

Emergency Management Plan Severe Weather Brief

TABLE OF CONTENTS

OVERVIEW/INTRODUCTION.....	3
SEVERE STORMS.	3
CRITERIA FOR ACTION	4
STORM ORGANIZATION.....	4
DAMAGE ASSESSMENT	5
RESOURCE MANAGEMENT	6
COMMUNICATION	6
TRAINING, EXERCISES, AND DRILLS	7

OVERVIEW/INTRODUCTION

FPL's Emergency Preparedness Plan provides guidance in the response to emergency situations associated with natural disasters, such as named tropical storms and hurricanes, cold weather, tornadoes and fires. The Plan identifies emergency conditions and delineates the responsibilities and duties of the FPL Emergency Response Organization. This summary is intended to provide a broad view of FPL's Emergency Preparedness Plan's overall emergency processes and its associated detailed procedures and standards on processes, systems, accounting, safe work practices, etc. The Emergency Preparedness Plan does not address common day-to-day emergencies; the established departmental procedures are used to cope with such incidents.

The Plan provides information on several key features, such as, organizations responsible for developing damage forecast, conducting damage assessment, restoration response, and supporting organizations for external agency support (such as regulatory agencies, EOC's, local municipalities, etc.) and major commercial and industrial customers. General information relative to our communications (internal and external) is also provided.

When an emergency incident is declared or anticipated, such as an approaching tropical storm or hurricane, FPL activates its Emergency Response Organization and establishes a comprehensive Command and Control structure for the incident, including the activation of its Command Center. As part of its Emergency Response Organization, FPL has incorporated key tenets and concepts according to National Incident Management System (NIMS) and the Incident Command System (ICS). When a hurricane or severe tropical storm threatens, or a situation, such as a wild fire or extreme cold weather event occurs, an appraisal of the situation is made by designated personnel (Planning Chiefs) and action is taken in accordance with this plan. FPL's Emergency Response Organization is then notified and mobilized to manage operations, logistics, and associated command staff, such as Public Information Officer, to coordinate all communications with the public sector and private enterprise, as well as appropriate governmental agencies.

Once the emergency is over, FPL's goal is to restore service in a safe, expeditious, and effective manner, while ensuring system integrity and minimizing the impact to our customers.

SEVERE STORMS

This summary will focus strictly on severe storms - named and unnamed - that impact the FPL service territory (regardless of actual landfall of storm's center) and cause service interruptions to our customers.

Watches and Warnings

Tropical Storm Watch - Issued when a tropical storm in which the maximum sustained surface winds range from 39-73mph is expected in a specified coastal area within 36 hours;

Tropical Storm Warning - Issued when a tropical storm is expected in a specified coastal area within 24 hours;

Hurricane Watch - Issued when hurricane conditions pose a possible threat to a specified coastal area within 36 hours; and

Hurricane Warning - Issued when winds of 74mph or higher are expected in a specified coastal area within 24 hours.

Hurricanes

Tropical storms/hurricanes are categorized by the Saffir-Simpson Hurricane Scale based on the circular wind speed and central pressure. The following is a summary of the storm categorization as found on the National Hurricane Center website:

Category One Hurricane:

Winds 74-95 mph (64-82 kt or 119-153 km/hr) - No significant damage to building structures; damage primarily to unanchored mobile homes, shrubbery, and trees; some damage to poorly constructed signs and also some coastal road flooding and minor pier damage.

Category Two Hurricane:

Winds 96-110 mph (83-95 kt or 154-177 km/hr) - Some roofing material, door, and window damage of buildings; considerable damage to shrubbery and trees with some trees blown down; considerable damage to mobile homes, poorly constructed signs, and piers; coastal and low-lying escape routes flood 2-4 hours before arrival of the hurricane

center; and small craft in unprotected anchorages break moorings.

Category Three Hurricane:

Winds 111-130 mph (96-113 kt or 178-209 km/hr) - Some structural damage to small residences and utility buildings with a minor amount of curtain wall failures; damage to shrubbery and trees with foliage blown off trees and large trees blown down; mobile homes and poorly constructed signs are destroyed; low-lying escape routes are cut by rising water 3-5 hours before arrival of the center of the hurricane; flooding near the coast destroys smaller structures with larger structures damaged by battering from floating debris; terrain that is continuously lower than 5 ft above mean sea level may experience inland flooding 8 miles (13 km) or more; and evacuation of low-lying residences within several blocks of the shoreline may be required.

Category Four Hurricane:

Winds 131-155 mph (114-135 kt or 210-249 km/hr) - More extensive curtain wall failures with some complete roof structure failures on small residences; shrubs, trees, and all signs are blown down; complete destruction of mobile homes; extensive damage to doors and windows; low-lying escape routes may be cut by rising water 3-5 hours before arrival of the center of the hurricane; major damage to lower floors of structures near the shore; and terrain lower than 10 ft above sea level may be flooded requiring massive evacuation of residential areas as far inland as 6 miles (10 km).

Category Five Hurricane:

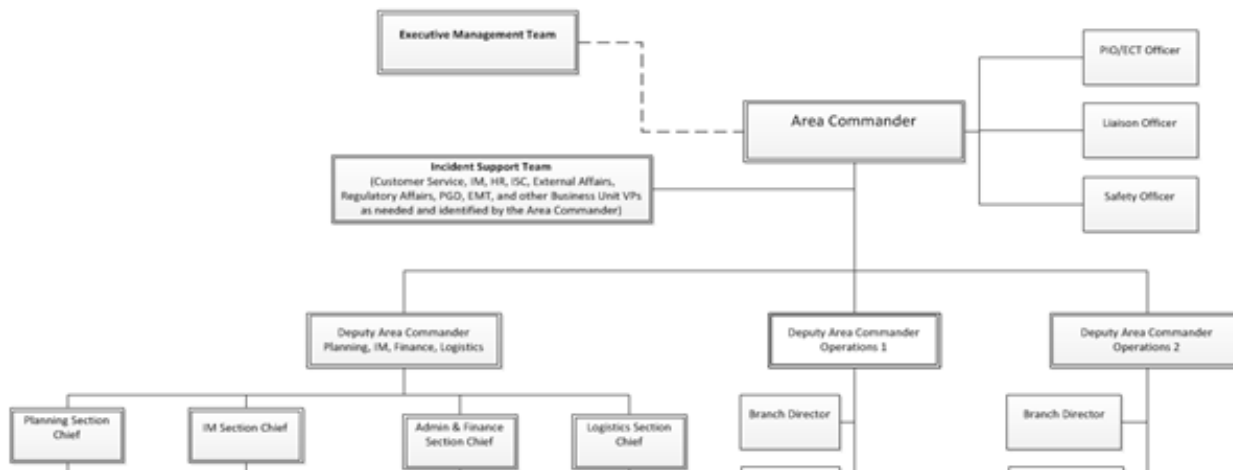
Winds greater than 155 mph (135 kt or 249 km/hr) - Complete roof failure on many residences and industrial buildings; some complete building failures with small utility buildings blown over or away; all shrubs, trees, and signs blown down; complete destruction of mobile homes; severe and extensive window and door damage; low-lying escape routes are cut by rising water 3-5 hours before arrival of the center of the hurricane; major damage to lower floors of all structures located less than 15 ft. above sea level and within 500 yards of the shoreline; massive evacuation of residential areas on low ground within 5-10 miles (8-16 km) of the shoreline may be required; Only 3 Category Five Hurricanes have made landfall in the United States since records began to kept: The Labor Day Hurricane of 1935, Hurricane Camille (1969), and Hurricane Andrew in August 1992.

CRITERIA FOR ACTION

At approximately 96 - 72 hours pre-landfall, it is the responsibility of the Power Delivery Sr. Director Emergency Preparedness to initiate a corporate conference call with all key business units (such as Marketing & Communications, Customer Service, External Affairs, etc.) and their staff in order to provide information about the storm's progress and review precautionary measures including activation of the pre-positioned public safety information messages. Once the course and severity of an imminent storm appear fairly well established, damage forecasts are prepared. Utilizing our mutual aid agreements, restoration resources are committed prior to impact. As appropriate, deployment of additional resources and materials may be authorized and situated at some point out of the storm's path, but close enough to permit short travel and quick deployment of these resources post storm. Preparations for receiving, accommodating, and assigning work crews and personnel from other areas will be completed by the FPL Command Center and coordinated with the appropriate incident commanders in advance of the storm, at either sites specifically for processing of personnel or crew staging areas. The existing service centers that are in the path of the storm will be in full storm activation level by 72 hours pre-landfall; the additional staging sites or work bases will begin full storm status once the storm has passed and it is safe to travel.

STORM ORGANIZATION

The storm organizational structure and lines of authority are based on the implementation of the principles of ICS, consistent with the NIMS protocols (including Incident Action Planning and communications plans). The following organization chart is based on a moderate impact. Depending on the nature of the storm and the extent of the forecasted damage, this structure would be expanded with other groups as needed. Again, this figure intends to show broad areas of responsibility, and assignments may be delegated or reassigned as necessary to perform the work and execute an effective restoration of service to customers. Roles and responsibilities have been developed for key positions and are part of the Emergency Preparedness Plans.



General

In addition to restoration, the FPL Area Command is responsible for continuous updated information to internal stake holders, general public, media, and state and federal agencies. The FPL Command Center will be appropriately staffed by business units and will be operational throughout the restoration process, including the demobilization phase. Initial damage and status reports will be made to this location by the affected areas, followed by regular progress reports of the restoration of service. Information submitted will be made available to all stakeholders and appropriate governmental agencies.

Key Responsibilities:

It is the responsibility of the appropriate business units (such as Power Delivery and Customer Service) to direct and allocate resources and materials as soon as possible following the passage of the storm. Rapid and orderly restoration of infrastructure including transmission lines, substations, and feeders is essential to minimize the impact on our customers. This requires a state of readiness achieved by planning and training, and coordination between the staging areas/work bases and the FPL Command Center.

The FPL Emergency Response Organization coordinates and arranges for support in the following major areas:

- Embedded Crews - line workers and vegetation management teams currently working in FPL's system;
- External crews - Non-Company crews (both line resources and vegetation management) from contractor and other utility companies;
- Materials, supplies and vehicles; and
- Logistical support (sleeping accommodations, food, laundry, etc.).

DAMAGE ASSESSMENT

Immediately following a severe storm, once conditions are safe for travel, a general assessment of damage should be made by all business units, in particular the Power Delivery Business Unit, and reported to the FPL Command Center. This initial report is not a detailed or quantitative survey but rather a qualitative review based on observations by managers and pre-identified spotters from the various area operations departments. This first storm report will address issues such as accounting for employees and their safety, organization levels, general extent and type of damage sustained, and readiness to begin restoration and receive additional outside resources. Aerial patrols will be coordinated simultaneously or immediately thereafter and incorporated in the damage assessment process.

The FPL Command Center, specifically the Planning Section, is responsible for providing key outage information back to the areas and organization as follows:

- Names of substations affected;
- Number of feeders impacted;
- Number of additional resources, crews or area storm teams being deployed; and
- Number of transmission lines out of service.

Due to the need for information there are several key planning conference calls conducted during the early days of restoration. These range from corporate level to operations - division level calls. Various systems are used to support the information flow, such as the Trouble Call Management System (FPL's outage management system), the Outage Communication System (customer centric), Ticket Ticker (near real time outage updates), and various other applications.

Understanding the level of feeder and lateral damage is key to understanding resource requirements. FPL has developed an application that allows patrollers to document this information utilizing mobile devices with the goal of completing this initial assessment within 48 hours. Currently, FPL continues developing additional mobile damage assessment applications and tools to enable detailed damage assessment and incorporation of this information into work planning.

RESOURCE MANAGEMENT

Based on pre-storm damage forecasts, as well as initial post-storm assessments, the Area Command Resource Unit will acquire and allocate additional resources to staging site/work bases. This determination is based on the amount and type of damage, location, and estimated time of restoration. The resources allocated for restoration will be both FPL embedded and external resources, and include both line workers and vegetation management crews. All resource movements will be tracked in FPL's Resources for Emergency Deployment (REDi) system. The Resource Unit will be responsible for performing the following activities and providing appropriate information to all parties as necessary:

- Expected resources, assigned locations, and ETA's;
- Update REDi with incoming resources and deployment activities;
- Maintain a record of all foreign crews on the system, the time they were requested and by whom, and the time they arrived;
- Continually evaluate the restoration progress and coordinate the reassignment of foreign crews as necessary; and
- Provide application for field supervision to maintain accurate records of outside resource time keeping/billing procedures. These records will be matched to the billing invoice, approved and processed for payment where appropriate.

COMMUNICATION

External storm communication

Public Information consists of both "preparatory" Emergency Public Information, Emergency Media Information programs, and internal distribution of publicly disseminated information. The Public Information Officer is responsible for the dissemination of information including prerecorded "public safety" messages that have been pre-positioned with the media within FPL's service territory.

Storm/hurricane messages cover voluntary pre-storm preparation and safety appeals, as well as information on how to facilitate safe and timely power restoration following a storm. Prompt activation of these messages, with support from the media, can help customers prepare for an emergency.

Emergency media information programs consist of timely and consistent news statements for release to radio, television and newspaper outlets in FPL's service territory as well as social media communications materials and collateral. These statements are drafted under the guidance of the Public Information Officer and FPL's Crisis Information Team organization as needed, and as information on the emergency becomes available. In addition, FPL is prepared to mobilize for media news briefings, provide interviews and otherwise assist with media and press requests for visual aids, photography and video, as appropriate.

The same emergency public information will be shared with state and local emergency management groups and agencies and other utilities or industry organizations, as appropriate

Internal storm communication

The Public Information Officer is responsible for ensuring that information developed for public dissemination is distributed internally to management and employees of the utility.

TRAINING, EXERCISES, AND DRILLS

FPL has a comprehensive training program that is exercised throughout the year to ensure its employees are prepared to respond to an event. The majority of the training is completed through instructor led courses, workshops, and web based training.

FPL conducts an annual dry run full scale exercise, prior to the beginning of hurricane season. This is a corporate wide exercise, and involves over three thousand employees, each with a specific storm assignment. The annual dry run provides FPL employees an opportunity to refresh their knowledge, practice their skills and prepare for a storm event.

During dry runs, required communications, reports and systems are exercised to simulate an actual storm. This provides a forum for all groups involved in restoration to:

- Exercise respective storm processes;
- Test any new process improvements;
- Test existing and new technology;
- Evaluate communications processes;
- Assess emergency preparedness by functional area;
- Identify improvement opportunities for processes prior to actual storm conditions; and
- Assess training needs.

Immediately following the dry run exercise, a lessons-learned session is conducted including company executives. In addition, feedback is requested via a database that is available to all employees. A summary of the feedback is completed with lessons learned and action items. A Plan-Do-Check-Act process is then followed until completion and implementation of all lessons learned. This critique process is followed with each actual event.