electrical Wires
- OSHA Fact Sheet on Working Safely With Electricity

NEIGHBORING ELECTRIC UTILITIES

Communications must be maintained with other utilities concerning line outages which affect their operations. Normally, such interfaces would be between the Dispatch & Control and its counterparts. Exchanges of information may then be made between the Director of Electric Operations, Engineering Services, Emergency Management, or their alternates, and the foreign utility. In some instances it will be advantageous to employ the other companies' crews to perform patrols and effect repairs. This will be done through the NAMAG process.

TELEPHONE UTILITIES

Attempts should be made to obtain assistance from telephone companies (our Joint Owners) in placing new poles. These companies may assign representatives to coordinate their work with Liberty Utilities' operations. The representative gathers pertinent information and relays it to the representative's company. Coordination of joint work with telephone forces is handled through this representative. The representative may also assist in cases of failure of supervisory and voice telephone circuits leased by Liberty Utilities. A Liberty Utilities IT technician will also be on site during major storms to provide emergency assistance.

PUBLIC WORKS

A municipal Public Works Department may assign a representative to work with Liberty Utilities Operations in clearing streets. The Public Works representative's function is to coordinate the work of their department with Liberty Utilities' operations.

NHOEM

For wide-scale events or when federal or state officials declare a state of emergency, the Liaison Officer will contact the New Hampshire Department of Homeland Security - Office of Emergency Management (OEM) office to report the emergency and will maintain contact with the agencies throughout the event. Liberty Utilities has agreed to provide a Liaison Officer to the NHOEM during the emergency as required.

OSHA QUICK CARD™

Electrical Safety

Electrical hazards can cause burns, shocks and electrocution (death).

- Assume that all overhead wires are energized at lethal voltages. Never assume that a wire is safe to touch even if it is down or appears to be insulated.
- Never touch a fallen overhead power line. Call the electric utility company to report fallen electrical lines.
- Stay at least 10 feet (3 meters) away from overhead wires during cleanup and other activities. If working at heights or handling long objects, survey the area before starting work for the presence of overhead wires.
- If an overhead wire falls across your vehicle while you are driving, stay inside the vehicle and continue to drive away from the line. If the engine stalls, do not leave your vehicle. Warn people not to touch the vehicle or the wire. Call or ask someone to call the local electric utility company and emergency services.
- Never operate electrical equipment while you are standing in water.
- Never repair electrical cords or equipment unless qualified and authorized.
- Have a qualified electrician inspect electrical equipment that has gotten wet before energizing it.
- If working in damp locations, inspect electric cords and equipment to ensure that they are in good condition and free of defects, and use a ground-fault circuit interrupter (GFCI).
- Always use caution when working near electricity.

For more complete information:

OSHA® Occupational Safety and Health Administration

U.S. Department of Labor

www.osha.gov (800) 321-OSHA

OSHA 3294 10N-05

Working Safely Around Downed Electrical Wires

Electrical hazards exist in some form in nearly all occupations. However, those hazards multiply for workers involved in cleanup and recovery efforts following major disasters and weather emergencies. One particular life-threatening danger exists around downed and low-hanging electrical wires.

Safety First

Above all else, always consider all equipment, lines and conductors to be energized. Be cautious and if you notice downed wires or damaged electrical equipment, contact appropriate utility personnel. Remember that circuits do not always turn off when a power line falls into a tree or onto the ground. Even if they are not sparking or humming, fallen power lines can kill you if you touch them or even the ground nearby.

Energy

Downed wires can energize other objects, including fences, water pipes, bushes and trees, buildings, telephone/CATV/fiber optic cables and other electric utilities. Even manhole castings and reinforcement bars (re/bar) in pavement can become energized by downed wires. During storms, wind-blown objects such as canopies, aluminum roofs, siding, sheds, etc., can also be energized by downed wires.

Backfeed

When electrical conductors are inadvertently energized by other energy sources, backfeed occurs. Some of those sources include:

- Circuit ties/switch points
- Lightning
- Generators
- Downstream events

Simply testing for energy sources is not sufficient since hazardous electrical events can happen without warning. Ensure that proper lockout/tagout procedures are always followed.

Rules to live by

- Do NOT assume that a downed conductor is safe simply because it is on the ground or it is not sparking.
- Do NOT assume that all coated, weatherproof or insulated wire is just telephone, television or fiber-optic cable.
- Low-hanging wires still have voltage potential even if they are not touching the ground. So, "don't touch them." Everything is energized until tested to be de-energized.
- Never go near a downed or fallen electric power line. Always assume that it is energized. Touching it could be fatal.
- Electricity can spread outward through the ground in a circular shape from the point of contact. As you move away from the center, large differences in voltages can be created.
- Never drive over downed power lines. Assume that they are energized. And, even if they are not, downed lines can become entangled in your equipment or vehicle.

- If contact is made with an energized power line while you are in a vehicle, remain calm and do not get out unless the vehicle is on fire. If possible, call for help.
- If you must exit any equipment because of fire or other safety reasons, try to jump completely clear, making sure that you do not touch the equipment and the ground at the same time. Land with both feet together and shuffle away in small steps to minimize the path of electric current and avoid electrical shock. Be careful to maintain your balance.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For more complete information:

OSHA Occupational Safety and Health Administration

U.S. Department of Labor
www.osha.gov
(800) 321-OSHA

Working Safely with Electricity

Working with electricity can be dangerous. Engineers, linemen, electricians, and others work with electricity directly, including overhead lines, cable harnesses, and circuit assemblies. Office workers and salespeople work with electricity indirectly and may also be exposed to electrical hazards.

Generators

One of the common tools utilized following the loss of power are portable generators. Most generators are gasoline powered and use internal combustion engines to produce electricity. Carbon monoxide is a colorless and odorless gas produced during the operation of gasoline powered generators. When inhaled, the gas reduces your ability to utilize oxygen. Symptoms of carbon monoxide poisoning include headache, nausea and tiredness that can lead to unconsciousness and ultimately prove fatal.

- DO NOT bring a generator indoors. Be sure it is located outdoors in a location where the exhaust gases cannot enter a home or building. Good ventilation is the key.
- Be sure that the main circuit breaker is OFF and locked out prior to starting any generator. This will prevent inadvertent energization of power lines from back feed electrical energy from generators and help protect utility line workers from possible electrocution.
- Turn off generators and let them cool prior to refueling.

Power Lines

Overhead and buried power lines are especially hazardous because they carry extremely high voltage. Fatal electrocution is the main risk, but burns and falls are also hazards.

- Look for overhead power lines and buried power line indicators.
- Stay at least 10 feet away from overhead power lines and assume they are energized.
- De-energize and ground lines when working near them.
- Use non-conductive wood or fiberglass ladders when working near power lines.

Extension Cords

Normal wear on cords can loosen or expose wires. Cords that are not 3-wire type, not designed for hard-usage, or that have been modified, increase your risk of contacting electrical current.

- Use only equipment that is approved to meet OSHA standards.
- Do not modify cords or use them incorrectly.
- Use factory-assembled cord sets and only extension cords that are 3-wire type.
- Use only cords, connection devices, and fittings that are equipped with strain relief.
- Remove cords from receptacles by pulling on the plugs, not the cords.

Equipment

Due to the dynamic, rugged nature of construction work, normal use of electrical equipment causes wear and tear that results in insulation breaks, short-circuits, and exposed wires. If there is no ground-fault protection, it can cause a ground-fault that sends current through the worker's body.

- Use ground-fault circuit interrupters (GFCIs) on all 120-volt, single-phase, 15- and 20-ampere receptacles, or have an assured equipment grounding conductor program (AEGCP).
- Use double-insulated tools and equipment, distinctively marked.
- Visually inspect all electrical equipment before use. Remove from service any equipment with frayed cords, missing ground prongs, cracked tool casings, etc.

Electrical Incidents

If the power supply to the electrical equipment is not grounded or the path has been broken, fault current may travel through a worker's body, causing electrical burns or death. Even when the power system is properly grounded, electrical equipment can instantly change from safe to hazardous because of extreme conditions and rough treatment.

- Visually inspect electrical equipment before use. Take any defective equipment out of service.
- Ground all power supply systems, electrical circuits, and electrical equipment.
- Frequently inspect electrical systems to insure that the path to ground is continuous.
- Do not remove ground prongs from cord- and plug-connected equipment or extension cords.
- Use double-insulated tools and ground all exposed metal parts of equipment.
- Avoid standing in wet areas when using portable electrical power tools.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

Think Safety!

For more complete information:

Occupational Safety and Health Administration

U.S. Department of Labor
www.osha.gov
(800) 321-OSHA

APPENDIX E

REFERENCES

Applicable Liberty Utilities Electric Operations Documents	
LU Community Site	**Title**
CQ&EM	Department Business Continuity Plans
CQ&EM	Field Guide for Mutual Aid Crews
CQ&EM	Weather Indices
EHSS	Employee Safety Handbook
Engineering	Overhead Construction Standards
Engineering	Underground Construction Standards
Engineering	Electric Operating Procedures
Engineering	Electric Service Bulletins
Engineering	Electric Maps & Records
Engineering	Code Blue Emergency System Activation

Applicable Liberty Utilities Logistics Documents	
LU Community Site	**Title**
CQ&EM	Hotel & Restaurant List
CQ&EM	Restaurant Storm Crew List
CQ&EM	Hotel Storm Crew List
CQ&EM	NAMAG Guidelines
CQ&EM	NAMAG Directory
CQ&EM	Local Utility Contacts
CQ&EM	Graybar Emergency Assistance Contacts
CQ&EM	Crew Log
CQ&EM	Local Crew Sheet

Applicable Liberty Utilities Logistics Documents (continued)	
LU Community Site	**Title**
CQ&EM	Crew Transfer Sheet
CQ&EM	Personnel Tracking Form
CQ&EM	Emergency Restoration Contractors
CQ&EM	Engineering & Retiree Resources List
CQ&EM	Leidos Emergency Response Team

Applicable Liberty Utilities Training Documents	
LU Community Site	**Title**
CQ&EM	Incident Command System Position Checklists
Learning & Development	Wire Down Hazard Assessor Field Guide Stand By Personnel Electric Hazards Safety

Notes:

1. See Electric Dispatch and Control for applicable ISO New England Documents.
2. The CQ & EM site is continuously updated with new documents. Also, existing documents are frequently revised. The documents copied in this Plan are illustrative only. See the CQ & EM site for the most current version.

NEW HAMPSHIRE HISTORICAL OUTAGES ALL UTILITIES For WIDE SCALE STORMS
Prepared by NHPUC Safety Division Rev 06/12/2015

		Worst Outage	2nd Worst Outage	3rd Worst Outage	4th Worst Outage	5th Worst Outage	6th Worst Outage
Eversource	Event Name	December 11-24, 2008 Ice Storm	February 25-March 4, 2010 Windstorm	Oct 29-Nov 4, 2011 Nor'easter (snow)	Nov 26 - Dec 1 2014 Thanksgiving Eve Snowstorm	Oct 26 - 31 2012 Hurricane Sandy	Aug 28 - Sept 1 2011 Tropical Storm Irene
	# of Customers Affected	322,438	265,728	237,000	207,339	137,070	125,714
	% of Customers Affected	66%	53%	47%	41%	27%	25%
	Duration of Restoration	312	144	159	114	108	79
	# of Restoration Crews(ex Tree/Dmg Assrs)	788	396	379	729	386	381
	Wire Reattached/Replaced (ft)	554,400	168,960	89,760	97,803	116,160	63,360
	# of Transformers Replaced	1,300	592	196	129	299	155
	# of Poles Set	783	175	177	59	161	57
	# of Crossarms Replaced	1,296	Unknown	Unknown	157	Unknown	Unknown
	Total Cost	$72,709,000	$26,523,000	$15,700,000	$32,500,000	$11,200,000	$7,100,000

NHEC	Event Name	December 11-24, 2008 Ice Storm	February 25-March 4, 2010 Windstorm	February 17 - 20, 2008	April 15 - 22, 2007	Nov 26 - Dec 1 2014 Thanksgiving Eve Snowstorm	Oct 26 - 31 2012 Hurricane Sandy	Aug 28 - Sept 1 2011 Tropical Storm Irene	Oct 29-Nov 4, 2011 Nor'easter (snow)
	# of Customers Affected	48,230	45,000	40,000	35,000	29,306	22,000	19,436	18,687
	% of Customers Affected	61%	58%	51%	45%	35%	28%	29%	24%
	Duration of Restoration (hrs)	190	128	72	168	102	108	77	66
	# of Restoration Crews(ex Tree/Dmg Assrs)	59	63	Unknown	Unknown	93	80	53	29
	Wire Reattached/Replaced (ft)	6,956	40,000	Unknown	316,800	820	Unknown	Unknown	Unknown
	# of Transformers Replaced	62	80	Unknown	Unknown	3	Unknown	Unknown	Unknown
	# of Poles Set	70	70	Unknown	75	17	Unknown	Unknown	Unknown
	# of Crossarms Replaced	120	180	Unknown	Unknown	4	Unknown	Unknown	Unknown
	Total Cost	$2,126,000	$1,314,854	Unknown	Unknown	$1,000,165	$2,532,429	$268,000	$249,000

Unitil	Event Name	February 25-March 4, 2010 Windstorm	Oct 29-Nov 4, 2011 Nor'easter (snow)	December 11-24, 2008 Ice Storm	Nov 26 - Dec 1 2014 Thanksgiving Eve Snowstorm	Oct 26 - 31 2012 Hurricane Sandy	Aug 28 - Sept 1 2011 Tropical Storm Irene
	# of Customers Affected	61,602	51,262	39,996	34,575	31,437	31,355
	% of Customers Affected	84%	69%	55%	46%	42%	42%
	Duration of Restoration (hrs)	96	88	288	66	61	36
	# of Restoration Crews(ex Tree/Dmg Assrs)	176	78	63	98	63	144
	Wire Reattached/Replaced (ft)	103,600	5,700	83,012	19,799	21,619	2,400
	# of Transformers Replaced	66	8	71	14	23	13
	# of Poles Set	137	9	67	9	18	0
	# of Crossarms Replaced	325	35	239	46	26	10
	Total Cost	$4,577,261.00	$3,265,000.00	$2,043,881.00	$2,071,048.00	$2,659,587.00	$2,554,000.00

Liberty	Event Name	December 11-24, 2008 Ice Storm	Oct 29-Nov 4, 2011 Nor'easter (snow)	Aug 28 - Sept 1 2011 Tropical Storm Irene	February 25-March 4, 2010 Windstorm	Oct 26 - 31 2012 Hurricane Sandy	March 7 - 10 2011 Ice/ Rain storm	Nov 26 - Dec 1 2014 Thanksgiving Eve Snowstorm
	# of Customers Affected	24,164	17,000	11,400	11,319	10,200	4,709	2,900
	% of Customers Affected	63%	41%	28%	27%	25%	11%	7%
	Duration of Restoration (hrs)	168	108	48	88	35	67	38
	# of Restoration Crews(ex Tree/Dmg Assrs)	78	25	32	79	42	67	13
	Wire Reattached/Replaced (ft)	12,980	Unknown	Unknown	Unknown	Unknown	Unknown	6,000
	# of Transformers Replaced	29	Unknown	Unknown	Unknown	Unknown	Unknown	6
	# of Poles Set	48	Unknown	Unknown	Unknown	Unknown	Unknown	10
	# of Crossarms Replaced	250	Unknown	Unknown	Unknown	Unknown	Unknown	25
	Total Cost	$2,305,065.00	$1,488,292.00	$1,000,796.00	$1,922,639.00	$1,501,777.00	$1,865,469	$150,000.00

NEW HAMPSHIRE HISTORICAL OUTAGES ALL UTILITIES For WIDE SCALE STORMS
Prepared by NHPUC Safety Division Rev 06/12/2015

		Worst Outage	2nd Worst Outage	3rd Worst Outage	4th Worst Outage	5th Worst Outage	6th Worst Outage
State Wide	Event Name	December 11-24, 2008 Ice Storm	February 25-March 4, 2010 Windstorm	Oct 29-Nov 4, 2011 Nor'easter (snow)	Nov 26 - Dec 1 2014 Thanksgiving Eve Snowstorm	Oct 26 - 31 2012 Hurricane Sandy	Aug 28 - Sept 1 2011 Tropical Storm Irene
	Concurrent Peak Customers Affected	432,632	337,542	299,235	238,865	190,000	184,701
	% of Concurrent Customers Affected	63%	50%	43%	34%	27%	27%
	Duration of Restoration (hrs)	312	144	159	114	108	79
	Non Concurrent Peak Customers Affected*	434,828	383,649	323,949	274,142	200,707	187,905
	% of NonConcurrent Customers Affected	63%	57%	47%	39%	29%	27%
	# of Restoration Crews (ex Tree/Dmg Assrs)*	988	714	511	933	571	610
	Wire Reattached/Replaced (ft)*	667,351	Incomplete Data	Incomplete Data	122,222	Incomplete Data	Incomplete Data
	# of Transformers Replaced*	1,482	Incomplete Data	Incomplete Data	151	Incomplete Data	Incomplete Data
	# of Poles Set*	968	Incomplete Data	Incomplete Data	95	Incomplete Data	Incomplete Data
	# of Cross-arms Replaced*	1,864	Incomplete Data	Incomplete Data	232	Incomplete Data	Incomplete Data
	Total Cost*	$78,983,946.00	$34,337,774.00	$20,702,292.00	$36,221,213.00	$17,893,793.00	$10,942,796.00

Source: NHPUC After Action Report November 2014 Snowstorm dated September 29, 2015

Tables A-1 and A-2: An Overview of the Regulated Electric Utilities in New Hampshire.

Source: Appendix E – NHPUC After Action Report November 2014 Snowstorm dated September 29, 2015

Table A-1			
Electric Provider	**Number of Customers**	**Total Square Miles of Service Territory**	**Total Miles of Transmission and Distribution**
New Hampshire Electric Cooperative (NHEC)	80,608	2,419	5,586
Unitil Energy Systems (UES)	76,003	408	1,568
Liberty Utilities (LU)	42,736	810	1,768
Public Service of New Hampshire (PSNH)	511,459	5,628	13,804
Total	710,806	9,265	22,726

Table A-2				
Electric Company	**Number of Towns Fully Served**	**No. Customers Within Towns Fully Served**	**Number of Towns Partially Served**	**No. Customer Within Towns Partially Served**
New Hampshire Electric Cooperative	18	22,756	99	57,852
Unitil Energy Systems	8	23,649	23	52,354
Liberty Utilities	3	24,290	19	18,446
Public Service of New Hampshire	95	330,267	117	181,192
Total	124	400,962	258	309,844

APPENDIX F

CITIES AND TOWNS SERVED

In addition to the map below, see the NHPUC web site for a listing of the electric, gas, water and sewer utility for each city / town.

Liberty Utilities
Operating Division in New Hampshire
Service Territory
Operating Centers
Hanover
Lebanon
Plainfield
Cornish
Charlestown
Acworth
Langdon
Marlow
Alstead
Walpole
Surry
Derry
Salem
Windham
Pelham

APPENDIX G

INCIDENT INVESTIGATION PROCEDURES

The decision to formally investigate an electric related incident or event is determined by the Director of Electric Operations, Director of Engineering, or the Director of Dispatch & Control.

A combination of one or more of the following Event Levels (see **Appendix A**) should be used in the decision.

- Fire or Explosion
- Natural Disaster
- Unplanned Supply Interruption
- Other: Terrorism, Breach of Security, Newsworthy Event

Once the decision is made to proceed, an investigating team including all appropriate participants associated with the incident or event will be convened. The team may vary depending on the incident or event.
There may be a separate Incident Analysis Investigation initiated by the Safety Department following an injury to a company representative.

A. General

The general objectives of the investigation are:

- Determine the origin of the fire, explosion, event, etc.;
- Identify the source (If any);
- Describe the sequence (if any);
- Determine the cause; and
- Establish the responsibility of the fire, explosion, event, etc.

For more information on Fire and Explosion Investigations refer to NFPA Chapter 21 Explosions.

Only essential personnel, those directed by Dispatch or their supervisor, should report to the scene of an incident or event. If you are not needed at the scene, report to a location away from the scene until such time that you are requested to report to the scene. Refrain from discussing the incident or event with anyone other than Liberty Utilities personnel. Avoid loud conversations or joking. Be aware your comments could be overheard or subject to misinterpretation by local residents, officials or reporters.
If you are asked a question, explain that you cannot speak for the Company and direct the questioner to the appropriate Liberty Utilities representative (typically, the assigned Public Information Officer).

The sight of unnecessary Company employees at an incident or event can give the wrong impression and could mistakenly associate Liberty Utilities with the incident or event, incorrectly implying Company involvement or exaggerate the gravity of the incident or event.

Note: Under RSA 153:4-a, the State Fire Marshal, or his designee, shall have access to any and all incidents involving hazardous materials and shall coordinate the activities of state services during a hazardous materials incident. The State Fire Marshal, or his designee, shall assume control of a hazardous materials incident at the request of the local fire chief or fire official in charge, or if the State Fire Marshal or his designee believes that the welfare of the public is not being appropriately served.

B. Incident Investigation Procedures

All incidents and events shall initially be investigated to determine the cause, the actions taken by Company personnel and the changes required to Company procedures or standards to prevent a reoccurrence. The exact extent of any investigation cannot be listed here, but the following should be a guide to the actions taken:

1. The person in charge of any investigation should make himself known to the police and fire officials in charge at the scene. Communication with these officials should be maintained to inform them of Company plans and to obtain help if necessary.

2. Record date and hour of the incident or event if known; if not, show best estimate and note that it is estimated.

3. Record time of arrival at scene.

4. Record names of all employees and Company representatives who were at the scene.

5. Keep detailed records as to the manner of the incident or event. If any tests or photographs are taken, record test readings and photographs taken and names of such individuals taking such photographs and tests.

6. Record time at which electricity was shut off and the manner in which it was shut off.

7. If excavation is required to discover the failure, indicate depth of facilities below the surface of earth and nature of earth above and below depth.

8. Have more than one individual note the nature of the failure and other appropriate indications at the location, such as extent of failure, whether or not the failure was old or new, drying out of earth in the vicinity of failure and test.

9. Photograph the area of failure and label as to the date, time and place.

10. Take photographs of property damage in area and a complete written inventory of all damages property and contents.

11. Check for signs of tampering or foreign connections on all electric lines and equipment.

12. No materials, facilities or equipment owned by the Company shall be removed without authorization from an appropriate Liberty Utilities representative (typically, the assigned On-Scene Commander). Any request for permission to remove the materials, facilities or equipment should indicate the purpose of the removal.

If any materials, facilities or equipment is removed, it should be clearly labeled and identified. Such items removed from the scene shall be returned to the Company. Contents of items removed should not be released to anyone except by the consent of the appropriate Liberty Utilities representative (typically, the assigned Public Information Officer).

13. Employees shall not give any comment or opinion to anyone at the scene or thereafter unless requested to do so by the appropriate Liberty Utilities representative (typically, the assigned Public Information Officer).

The above outline is only a preliminary plan to follow. In certain situations, the investigation may be carried out by others employed by the Company.

C. Claims Investigations

The Company has hired Crawford to oversee the investigation of any incident or event that may result in claims against the Company (see below). In the event of such incident or event, Crawford will dispatch to the scene forensic investigators on behalf of the Company, whose purpose is to collect potential evidence to defend or resolve any claims that may arise out of the incident or event. Company personnel should cooperate fully with any Crawford claims investigator. Prior to speaking to such investigator, Company personnel should verify with the Incident Commander the identity of the claims investigator representing Crawford.

D. Preservation of Evidence

Whenever wires, pipes, fittings, meters, or other materials are removed and held for evidence in possible future investigation in which the Company may be involved, it is important that all fractured metal surfaces be preserved in their original condition at the time of the incident or event. Tampering with the fractured area shall not be permitted. If the specimens are needed to determine the basic metallurgical structure of the material, they may be removed from the area adjacent to but not including the fractured surface. All the materials described above are to be stored in containers plainly labeled, and placed in the storeroom for safe keeping.

Direct any questions you have to the On-Scene or Incident Commanders.

Date: May 18, 2015

Subject: Incident and Event Investigations: Gas & Electric

To: Sue Fenton, Norm Gallagher, Rich MacDonald, Rob Blank, Kurt Demmer, Chris Brouillard

From: Leo Cody

Liberty Utilities is reviewing its Gas and Electric Claims process. This review covers both:

1. Small claims reported by our customers and by the public, and
2. Investigations initiated after an incident or event.

This memo covers only #2 above and replaces the Interim NH Protocol dated May 8, 2015.

Effective immediately, Gas and Electric Emergency Dispatch will follow the following procedure whenever there is a need for a forensic investigator at the scene.

Step 1. If there is a Gas Level 1 - Catastrophic Impact Event, or
a Gas Level 2 - Major Impact Event, or
an Electric Type 1 - Catastrophic Event, or
an Electric Type 2 - Major Impact Event, and
there is a fatality, serious injury, or significant property / facilities damage,
then, after first confirming with Rich MacDonald (Gas), or Rob Blank (Electric), or Norm Gallagher (Production), contact the following individuals:

Name	Company	Cell Phone	Work Phone
Richard Gunn	Senior Casualty Adjuster Crawford Global Technical services	404-431-6407	404-497-6829
James Devall	Vice President Crawford & Company	214-458-9227	214-459-6362

Step 2. Tell them:
Date of the Incident or Event.
Time of the Incident or Event.
Location of the Incident or Event.
Describe the Incident or Event.
To contact Rich MacDonald at 603-235-8766 (if Gas related).
To contact Rob Blank at 603-327-7910 (if Electric related).
To contact Norm Gallagher at 603-231-6349 (if Production related).

Note: Consider notifying Crawford if there is a Gas Level 3 - Serious Impact Event or an Electric Type 3 – Serious Impact Event that is significant in the opinion of Rich MacDonald, Rob Blank, or Norm Gallagher.

Please contact me if you have any questions.

cc: Sarah Knowlton, John Shore, Kelly Goodwin

APPENDIX H

CQ&EM FORMS

These documents are as of December 14, 2015 and are illustrative samples. See the CQ&EM site for the most current versions and other related documents. Assignments may have changed due to personnel changes.

- Meeting Agenda – Prior To Event
- Meeting Agenda – During Event
- Meeting Agenda – Post Event
- Emergency Planning Matrix – 3 Day Checklist
- Organization Charts
- The Planning Process

Meeting Agenda – Prior to Event

Event Name: **Meeting Number:**
Meeting Date: **Meeting Time:**
Meeting Host:

President	David Swain			
Vice-President	TBD			
Assignments – Incident Command System	**Primary**	**Attend**	**Secondary**	**Attend**
1. Incident Commander	Kurt Demmer		Rob Blank	
2a.Regional Commander-Salem	Rob Blank		Kurt Demmer	
2b.Regional Commander-Lebanon	Rob Blank		Kurt Demmer	
3. Planning/Resource Officer	Chris Brouillard		Steve Hall	
4. Logistics Officer	Rich Foley		Heather Tebbetts	
5. Financial Officer	Kevin McCarthy		Paul Kinch	
6. Human Resource Officer	Mark Smith		John Sanabria	
7. Liaison Officer	Michael Licata		Steve Mullen	
8. Information Officer	Susan Fenton		John Shore	
9. System Control Center	Norm Gallagher		Pete LePoer	
10 Customer Call Center	Kelly Goodwin		Christine Downing	
11.Data Collection Officer	Russ McIntyre		Maureen Karpf	
12.Gas Operations	Rich MacDonald		Gwyn Cassetty	
13.IT Coordinator	Don Romano		David Chung	
14.Safety & Health Officer	Rich Paradie		Ken Salter	
15.Environment Officer	Mary Casey		Rich Paradie	
16.Security/Facilities Officer	Steve Szczechura		Doug Dorn	
Assignments - System Wide				
18.Municipal Room Coordinator	Jill Fitzpatrick		Mark Camasso	
19.Wires Down Office Support 19 (a) Service Inspector Coordinator	Tracey Mini Bob Reals		Ted Cluff Emily Paquette	
20.Wires Down Field Assessor	*Electric Operations*			
21.Damage Assessment	Ian Crabtree		David Lepie	
22.Tree Crew/Forestry Coordinator	Jeff Carney		*Consultant*	
23.OnBoarding Contractors	Rich Paradie		Ken Salter	
24.Field Guide Mutual Aid Contractors	Bob Johnson		Ken Salter	
25.Service Restoration/Outage Coordinator	Joel Rivera		Anthony Strabone	
26.Wires Down Standby Personnel	Bob Mostone		Alain Tinker	
Assignments - Salem				
17.Electric Operations Supervisor	Pat O'Neill		Mario Barone	
Assignments - Lebanon				
17.Electric Operations Supervisor	Travis Singer		Mario Barone	
Assignments - Oakville				
Operations, Engineering, IT				

Form Revised on December 14, 2015.
See the CQ&EM Folder on the Liberty East Community site for the list of Backup/Second Shift Assignments.

SAFETY MESSAGE

WEATHER

A. Current Weather Report

A. Source:
B. Time:
C. Description:

B. Current Weather Scenarios

A. Best Case:
B. Worse Case:
C. Most Likely Case:

C. EII EVENT Index

A. Event Level:
B. Confidence Level:

Energy Event Index Definition

No Leaves (Oct 1 - Mar 31) (winter override)

	Wind Speed	Wind/Gust	Snow	Ice
EEI 1	< 40 mph	< 45 mph	< 6 in.	< 1/10 in.
EEI 2	>= 40 mph	>= 45 mph	>= 6 in.	>= 1/10 in.
EEI 3	>= 50 mph	>= 55 mph	>= 8 in.	>= 3/8 in.
EEI 4	>= 60 mph	>= 70 mph	>= 12 in.	>= 1/2 in.
EEI 5	>= 70 mph	>= 85 mph	>= 24 in.	>= 1 in.

Confidence Level	
Low	< 30% chance
Medium	>= 30% to < 60% chance
High	>= 60% chance

Action Items:

SITUATION ASSESMENT

1. **Has the Director of Electric Operations declared that the Company is in Storm Preparation mode?**
   Yes ☐ No ☐
   A. Date:
   B. Time:

2. **Expected Event Type As Of Meeting Time**
   (Note: See Attachment 1)
   A. Best Case: Choose an item.
      Customers Impacted -
   B. Worse Case: Choose an item.
      Customers Impacted -
   C. Most Likely Case: Choose an item.
      Customers Impacted –

3. **Expected Event Impact As Of Meeting Time**
   A. Impact Date: Click here to enter a date.
   B. Impact Time:
   C. Impact Duration:
   D. Impact Location
   E. Impact Description:

4. Will the Event occur during a Holiday or over a Weekend? _____

5. Does the NHPUC Safety Division anticipate a Wide-Scale Emergency? _____
Has the NHPUC named the Event? _____
(If yes, file NHPUC Form E-33 prior to the onset of the Event.)

(Note: Wide-Scale Emergency is defined as a sustained interruption of electric service to 10% or more of Liberty Utilities customers and restoration of electric service to any of these customers takes more than 24 hours; or a government declared official state of emergency involving an interruption of electric service.)

Action Items:

RESOURCE REQUIREMENTS

Notes: A crew generally consists of two people with a truck and equipment.
Line Crews: Responsible for switching and repair of equipment and hardware and the final energizing of the line.
Digger Crews: Responsible for replacing utility poles.
Tree Crews: Responsible for removing and relocation of downed trees and limbs to eliminate safety hazards.
On Property Crews: Outside contractor crews currently working in state for Liberty Utilities at the time of the event.
Foreign Crews / External Crews / Mutual Aid Crews: Outside company or contractor crews requested by LU.

1. Expected Company Resources Required to Restore Electric Service As Of Meeting Time
(Liberty Utilities Blue Sky staffing level is 13 crews.)

	Lebanon	Salem	Charlestown	Total
LU Line Crews				
On Property Line Crews				
Additional Contractor Line Crews				
LU Tree Crews				
On Property Tree Crews				
Additional Contractor Tree Crews				
On Property Digger Crews				
Additional Contractor Digger Crews				

Has the Company canceled vacation for employees? _____
Has the Company notified employees to be on standby? _____
Has the LIBERTY UTILITIES – ELECTRIC OPERATIONS ON-CALL SCHEDULE been issued? _____

2. Expected Foreign / Mutual Aid Resources Required to Restore Electric Service As Of Meeting Time

	Lebanon	Salem	Charlestown	Total
Foreign Line Crews				
Foreign Tree Crews				
Foreign Digger Crews				

3. North Atlantic Mutual Assistance Group (NAMAG)
Has Liberty Utilities initiated a Joint Mobilization Conference Call through NAMAG? _____
Has another operator initiated a Joint Mobilization Conference Call through NAMAG? _____
What is the Liberty Utilities status at the time of the meeting?
Holding _____ Who made the decision? _____
Requesting _____ Who made the decision? _____
Offering _____ Who made the decision? _____

Has Liberty Utilities requested assistance from neighboring utilities? _____
(See NAMAG exception to Rules of Engagement if a single impact for a short duration.)

4. Expected Outside Contractors Required to Perform Other Services As Of Meeting Time
Service:
Contractor:
Contact:

Service:
Contractor:
Contact:

Action Items:

PRE-STAGING of CREWS, PERSONNEL and MATERIALS

Has the Company considered the need to pre-stage crews? _____
Who made the decision? _____When? _____

Date Pre-Staging is expected? _____Time? _____

	LU Contact	Lebanon	Salem	Charlestown
Crews				
Location				
Onboarding				
Field Guides				
Stand-By Personnel				
Tools, Equipment, Materials				
Security				
Meals				
Lodging				
Municipal Room				
Regional EOC				
Damage Assessment				

Action Items:

COMMUNICATIONS – Action Items

A. Company Employees:

B. Governor / State Government / NH WebEOC:

C. NHPUC Safety Division:

D. Cities / Towns:
Are there any Storm Conference Calls scheduled:

E. Customers / Critical Care Customers:

F. Public:

G. NAMAG & Other Industry Groups:

H. Other Pole Attachees:

REPORTS – Action Items

A. Prepare internal Storm Planning Report:

B. File Puc Form E-33 prior to the onset of any anticipated Wide-Scale Emergency:

C. Continue to prepare and file all other required reports:

ADMINISTRATION

A. Send all storm related information and documentation to “SM NH Storm Data”.
B. See CQ&EM folder on Liberty Utilities East site for Emergency Management Forms and Reports.
C. Pre-Staging Deferrable Event? _____
D. Storm/Event Accounting:

Description	GP Expense Job	GP Capital Job	GP VM Job
Storm Event EII Level			

INCIDENT COMMAND SYSTEM POSITIONS – Comments / Questions

1. Incident Commander:

2. On-Scene Commander / Regional Commander:

3. Planning / Resource Officer:

4. Logistics Officer:

5. Financial Officer:

6. Human Resource Officer:

7. Liaison Officer:

8. Information Officer:

9. System Control Center:

10. Customer Call Center:

11. Data Collection Officer:

12. Gas Operations

13. IT Coordinator:

14. Safety & Health Officer:

15. Environment Officer:

16. Security/Facilities Officer:

17. Regulatory Compliance:

18: Others:

NEXT MEETING

Meetings will be held twice daily (10am & 4pm)

A. Date:
B. Time:
C. Location:
D. Liberty Storm Conference Call Number: **1-888-875-1833**
   Guest Passcode: **430980**
   Host Passcode: **4309805**

ATTACHMENT 1

The following are guidelines to determine the severity of Emergencies and their Operating Conditions for the Company.

The guidelines are intended to be consistent with Table 306-1 in NH Puc 306.09:

Emergency Response Standards and Electrical Outage Restoration

Type 5 **Small Impact Event** *(Localized Response Condition / Normal Operations)* - System activity is normal with response coordinated with local on-call personnel. Incident Command Structure not activated.
(0 - 840 customers)

Type 4 **Moderate Impact Event** *(Heightened Alert)* - The severity within a Region(s) is (are) such that restoration activities are generally accomplished within a 24 hour period. This may require assistance from another Region or contractors. Incident Command Structure may be activated at the Region level.
(840 - 2100 customers)

Type 3 **Serious Impact Event** *(Enhanced Support)* - The severity within a Region(s) is (are) such that restoration activities are generally accomplished with assistance from other Regions and contractors within 24 to 48 hour period. Incident Command structure activated at the Regional level.
(2100 - 4200 customers)

Type 2 **Major Impact Event** *(Comprehensive Support)* – The severity within the Region (s) is (are) such that restoration activities are generally accomplished with assistance from other Regions and contractors within a 48 to 144 hour period. This may require mutual assistance from other utilities. Incident Command Structure activated at the Regional level and may be activated at the System level.
(4200 - 8400 customers)

Type 1 **Catastrophic Impact Event** *(Emergency Support)* – The severity within a Region(s) is (are) such that restoration activities are accomplished with assistance from other Regions, contactors and require mutual assistance from other utilities. Restoration activities will generally require 48 to 240 hour period. The Incident Command Structure will be activated at the Regional and System levels.
(>8400 customer)

Puc 306.09 (g): Each ERP shall incorporate projected event levels consistent with Table 306-1.

Table 306-1			
Utility	**ERP Event Level**	**% Customers Out**	**Outage Duration (Hrs.)**
	5	≤2	<12
	4	>2≤5	0-24
	3	>5 ≤10	24-48
	2	>10≤20	48-144
	1	>20	48-240

Liberty Utilities

Meeting Agenda – During Event

Event Name: **Meeting Number:**
Meeting Date: **Meeting Time:**
Meeting Host:

President	David Swain			
Vice-President	TBD			
Assignments – Incident Command System	**Primary**	**Attend**	**Secondary**	**Attend**
1. Incident Commander	Kurt Demmer		Rob Blank	
2a.Regional Commander-Salem	Rob Blank		Kurt Demmer	
2b.Regional Commander-Lebanon	Rob Blank		Kurt Demmer	
3. Planning/Resource Officer	Chris Brouillard		Steve Hall	
4. Logistics Officer	Rich Foley		Heather Tebbetts	
5. Financial Officer	Kevin McCarthy		Paul Kinch	
6. Human Resource Officer	Mark Smith		John Sanabria	
7. Liaison Officer	Michael Licata		Steve Mullen	
8. Information Officer	Susan Fenton		John Shore	
9. System Control Center	Norm Gallagher		Pete LePoer	
10 Customer Call Center	Kelly Goodwin		Christine Downing	
11.Data Collection Officer	Russ McIntyre		Maureen Karpf	
12.Gas Operations	Rich MacDonald		Gwyn Cassetty	
13.IT Coordinator	Don Romano		David Chung	
14.Safety & Health Officer	Rich Paradie		Ken Salter	
15.Environment Officer	Mary Casey		Rich Paradie	
16.Security/Facilities Officer	Steve Szczechura		Doug Dorn	
Assignments - System Wide				
18.Municipal Room Coordinator	Jill Fitzpatrick		Mark Camasso	
19.Wires Down Office Support 19 (a) Service Inspector Coordinator	Tracey Mini Bob Reals		Ted Cluff Emily Paquette	
20.Wires Down Field Assessor	*Electric Operations*			
21.Damage Assessment	Ian Crabtree		David Lepie	
22.Tree Crew/Forestry Coordinator	Jeff Carney		*Consultant*	
23.OnBoarding Contractors	Rich Paradie		Ken Salter	
24.Field Guide Mutual Aid Contractors	Bob Johnson		Ken Salter	
25.Service Restoration/Outage Coordinator	Joel Rivera		Anthony Strabone	
26.Wires Down Standby Personnel	Bob Mostone		Alain Tinker	
Assignments - Salem				
17.Electric Operations Supervisor	Pat O'Neill		Mario Barone	
Assignments - Lebanon				
17.Electric Operations Supervisor	Travis Singer		Mario Barone	
Assignments - Oakville				
Operations, Engineering, IT				

Form Revised on December 14, 2015.
See the CQ&EM Folder on the Liberty East Community site for the list of Backup/Second Shift Assignments.

SAFETY QUESTIONS

1. Is the Public Safe?
2. Are the Employees Safe and All Accounted For?
3. Are the Employees' Family Members Safe?

WEATHER

A. Current Weather Report

A. Source:
B. Time:
C. Description:

B. Current Weather Scenarios

A. Best Case:
B. Worse Case:
C. Most Likely Case:

C. EII EVENT Index

A. Event Level:
B. Confidence Level:

Energy Event Index Definition

No Leaves (Oct 1 - Mar 31) (winter override)

	Wind Speed	Wind/Gust	Snow	Ice
EEI 1	< 40 mph	< 45 mph	< 6 in.	< 1/10 in.
EEI 2	>= 40 mph	>= 45 mph	>= 6 in.	>= 1/10 in.
EEI 3	>= 50 mph	>= 55 mph	>= 8 in.	>= 3/8 in.
EEI 4	>= 60 mph	>= 70 mph	>= 12 in.	>= 1/2 in.
EEI 5	>= 70 mph	>= 85 mph	>= 24 in.	>= 1 in.

Confidence Level	
Low	< 30% chance
Medium	>= 30% to < 60% chance
High	>= 60% chance

Action Items:

SITUATION ASSESMENT

1. **Has the Incident Commander mobilized the Company resources?**
   Yes ☐ No ☐
   A. Date:
   B. Time:

2. **Event Impact As Of Meeting Time**
   A. Impact Location
   B. Impact Description:

3. **Event Type As Of Meeting Time**
   A. Best Case: Choose an item.
      Customers Impacted -
   B. Worse Case: Choose an item.
      Customers Impacted -
   C. Most Likely Case: Choose an item.
      Customers Impacted –

4. **Has the Governor declared a State of Emergency?** _____

5. **Has the State opened its Emergency Operations Center?** _____

6. **Has the NHPUC Safety Division declared a Wide-Scale Emergency?** _____

7. **Are there any known road closures on the NH WebEOC?** _____

8. **Damage Assessment Summary As Of Meeting Time**

	Lebanon	**Salem**	**Charlestown**
Time of First Outage			
Peak Number of Customers Affected			
Peak Percent of Customers Affected			
Number of Circuits Locked Out			
Number of Feeders Affected			
Number of Substations Affected			
Number of Services To Be Replaced			
Footage of Wire To Be Reattached/Replaced			

RESOURCE DEPLOYMENT

Notes: A crew generally consists of two people with a truck and equipment.
Line Crews: Responsible for switching and repair of equipment and hardware and the final energizing of the line.
Digger Crews: Responsible for replacing utility poles.
Tree Crews: Responsible for removing and relocation of downed trees and limbs to eliminate safety hazards.
On Property Crews: Outside contractor crews currently working in state for Liberty Utilities at the time of the event.
Foreign Crews / External Crews / Mutual Aid Crews: Outside company or contractor crews requested by LU.

1. Company Resources Required to Restore Electric Service As Of Meeting Time
(Liberty Utilities Blue Sky staffing level is 13 crews.)

	Lebanon	Salem	Charlestown	Total
LU Line Crews				
On Property Line Crews				
Additional Contractor Line Crews				
LU Tree Crews				
On Property Tree Crews				
Additional Contractor Tree Crews				
On Property Digger Crews				
Additional Digger Crews				

Has the Company canceled vacation for employees? _____
Has the Company notified employees to be on standby? _____

2. Foreign / Mutual Aid Resources In State to Restore Electric Service As Of Meeting Time

	Lebanon	Salem	Charlestown	Total
Foreign Line Crews				
Foreign Tree Crews				
Foreign Digger Crews				

3. Additional Foreign / Mutual Aid Resources Needed to Restore Electric Service As Of Meeting Time

	Lebanon	Salem	Charlestown	Total
Foreign Line Crews				
Foreign Tree Crews				
Foreign Digger Crews				

4. North Atlantic Mutual Assistance Group (NAMAG)
Has Liberty Utilities initiated a Joint Mobilization Conference Call through NAMAG? _____
Has another operator initiated a Joint Mobilization Conference Call through NAMAG? _____
What is the Liberty Utilities status at the time of the meeting?
Holding _____ Who made the decision? _____
Requesting _____ Who made the decision? _____
Offering _____ Who made the decision? _____

Has Liberty Utilities requested assistance from neighboring utilities? _____
(See NAMAG exception to Rules of Engagement if a single impact for a short duration.)

5. Damage Assessment Resources Needed to Restore Electric Service As Of Meeting Time

	Lebanon	Salem	Charlestown	Total
Wires Down Office Support				
Wires Down Field Assessor				
Wires Down Standby				
Damage Assessment				

6. Is there a need to utilize local fire and police for Damage Assessment? _____

7. **Outside Contractors Performing Other Services As Of Meeting Time**

Service:
Contractor:
Contacted By:

Service:
Contractor:
Contacted By:

Action Items:

ESTIMATED TIME OF 90% RESTORATION (See Appendix I of the Emergency Plan)			
	Lebanon	**Salem**	**Charlestown**
1. Live Wires / Extreme Hazards			
2. Transmission			
3. Substations			
4. Critical Facilities			
5. Life Support Customers			
6. Primary Circuits			
7. Secondary Circuits			
8. Final Circuit Sweep			
9. Permanent Repairs			

Action Items:

STAGING of CREWS, PERSONNEL and MATERIALS

Are all Foreign Crews in place? _____
Are additional Foreign Crews expected? _____When? _____

	LU Contact	Lebanon	Salem	Charlestown
Crews				
Location				
Onboarding				
Field Guides				
Stand-By Personnel				
Tools, Equipment, Materials				
Security				
Meals				
Lodging				
Municipal Room				
Regional EOC				
Damage Assessment				

Action Items:

COMMUNICATIONS – Updates

A. Company Employees:

B. Governor / State Government / NH WebEOC:

C. NHPUC Safety Division:

D. Cities / Towns Storm Conference Call:

E. Customers / Critical Care Customers:

F. Public:

G. NAMAG & Other Industry Groups:

H. Other Pole Attachees:

REPORTS – Action Items

A. Prepare internal Storm Planning Report:

B. File Puc Form E-33 if required:

C. Continue to prepare and file all other required reports:

ADMINISTRATION

A. Send all storm related information and documentation to “SM NH Storm Data”.
B. See CQ&EM folder on Liberty Utilities East site for Emergency Management Forms and Reports.
C. Pre-Staging Deferrable Event? _____
D. Storm/Event Accounting:

Description	GP Expense Job	GP Capital Job	GP VM Job
Storm Event EII Level			

INCIDENT COMMAND SYSTEM POSITIONS – Comments / Questions

1. Incident Commander:

2. On-Scene Commander / Regional Commander:

3. Planning / Resource Officer:

4. Logistics Officer:

5. Financial Officer:

6. Human Resource Officer:

7. Liaison Officer:

8. Information Officer:

9. System Control Center:

10. Customer Call Center:

11. Data Collection Officer:

12. Gas Operations

13. IT Coordinator:

14. Safety & Health Officer:

15. Environment Officer:

16. Security/Facilities Officer:

17. Regulatory Compliance:

18: Others:

NEXT MEETING Meetings will be held twice daily (10am & 4pm)

A. Date:
B. Time:
C. Location:
D. Liberty Storm Conference Call Number: **1-888-875-1833**
   Guest Passcode: **430980**
   Host Passcode: **4309805**

Meeting Agenda – Post Event

Event Name: **Meeting Number:**
Meeting Date: **Meeting Time:**
Meeting Host:

President	David Swain			
Vice-President	TBD			
Assignments – Incident Command System	**Primary**	**Attend**	**Secondary**	**Attend**
1. Incident Commander	Kurt Demmer		Rob Blank	
2a.Regional Commander-Salem	Rob Blank		Kurt Demmer	
2b.Regional Commander-Lebanon	Rob Blank		Kurt Demmer	
3. Planning/Resource Officer	Chris Brouillard		Steve Hall	
4. Logistics Officer	Rich Foley		Heather Tebbetts	
5. Financial Officer	Kevin McCarthy		Paul Kinch	
6. Human Resource Officer	Mark Smith		John Sanabria	
7. Liaison Officer	Michael Licata		Steve Mullen	
8. Information Officer	Susan Fenton		John Shore	
9. System Control Center	Norm Gallagher		Pete LePoer	
10 Customer Call Center	Kelly Goodwin		Christine Downing	
11.Data Collection Officer	Russ McIntyre		Maureen Karpf	
12.Gas Operations	Rich MacDonald		Gwyn Cassetty	
13.IT Coordinator	Don Romano		David Chung	
14.Safety & Health Officer	Rich Paradie		Ken Salter	
15.Environment Officer	Mary Casey		Rich Paradie	
16.Security/Facilities Officer	Steve Szczechura		Doug Dorn	
Assignments - System Wide				
18.Municipal Room Coordinator	Jill Fitzpatrick		Mark Camasso	
19.Wires Down Office Support 19 (a) Service Inspector Coordinator	Tracey Mini Bob Reals		Ted Cluff Emily Paquette	
20.Wires Down Field Assessor	*Electric Operations*			
21.Damage Assessment	Ian Crabtree		David Lepie	
22.Tree Crew/Forestry Coordinator	Jeff Carney		*Consultant*	
23.OnBoarding Contractors	Rich Paradie		Ken Salter	
24.Field Guide Mutual Aid Contractors	Bob Johnson		Ken Salter	
25.Service Restoration/Outage Coordinator	Joel Rivera		Anthony Strabone	
26.Wires Down Standby Personnel	Bob Mostone		Alain Tinker	
Assignments - Salem				
17.Electric Operations Supervisor	Pat O'Neill		Mario Barone	
Assignments - Lebanon				
17.Electric Operations Supervisor	Travis Singer		Mario Barone	
Assignments - Oakville				
Operations, Engineering, IT				

Form Revised on December 14, 2015.
See the CQ&EM Folder on the Liberty East Community site for the list of Backup/Second Shift Assignments.

SAFETY LESSONS LEARNED FROM EVENT

WEATHER

A. Current Weather Report

A. Source:
B. Time:
C. Description:

B. Future Weather Scenarios

A. Best Case:
B. Worse Case:
C. Most Likely Case:

C. EII EVENT Index

A. Observed EEI Level:
B. Confidence Level:

Energy Event Index Definition

No Leaves (Oct 1 - Mar 31) (winter override)

	Wind Speed	Wind/Gust	Snow	Ice
EEI 1	< 40 mph	< 45 mph	< 6 in.	< 1/10 in.
EEI 2	>= 40 mph	>= 45 mph	>= 6 in.	>= 1/10 in.
EEI 3	>= 50 mph	>= 55 mph	>= 8 in.	>= 3/8 in.
EEI 4	>= 60 mph	>= 70 mph	>= 12 in.	>= 1/2 in.
EEI 5	>= 70 mph	>= 85 mph	>= 24 in.	>= 1 in.

Confidence Level	
Low	< 30% chance
Medium	>= 30% to < 60% chance
High	>= 60% chance

Action Items:

SITUATION ASSESMENT

1. **Has the Incident Commander demobilized the Company resources?**

   Yes ☐ No ☐

   A. Date:
   B. Time:

   Are Company employees released from Storm Assignments? _____

2. **Event Impact As Of Meeting Time**

   A. Impact Date: Click here to enter a date.
   B. Impact Time:
   C. Impact Duration:
   D. Impact Location
   E. Impact Description:

3. **Event Type As Of Meeting Time**

   A. Best Case: Choose an item.
      Customers Impacted -
   B. Worse Case: Choose an item.
      Customers Impacted -
   C. Most Likely Case: Choose an item.
      Customers Impacted –

4. **Has the Governor declared the end of the State of Emergency?** _____

5. **Has the State closed its Emergency Operations Center?** _____

6. **Has the NHPUC Safety Division declared the end of the Wide-Scale Emergency?** _____

7. **Damage Assessment Summary As Of Meeting Time:**

	Lebanon	**Salem**	**Charlestown**
Peak Number of Customers Affected			
Peak Percent of Customers Affected			
Remaining Number of Customers Affected			
Remaining Percent of Customers Affected			

Action Items:

RESOURCE DEPLOYMENT

Notes: A crew generally consists of two people with a truck and equipment.
Line Crews: Responsible for switching and repair of equipment and hardware and the final energizing of the line.
Digger Crews: Responsible for replacing utility poles.
Tree Crews: Responsible for removing and relocation of downed trees and limbs to eliminate safety hazards.
On Property Crews: Outside contractor crews currently working in state for Liberty Utilities at the time of the event.
Foreign Crews / External Crews / Mutual Aid Crews: Outside company or contractor crews requested by LU.

1. Company Resources Required to Restore Electric Service As Of Meeting Time

(Liberty Utilities blue sky staffing level is 13 crews.)

	Lebanon	Salem	Charlestown	Total
LU Line Crews				
On Property Line Crews				
Additional Contractor Line Crews				
LU Tree Crews				
On Property Tree Crews				
Additional Contractor Tree Crews				
On Property Digger Crews				
Additional Contractor Digger Crews				

2. Foreign / Mutual Aid Resources In State to Restore Electric Service As Of Meeting Time

	Lebanon	Salem	Charlestown	Total
Foreign Line Crews				
Foreign Tree Crews				
Foreign Digger Crews				

3. Additional Foreign / Mutual Aid Resources Needed to Restore Electric Service As Of Meeting Time

	Lebanon	Salem	Charlestown	Total
Foreign Line Crews				
Foreign Tree Crews				
Foreign Digger Crews				

4. North Atlantic Mutual Assistance Group (NAMAG)

Has Liberty Utilities initiated a Joint Mobilization Conference Call through NAMAG? _____
Has another operator initiated a Joint Mobilization Conference Call through NAMAG? _____
What is the Liberty Utilities status at the time of the meeting?

Holding _____ Who made the decision? _____
Requesting _____ Who made the decision? _____
Offering _____ Who made the decision? _____

Has Liberty Utilities requested assistance from neighboring utilities? _____
(See NAMAG exception to Rules of Engagement if a single impact for a short duration.)

5. Damage Assessment Resources Needed to Restore Electric Service As Of Meeting Time

	Lebanon	Salem	Charlestown	Total
Wires Down Office Support				
Wires Down Field Assessor				
Wires Down Standby				
Damage Assessment				

6. **<u>Outside Contractors Performing Other Services As Of Meeting Time</u>**

Service:
Contractor:
Contacted By:

Service:
Contractor:
Contacted By:

Action Items:

STAGING of CREWS, PERSONNEL and MATERIALS

Are all Foreign Crews in place? _____
Are additional Foreign Crews expected? _____When? _____

Are any Liberty Utilities crews assisting other operators? _____

	LU Contact	Lebanon	Salem	Charlestown
Crews				
Location				
Onboarding				
Field Guides				
Stan-By Personnel				
Tools, Equipment, Materials				
Security				
Meals				
Lodging				
Municipal Room				
Regional EOC				
Damage Assessment				

Action Items:

COMMUNICATIONS – Updates

A. Company Employees:

B. Governor / State Government / NH WebEOC:

C. NHPUC Safety Division:

D. Cities / Towns Storm Conference Call:

E. Customers / Critical Care Customers:

F. Public:

G. NAMAG & Other Industry Groups:

H. Other Pole Attachees:

Is there a need to schedule follow-up meetings with any of the above? _____

_____

REPORTS – Action Items

A. File Puc Form E-33 if required:

B. Prepare internal Storm Planning Report:

C. Prepare internal Storm Summary Report:

D. Continue to prepare and file all other required reports:

E. Prepare NHPUC After Action Self- Assessment (within 60 days)

F. Respond to any outstanding NHPUC Safety Division Data Requests.

G. Prepare Annual Storm Fund Report (file by April 1st of the next calendar year)

H. Send Lessons Learned and Areas of Improvement Suggestions to the "SM NH Storm Data".

ADMINISTRATION

A. Send all storm related information and documentation to "SM NH Storm Data".
B. See CQ&EM folder on Liberty Utilities East site for Emergency Management Forms and Reports.
C. Is this a Qualified Storm Event? _____
D. Storm/Event Accounting:

Description	GP Expense Job	GP Capital Job	GP VM Job
Storm Event EII Level			

INCIDENT COMMAND SYSTEM POSITIONS – Comments / Questions

1. Incident Commander:

2. On-Scene Commander / Regional Commander:

3. Planning / Resource Officer:

4. Logistics Officer:

5. Financial Officer:

6. Human Resource Officer:

7. Liaison Officer:

8. Information Officer:

9. System Control Center:

10. Customer Call Center:

11. Data Collection Officer:

12. Gas Operations

13. IT Coordinator:

14. Safety & Health Officer:

15. Environment Officer:

16. Security/Facilities Officer:

17. Regulatory Compliance:

18: Others:

NEXT MEETING

Meetings will be held twice daily (10am & 4pm)

A. Date:
B. Time:
C. Location:
D. Liberty Storm Conference Call Number: **1-888-875-1833**
   Guest Passcode: **430980**
   Host Passcode: **4309805**

Updated December 17, 2015

Emergency Planning Matrix
3 Day Checklist

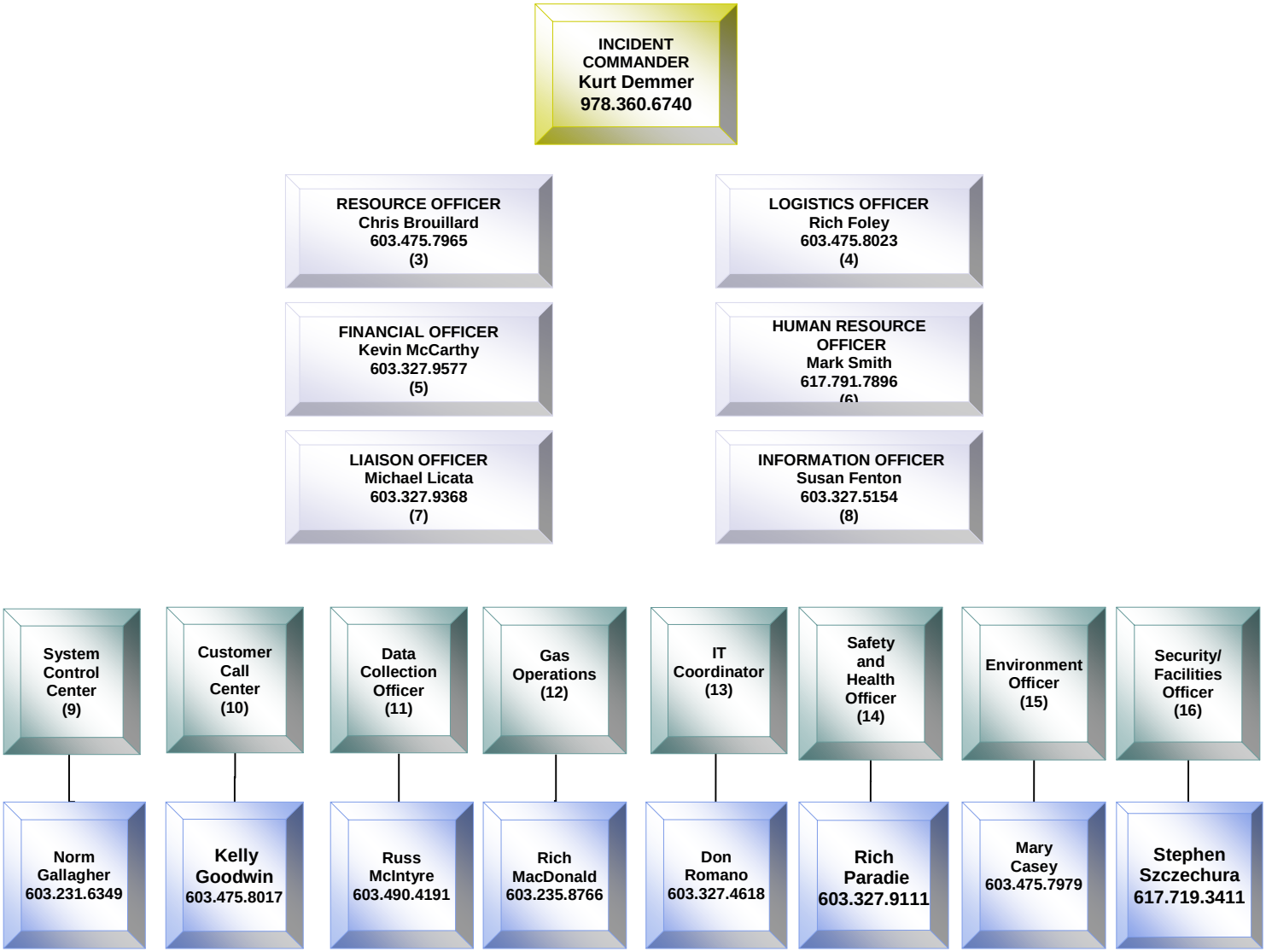
Storm Name / Date:_____

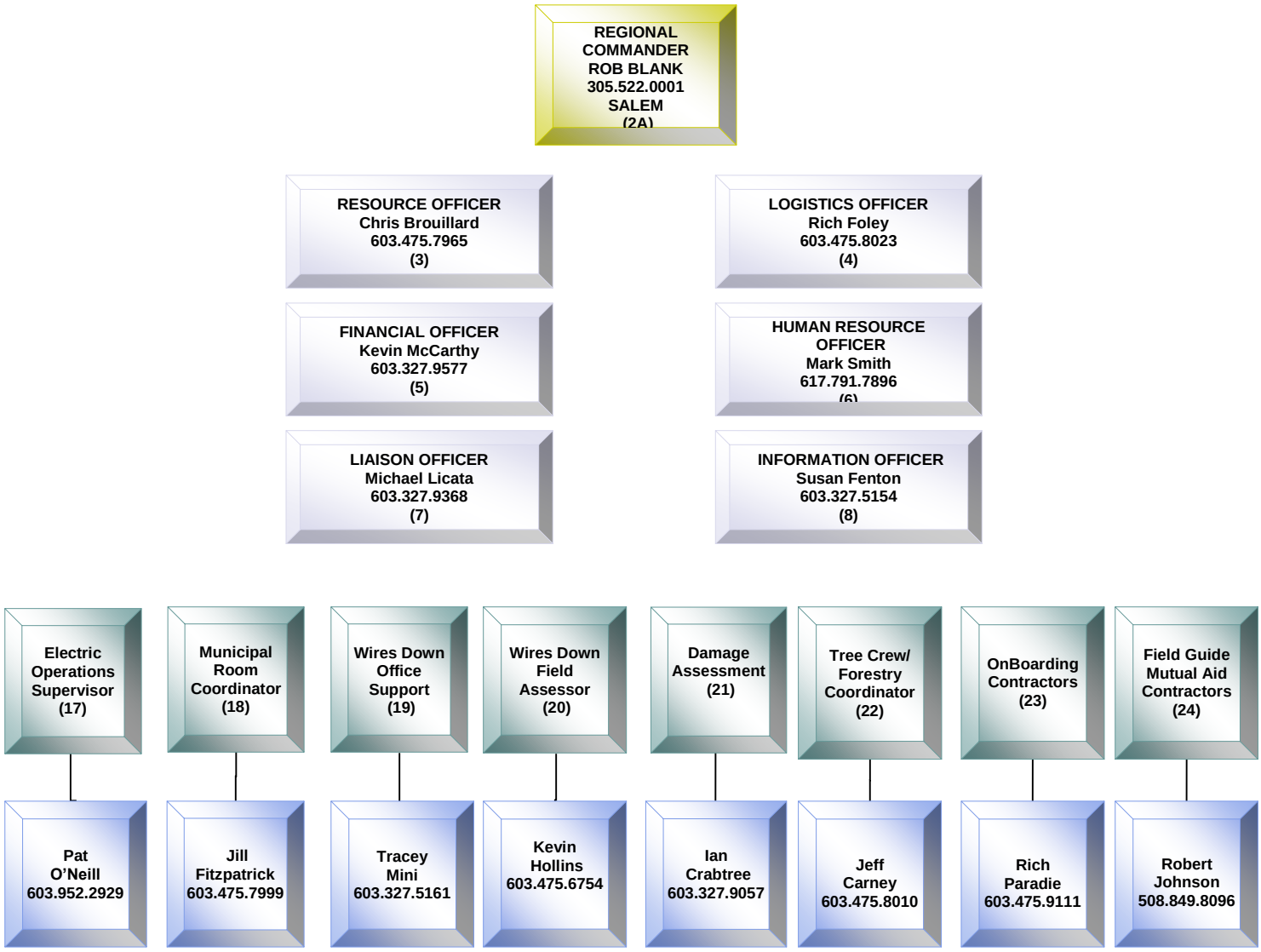
Description	Responsibility	3 Days in Advance	2 Days in Advance	1 Day in Advance	Open EOC
Weather Forecasts	*Emergency Planning* *Electric Operations* *Dispatch & Control*	Monitor/Communicate NOAA/NWS Weather Bug Weather Underground Telvent	Monitor/Communicate NOAA/NWS Weather Bug Weather Underground Telvent	Monitor/ Communicate NOAA/NWS Weather Bug Weather Underground Telvent	Monitor/ Communicate
Storm Plans	*Emergency Planning* *Incident Commander*	Review Plans	Review Plans Emergency Plan Emergency Response Matrix Position checklists	Review Plans Emergency Plan Emergency Response Matrix Position checklists	Follow Plans
Identify Incident Commander and appropriate ICS staff	*VP Operations* *Electric Ops Director* *Emergency Planning*	Review role responsibilities Communicate to key personnel Use ICS Org Chart EEP	Review role responsibilities Communicate to key personnel Use ICS Org Chart EEP	Review role responsibilities Communicate to key personnel Use ICS Org Chart EEP	Communicate to key personnel
Set Up Storm Conference Call	*Incident Commander* *Electric Operations* *Emergency Planning*	Notify essential ICS Staff and department personnel Use Position Checklist	Notify essential ICS Staff and department personnel Use Position Checklist	Notify essential ICS Staff and department personnel Use Position Checklist	Notify essential ICS Staff and department personnel Use Position Checklist
Identify level of storm	*Incident Commander* *Electric Operations* *Emergency Planning*	Communicate to ICS Staff and department personnel.	Communicate to ICS Staff and department personnel Update as necessary	Communicate to ICS Staff and department personnel Update as necessary	Communicate to ICS Staff and department personnel Update as necessary
Restoration Crew Resources(OH, UG, O&M) Internal	*Electric Operations* *Incident Commander* *Human Resources*	Check resource availability	Make union notifications and cancel vacations if required Prepare Crew Transfer Sheet	Make union notifications and cancel vacations if required Prepare Crew Transfer Sheet	Activate Crews
Tree Crews	*Forestry Coordinator* *Electric Operations*	Check resource availability Notify Vendors	Verify need Notify vendors Start securement process if necessary Prepare crew transfer sheet	Secure crews and put on stand by Prepare Crew Transfer Sheet	Activate Crews
Contractor Crews	*Incident Commander* *Electric Operations* *Emergency Planning*	Verify number of crews that are currently on the property Identify additional resources needed	Verify number of crews that are currently on the property Identify additional resources needed Request additional resources Use contractor contact list Prepare crew transfer sheet	Verify number of crews that are currently on the property Identify additional resources needed Request additional resources Use contractor contact list Prepare crew transfer sheet	Activate Crews
CMS - Wires Down Personnel	*Electric Operations* *Incident Commander*	Check resource availability	Make union notifications and cancel vacations if required.	Prepare resource reports Prepare Crew Transfer Sheets	Activate as necessary
Public Utilities Commission NH OEM	*Government Relations* *Emergency Planning* *Electric Operations*	Check contacts Respond to PUC request for Resource Report if contacted If additional Resources are secured, revise report and resend.	Check contacts Respond to PUC request for Resource Report if contacted If additional Resources are secured, revise report and resend.	Check contacts Respond to PUC request for Resource Report if contacted If additional Resources are secured, revise report and resend	Send Resource Report or update previously sent report and resend. Provide Customer Outage Report. Both in accordance with EEP
Municipal Room	*Municipal Relations/Liaison Coordinator*	Check contacts Access need for pre-event contact	Check contacts Access need for pre-event contact Contact municipals - verify phone numbers, etc. Contact to notify of intent to open Municipal	Check contacts Access need for pre-event contact Contact municipals - verify phone numbers, etc Contact to notify of intent to open Muni room	Notify Municipals of Opening
Customer Contact Center	*Customer Contact Center Manager*	Determine staffing needs and make additional resource notifications	Review medical notification process (critical care customers)	Setup backup processes and supplies	Implement CCC procedures
Storm Card Limits	*Finance/Procurement*	Contact AP to increase Storm Card Limits where necessary	Contact AP to increase Storm Card Limits where necessary	Contact AP to increase Storm Card Limits where necessary Approve DOA for storm card expenditures (if necessary)	
Work Request	*Finance/Procurement* *Emergency Planning*	Prepare work request	Prepare work request	Issue work request	
Laptops	*Emergency Planning* *IT*	Identify need.	Identify need & inform IT	Identify need & inform IT	Confirm or activate delivery
Cellular Storm Phones	*Emergency Planning*	Ask each dept. for need	Make available	Charge and operate	Charge and operate
Employee Resources	*Emergency Planning* *Incident Commander*	Review Storm Assignments list & identify need	Review listing from candidate pool list & identify need	Request activation. Communicate need to Operation Center, EOC	Activate Emergency Assignments as appropriate
Retiree Resources	*HR* *Emergency Planning*	Review listing	Identify Need	Contact resources. Prepare "Field Guide" kits including	Activate Retiree Resources
Distribution Control Center	*Electric Operations* *Incident Commander*	Follow-up	Follow-up	Switch Feeders to normal. Exchange names of contact persons. Test radio frequencies	Notify of opening
Damage Appraisers	*Electric Operations* *Incident Commander*	Identify need.	Request resources required.	Request resource to be activated or place on stand-by	Activate Resources
Outside Crew Information Booklets	*Safety* *Emergency Planning*	Check Quantities	Make available	Identify need	Meet with Contractors and review
Map Reproduction	*Electric Operations* *Emergency Planning* *Maps & Records Lead*	Identify need	Confirm Availability	Deliver if necessary	Deliver if necessary
Restaurants	*Logistics Coordinator*	Identify need	Identify need Secure Restaurant/Lodging/Fuel matrix	Identify need Secure Restaurant/Lodging/Fuel matrix	Confirm locations and assign as necessary
Lodging	*Logistics Coordinator*	Identify need	Identify need Secure Restaurant/Lodging/Fuel matrix	Identify need Secure Restaurant/Lodging/Fuel matrix	Confirm locations and assign as necessary
Storm Stock	*Electric Operations* *Emergency Planning* *Logistics Coordinator*	Review inventory and evaluate needs	Request any additional need	Receive material	
Communication Systems	*Telecom Coord*	Check radios, key telephone numbers, hand held radios.	Check radios, key telephone numbers, hand held radios.	Assign IT correct routing	Activate storm communications system
Vehicles - Internal	*Electric Operations* *Transportation Lead*	Check Availability	Release from Maintenance	Stock vehicles with emergency stock	
Vehicle Rental Vendors	*Electric Operations* *Emergency Planning* *Transportation Lead*	Check Availability	Determine need	Arrange for delivery	
Lebanon/Salem Emergency Generators	*Facilities Lead* *Emergency Planning*	Test & Check Refueling	Test & Check Refueling	Confirm status	
Lebanon/Salem Emergency Operation Center(s)	*Electric Operations*	Check all phones, fax machines, radios and computers Check access to Responder	Check all phones, fax machines, radios and computers Check access to Responder and test	Check all phones, fax machines, radios and computers Check access to Responder and test	Staff and Activate

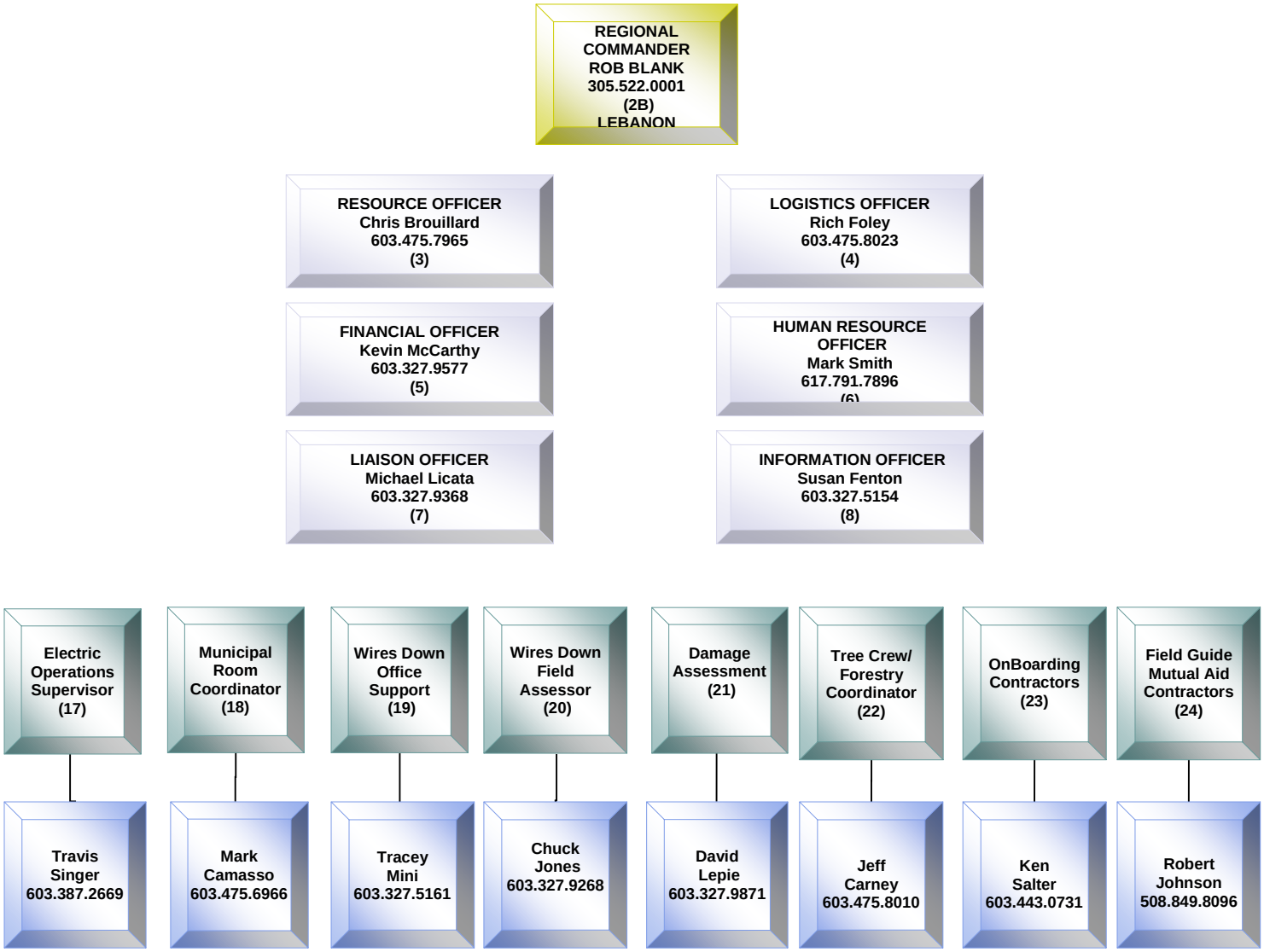
ELECTRIC EVENT ORGANIZATION

Event Name:

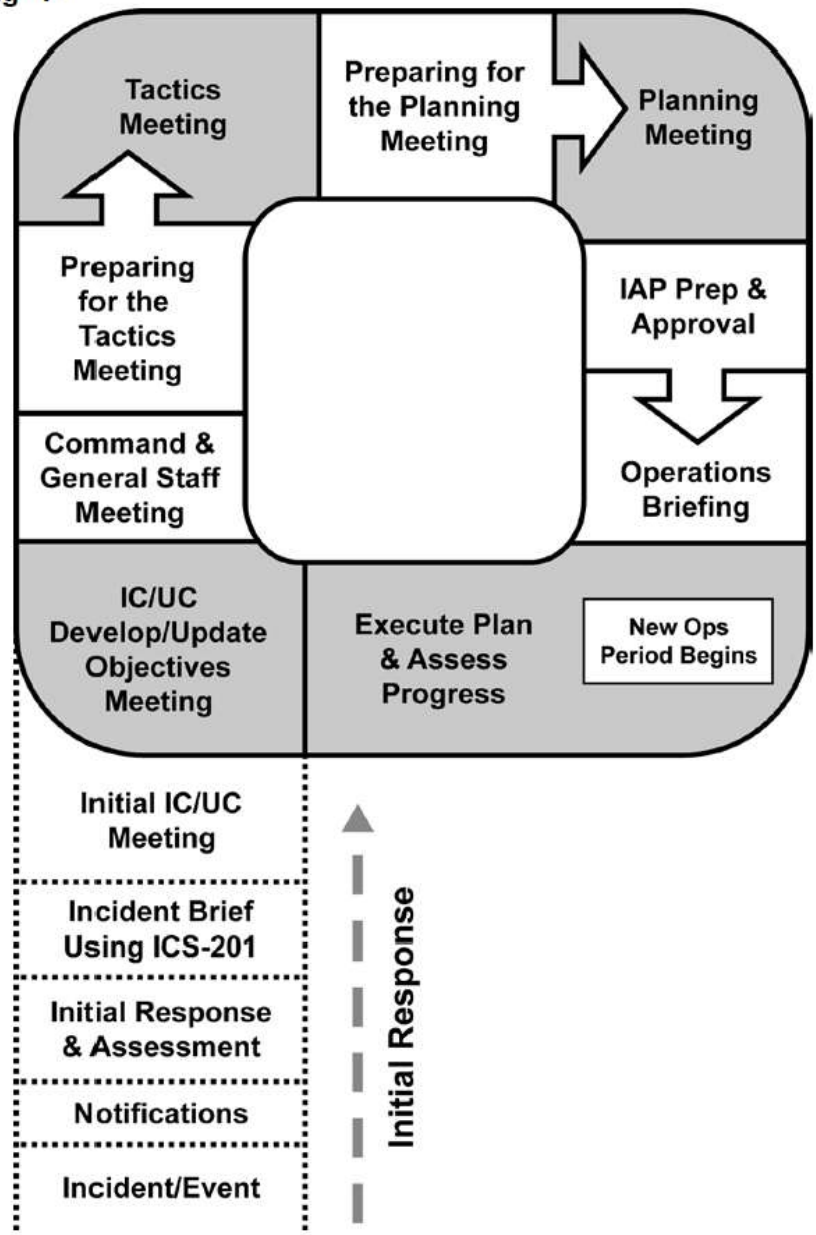
Date:
Time:




REGIONAL COMMANDER ROB BLANK 305.522.0001 SALEM (2A)
RESOURCE OFFICER Chris Brouillard 603.475.7965 (3)
LOGISTICS OFFICER Rich Foley 603.475.8023 (4)
FINANCIAL OFFICER Kevin McCarthy 603.327.9577 (5)
HUMAN RESOURCE OFFICER Mark Smith 617.791.7896 (6)
LIAISON OFFICER Michael Licata 603.327.9368 (7)
INFORMATION OFFICER Susan Fenton 603.327.5154 (8)
Electric Operations Supervisor (17)
Municipal Room Coordinator (18)
Wires Down Office Support (19)
Wires Down Field Assessor (20)
Damage Assessment (21)
Tree Crew/ Forestry Coordinator (22)
OnBoarding Contractors (23)
Field Guide Mutual Aid Contractors (24)
Pat O'Neill 603.952.2929
Jill Fitzpatrick 603.475.7999
Tracey Mini 603.327.5161
Kevin Hollins 603.475.6754
Ian Crabtree 603.327.9057
Jeff Carney 603.475.8010
Rich Paradie 603.475.9111
Robert Johnson 508.849.8096


REGIONAL COMMANDER ROB BLANK 305.522.0001 (2B) LEBANON
RESOURCE OFFICER Chris Brouillard 603.475.7965 (3)
LOGISTICS OFFICER Rich Foley 603.475.8023 (4)
FINANCIAL OFFICER Kevin McCarthy 603.327.9577 (5)
HUMAN RESOURCE OFFICER Mark Smith 617.791.7896 (6)
LIAISON OFFICER Michael Licata 603.327.9368 (7)
INFORMATION OFFICER Susan Fenton 603.327.5154 (8)
Electric Operations Supervisor (17)
Municipal Room Coordinator (18)
Wires Down Office Support (19)
Wires Down Field Assessor (20)
Damage Assessment (21)
Tree Crew/ Forestry Coordinator (22)
OnBoarding Contractors (23)
Field Guide Mutual Aid Contractors (24)
Travis Singer 603.387.2669
Mark Camasso 603.475.6966
Tracey Mini 603.327.5161
Chuck Jones 603.327.9268
David Lepie 603.327.9871
Jeff Carney 603.475.8010
Ken Salter 603.443.0731
Robert Johnson 508.849.8096

The Planning "P"



- The Planning "P" is a guide to the process and steps involved in planning for an incident. The leg of the "P" describes the initial response period: Once the incident/event begins, the steps are Notifications, Initial Response & Assessment, Incident Briefing Using ICS 201, and Initial Incident Command (IC)/Unified Command (UC) Meeting.
- At the top of the leg of the "P" is the beginning of the first operational planning period cycle. In this circular sequence, the steps are IC/UC Develop/Update Objectives Meeting, Command and General Staff Meeting, Preparing for the Tactics Meeting, Tactics Meeting, Preparing for the Planning Meeting, Planning Meeting, IAP Prep & Approval, and Operations Briefing.
- At this point a new operational period begins. The next step is Execute Plan & Assess Progress, after which the cycle begins again.

Source: draft NIMS document

APPENDIX I

RESTORATION OF SERVICE

GENERAL

Emergency work is done and service is restored generally in the order of priority below.

RESTORATION PRIORITY

1. Live Wires and Extreme Hazards
   The elimination of hazards to the public takes precedence during emergencies. Available local personnel are to be divided into the minimum size crews required to clear the hazards. Wires are cleared so that service can be restored up to the break.

2. Transmission
   Transmission line restoration is prioritized by National Grid Network Operations. Bulk power circuits not directly affecting substations are assigned priority depending on the importance of the circuit and the effect of its loss on the bulk power system. The need for bulk power circuits is determined by the Transmission Control Center Shift Supervisor in coordination with the applicable Dispatch & Control location. Although Liberty Utilities does not own Transmission facilities in NH, these facilities owned by National Grid supply the substations and monitoring systems.

3. Substations
   Substation repairs are directed by the Supervisor Substation Operations. He/she consults with the Liberty Utilities Dispatch & Control Center and the National Grid Transmission Control Center Shift Supervisor to determine the order of restoration.

4. Critical Facilities
   Priority and consideration for restoration is given Critical Facilities. Specific requests for other restoration prioritization should be made to the Incident Commander or designee.

5. Life Support Customers
   Efforts will be made to restore service to Life Support Customers as quickly as conditions warrant.

6. Primary Circuits
   Main portions of primary circuits will be restored by cutting faulted sections cleared either by opening switches or cutting wires. Primary faults will then be corrected to restore all primaries.

7. Secondary Circuits
   Secondary, multiple street lights, and services will be restored at the same time. A crew will attempt to complete all the work on one visit to a trouble location. It is the Crew Leader's duty to examine the trouble location and repair any trouble. If the customer's equipment requires repair, he will notify the customer, using the attached form, and restore the service wires, leaving them disconnected at the house. Personnel other than Lineworkers may be utilized for secondary and service restoration.

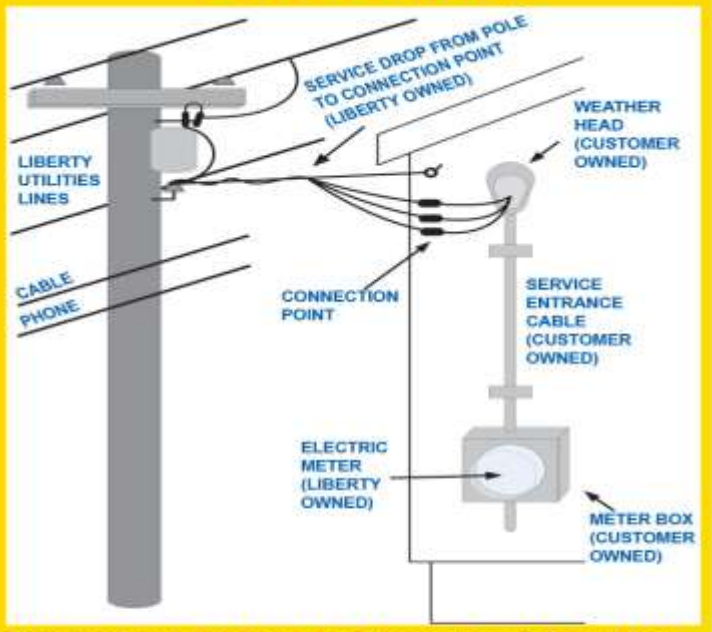
8. Final Circuit Sweep
   Final circuit sweeps will be assigned to line and tree crews.

9. Permanent Repairs
   After all service is restored, permanent repairs will be made to temporary jobs. During the restoration of service, permanent repairs should be made if practicable to avoid hazardous conditions and eliminate duplication of effort. A log of temporary repairs will be made during the restoration process to facilitate the installation of permanent repairs at these locations.

WARNING NOTICE FORM

If you see a downed line,
keep everyone away and call us immediately

Power Outage/Downed Wire
1-855-349-9455



This is an important notice. Please have it translated.

Este es un aviso importante. Por favor, tenga lo tradujo.

Liberty Utilities

92170-WDDH1014-NHE

Address _____

Date/Time of Visit _____

Initials _____

- ◯ Repairs were made. Please contact us if problem persists or if you have any questions.
- ◯ Please contact an electrician. See reverse.
- ◯ We could not locate the source of the reported trouble. Please contact us at 1-800-375-7413
- ◯ Tree trimming performed.
- ◯ Surveyed trouble. Situation made safe and Liberty Utilities will return at a later date to make permanent repairs.
- ◯ Non-Liberty Utilities equipment. Please contact:
  - ◯ Telephone Co.
  - ◯ Cable Co.
  - ◯ Town
  - ◯ Other
- ◯ Other _____

_____

_____

Liberty Utilities

PRE-STAGING CREWS

Early requests for mutual assistance are critical to having additional resources arrive as quickly as possible and in sufficient quantities.

When deciding to procure and coordinate outside resources, the decisions and notes of decisions must be documented. These decision points shall be included in future Post-Storm After Action reviews.

When a Wide-Scale Emergency (potential of affecting 10% or more of our customers) is anticipated, the Company should follow a written procedure for pre-staging crews.

The procedure should:

1. Identify staging areas needed for crews, equipment and materials.
2. Prepare staging areas to receive crews, equipment and materials.
3. Factor in travel conditions and travel time for deciding when and where to pre-stage.
4. Account for upcoming Holiday periods, if any. (See Section J.) Businesses may be closed.
5. Determine how many crew resources will be needed based on forecasts.
   (See the EEI Table in Appendix A and the Meeting Agenda – Prior to Event Form in Appendix H.)
6. Notify all Liberty Utilities NH employees of the activation of their Storm Assignments.
7. Utilize the available pool of resources both internally and through the North Atlantic Mutual Assistance Group (NAMAG). See Appendix L. There is a well-established set of guidelines for all operators within a particular region for obtaining outside additional resources. It is imperative that all operators follow these guidelines to ensure the timely and effective utility restoration response for all affected customers in New Hampshire and the surrounding region.
8. Incorporate historical restoration data and lessons learned from past Wide-Scale Emergencies. (See Appendix E.)
9. Anticipate that repeat outages occur on many circuits so that some restoration becomes temporary and permanent restoration may require multiple trips to some locations.
10. Follow the OnBoarding procedure and Field Guide for Mutual Aid Groups.

The NHPUC:

- "Advocates that it is less costly to pre-stage external crews and shorten the overall duration of customer outages by quickly ramping up the restoration crews with large amounts of external crews."
- "Promotes triggering of action plans at the earliest practical moment even though potential storms may not ultimately materialize."

Source: NHPUC After Action Report Thanksgiving Snowstorm dated September 29, 2015, page 66.

APPENDIX J

DAMAGE ASSESSMENT

INTRODUCTION

Damage Assessment or Storm Damage Appraisal is performed to assess physical damage such as wires down and poles broken on overhead Distribution and Sub-Transmission lines following a storm event. The Storm Damage Appraisal process will be used to formulate the appropriate level of storm response by Liberty Utilities Electric Operations Team.

This procedure describes the activities undertaken 72 hours in advance of the storm, 24 hours in advance of the storm, and immediately after the storm, and clearly defines roles and responsibilities. Additionally, this procedure describes the discrete phases of the Storm Damage Appraisal process.

GENERAL

If damage to the overhead Sub-Transmission system and/or the Distribution system is extensive as indicated by a large number of locations, helicopter surveys may be initiated as soon as practicable. If Distribution circuits are out due to a Transmission outage, but it is known that the Distribution feeder(s) were damaged from the event, Distribution surveys should commence prior to the Transmission system being energized, if possible, to reduce Distribution restoration time.

Field surveys are the main source of information on the scope and severity of damage conditions. This first step will normally be a Phase I Survey. Results from this survey, combined with current weather forecasts, Responder data, 911 calls, and customer calls, will dictate further actions. The Regional Incident Commander will determine the need for a Phase II Survey and what personnel would be required to conduct it.

RESPONSIBILITIES

The following responsibilities have been assigned to ensure the proper maintenance of the Storm Damage Appraisal process.

Regional Engineering/Planning Officer (Damage Appraisal)

- Reports to the Regional Incident Commander
- Oversees the Damage Appraisal Patrol and Work Packet Support Process
- Ensures that work is prioritized based on the Priority Feeder ranking, OMS Customer count, direction from Dispatch Control Centers, and direction from Regional Storm Rooms
- Receives and organizes Damage Appraisal teams and Runners
- Acts as single point of contact for Damage Appraisal teams and Runners
- Coordinates lodging and meals for Damage Appraisal teams
- Coordinates with Logistics Officer for additional Fleet needs
- Provides updates on known road closures to Patrollers
- Provides materials required by Damage Appraisal teams
- Assigns patrols to teams
- Tracks progress of Damage Appraisal teams
- Assigns Runners as necessary for pickup or delivery of damage patrols and work packets
- Receives calls from field teams on completed work packets and informs Damage Appraisal Patrollers and coordinates response appropriate to the conditions
- Ensures that unsafe and hazardous conditions are corrected
- Ensures that team members have the materials required
- Informs the Damage Appraisal Manager of needs, problems, and progress

Damage Appraisal Patroller

- Reports to the Regional Engineering/Planning Coordinator (Damage Appraisal)
- Performs damage patrols as assigned
- Returns patrol paperwork to the Regional Engineering/Planning Coordinator (Damage Appraisal)
- Where unsafe conditions are found, makes the area safe, notifies the Regional Engineering/Planning Coordinator (Damage Appraisal), and stands by until relieved, if necessary
- Abides by all Liberty Utilities Safety Guidelines
- Ensures that unsafe and hazardous conditions are corrected

Damage Appraisal Work Packet Support Coordinator

- Reports to the Regional Engineering/Planning Coordinator (Damage Appraisal)
- Supervises the work packet support process
- Coordinates lodging and meals for Work Packet Support personnel
- Provides the materials required for the Work Packet Support process
- Receives completed damage patrol paperwork
- Reviews patrol forms for completeness and accuracy
- Builds work packets using damage patrol materials
- Prioritizes work packets
- Coordinates delivery of Work Packets to Field Teams
- Collects completed work packet paperwork
- Following the storm, ensures that completed work packets are transferred to Engineering to build confirming work plans capturing plant items installed
- Reviews material requirements and notifies Logistics Officer, or designee, of any large quantities of stock or specialty equipment that may require procurement

Regional Damage Appraisal Work Packet Support Team

- Creates a work packet for restoration crews
- Assigns a unique work packet number and records this number on the envelope and all detail sheets inside
- Photocopies the envelope and detail sheets
- Staples the package as a work packet
- Records the crew or Supervisor receiving the packet on the original envelope, if possible
- Gives the photocopied work packet to the restoration crew
- Retains the original Damage Patrol envelope and Damage Patrol detail sheets at the staging area for tracking

Restoration Crews

- Make repairs as indicated by the work packet
- Enter details about the actual repairs made in the space provided on the Damage Patrol detail sheets included in each work packet; it is important that the restoration crew list the details of items removed and installed to facilitate building confirming work plans following the storm
- Report completed repairs to the Branch by Work Packet Number

PROCESS

The steps presented on the following pages direct the responsible parties through the Damage Appraisal process.

Pre-Storm

Damage Appraisal Preparation - 72 Hours in Advance of the Storm

Using weather forecasts, the Regional Engineering/Planning Officer will make arrangements for the deployment of Damage Appraisal teams to the potentially affected areas in advance of or following the arrival of the storm.

- Decides on the advance placement of Damage Appraisal Patrollers
- Arranges for personnel to report as Damage Appraisal Patrollers
- Prioritizes the circuits by Critical Facility for Damage Patrol
- Ensures all Damage Appraisal Patroller material requirements are met
- Assigns the circuits to local personnel for Damage Patrol on return to work

Regional personnel should be assigned circuits to Damage Patrol on their commute to their storm assignment. These Damage Patrols would be very preliminary and used to build a very high level estimate of restoration crew requirements. Circuits patrolled by Regional personnel on their commute will be scheduled for a second Phase 1 Damage Patrol by a Damage Appraisal Patroller.

Regional personnel should be made available in sufficient numbers to determine feeder lockouts and be available for circuit sectionalizing and wires down response. If Damage Appraisal Patrollers are delayed by wires down, a timely and accurate restoration estimate will not be achieved.

If there is extensive damage to the overhead Sub-Transmission system and/or the Distribution system, helicopter patrols may be arranged and completed as soon as practicable.

Immediately After the Storm

Damage Appraisal Patroller

- Within 24 hours of the end of the storm, performs Phase 1 Damage Patrols as directed by the Regional team
- Within 48 hours of the end of the storm, performs Phase 2 Damage Patrols as directed by the Regional team
- Documents the damage and repairs necessary on the Damage Appraisal Patrol forms (Exhibit 1 of this section)
- Places all forms from a single location into the Damage Appraisal Patrol envelope (Exhibit 2 of this section)

Regional Damage Appraisal Work Packet Support Team

- Tallies the material and repair requirements on the Damage Patrol envelope
- Creates the Estimated Crew Hour Requirement from the tally
- Creates a work packet using the Damage Patrol envelope and detail sheets
- Estimates the restoration time by the number of restoration crews available
- Assigns the work packets to restoration crews
- Tracks the work using a Regional Damage Spreadsheet

Restoration Crews

- Use the work packets to assign crews and equipment to complete restoration
- Track the materials used on the Damage Patrol detail sheet
- Report restoration by work packet number

Post-Storm

Regional Engineers

- Use completed work packets to build and close out confirming work plans where applicable

Regional Damage Appraisal Team

- Transfers the completed work packets to Engineering at the conclusion of the storm

SUBSTATION SURVEYS

A survey of all non-EMS substations should be implemented to check for lockout and/or station conditions/damage in the early stages of an event.

PHASE I SURVEY

Implemented within 24 hours of the end of the storm, this type of survey concentrates on main 3-Phase lines, the fuses for taps, and highly populated areas. Conclusions on damage from this survey as well as Responder data, customer calls, and 911information, will allow management to quickly formulate appropriate action such as calling for additional crews and/or ordering a Phase II Survey of the appropriate magnitude.

PHASE II SURVEY

Implemented within 48 hours of the end of the storm, this is a complete survey of individual Distribution feeders, recording damage and problems requiring correction. The extent of this survey and the size of the survey work force will be dictated by known damage conditions and any further damage anticipated by continued storm activity.

SURVEY RESULTS FOR ESTIMATED RESTORATION TIME AND RESOURCE REQUIREMENTS

The Regional Engineering/Planning Coordinator (Damage Appraisal) will determine the estimated man hours of work to complete the restoration. This will be calculated by using the work sheet on the Damage Patrol envelope.

The need for additional crews will be determined by the repair time estimates and the crew availability within the affected region. It is important that Transmission requirements also be incorporated into repair hour estimates.

FEEDER SWEEPS

It is common practice in areas severely affected by storm damage to complete feeder sweeps or final surveys at the completion of the restoration event prior to the release of line crews. This sweep is to ensure that all services are restored and that all temporary repairs are noted and/ or completed. There are applications where line crews will be required for restoration, but some or many feeders may have already been fully restored. In this application it may be appropriate to begin feeder sweeps with traditional survey personnel so that line crews may continue with the restoration process, while reducing the overall restoration time to Liberty Utilities customers.

Damage Assessment Worksheet

Liberty Utilities		STORM DAMAGE ASSESSMENT PATROL	
STATION / FEEDER:		ROAD/STREET:	
DATE / TIME SURVEYED:		SURVEYOR:	

Item	Brk Pole*	Anchor	Transformer*	Guy Wire	3P Pri Down	1P Pri Down	Sec Down	Crossarm / Pin	Cutout /Disconnect	Recloser / Airbreak	Regulator	Capacitor	Streetlight	Floodlight	Service	Tree**	DESCRIPTION OF DAMAGE	T.D. LINE POLE #
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
																	TOTAL QUANTITY	
																	ESTIMATED CREW HOURS	
Item	Brk Pole*	Anchor	Transformer*	Guy Wire	3P Pri Down	1P Pri Down	Sec Down	Crossarm / Pin	Cutout /Disconnect	Recloser / Airbreak	Regulator	Capacitor	Streetlight	Floodlight	Service	Tree**	Need Totals for Storm Status Reports *Indicate S-Street, R-Right of Way or F-Field/Rear Lot **Indicate L-Line or T-Tree Trimming Required	

Damage Patrol Envelope – Work Packet

Damage Assessment Patrol Envelope

	Date	Time
Repairs Complete		
Energized		
Called in Complete		

Division _____

Region _____

Station / Feeder _____

Patrol Phase Phase 1 Phase 2

Final Sweep

Crew Type Line Tree

Hours _____ Poles _____

3 Ph Pri Spans _ 1 Ph Pri Spans _____

Sec Spans _____ Transformers _____

Work Packet Number _____

Estimating Crew Hour Requirement
(assumes 2 person crew)

Line Crew Equipment	Quantity	Crew Hours	Total Hours
Pole		8	
Pole - off street		12	
Anchor		2	
Transformer		3	
Transformer- off street		5	
Guy Wire		1	
3 Ph Primary Span		4	
1 Ph Primary Span		2	
Secondary Span		2	
Crossarm / Pin		1	
Cutout / Disconnect		1	
Recloser / Airbreak		10	
Regulator		8	
Capacitor		4	
Streetlight		1	
Floodlight		1	
Service		2	
Limbs on Wires		1	
		Total	

Tree Crew			
Tree Crew Needed		2	
		Total	

Assigned To: _____

Tree Work Required before Line Work Can be Completed

CRITICAL CUSTOMER

Environmental Cleanup Required

Dig Safe Notification:

_____

APPENDIX K

SUBSTATION DECENTRALIZED OPERATIONS

GENERAL

If the extent of damage is such that decentralization to the substation level is required, the Regional Incident Commander will have overall responsibility for implementation of items within this section of the plan.

Severe storms which eliminate the direct interchange of information between the Regional Storm Room and the field may be worked by assigning whole feeders or substation areas to a task force group. The group would consist of necessary supervision, line and tree crews, and support personnel to work without outside direction and to restore service according to established restoration priorities. The Substation Group Leader and group will report to the Regional Incident Commander.

The Substation Group Leader will update the Regional EOC in a timely manner and submit a report to the Regional EOC every 6 hours or at other predetermined time intervals. The restoration board should be utilized for the marking of crew locations, which will aid in the overall planning of crew movements and give a visual indication of crew locations and how best they can be utilized. As work in a particular area nears completion, customer calls indicating that an outage still exists can be plotted and then related to the appropriate field crew. This will give a better picture at the EOC regarding actual progress in that area.

When tree crews are working independently of line crews or when numerous tree crews are required to assist in a decentralized mode they should be supported by adequate field Forestry supervision.

The goal of the Forestry portion of this task force will be to support line restoration efforts with 1 tree crew for every 5 line crews and to provide advance tree clearing with additional groups of tree crews working ahead of line crews on feeders.

The respective duties of all are outlined below.

SUBSTATION GROUP LEADER

1. Makes all necessary decisions affecting the restoration effort of the decentralized area including mutual aid requirements.
2. Prioritizes the damage and work locations for the most rapid and effective restoration.
3. Determines in which areas Damage Assessments should be conducted and keeps abreast of their status. Survey crews should be assigned to the Regional Incident Commander responsible for restoration in a particular area. In the event that the survey crew is not needed to survey some other area, they should be assigned to the Regional Incident Commander until the complete restoration is accomplished in that area.
   A survey crew should be assigned to each field Supervisor.
4. Coordinates the request for and the movement of all Company and foreign crews, including service crews, for timely restoration. A log made of locations to which to send the crews once their current assignment should be completed.
5. Groups the crews into different work schedules and staggers them for highest productivity. This should be coordinated with the Regional EOC.
6. Makes arrangements for timely deliveries of materials from Procurement.
7. Arranges for the periodic reporting of present status to the Regional EOC. This reporting includes the compilation of information for the "Storm Status Report," prediction of restoration times for Customer Service Center use, etc.
8. Delivers any pertinent information from the Regional EOC to the field Supervisor and personnel through the Outage Coordinator.
9. Obtains an adequate amount of circuit maps for the crews to use.
10. Notifies foreign crews of their accommodations.
11. Coordinates all meal periods.
12. Determines assignment of cleanup crews. Minimizes the use of these crews until all major restoration is complete.
13. Arranges for the restoration of station breakers in coordination with the Regional Storm Room, Dispatch & Control, and field supervision.

14. Marks on the map the locations of primaries down, services down, trees down, crew locations, etc.
15. Keeps a log of all crew locations with their work schedule, affiliation, and field leader.
16. Sorts all incoming data and records data from Damage Surveys.
17. Coordinates with the Substation Group Leader on locations to which to send crews and damage surveyors.
18. Utilizes Responder to support the restoration effort.

OUTAGE COORDINATOR

1. Relays information and assignments over the radio.
2. Maintains a logbook on crew locations, times, and all information given. This will reduce confusion and lost information.
3. Notifies the Substation Group Leader of information requiring his/her approval or decision.
4. Relays all necessary information regarding restoration over the telephone.
5. Maintains a logbook of all transactions that occur over the telephone so that information is not lost.
6. Updates storm status reports at designated time intervals and relays this information to the Regional EOC.
7. Coordinates with the Substation Group Leader and Lodging for crew accommodations.
8. Makes a record of temporary repairs so that permanent repairs may be completed later.
9. Utilizes Responder to support the restoration effort.

LINE SUPERVISOR

1. Supervises the field crews responsible for the restoration of feeders within a given area.
2. Instructs Crew Leaders that upon their arrival at an assignment, they must coordinate with Fire, Law Enforcement, and/or the Substation Group Leader for a situational briefing prior to initiating any work.
3. Receives restoration assignments through the Outage Coordinator from the Substation Group Leader.
4. Notifies the Outage Coordinator of the completion of the restoration.
5. Notifies the Outage Coordinator when temporary repairs are needed, the nature of these repairs, and their locations.

FORESTRY SUPERVISOR

1. Supervises the tree crews responsible for clearing tree conditions on feeders within a given area.
2. Coordinates with the Line Supervisor and Outage Coordinator to assist line crews in the restoration of feeders within a given area.
3. Receives restoration assignments from the Outage Coordinator and notifies the Outage Coordinator and Line Supervisor upon the clearing of tree conditions.
4. Reviews staffing assignments on a daily basis with the Substation Group Leader and with the Forester at the Regional Storm Room. As crews complete tree work ahead of restoration on a feeder or substation, coordinates their reassignment to the next priority area.
5. Coordinates and supervises the cleanup of tree conditions after the total storm restoration has been completed. This work will be kept to a minimum until all major tree work has been completed and will include the removal of damaged, broken, or hanging limbs and trees over or on the conductors following the storm.

DAMAGE APPRAISAL PATROLLER

1. Makes the appropriate surveys.
2. Reports the survey results to the Regional Engineering/Planning Officer (Damage Appraisal), but works directly for the field Supervisor.
3. After surveys are complete, performs additional duties for the Incident Commander as specified. These duties would include acting as a Runner to deliver information from the Substation Group Leader to the field Supervisor.

RUNNER/GUIDE

1. Escorts the foreign field forces to the job sites.

2. Assists the foreign field forces at the job sites with all logistical matters (locating streets, fuel, restaurants, etc.).

ADDITIONAL ELEMENTS

The following additional elements of decentralization may be warranted:
With widespread damage within one or more Regions, the existing storm management team may be supplemented. Personnel from non-affected Regions should be called upon to assist within a Region.

Additionally, for such a severe condition, consideration should be given to the utilization of Managers from other departments to assist in coordinating the overall Logistics, Electricity Operations, as well as public information activities within the Region.

The Regional Incident Commander will assist in the determination of the need for the above decentralized management team. In general, decentralization of not only the above, but also damage assessment, lodging, planning, etc. will generally be required to the same degree as the previously described storm management decentralization.

A complete listing of the decentralized command structure with contact numbers will be disseminated by the Planning/Resource Officer as quickly as possible throughout the entire storm organization.

Daily scheduled progress meetings and restoration planning sessions should be utilized by the decentralized management team. These sessions should include representation from all disciplines involved, i.e. Procurement, Safety, etc.

A storm of this magnitude will also require a specifically designated Regional Communications Coordinator to coordinate communications, strategies with customers, governmental authorities, and the media as well as Liberty Utilities leadership and employees.

A designated Logistics Officer for large scale material requirements and emergency generators should be assigned at the earliest possible stages of a major catastrophic event. The individual should also act as a liaison between Liberty Utilities and the federal and state agencies providing generator assistance.

STAGGERED CREW SCHEDULING

For Operating Condition Types 1, 2, 3 and possibly 4, organization on a daily basis is essential.

GENERAL

When working with many crews out of one decentralized location, the crews must be staggered into groups to avoid confusion and delays. When everyone tries to eat or fuel vehicles at the same time, the delays can become lengthy. The most productive work is performed during daylight hours. The groups should have a staggered working schedule. One possibility is outlined below.

WORK SCHEDULE

Crews should be divided into 2 groups, working mostly daylight hours. The majority of crews should rest at night. Work should continue at a reduced schedule at night. The night supervision reviews the day's progress, assesses the current situation, makes arrangements for materials, and assigns the next day's work locations. As the day supervision arrives, they can discuss the day's work with the night supervision. The night supervision will immediately assign the day crews their work, avoiding lengthy delays. The day supervision will then coordinate and control the daily activities. When night falls, the 2 supervision groups discuss the progress, and the cycle continues.

Start times may be changed depending on the time of year to take advantage of maximum daylight hours.

APPENDIX L

MUTUAL ASSISTANCE

GENERAL

The Planning/Resource Officer with assistance from the Logistics Officer is responsible for obtaining additional resources internally as well as from contractors, and other Utilities. These resource requests will be made by the System or Regional Incident Commander, or designee.

Acquisition and allocation of resources begins in the Pre-Event Stage of an event and continues through the Service Restoration Stage. Throughout this time, the System or Regional Incident Commander, in concert with the Planning/Resource Officer, is responsible to develop the restoration strategy and its associated resource requirements. Due to every event's unique nature, subjective analysis as well as experience during similar events and knowledge of historical impacts that have occurred elsewhere in the country is required to estimate resources, material and equipment requirements based on weather or other known hazard conditions.

For forecasted wide-scale events, the Company utilizes a pre-event checklist, and a series of conference calls, to align and mobilize the organization into action. This alignment typically includes pre-positioning of resources which may come from an internal or external source. Part of Liberty Utilities' strategy is to acquire sufficient resources as part of the preparation phase. To ensure that this occurs, the Company has a portfolio of external resource options.

Throughout an event, as field conditions change and information about field conditions evolves, resources (internal, contractor, and mutual assistance) may be redeployed by the System or Regional Incident Commanders.

PROCEDURE

The System or Regional Incident Commander is responsible for performing a situational assessment and determining resource needs during the Pre-Event Stage as well as throughout the event. The specific conditions predicted, existing or impending will be identified including the following:

1. Nature of cause of emergency - wind, lightning, etc.
2. Geographical location of emergency
3. Number of cases of trouble by location
4. Number of customers affected
5. Number of circuit lockouts by circuit designation
6. Number of crews in the field by location

Subsequently, the emergency will be classified into one of the five Event Types, and when required, assistance procedures will be implemented in accordance with the following:

Event Type 5
This classification of emergency usually does not require assistance from outside a Region. Local personnel and Utility Contactors are sufficient for this level.

Event Type 4
This classification of emergency may require assistance from outside a Region. The Electric Operations Director, Regional Incident Commander and/or his/her designee will arrange for the required assisting personnel from other Regions. If additional resources from outside the Region are required, the person in charge will arrange for the required resources.
The information required can be found in Exhibit A. The Supervisor of the supporting crews, upon arrival in the requesting Region(s), will perform the duties as outlined in Exhibit C. The crew transfer sheet in Exhibit B will be used to record crew movement.

When assisting personnel from organizations other than Electricity Operations are required, it will be the responsibility of the person in charge to make arrangements for the required personnel.

Event Type 3
This classification of emergency usually requires assistance from other Regions and external resources. The Electric Operations Director, System or Regional Incident Commander and/or his/her designee will arrange for the required assisting personnel. If additional external resources are required, the Planning/Resource Officer will arrange for the required resources. The information required can be found in Exhibit A. The Supervisor of the supporting crews, upon arrival in the requesting Region(s), will perform the duties as outlined in Exhibit C. The crew transfer sheet in Exhibit B will be used to record crew movement.

When assisting personnel from organizations other than Electricity Operations are required, it will be the responsibility of the Planning/Resource Officer to make arrangements for the required personnel.

Event Type 2
This classification of emergency usually requires assistance from other Regions and external resources. The System or Regional Incident Commander and/or his/her designee will arrange for the required assisting personnel. When additional external resources are required, the Planning/Resource Officer with assistance from the Logistics Officer will arrange for the required resources. The information required can be found in Exhibit A. The Supervisor of the supporting crews, upon arrival in the requesting Region(s), will perform the duties as outlined in Exhibit C. The crew transfer sheet in Exhibit B will be used to record crew movement.

When assisting personnel from organizations other than Electricity Operations are required, it will be the responsibility of the Planning/Resource Officer to make arrangements for the required personnel.

Event Type 1
This classification of emergency will require assistance from external resources.

NORTH ATLANTIC MUTUAL ASSISTANCE GROUP (NAMAG)
The Company is a member of the North Atlantic Mutual Assistance Group (NAMAG) and has mutual assistance agreements with many contractors. See the CQ&EM site for the current NAMAG Guidelines dated June 27, 2014. NAMAG maintains a Mutual Assistance Roster of major electric utilities in the United States. This information includes the names, addresses, and telephone numbers of personnel to contact in each company.

The System or Regional Incident Commander and/or his/her designee will arrange for the required assisting personnel. When additional external resources are required, the Planning/Resource Officer with assistance from the Logistics Officer will arrange for the required resources. The information required can be found in Exhibit A. The Supervisor of the supporting crews, upon arrival in the requesting Region(s), will perform the duties as outlined in Exhibit C. The crew transfer sheet in Exhibit B will be used to record crew movement.

When Mutual Assistance is required, the Planning/Resource Officer with assistance from the Logistics Officer is responsible to secure and mobilize additional resources from the following resource pools:

- Utility and Non-Utility Contractors (currently working for Liberty Utilities)
- North Atlantic Mutual Assistance Group (NAMAG)

The Company maintains contact information for a portfolio of contractors. Contractor Support will be requested at the direction of the System Incident Commander or designee. The Planning/Resource Officer will report back to the System Incident Commander with contractor responses and provide the appropriate crew rosters upon notification. The System and Regional Incident Commanders will determine the assignment locations with information provided by the Planning/Resource Officer with assistance from the Logistics Officer along with contact names and phone numbers to which to direct the contract personnel. The Planning/Resource Officer with assistance from the Logistics Officer will provide the appropriate information to the responding contractor company. Upon arrival, contractor resources are on-boarded and directed by the appropriate leadership and Safety Officer.

The Incident Commander and the Manager of Emergency Management will participate in NAMAG storm calls. The purposes of the calls are to identify resource needs and procure the required resources for the event. The Planning/Resource Officer with assistance from the Logistics Officer will contact utilities and contractors for mutual assistance as requested by the System Incident Commander.

The procedure is the same for any Event Type that requires external resources. The assisting parties will exchange information and perform the duties as outlined in Exhibits A and C of this section

SERVICE CREWS

During major storms, when there may be many services down, service crews may be formed at the request of the Incident Commander to supplement existing line resources to restore single phase secondary services.

Crew Makeup
Crews may originate from any job classification that is qualified to work on and near exposed energized electrical equipment and has been issued and trained in the proper use of Class 0 rubber gloves at a minimum. When service crews are formed, the normal complement should be a two-person crew. As service crews are formed, all efforts will be made to provide qualified supervision to oversee service crew work in the field.

Scope of Work
All service restoration activities will be limited to repair on single phase secondary service drops only. All such repairs from the pole to the customer's meter channel should be treated as energized at all times. No connects will be allowed on the pole end if the pole is equipped with primary equipment, such as transformers, regulators, capacitors, etc. Mid-span connections will be limited to bucket truck applications only, provided adequate clearances can be maintained from the primary conductor.

Crew Dispatch
A separate dispatch operation should be established to handle all service restoration activities which would allow the Region to concentrate feeder restoration. This dispatch operation will report all activities to the Regional Storm Room. After service crews are dispatched, they should contact the Supervisor in charge of the feeder to which they are assigned to coordinate work activities.

Training
All personnel involved with the repair/replacement of services during storm restoration will have completed Storm Restoration Training for Non-Line Personnel.

WIRES DOWN APPRAISAL AND STANDBY

During a storm event it may be necessary to send qualified individuals to reported line trouble locations and verify if the trouble is in fact Company equipment.

Scope of Work
Trouble assessors will determine if the trouble presents a hazard to the public. If it does they will attempt to make the area safe. The experience and training of the individuals will vary upon those responding. If electrically qualified and properly equipped to make the field conditions safe, the assessor should do so. If the time element to do so will detrimentally impact the assessment completion time, the responder will notify survey supervision and request direction. If a hazardous condition still exists, then an individual will be dispatched to standby and guard the hazardous conditions until repairs can be made. Conditions reported by trouble assessors will be compiled and forwarded to the Regional Storm Room.

Crew Makeup
Ordinarily, Regional personnel fulfill the role of Wires Down Standby. However, during major emergencies others may be utilized such as personnel from Underground, Substation, Customer Meter Services, Gas Construction, Design and Engineering.

Crew Dispatch
During major emergencies, a separate Wires Down Center may be established to handle all downed wire guarding activities. This Center, however, will report the location, status, etc. of downed wire locations to the Regional Storm Room.

Training
Personnel working with energized conductors in making the area safe or completing service restoration will have received proper electrical training prior to the event. Those not trained and qualified SHALL NOT work with energized equipment or attempt to do any work outside of their qualifications and training.

SUPPORT PERSONNEL

Support personnel may be in the form of other Liberty Utilities Operations and Non-Operations personnel and retirees. All orders to mobilize these personnel will be communicated to the Planning/Resource Officer or Incident Commander. Support personnel may be utilized as runners/guides to assist foreign field forces in locating job sites and other logistical matters such as locating fuel and restaurants. Individuals utilized as runners/guides should have a local knowledge of streets, restaurants, supply points and fuel points.

When such orders are issued, the applicable information included in Exhibit A of this section will be provided.

When assembled, the applicable information included in Exhibit B of this section will be provided to the Incident Commander for forwarding onto the Region requesting assistance.

TRANSPORTATION

The mode of transportation for personnel and vehicles depends primarily on two factors, distance and weather.

As a guideline, when distances of 100 miles or greater are involved, the vehicles should be dispatched separately from the personnel. Drivers are to be provided for the vehicles and the personnel are to be transported by bus, train, or plane as the conditions dictate at the time.

CANADIAN/UNITED STATES BORDER CROSSING GUIDANCE

To facilitate the processing of mutual aid crews to and from Canada into New England, the Canadian/United States Border Crossing Guidance document located on the EEI RestorePower web site at eei-restorepower.groupsite.com/main/summary should be followed.

This guidance document will satisfy the requirements of both the Immigration and Naturalization Crews Service (INS) and Customs. A list of the Canadian/United States Border Crossing locations is in Exhibit D. The Incident Commander or Emergency Management is responsible for implementing these procedures.

EXHIBIT A

Information Supplied by Party Seeking Assistance

1. Number and type of personnel required; i.e. line crews, tree crews, sorters, mappers, servicemen, mechanics, communication testers, etc.

2. Geographical location to have personnel to report to and telephone number of the Branch Supervisor responsible for restoration at that location.

3. When the personnel are required.

4. Estimated duration of the emergency.

5. Equipment needed: *
   A. Line trucks (buckets, diggers, etc.)
   B. Passenger cars
   C. Other vehicles and equipment necessary for weather condition
   D. Radio base station

   * Utilities supplying Liberty Utilities with crew complements greater than 30 crews may be requested to bring a rack body boom truck for materials if the event is of such duration and size that support for distribution of materials is requested by the Warehouse Materials Coordinator.

6. Materials needed.

7. Suggested highway routes to travel.

8. Other pertinent information such as local weather conditions.

EXHIBIT B

Liberty Utilities

Crew Transfer Sheet

Date:

* Select Field to Reveal Drop-Down List
* Complete All Fields Shaded in Yellow - Others are Optional

Number of Hotel Rooms: Singles

Number of Hotel Rooms: Doubles

FROM

Company/Contractor Co Name:

Head Quarters (Yard, Barn):

Company/Contractor Contact:

Telephone #: XXX-XXX-XXXX

Fax #: XXX-XXX-XXXX

Liberty Supervisor / FCC:

Telephone #: XXX-XXX-XXXX

TO

Restoration Region:

Number of Qualified Crews:

Number of Buckets: Number of Diggers:

CREW AVAILABILITY

- ☐ Available to Work on Arrival
- ☐ Requires Rest on Arrival

DEPARTURE (From Home HQ)

Date/Time: MM/DD/YY hh:mm (Military)

ESTIMATED ARRIVAL

Date/Time: MM/DD/YY hh:mm (Military)

ACTUAL ARRIVAL

Date/Time: MM/DD/YY hh:mm (Military)

CREWS RELEASED

Date/Time: MM/DD/YY hh:mm (Military)

CREW CAPABILITIES (Qualified/Rated)

- ☐ Overhead Distribution
- ☐ Transmission
- ☐ Underground
- ☐ Forestry
- ☐ Other

NOTES:

Employee ID	Last Name	First Name	*Gender	Supervisor/ Foreman (Y/N)	*Storm Role	Cell #	Require Lodging	Vehicle Description

EXHIBIT C
Procedure for Supervisors Assisting Other Parties

1. Call the Supervisor responsible for restoration upon arrival at the point of the emergency work assignment.

2. Verify information as to where the crews will be met and where they will report for work.

3. Verify that PCard has increased limit with expanded purchase authorization and cash withdraw capability.

4. Obtain information on crew lodging and meals.

5. Check the restaurant hours for proper accommodations, especially breakfast.

6. Establish the daily work schedule.

7. Arrange for the assignment and storing of vehicles.

8. Arrange for the assignment of a guide who knows the local area and who is qualified to request switching and obtain mark-ups on lines and equipment.

9. Request general information for your crews.

10. Request Transmission and Distribution system descriptions and instructions for your crews.

11. Request maps of the Distribution circuits.

12. Request important telephone numbers such as for the work headquarters, Branch Operator's office, police, and doctor.

13. Maintain a daily log of activities from the time of departure.

14. Turn in all outstanding unpaid bills.

15. Return expense money.

16. Arrange for the return home in a reasonable and prompt manner.

17. Report to the local Supervisor responsible for restoration.

18. Submit required reports.

EXHIBIT D

US Customs and Border Protection – Border Crossing Ports of Entry

PORTS	FACILITIES & CROSSING	PHONE NO.	FAX NO.
24 HOUR CONTACT NUMBER FOR CHAMPLAIN/TROUT RIVER LOCATIONS 518-298-8346			
CHAMPLAIN,NY	Main Office	518-298-8346* 518-298-7212	518-298-8395
	Cannons Corners	518-236-5312	518-236-4961
	Mooers	518-236-7113	518-236-4008
	Overton Corners (Route 276)	518-298-3182	518-298-4944
	Rouse's Point	518-297-2441	518-297-3632
TROUT RIVER, NY	Main Office	518-483-0821*	518-483-3717
	Chateaugay	518-497-6633	518-497-6639
	Churubusco	518-497-6491	518-497-0028
	Fort Covington	518-358-2444	518-358-9290
	Jamison's Line	518-483-1009	518-483-6433
MONTREAL, ONT Wednesdays Only 10a.m. – 1:30 pm	Main Office	514-631-2097	514-631-5126
BUFFALO, NY	Port Office in Downtown Buffalo	716-843-8339	716-843-8523
	Buffalo/Niagara Falls International Airport	716-632-4727*	716-632-6275
	Lewiston Bridge	716-282-1500	
	Rainbow Bridge	716-284-5174*	716-282-4671
	Whirlpool Bridge	716-278- 0200/0918*	716-292-5953
	Peace Bridge	716-885-3414* 716-885-3367* 716-881-5225	716-885-3521
ALEXANDRIA BAY, NY	Main Office	315-482- 2472/2261/2472* Ext. 264/290/293	
	Cape Vincent	315-482-2681* 315-654-2781	315-482-5422 315-654-3382
	Massena	315-769-3091*	315-769-3146
	Ogdensburg	315-393-0770* 315-393-1390*	315-393-2099
HOULTEN, ME	Main Office	207-532-2131	207- 532-6622
	Forest City	207-448-2288	
	Monticello	207-538-9475	
	Orient	207-448-2427	
NORTON, VT	Main Office	802-822-5233	802-822-5512
	Pittsburg, NH	819-656-2261	

*Point of Entry number staffed 24/7

APPENDIX M

EMPLOYEES, CONTRACTORS AND FOREIGN CREWS WELFARE

GENERAL

All employees should get at least 6 to 8 hours off in every 24 hour period. It is desirable to work during daylight hours to maximize efficiency and safety. It is also important to provide ample staffing at night that should include One Person Crew coverage to respond to 911 and large outage calls, pole setting in preparation of crews coming off rest, and large outages where the work area damage is known and can be worked efficiently and safely while meeting crew rest concerns.

Foreign crews and supervisory personnel:

1. Procurement may be issued for each Supervisor or other person charged with cash management responsibilities
2. County road map and circuit diagrams will be issued for each Supervisor and crew
3. Every effort must be made to provide quality lodging and meals. At least 2 hot meals will be provided daily. It may be desirable to house groups of workers away from the work area and transport them by bus if proper facilities are not available locally.
4. Crews traveling to another Region or utility for an undetermined amount of time will be instructed to have a minimum of 7 days' supply of clothing and personal items.
5. Crews traveling to another Region should eat, if necessary, prior to their arrival at the storm area.
6. The following are Liberty Utilities policies that must be adhered to by employees, hired contractors, or foreign crews:
   a. There will be no consumption of alcoholic beverages during regular working hours, overtime, emergency, or at meals.
   b. Meals will be obtained at a reasonable price.
   c. The unlawful use, possession, sale, or purchase of "controlled substances" is prohibited.
   d. No person will enter Liberty Utilities property while in possession of a firearm of any description, loaded or unloaded.
   e. Room accommodations will be treated respectfully and in accordance with "House Rules."
   f. Liberty Utilities will not pay for hotel charges for room service, movie charges, etc. One call (to the home number) of a reasonable duration is allowed.
   g. Personnel who are sick, injured, or otherwise unable to report to work will inform their immediate Supervisor who, when applicable, will report this to their assigned Liberty Utilities representative.
7. The Code Blue Emergency System is designed to allow workers in the field the ability to broadcast an emergency condition and request assistance in obtaining ambulance, rescue, or police service to the scene.

REFERENCES

See the Liberty Utilities Storm Restoration Guidebook dated December 1, 2014.
This is a general safety & health guide for foreign utility crews and contractors responding to an emergency at Liberty Utilities. The Guidebook is on the CQ&EM site.

See the Code Blue Emergency Activation Procedure dated December 18, 2014.

APPENDIX N

COMMUNICATIONS

PURPOSE

The Public Information Officer or designee will be responsible for implementing items within this section of the plan and unity of message will be one of their primary responsibilities.

1. Customer Communications

A. Customer Call Response

The Liberty Utilities Customer Service Center has the ability to reallocate available telephone lines, allowing for greater customer access during major outages. The Service Center is also equipped with IVR (automated answering system) that is used to handle storm outage calls received. The automated system is designed to reroute customers who have indicated that they have an emergency situation, back into the Service Center queue.

During the Pre-event stage, the Manager of the Customer Service Center, or his/her designee, based on the most recent weather forecast and historical experience, makes resource staffing level decisions, establishes schedules to adequately handle the increased customer call volume, and coordinates additional resources to meet those requirements.

B. Customer Messaging

1. Broadcast Messaging

Liberty Utilities has the ability to broadcast outage communication to customers to verify if their power has been restored during a large scale outage event. The process is a fast, low cost way of determining if services are damaged on the distribution circuits that have been identified as restored in the Responder outage management system. The decision to activate the messaging will be made by the Incident Commander or designee.

2. IVR / Public Service Announcements

The Customer Service Center will create appropriate informational messages on the Customer Service Center's IVRs (Inter-voice Response Units) if warranted, notifying customers of potential service interruptions due to an emergency event. The Customer Service Center will also update the IVRs with information regarding restoration times for the affected area, safety information, and Public Service Announcements, to ensure that a unified message is provided to customers.

3. Estimated Time of Restoration (ETR)

ETR messaging will be managed by the Dispatch & Control Center and/or activated Storm Center(s) at the direction of the Incident Commander or designee. ETRs noted in the Customer Service System will reflect edited ETR information within the Outage Management System. ETRs noted in the online outage map will also reflect information within the Outage Management System unless disabled, in which case "TBD" will be noted until field information becomes available. ETRs should be populated with the most updated information provided by Field Operations. ETRs will be managed by Dispatch Area, Crew Area, or Device.

C. Life Support Customers

The Customer Service Center is responsible for maintaining a database of Life Support Customers. Life Support Customers are added to the database upon successful completion by the customer of enrollment criteria. The Life Support Customer list is reviewed annually.

The Customer Service Center will attempt to communicate with Life Support Customers likely to be impacted by an emergency event before the event. The Customer Service Center will attempt to contact those live support customers whose service has been interrupted during the event and after restoration of service.

The Customer Service Center will:

1. Identify Life Support Customers that are impacted by the emergency utilizing the Power On Life Support Monitoring Tool.

2. Attempt to contact identified Life Support Customers to inform them of the scope of the interruption and the restoration forecast. If a customer cannot be reached, attempt make contact at third party number if information is available (always leave a message on the answering machine).

   Note: Customer Service Center Representatives are to cover the following "Key Points" when contacting Life Support Customers.

   A. Identify yourself as calling from Liberty Utilities.
   B. If leaving a message on an answering machine, indicate the date and time of your call.
   C. Provide information concerning potential service interruptions due to emergency event or provide actual outage and restoration as available.
   D. Advise that if the customer feels they are in a life threatening situation, to call police, fire, or 911.

2. Municipal Communications

A. Advanced Planning and Training

Government and Community Relations and Customer Care Staff will work closely with Emergency Management in conducting at least one annual meeting with:

1) Appropriate local elected and appointed officials of each of the cities and towns in which it provides service to ensure the effective and efficient flow of information between the Company and local elected and appointed officials during an emergency event; and

2) State and local public safety officials of each of the cities and towns in which it provides service to ensure the effective and efficient coordination between the Company and local public safety officials during an emergency event and to review Company policies and procedures that will identify the service locations of its Life Support Customers and refer all requests by Life Support Customers and other special needs customers to public safety officials for response.

Vegetation Management will meet with Tree wardens or appropriate officials of each of the cities and towns in which it provides service, to ensure the effective and efficient coordination between the Company and the city or town regarding the Company's annual vegetation management practices and the Company's response during an emergency event.

In addition, Government and Community Relations and Customer Care will submit to Emergency Management a report from the Government/Public Safety Official Meeting that includes the following information:

(1) invitees and their job titles
(2) attendees and their job titles
(3) the agenda
(4) all presentation materials
(5) minutes
(6) action items that result from the meeting
(7) status of each identified action item.

B. Government/Public Safety Official Communication

Government and Community Relations and Customer Care will be responsible for maintaining a contact database for emergency events, which will consist of municipal emergency managers along with state and other local public safety officials and/or their designees and critical care facilities (hospitals). This contact information will include titles, addresses, phone numbers, and other pertinent data as appropriate.
Government and Community Relations and Customer Care will be the custodians of this information.

For any Event Type that requires it, the Planning/Resource Officer or designee will be responsible for distributing reports to the Municipal Room lead. The Municipal Room lead or designee will establish communications with other local public safety officials and/or their designees. These reports will include both pre-event stage and service restoration stage reports.

-

Dedicated Line

A dedicated telephone number(s) may be established for responding to local governmental authority inquiries during any Event Type which may require it or at the request of the Incident Commander. This responsibility will be assigned to Government and Community Relations and Customer Care and will generally coincide with the activation of the EOC and/or the Company's Wires Down program. The telephone number will only be provided to authorized municipal officials, for their official use only, prior to activation of the dedicated line. If a municipality is concerned over the loss of electrical service to facilities that provide vital services to the public, e.g. nursing homes, key municipal facilities, sewage treatment plants, etc., they should communicate this concern to the Company via this dedicated line. If this dedicated line has not been activated, the municipality should make contact with the Company via their normal communication channels.

C. Municipal Liaison

The Customer Care Team is established to develop relationships between the Company and municipal officials to better respond to the community needs during a restoration effort. During more severe storms and extended restoration efforts, some or all municipalities affected may be assigned a Municipal Room Liaison, as resources permit. When directed Municipal Room Liaisons will report to their assigned area and will provide personal assistance in the prioritization of work to ensure public safety and to facilitate the restoration of electric service to the assigned community. The Company has experienced over time that providing a liaison to municipalities severely affected by emergency events not only supports the local area affected, but also aids in prioritizing the restoration of electric facilities and may improve access to Company facilities by obtaining municipal support.

D. Municipal Conference Call

During an Event Type 1, 2 and 3 storms, where restoration is not expected to be completed within 48 hours, or at the request of the Incident Commander, a Municipal Conference Call will be utilized daily until the completion of the restoration effort. Additionally, in extraordinary events such as load shed scenarios where information on restoration needs to be communicated to community leaders, the Municipal Conference Call will be utilized. Government and Community Relations and/or Customer Care will be responsible for coordinating the call and notifying the applicable community leaders of the conference call number and time that the conference call will take place. All information to be shared during the conference call will be reviewed with the Incident Commander prior to the call in order to be shared with respective state regulatory staffs as necessary. In the event that phone lines are incapacitated, the requirement to conduct this call is waived. Community leaders will acquire information through the state emergency management as is normal operating procedure under the Incident Command System.

3. Media Relations

A. Media Relations Liaison to EOC

During an Event Type 1, 2 or 3 storms or by determination of the Incident Commander, a Media Relations Representative will be assigned to communicate directly with the EOC and be assigned a location within the EOC. This representative will maintain contact with the Public Information Officer and others in the Company as required.

B. Media Relations Response Team

Whenever an electric emergency is classified as Event Type 1, 2, 3, or possibly 4, an emergency Media Relations Response team will be placed on standby for possible deployment to the impacted area.

C. Media Access

News media representatives may be permitted access to facilities in times of emergency when accompanied by appropriate management personnel. Pre-designated areas within the limits of safety and security will be selected.

D. Public Service Announcements/Advertising

As conditions warrant, the Public Information Officer, at the request of the Incident Commander, will place advertising with print and/or broadcast outlets to convey safety, storm restoration, or other emergency event information.

4. Internal Communications

A. Employee Messaging

Employees will be kept informed during an emergency event by the Liberty Utilities E- mail system and broadcast telephone messages. Employee Communications will be responsible for implementing the messages when directed by the Incident Commander.

APPENDIX O

PUBLIC SAFETY

GENERAL

Public Safety during an event is the Company's number one concern. The elimination of hazards to the public takes precedence during emergencies. During a storm event it may be necessary to send qualified individuals to reported line trouble locations and verify if trouble is in fact related to Liberty Utilities equipment.

Under normal operating conditions the Dispatch & Control Center has responsibility for dispatching resources to all trouble locations, regardless of whether they are reported by a municipality or the general public.

When Liberty Utilities decentralizes from the Dispatch & Control Center, the Regional storm room dispatches resources to trouble locations. During major storm events, the System or Regional Incident Commander may determine, due to the amount of down wire calls, to implement plans to activate the Wires Down room to support the storm room. The wire down room assists the storm room by managing the additional support resources engaged in wire down appraisal and standby functions. In these situations the wires down room under the direction of the storm room lead will assume responsibility for prioritizing and dispatching trouble orders with a wire down condition and assessing or rectifying conditions found in the field.

When widespread interruptions and damage occur, the Company utilizes restoration crews and other trained individuals to respond to reports of down wires reported by both police & fire officials as well as general customers in order to preserve public safety. The purpose of the wire down organization is to supplement the resources dispatched by the storm room in order to relieve Police and Fire apparatus standing by Company assets and to make wires sown situations safe.

WIRES DOWN CONDITIONS

The initial trouble call to report the wire condition is received in the following ways:

Priority 1 – "Life Threatening" Police / Fire Emergency Lines in Dispatch & Control Center (1-877-247-3603).

Priority 2 & 3 – Hindering Emergency Operation - Police / Fire Emergency Lines in Customer Service Center (1-877-598-6326).

All other customer calls – general customer service number

WIRES DOWN REPORTED BY GENERAL PUBLIC

Wires down reported by the general public are dispatched to a restoration crew. In the event a restoration crew is not available, individuals that are trained in the wires down process are sent to the reported locations to appraise the situation. If the reported wire down is an electric wire, they will either "make safe" the area by performing a cut and clear activity or they will "stand by" until a crew can be dispatched to repair the outage and pick up the wire condition reported.

PRIORITY WIRES DOWN REPORTED BY FIRST RESPONDERS

The definitions established for Police & Fire Priority 1, 2 and 3 trouble calls where municipal officials are en-route to an emergency or on-site at a location of concern are as follows:

1) **Priority 1** Emergencies are life threatening. The Company responds to Priority 1 calls as soon as possible with the nearest trained resource. These calls are taken in the Dispatch and Control Center. Examples include:
    a. A person is trapped in a vehicle that has struck a utility pole and the pole or equipment is prohibiting emergency personnel from approaching the vehicle.

    b. A person is trapped in a burning building and emergency personnel need electrical service disconnected before they can enter the building.

    c. A member of the public has come in contact with electrical wires or equipment (e.g., sever electrical shock or electrocution) and the location needs to be made safe before rescue can start.

    In the event that a municipality incorrectly classifies a standby call as Priority 1, the Company will reclassify the call and notify the municipality of the correct classification.

2) **Priority 2** emergencies are those that hinder emergency operations. The Company will respond to Priority 2 emergencies with the next available trained resource. These calls are taken in the Customer Service Center and dispatched via the Outage Management System. Examples include:

    a. Wires and / or equipment blocking a roadway.

    b. Electrical service needing to be disconnected before a structure fire can be extinguished.

    c. Electrical service needing to be disconnected so that emergency personnel can enter a flooded home or area of town.

3) **Priority 3** emergencies are non-threatening emergency hazards. The Company will respond to Priority 3 calls with a capable resource. These calls are taken in the Customer Service Center and dispatched via the Outage Management System. Examples include:

    a. Wires and / or equipment down along a sidewalk or commonly traveled way.

    b. Tree limb arcing on wires.

    c. Pad-mount transformer pushed off of its pad and wires exposed.

    d. Utility pole struck by motor vehicle and personnel on scene unsure of pole's integrity.

DESCRIPTION OF PRIORITY WIRES DOWN PROCESS

The Company has committed to provide Estimated Time of Arrival (ETA) information on all Police and Fire calls where a stand-by condition is indicated. The Company will provide an Estimated Time of Arrival for all Priority 1 calls within thirty minutes and for Priority 2 and 3 calls as soon as possible.

Under normal operating conditions the Dispatch & Control Center has responsibility for dispatching resources to all trouble locations, as well as estimating and disseminating Estimated Time of Arrival for Priority 1 through 3 ETAs based on consultation with field personnel regarding factors which may include known travel conditions and resource availability.
During wide-scale events, Regional storm rooms take over the responsibility from the Dispatch & Control Center for dispatching resources in Liberty Utilities' operating areas.

The Municipal Room Coordinator obtains the ETA for Priority 1 through 3 calls from the storm room or directly from the Outage Management System and communicates the ETA to the requesting police or

fire department via phone call. If there is a significant change to the ETA subsequent to the initial ETA communication the Municipal Room Coordinator will call the municipality to communication the revised ETA.

In addition to the ETA information (Time of ETA call back and ETA provided) the following information is also captured to provide the necessary information for post storm reporting on the Police / Fire trouble calls with a stand-by condition noted:

a. Date & Time of call
b. Location of trouble
c. Nature of the call
d. Priority
e. Time crew assigned
f. Time crew arrived
g. Time made safe / repaired

During storm events the Municipal Room Coordinator will capture this information for Priority 1 calls and will attempt to capture as much of this information as possible for Priority 2 and 3 calls.

APPENDIX P

SAFETY & HEALTH COORDINATION

GENERAL

The Safety and Health Officer is responsible for the implementation of items within this section of the plan.

MOBILIZATION CRITERIA

Whenever the Electric Emergency Management Plan is activated, the appropriate Safety and Health personnel will be notified and mobilized in accordance with the classification of the emergency. The Incident Commander and the Manager of Safety and Health will, if appropriate, determine the scope of the emergency and will immediately assign Safety and Health personnel to work in locations affected by the emergency.

SAFETY SUPPORT BY OPERATING CONDITION LEVELS

Operating Condition Type 5

- Safety will monitor work activities on a local basis and respond accordingly.

Operating Condition Type 4 & 3

- The Incident Commander will contact the Manger of Safety and Health for assistance within EHS&S from which manpower will be used to help with restoration efforts.
- Safety will work with local supervision regarding the restoration effort and will conduct field observations/audits, incident analyses, and training as needed.
- Safety will act as a liaison between Supervisors and outside utilities concerning any Safety-related activity or situation.

Operating Condition Type 2 & 1

- The System or Regional Incident Commander will contact the Manger of Safety and Health for assistance within EHS&S and possible through mutual assistance from which manpower will be used to help with restoration efforts.
- Safety will work with local supervision regarding the restoration effort and will conduct field observations/audits, incident analyses, and training as needed.
- The Manager of Safety and Health will arrange to provide dedicated Safety and Health staff for designated and specified work locations. This dedicated staff will be available for field sites and other staging locations as needed.
- Safety will act as a liaison between Supervisors and outside utilities concerning any Safety-related activity or situation.

RESPONSIBILITIES

Manager Safety

- Assign a Safety Representative to the restoration area based on the classification and location of the emergency situation.
- Establish a Command Center in which appropriate Safety and Health staff will be assigned and to which other staff members can report.
- Coordinate the scheduling and duty assignments of Safety and Health staff.
- Ensure that various Safety reports (i.e. near misses/incidents) are effectively communicated to field employees throughout the storm zone.
- Coordinate incident analyses, field audits, training, and regulatory inquiries.
- Conduct a critique of Safety response efforts to identify lessons learned.

Safety Representative

- Support local supervision regarding the restoration effort as needed.
- Act as a liaison between Supervisors and outside utilities concerning any Safety-related

activities or incidents.

- Manage, receive, and communicate Safety reports (i.e. near misses/incidents) to field employees throughout the storm zone.
- Facilitate incident analyses and field audits.
- Develop and deliver specific Safety and Health regulatory training to employees and keep an assignment of their work (i.e. service restoration, fall protection, traffic control, and tagging) if they have not received it previously.

APPENDIX Q

FLEET MANAGEMENT

GENERAL

The Logistics Officer will be responsible for implementing items within this section of the plan.

The designated Fleet Services representative will oversee and coordinate Fleet Services activities.

The Electric Operations Supervisor in charge will be responsible for ensuring that crew vehicles are pre-operationally (49 CFR Pre-Trip) checked, including fuel, oil and water levels. The respective Regions(s) will notify local Fleet supervision before sending vehicles.

Fleet Supervision will provide consultation to Electric Operations to ensure that the age, type, and condition of the vehicles and equipment being sent is appropriate for the length and duration of the trip.

Procurement is responsible for furnishing:

1. Additional motor vehicle equipment as required
2. Appropriate gasoline credit cards and EZPass' for use by the Supervisor on the New Hampshire Highways, or making arrangements for fuel
3. Notification to state authorities, the Federal Highway Administration, and the appropriate Police Agencies.

Depending on the severity of the emergency, repair garages may have to be notified to operate on a 24-hour basis in the Region(s) involved in restoration. Repairs should be made while crews are on rest time whenever possible.

RENTAL OF EQUIPMENT

When supplemental equipment is needed, The Logistics Officer or the Incident Commander will contact Procurement. They will then seek available equipment using the following order of precedence:

a. Availability within the Company's fleet
b. Obtaining equipment from other sources
c. Availability and rates from other utilities

The goal of Procurement is to obtain the needed equipment when it is required at the lowest cost.

For Event Type 1, 2 or 3 the Incident Commander may establish a Storm Fleet Services Equipment Coordinator.

FUEL TAX PERMIT

The North Atlantic Mutual Assistance Group has established a fuel tax permit procedure to be used when applying for a fuel and trip permit for those vehicles in excess of 18,000 pounds (lbs.) traveling outside of New Hampshire for either emergency storm damage or the delivery of materials. The procedure can be found on the EEI RestorePower website at eei-restorepower.groupsite.com.

A listing of the Equipment IDs for all vehicles over 18,000 lbs. must be maintained and include the following:

- The states for which the trip and fuel permits are required
- The effective date of the permit(s)
- The estimated return date
- The address of the location to which the paper copy of the permit should be sent
- The fax number to which the permit should be faxed

- The name, E-mail address, phone number, and fax number of the contact person in Operations to whom the permits should be sent. This person is responsible for distributing the permits to the crews/trucks.

In most states these permits are only good for 10 to 30 days. If the permit should expire before the vehicle leaves the state, another permit must be applied for.

Upon receipt of the fuel tax permit, the Electric Operations contact will distribute the permits to the appropriate vehicles. These permits must be kept with the unit.

APPENDIX R

ACCOUNTING

GENERAL

The Regions, as well as other departments that assist during a storm emergency, should use the following guidelines to charge their costs to a storm or emergency event.

PROCESS

1. Liberty Utilities will establish a specific Storm Project for use during storms or events. The Project will be created in accordance with the Liberty Utility project approval processes. The Project will have a budget approximately equal to the prior year's actual storm spending less any storm charges that are determined to be unusually large so as to distort the data trend. The Storm Project will be entered into Great Plains. Under the Storm Project a job will be created for each storm event during the year. Prior to incurring charges for a major storm, a separate Capital, Operations and Maintenance (O&M) and Vegetation Management job will be set up. For routine storms and weather events, a single O&M job will be set up.

   A. When there is substation capital damage to Liberty-owned substations during a storm or emergency event, a separate job must be set up in the Great Plains under the storm project to capture costs for each substation that sustains capital damage. The location of the substation will be on the job. In Great Plains the job is held in CWIP, FERC account 107. When the job is determined by operations to be complete it is unitized into FERC account 101.

2. Both Liberty Utility employees and outside contractors working on storm duty will charge the storm job for their costs. The costs may include: labor, transportation, meals, lodging, and benefits'.

3. All materials issued during the storm should be charged to the job for the work being performed.

4. All invoices from external contractors providing tree trimming will be processed by Liberty with the appropriate job number.

5. All invoices from foreign utilities providing line crews and other resources will be processed according to Liberty Utilities procedures requiring operations to submit the appropriate job number, accounting cost codes and invoice approval. Liberty Accounts Payable will enter invoices into the accounting system and process the payment to the contractor.

6. At the conclusion of a storm, all information related to the job will be sent to Operations Engineering so an Engineer can create a confirming job for each town that had units of plant installed/removed. (Approved copies of the job should be forwarded to Accounting.)

7. Electric Operations will review the actual capital costs from the storm event.

8. If the storm requires the Emergency Operations Center to be activated, all personnel working either in the Emergency Operations Center or other support services will charge the storm job. Support services charged to the job will accumulate in the Great Plains accounting system. Liberty Accounting will report the storm costs from Great Plains using the job number.

9. In accordance with GSE's Storm Recovery Adjustment (SRA) provision in its tariff, a storm that causes 30 concurrent trouble calls and 15% of customers interrupted or 45 concurrent trouble calls is a major storm event. O&M costs due to major storm events are recoverable from customers – no recovery for capital costs. Under the current Tariff all O&M costs due to a major storm event are recoverable from customers. Therefore labor hours charged to a storm work order are immediately recoverable from ratepayers. Once it is determined that storm costs are

recoverable in accordance with the GSE SRA. The storm O&M costs are accumulated and an initial deferral entry is booked in Great Plains for the cost that has been incurred to date. Monthly an additional query will be run for the storm job to collect any additional storm charges that have been submitted for payment. This process will be repeated each month until it is determined that all storm costs have been paid by GSE and deferrable costs accumulated to enable recovery. Charges that are deferred for collection are accumulated, reviewed for reasonableness and organized into a storm filing that is submitted to the NHPUC for audit. In addition the storm filing will be the focus of discussions in storm hearings with the NHPUC.

10. Storm Restoration Services to Other Utilities – When a utility requests storm restoration assistance under the mutual aid program, Liberty Utilities operations will review request and approve it based upon its mutual aid approval processes. After the mutual aid approval process is complete a job will be set up in Great Plains. The job will have the date of the storm and the name of the utility that receives the assistance. If a purchase order is received for the services, a copy of the purchase order should be sent to Accounting with the correct job number clearly listed. To document when the crews have returned from their restoration assignment and to assist in billing of the utility receiving the services the Director of Electric Operations will forward an E-mailto Accounting with the following information:
    - Project and job number for each utility.
    - "Attention to" name of contact person from the utility receiving aid.
    - Number of crews and support personnel sent to each utility.
    - The time crews departed and returned.
    - "Internal Contact Name" of Liberty Utilities personnel involved with the billing.

11. After the storm costs are processed into the accounting system and recorded to the job, Electric Operations will notify Accounting that no further storm expenses are expected and that a bill for the assistance cost is to be sent to the utility that received the aid. The invoice support to the utility generally includes cost information on:
    - Transportation: number of vehicle, the type and how many hours utilized.
    - Outside services: primarily employee expenses.
    - Labor: summary information on employee hours worked without detailed. Breakdown by employee. The invoice notes that labor is fully burdened.