

Hurricane Preparedness Workshop for 2021

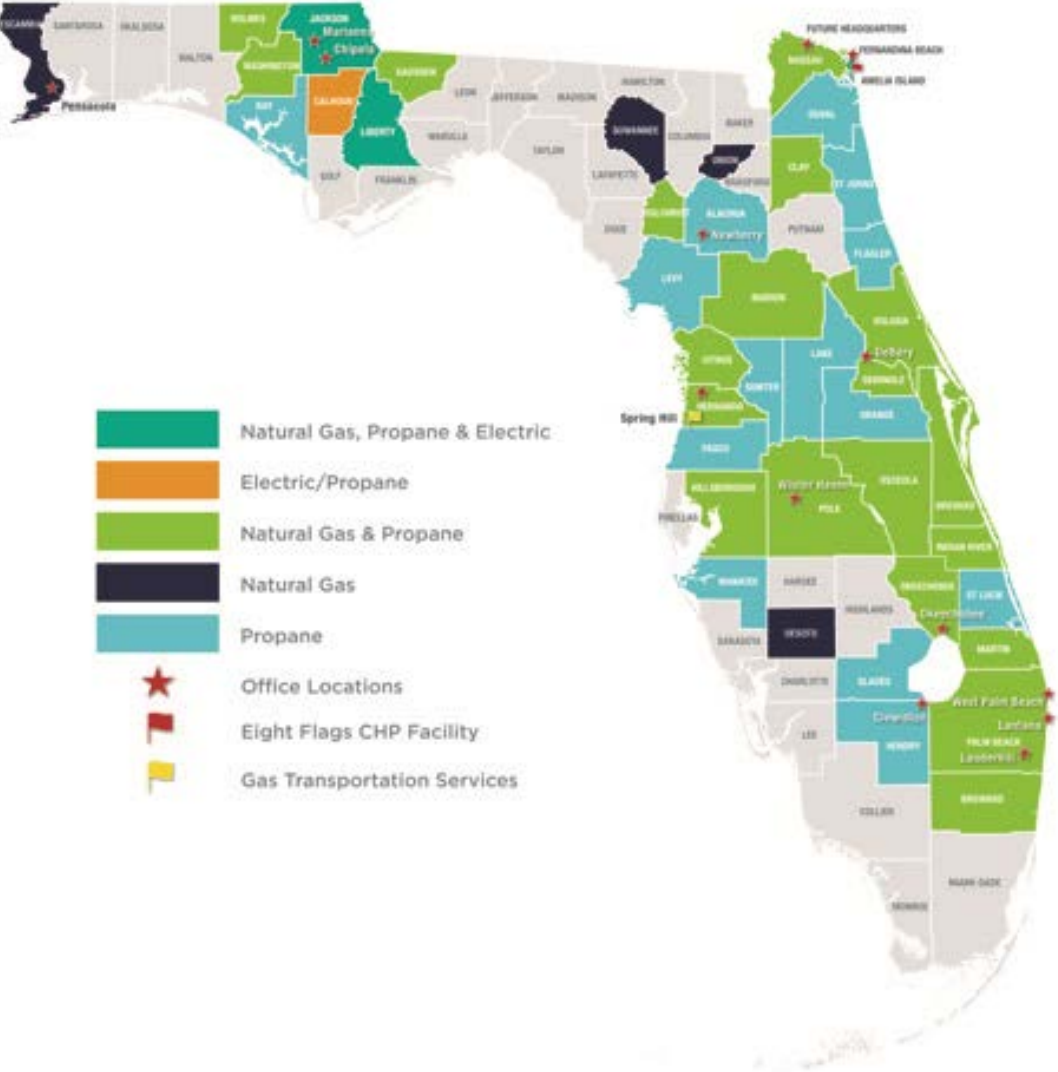
Jorge Puentes

Manager, Technical Engineering

May 19, 2021



Florida Public Utilities Company Service Areas



- Natural Gas, Propane & Electric
- Electric/Propane
- Natural Gas & Propane
- Natural Gas
- Propane
- Office Locations
- Eight Flags CHP Facility
- Gas Transportation Services

Service territory includes:

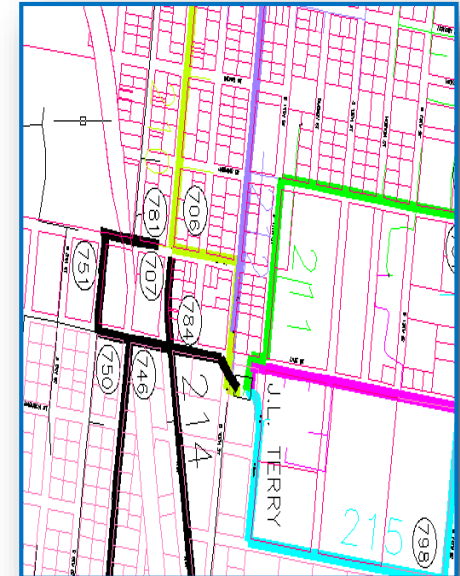
- Over 28,000 electric customers.
- 15.8 miles of transmission lines.
- 902 miles of distribution lines.

Overview of Preparation and Restoration Process

Preparation

Activation

Restoration



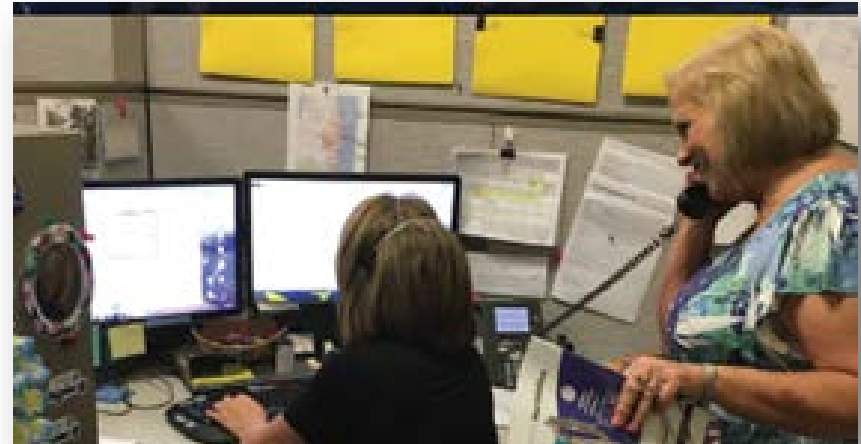
Pre-Storm Planning

- Culture of preparedness – safety first.
- COVID-19 preventive measures
 - FPU Pandemic Procedures
 - Working conditions and logistics
 - Additional PPE
 - Customer interfaces
 - Mutual Aid Implications
- Response planning and company wide readiness exercises including electric, natural gas and propane operations.
 - Company wide table top drill scheduled for 3rd week in May & July 12, 2021
 - Focus on lessons learned from Hurricane Michael and other hurricanes
 - Improved procedures in logistics



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.



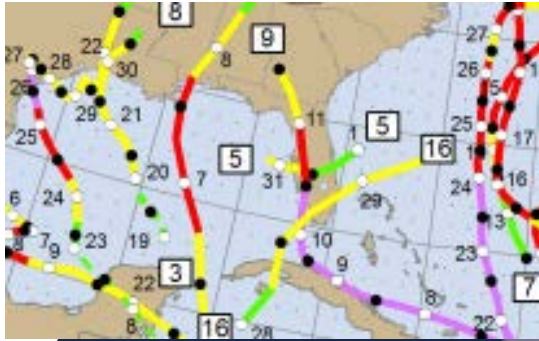
Pre-Storm Planning

- System, facility and inventory inspections
 - Emergency materials and supplies included in emergency plan
 - Emergency items ordered and stocked prior hurricane season
- 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



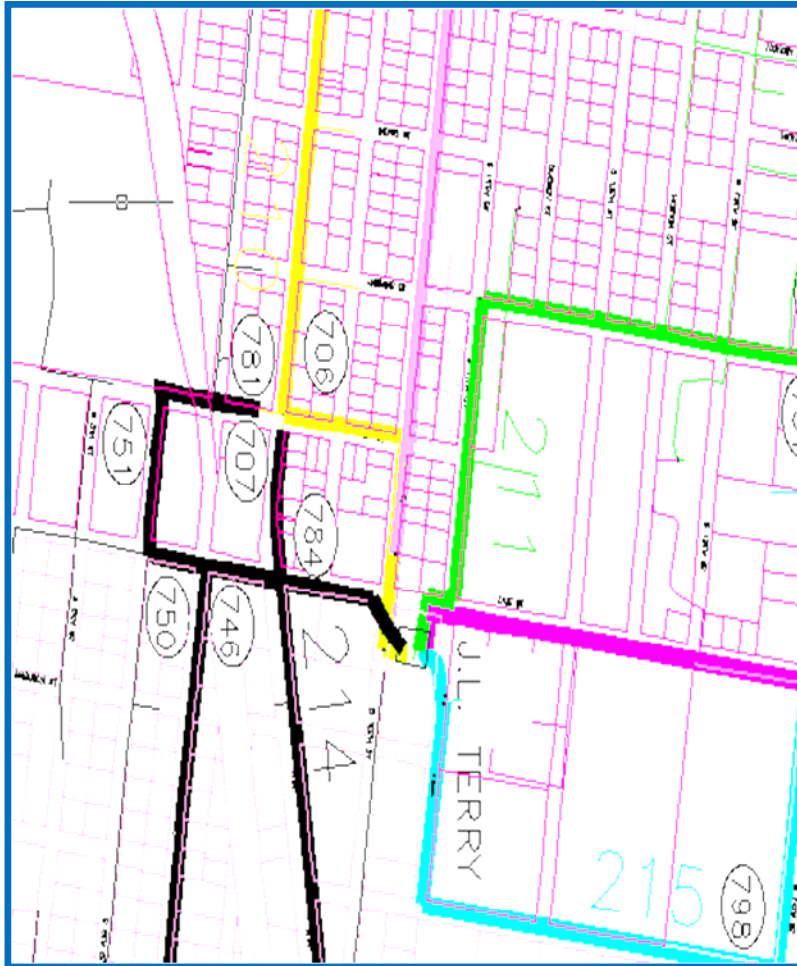
Activation

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.

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 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

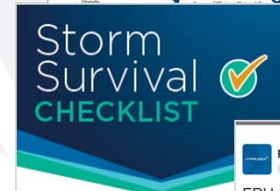
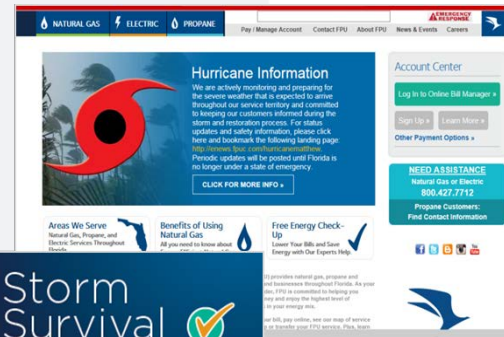
Customer Communication- Awareness Pre-Storm

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.

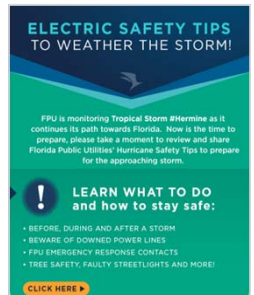
Received the 34th Annual Governor's Hurricane Conference "2020 Public Education/Public Information Award" for Florida Public Utilities' innovative and effective communications and public resources that enhance hurricane preparedness, response, recovery and mitigation in the state of Florida.



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



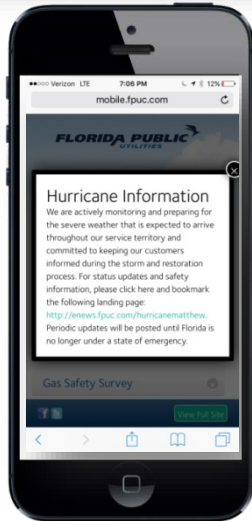
- ### Hurricane Supplies
- Drinking water—at least a 3-day supply (one gallon per person per day (plus additional gallons for washing your pet, etc.))
 - Food—at least a 3-day supply of non-perishable, easy-to-prepare food
 - Flashlights
 - Batteries
 - Candles and matches
 - Disposable kitchen supplies—paper plastic utensils, paper towels, pre-moistened towelettes
 - Sanitation and personal hygiene items
 - Baby supplies (bottles, formula, baby food, diapers)
 - Pet food
 - First aid kit
 - Medications (one week supply) and other medical items



Digital Communications

All Digital Communications Linked to One Main Update Landing Page

FPUC.com and mobile website



Hurricane Michael Updates

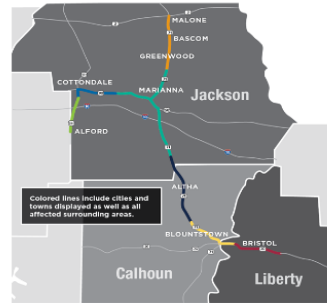
Visit this page for storm-related updates and safety information.

[October 20, 2018- 5:30 pm]

ATTENTION ALL FPU NORTHWEST TERRITORY CUSTOMERS:

Visit our Restoration Map page to see latest updates for your area at www.FPUC.com/HurricaneMichaelRestorationMap

- ALL HOSPITALS AND MEDICAL FACILITIES (CONTINGENCY PLAN)**
All hospitals and medical facilities in the Northwest Territory are advised to have contingency plans in place for the event of a power outage. For more information, please visit www.FPUC.com/HurricaneMichaelRestorationMap.
- ALL RESIDENTS - POWER OUTAGE PREPAREDNESS**
Customers are advised to have contingency plans in place for the event of a power outage. For more information, please visit www.FPUC.com/HurricaneMichaelRestorationMap.
- RESTORATION SCHEDULE TO BE DETERMINED**
The Florida Public Utilities Company is currently assessing the damage to the power system in the Northwest Territory. Restoration will be completed as quickly as possible. For more information, please visit www.FPUC.com/HurricaneMichaelRestorationMap.
- SAFETY - AVOID DOWNED WIRES**
Customers are advised to avoid downed wires and to report any downed wires to 800-427-7712.
- RESTORATION SCHEDULE TO BE DETERMINED**
The Florida Public Utilities Company is currently assessing the damage to the power system in the Northwest Territory. Restoration will be completed as quickly as possible. For more information, please visit www.FPUC.com/HurricaneMichaelRestorationMap.
- ALPHA AND BETA TO COLLECT RESTORY (UNDETERMINED)**
Customers are advised to have contingency plans in place for the event of a power outage. For more information, please visit www.FPUC.com/HurricaneMichaelRestorationMap.



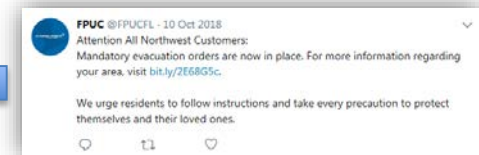
[October 20, 2018- 12:00 pm]

ATTENTION ALL FPU NORTHWEST TERRITORY CUSTOMERS:

For information and resources related to Power Restoration, please visit FPUC.com/huricanerestorationresources. 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



Plans and Initiatives

- Vegetation Management:
 - Three year trim cycle for all distribution feeders (4.33 Total cycles completed)
 - Six year trim cycle for distribution laterals (2.17 Total cycles completed)
 - Three year trim cycle for transmission lines
- Accomplishments in 2020:
 - Trimmed 23.11 miles of distribution feeders
 - Trimmed 70.77 miles of distribution laterals.
 - Perform “hot spot” distribution trimming prior to hurricane season. Miles trimmed are included in totals above.

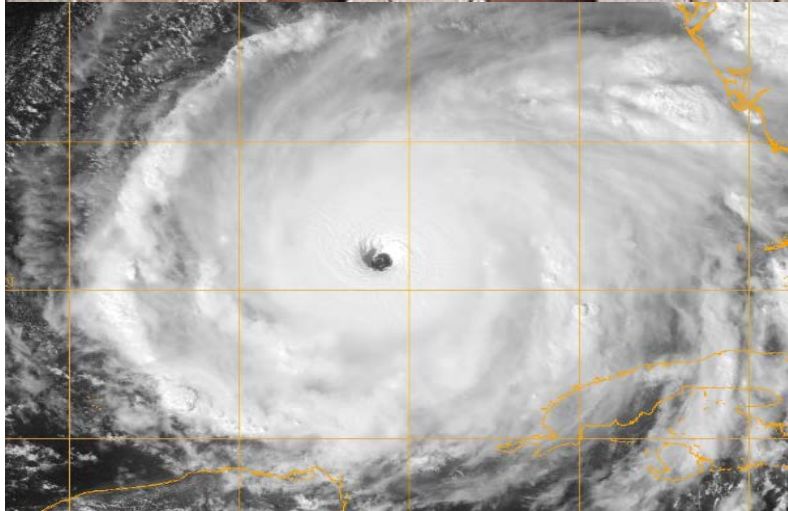


Plans and Initiatives

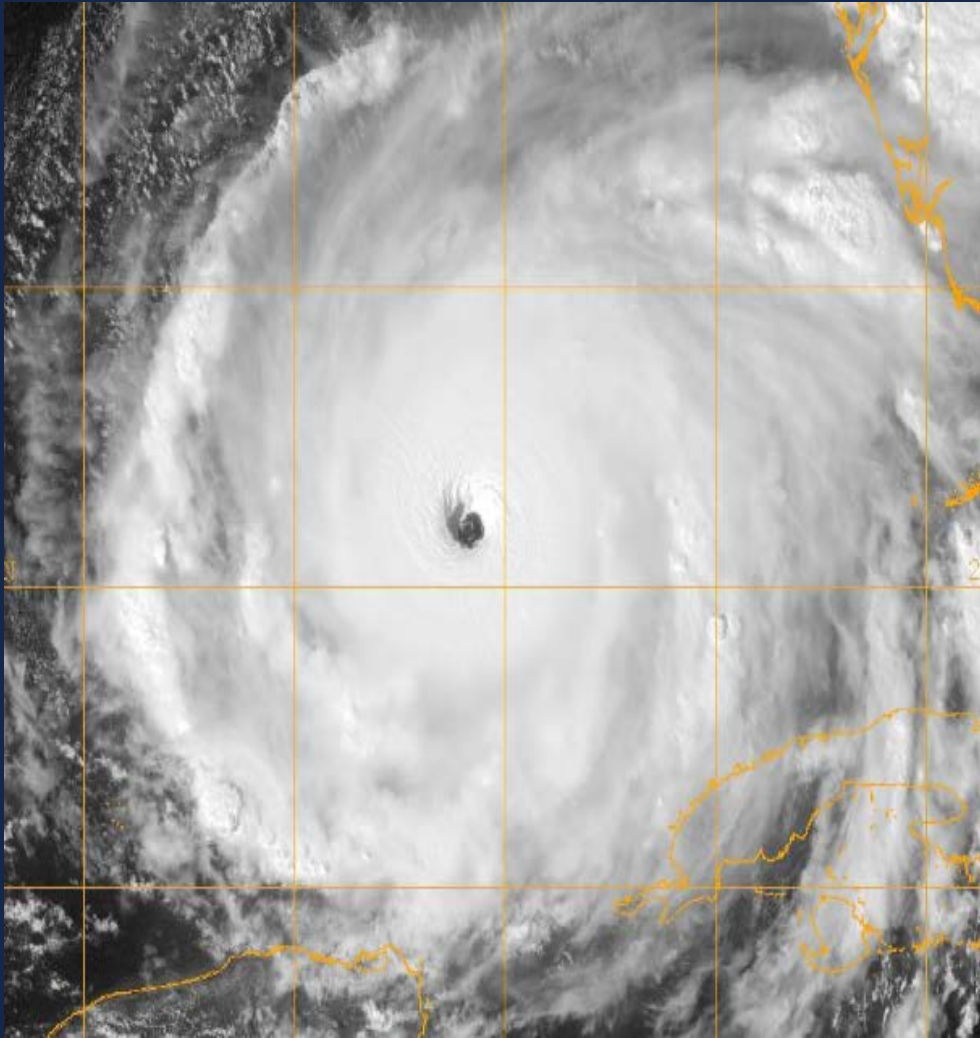
- Wood Pole Inspection:
 - Eight year cycle (1.63 Total cycles completed)
 - Transmission and Distribution inspections on the same cycle
 - Total poles inspected from beginning of this eight year cycle 18,289
 - During 2020:
 - Total of 4,291 poles inspected.
 - Poles replaced 130
 - Poles that need to be replaced in upcoming years 262.



Suggested Improvements Based on Lessons Learned



- 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
- Locate storage areas for pre-staging that are easily accessible, not subject to flooding and large enough for all equipment.
- 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?

Jorge Puentes
Florida Public Utilities Company
Manager, Technical Engineering
jpuentes@fpuc.com
(904) 430-4712

