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April 16, 2018

E-PORTAL FILING

Ms. Carlotta Stauffer, Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

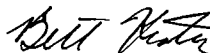
Re: Docket No. 20170215-EU – In re: Review of electric utility hurricane preparedness and restoration actions.

Dear Ms. Stauffer:

Attached for filing, please find Florida Public Utilities Company's presentation for use during the May 2-3, 2018 workshop.

Thank you for your assistance with this filing. As always, please don't hesitate to let me know if you have any questions whatsoever.

Kind regards,



Beth Keating
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Tallahassee, FL 32301
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MEK

Hurricane Preparedness and Restoration Overview 2006-2017

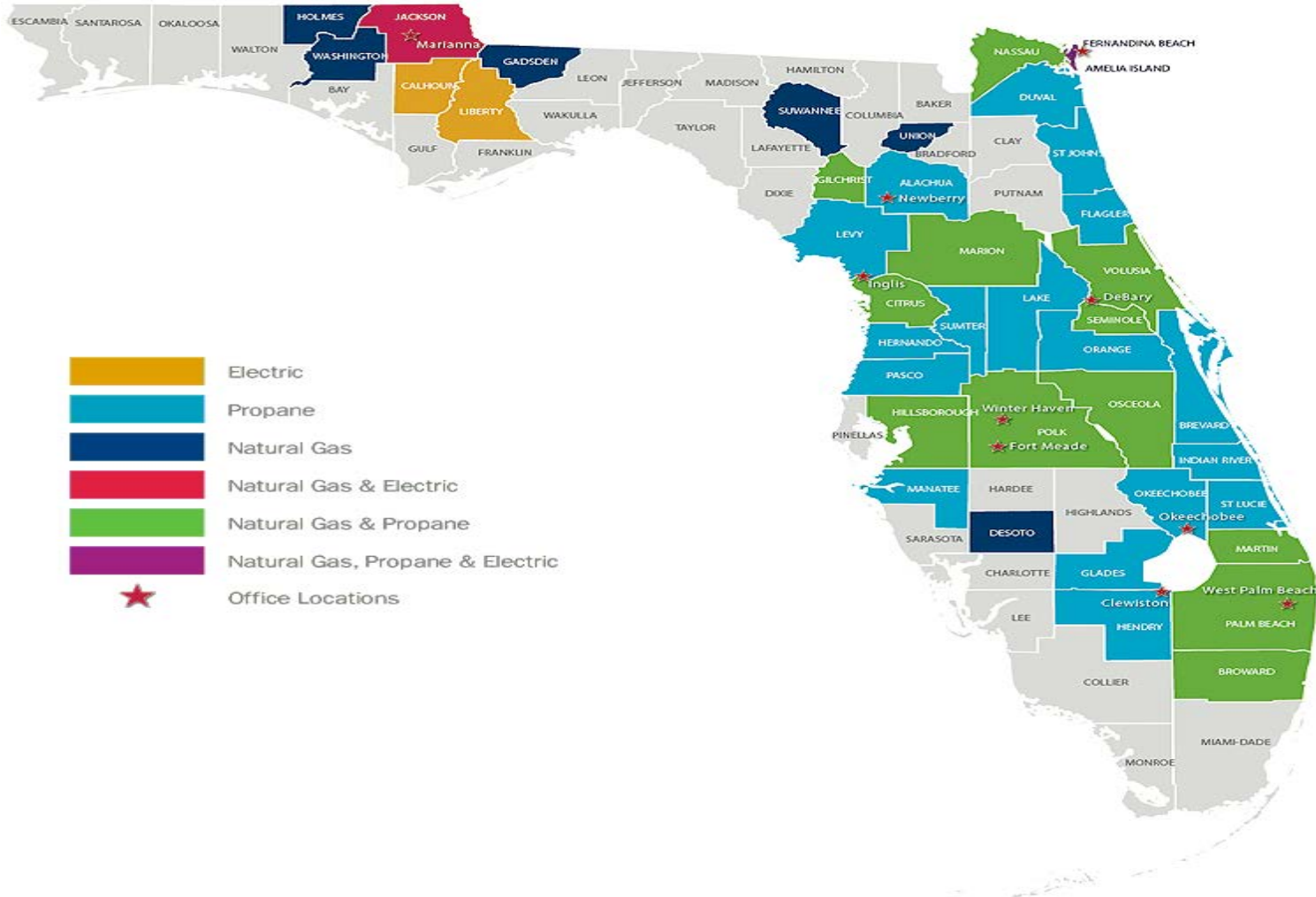
Jorge Puentes

Technical Engineering Manager

May 2 - 3, 2018



FPU Service Areas



- Electric
- Propane
- Natural Gas
- Natural Gas & Electric
- Natural Gas & Propane
- Natural Gas, Propane & Electric
- ★ Office Locations

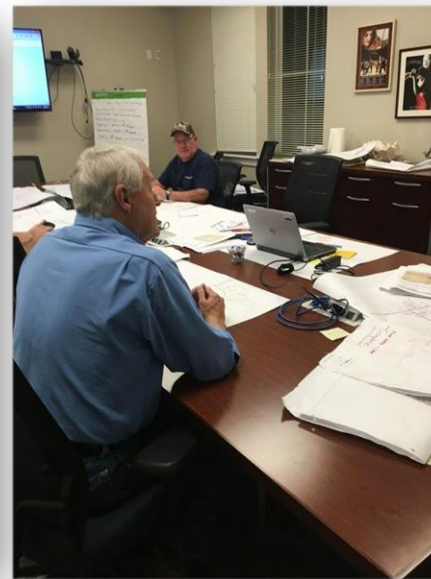
Overview of Prevention and Restoration Process

Storm
Hardening

Preparation

Activation

Restoration



Plans and Initiatives 2006-2017

- Wood Pole Inspection:
 - Eight year cycle (1.25 Total cycles completed)
 - Total poles inspected 32,921
 - Total poles replaced 2,186
- Vegetation Management:
 - Three year trimming feeder cycle (3 Total cycles completed)
 - Six year trimming lateral cycle (1.5 Total cycles completed)
 - Approx. combined total feeder and lateral miles trimmed 1,337
- Joint Use Pole Attachment Audit completed



Plans and Initiatives 2006-2017

- Transmission Climbing Inspection:
 - Six year cycle
 - Completed in 2012 with upcoming 2018 inspection
- Installed a total of 85 concrete poles in the 69KV transmission system (includes replacing older wood structures and rebuilt 1.2 mile Rayonier line)
- Many distribution and substation projects completed to harden infrastructure (FPL Interconnect)
- Implemented OMS with Linemen App.
- Total O&M and Capital costs:
 - \$17,912,406 Capital
 - \$10,441,869 O&M



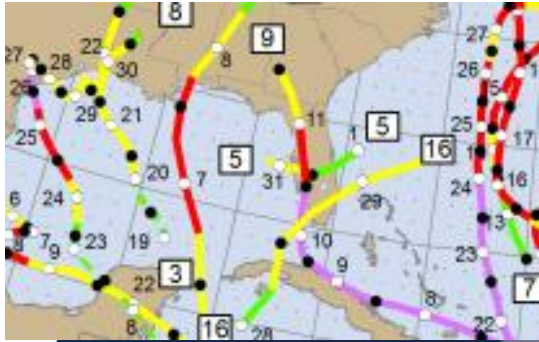
Pre-Storm Planning

- Culture of preparedness – safety first.
- Customer Outreach Programs
 - Hurricane/Storm Brochures
 - Website Information & Bill Inserts
 - Public Service Announcements
- Emergency Procedures, Storm and Communication Plans.
- Annual storm preparation, response planning and company-wide readiness exercises including electric, natural gas and propane operations.
- System, facility and inventory inspections.
- Coordination with EOCs, other utilities and governmental agencies.
- Participation in SEE and SGA Mutual Assistance programs.



Activation

Electric, Natural Gas and Propane



- Storm Watch - initial activation.
- Duties and assignments reviewed.
- Inventory levels, logistics items, meals, hotels, fuel, outside vendors confirmed.
- Storm Warning – active
- Secure our buildings/facilities.
- Contact county EOCs, other local officials, contractors, and energy partners (SEE).
- Employees activate their family storm plans.
- Redeploy Call Center resources.

Systematic Approach



- OMS and SCADA systems organize/prioritize restoration.
- Physical damage survey.
- Teamed external crews with FPU crew leaders.
- Tree crews sent ahead to remove debris and clear areas.
- Restoration Priority Electric System:
 - Generation (Eight Flags, Inc)
 - Transmission (FPL Interconnection)
 - Substations
 - Distribution Feeders
- Restoration Priority Customers:
 - Hospitals
 - Police, Fire and EOC
 - Storm Shelters and Elderly Care Facilities
 - Water and Sewer Plants
 - Food Retailers and Restaurants

Hardened vs. Non-Hardened Facility Performance



- No damage to storm hardened transmission poles.
- No damage to storm hardened distribution poles
- Hermine – Repairs: 22
Replacements: 0 to non-hardened facilities
- Matthew – Repairs: 189
Replacements: 14 to non-hardened facilities
- Irma – Repairs: 311
Replacements 37 to non-hardened facilities

Underground vs. Overhead Facility Performance



- Most storm damage was caused by vegetation
- No repairs done to the UG system. Except for customer storing debris on top of pad-mounted transformers.

Impediments to Restoration



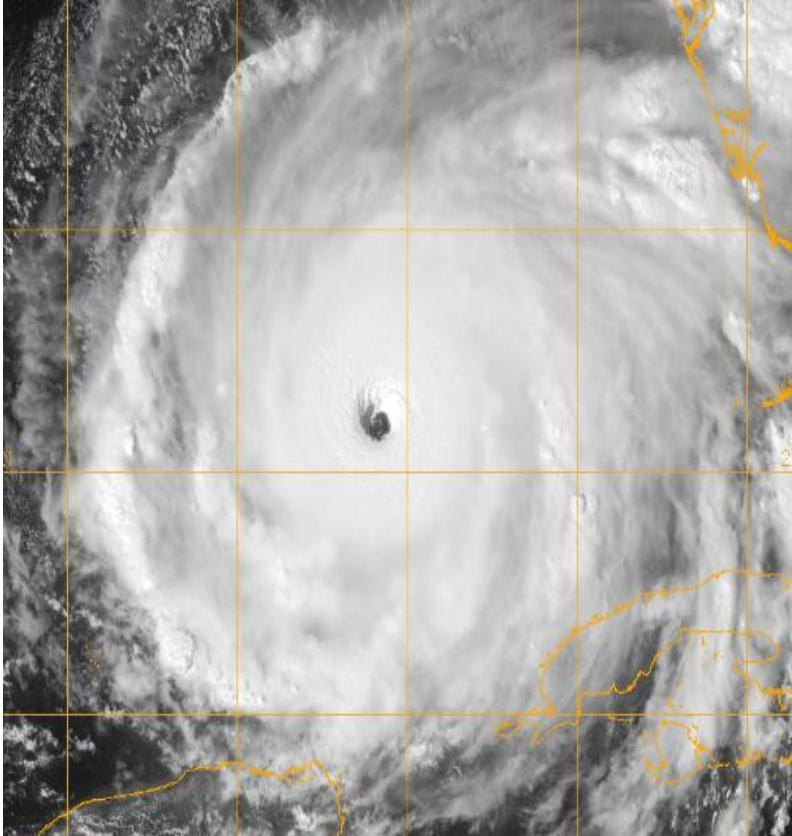
- Amelia Island Mandatory Evacuation (Matthew & Irma)
- Magnitude and track of hurricane in securing mutual aid resources (Matthew & Irma)
- Clearing Vegetation
- Winds over 40 MPH
- Rain/Flooding

Customer Communications

- FPU Winner of Bronze Award - Chartwell's 2018 Outage Communications Awards.
- FPU staff Call Centers and EOCs 24x7
- Constantly monitored social media.
- All customer communication linked to one web landing page to ensure consistent, timely customer updates.
- <http://FPUCHurricaneupdates.com>
- Press Releases. Customer Email Blasts
- IVR Messages to Medical Customers
- Facebook and Twitter
- FPUC.com/ Mobile.FPUC.com
- Coordinated home visits.
- Letter from FPU president.

The collage illustrates the operational and communication aspects of hurricane response. The top right shows a technician in a hard hat interacting with a control room filled with data monitors. The middle left shows a utility truck with a bucket, likely used for power line maintenance. The right side features screenshots of the 'Hurricane Irma Update' and 'Hurricane Matthew' web pages, which provide customers with real-time information on power restoration progress, safety instructions, and contact details for emergency services.

Suggested Improvements Based on Lessons Learned



- Continue to invest in all Storm Hardening initiatives
- Continue to invest in technology that advances hurricane prediction.
- Continue to improve GIS,OMS, IVR implementations and other technologies.
- Evaluate vegetation management feeder and lateral cycles.
- Work closely with customers to avoid storing debris on top of pad-mounted transformers.
- Continue to improve internal resource allocation as well as effectively securing mutual aid resources.

Business Continuity

