

HURRICANE PREPAREDNESS MEETING OVERVIEW

By: Adam Hill
Engineering Specialist I
Florida Public Service Commission

Topics Discussed

- Inspection, Maintenance, and Repair Programs
- Communication Plans
- Recovery Plans
- Polar Vortex

Overview

- Overall Trends
- Company-specific Details
- Summary of changes

Overall Trends

- Inspection, Maintenance, and Repair Programs
 - On track for wooden pole inspection programs
 - All poles failing 2012 inspections have been addressed
 - Vegetation trim cycles with increased activity before storm season
- Communication Plans
 - Most have a social media plan
 - Established communication channels with local government and EOCs

Overall Trends

- Recovery Plans and Drills
 - All IOUs have at least 1 annual drill
 - All utilities have emergency recovery plans that prioritize critical infrastructure
- Polar Vortex
 - 4/5 IOUs directly impacted or assisted during winter storms
 - Lessons learned in personnel logistics – transportation, lodging, and dispatch

Company-specific Details

- Florida Power & Light
- Duke Energy
- Tampa Electric
- Gulf Power
- Florida Public Utilities Company
- Municipals
- Cooperatives – Tri-County Electric

Florida Power & Light

- Completed 8-year wooden pole cycle:
 - 2013: Inspected 130,037 poles (13.2% of total)
 - 12.8% pole failure
- Visual inspection on 100% of transmission lines, with additional climbing inspections before storm season
- Storm harden and install flood monitoring on all substations in 100-year flood plane
- Strong public engagement facet – 400 public events
- 350 FPL + contractors sent to assist Georgia Power

Duke Energy

- Year 7 of 8-year wooden pole cycle:
 - 2013: Inspected 97,071 poles (12.3% of total)
 - 15.8% pole failure
- 50 employees assigned to local government EOCs
- Recovery plan has a renewed focus on efficiency – maximizing daylight hours
- Dedicated road clearing crews
- New redundant control center is online
- 250 employees and contractors deployed to Carolinas
- Increased communication with road authorities
- Evaluating damage assessment processes between North and South teams

Tampa Electric

- Year 7 of 8-year wooden pole cycle:
 - 2013: Inspected 49,362 poles (11.7% of total)
 - 17.8% pole failure
- Employees stationed in EOCs for storm response
- Plan to de-energize downtown network prior to flooding to prevent damage
- Emphasis on lightning arrestors during off-season
- Assisted Georgia Power
 - Plan to focus on assigning work quickly in the future

Gulf Power

- Year 7 of 8-year wooden pole cycle – finished 1 year early!
 - 2013: Inspected 21,884 poles (10.8% of total)
 - 3.6% pole failure – finding fewer failures during repeat testing
- All right-of-way inspected and trimmed prior to storm season
- 13 employees assigned to EOCs
- Improved communication with EOC to understand needs
- New training facility & EOC built
- Storm drill will focus on logistics (fuel, transportation)
- 250 employees sent to Georgia
- 74 to Dallas

Florida Public Utilities Company

- Year 6 of 8-year wooden pole cycle:
 - 2013: Inspected 3,887 poles (14.9% of total)
 - 13.5% pole failure
- Planning Interactive Voice System to route calls
- Implemented redundant control software backups
- Hardening feeder for Marianna hospital
- Reliability improvement in response to vegetation management
- No involvement in winter storms

Municipals

- Half of utilities perform their own drills
- All utilities meet to run through storm procedure & share best practices
- Underground transition in Winter Park & Jacksonville Beach – will collect data for efficacy

Cooperatives – Tri-County Electric

- Inspect ALL infrastructure yearly, more frequently for worst performing areas
- System design improvements through conferences
- Yearly update of restoration plan & exercises
- All co-ops use same building specs to aid assistance

Summary of changes

- Largest risk is lack of materials and assistance in case of multiple storms or a large catastrophic storm.
- Secondary challenge is public expectations during a busy storm season
- Communication plans are multifaceted
- Progress in wood-replacement construction continues