Hurricane Preparedness Workshop for 2022

Jorge Puentes

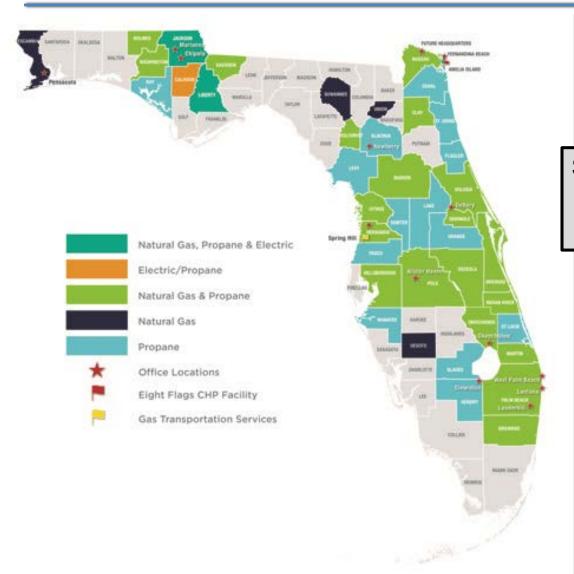
Manager, Engineering

May 17, 2022





Florida Public Utilities Company Service Areas



Service territory includes:

- Over 28,000 electric customers.
- 15.8 miles of transmission lines.
- 906 miles of distribution lines.

Overview of Preparation and Restoration Process

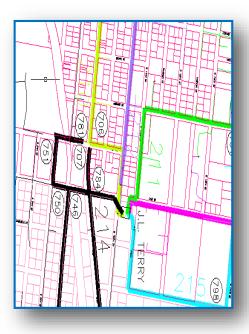
Preparation

Activation

Restoration







Preparation

Pre-Storm Planning

- Culture of preparedness safety first.
- COVID-19 preventive measures
 - FPU Pandemic Procedures
 - Working conditions and logistics
 - Customer interfaces
 - Mutual Aid
- Response planning and company wide readiness exercises including electric, natural gas and propane operations.
 - Company wide planning and table top drill scheduled for May 27, 2022 & mid June.
 - Focus on lessons learned from Hurricane Michael and other hurricanes
 - Improved procedures in logistics



Preparation

Pre-Storm Planning

- Customer Outreach Programs
 - Hurricane/Storm Brochures
 - Website Information & Bill Inserts
 - Public Service Announcements
- Emergency Procedures, Storm and Communication Plans.
- Consider alternative staging options depending on storm path.
- Review staff assignments for Operations, IT and Customer Care.
- Engage with contractors who have signed restoration agreements to ensure their support.







Preparation

Pre-Storm Planning

- System, facility and inventory inspections
 - Emergency materials and supplies included in emergency plan
 - Emergency items ordered and stocked prior hurricane season (Supply Chain)
- Coordination with city/county/state EOCs and other utilities
 - Ongoing communications with each organization
 - Participation occurs at all meetings
- Participation with the Southeastern Electric Exchange Mutual Assistance Committee
- Mutual Assistance agreements various municipalities within Florida
- Participation in Edison Electric Institute Storm Drills





Activation

Electric, Natural Gas and Propane

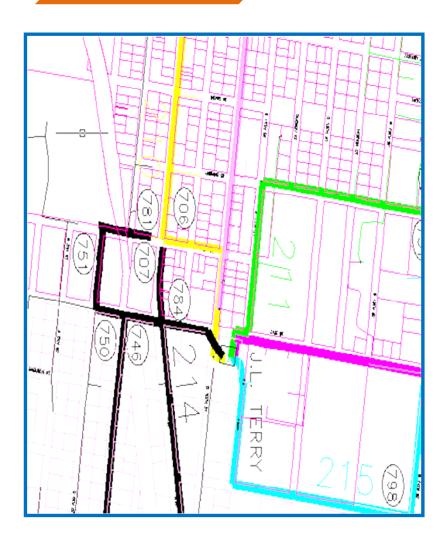


- Storm Watch initial activation.
- Duties and assignments reviewed.
- Inventory levels, logistics items, meals, hotels and outside vendors confirmed.
- Equipment, fuel and inventory levels checked for readiness.
- Storm Warning active
- Secure our buildings/facilities.
- Contact county EOCs, other local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



Restoration

Systematic Approach



- OMS and SCADA systems organize/prioritize restoration.
- Physical damage survey.
- Team 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 & JEA connections)
 - 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



Customer Communication- Awareness Pre-Storm

In preparation for the storm, FPU publishes watch and warning notifications at the 72, 48 and 12 hour increments to local and national media outlets.

- Bill Inserts
- Print Ads
- Brochures
- IVR Messaging
- Press Releases
- E-Blasts
- Social Media Posts
- Website Updates
- Public Service Announcements



Digital Communications

All Digital Communications Linked to One Main Update Landing Page

FPUC.com and mobile website









[October 20, 2018- 12:00 pm]

ATTENTION ALL FPU NORTHWEST TERRITORY CUSTOMERS:

For information and resources related to Power Restoration, please visit FPUC.com/hurricanerestorationresources. Learn about:

- Electric Rules and Standards
- Customer / Utility Responsibilities
- Steps to Restore Power
- Electrical / HVAC Contractors in the Area
- Frequently Asked Questions

Social Media Sites







Write a comment...

Storm Hardening

Plans and Initiatives

- Vegetation Management:
 - Three year trim cycle for all distribution feeders (4.67 Total cycles completed)
 - Six year trim cycle for distribution laterals (2.33 Total cycles completed)
 - Three year trim cycle for transmission lines
- Accomplishments in 2021:
 - Trimmed 30.58 miles of distribution feeders
 - Trimmed 80.28 miles of distribution laterals.
 - Perform "hot spot" distribution trimming prior to hurricane season. Miles trimmed are included in totals above.



Storm Hardening

Plans and Initiatives

- Wood Pole Inspection:
 - Eight year cycle (1.75 Total cycles completed)
 - Transmission and Distribution inspections on the same cycle
 - Total poles inspected from beginning of this eight year cycle 21,114 (66.61%)
 - Accomplishments in 2021**:
 - Total of 2,825 poles inspected.
 - Poles failed 109
 - Failure rate 3.86%
 - Poles replaced 203
 - Poles that need to be replaced in upcoming years 672



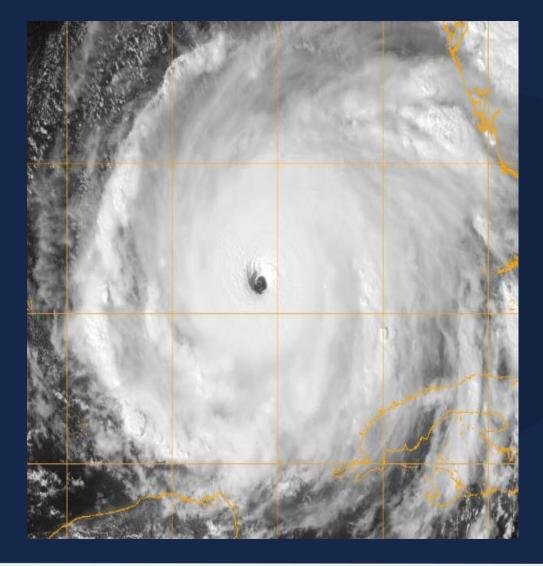


^{**}Note: Due to COVID-19, Wood Pole inspections were completed in February 2022.

Improvements Based on Lessons Learned



- Order material earlier due to supply chain disruptions
- Locate storage areas for pre-staging that are easily accessible, not subject to flooding and large enough for all equipment
- Include record keepers with each crew working to document labor, materials and equipment used during restoration.
- Increase security at offices and staging areas to prevent unauthorized individuals from entry
- Continue to invest in all Storm Hardening initiatives
- Continue to invest in technology that advances hurricane prediction and communications.
- Continue to improve GIS,OMS, IVR implementations and other technologies.



Questions?

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