



**Gulf Power®**

# **Hurricane Preparedness Workshop for 2019**

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# Emergency Preparedness Review

- **Preparation**
- **Communication**
- **Restoration**



# Preparation

## Distribution Vegetation Management

- **Mainline Annual Trim Schedule (MATs)**
  - Feeder maintenance – on 1/3 of the mainlines (3 year cycle)
  - 2018: 241 Miles Planned/280 Actual
- **Mainline Inspection and Correction Schedule (MICS)**
  - Inspect and correct vegetation hazards on the other 2/3 of the mainlines annually
  - 2018: 482 Miles Planned/517 Actual
- **Scheduled Annual Lateral Trimming (SALT)**
  - Lateral maintenance of 1/4 of the lateral miles (4 year cycle)
  - 2018: 1,287 Miles Planned/1617 Actual



# Preparation

## Additional Distribution Vegetation Management

- **Right-of-Way Perfection Program**
  - 15 Feet Clearing Right
  - 89 Miles Acquired and Trimmed



# Preparation

## Transmission Vegetation Management

- **230kV R/W Vegetation and Correction (NERC)**
  - Ground inspection patrols and correction of any vegetation hazards identified will be completed by June 1<sup>st</sup>
  - 2018 – 100% Inspections Complete – 595 miles
    - Corrections Complete
- **46kV & 115kV R/W Vegetation and Correction (Non-NERC)**
  - Ground inspection patrols and correction of any vegetation hazards identified will be completed by year end
  - 2018 – 100% Inspections Complete
    - 115kV = 1016 miles
    - 46kV = 58 miles
    - Correction @ 98% Complete
    - Target June 1<sup>st</sup> Completion





# Preparation

## Distribution Inspection/Maintenance/Repairs

- **Pole Inspections**

- 8 year cycle
  - ~26,000 pole inspections planned/year
  - 28,070 inspected in 2018
  - 2.71% reject rate
  - 685 poles replaced



- **Feeder Patrols**

- Annual inspection of distribution feeders
- Repairs scheduled for completion by June 1st

- **Infrared Inspections**

- Annual inspection of critical equipment
- Items are identified and prioritized for repairs by June 1st

# Preparation

## Transmission Inspection/Maintenance/Repair

- **Pole Inspections**

- Wood and Concrete Poles/Structures

- Ground line – 12 year cycle

- Comprehensive walking/climbing – 12 year cycle

- Poles are visited every 6 years as programs run simultaneously

2018 Planned	1338
2018 Inspected	1342
2018 Rejects	9

# Preparation

## Transmission Inspection/Maintenance/Repair

- **Pole Inspections**

- Metal Structures

- Ground line – 18 year cycle

- Ground line inspection cycle 18 year

- Comprehensive walking/climbing or helicopter – 18 year cycle

- Poles are visited every 6 years as programs run simultaneously

- Aerial Patrols

- Four patrols conducted annually

2018 Planned	191
2018 Inspected	8*
2018 Rejects	0

*\*Hurricane Michael*





## Distribution Storm Hardening

- **Critical Infrastructure Improvements**
  - Extreme Wind Loading Construction Standard
  - Focus continues on critical infrastructure upgrades
  - Hospitals, first responders, storm shelters, critical load, etc...
  - Projects in all three Districts
  - Completed 6 projects in 2018
  - No projects impacted by storm events
  - No undergrounding pilots at this time
- **Construction Program and Standards**
  - Gulf is consulting with FPL regarding best practices, construction methods, and material options



# Preparation

## Transmission Storm Hardening Measures

- **Completed previous programs associated with storm guying and wooden cross arm replacements in 2018**
- **Begin wooden structure replacement program in 2019 as part of new Storm Hardening Filing**
  - Multi-year program
- **Begin in 2019 a Substation Flooding Monitoring program at 13 substations and hardening of several substation switch houses**



# Preparation

## Drills – Training - Improvement

- **2019 storm drill scheduled for April 25<sup>th</sup>**
- **Plan to attend FPL drill on May 2<sup>nd</sup>**
- **2018 storm drill**
  - Full Activation of Storm Center
  - Engaged as many employees as possible
  - Cyber Drill
- **Ongoing refresher training**
- **Every employee has a storm assignment**
- **New Employee Orientation**
- **Continued improvement of processes**
- **Implementation of Best Practices**
  - Drill
  - Hurricane Michael



# Communication

## Customer Communication

- Continue to focus on customer communication before, during, and after any event.



Web Page



Outage Map



Mobile App







## Hurricane Michael Communication

### DEBRIS PICKUP SAFETY


**SHOCK HAZARD** Watch for overhead power lines while using equipment to remove debris. Also, energized power lines, padmounted transformers and pedestals could be concealed by debris.



**DO NOT MAKE CONTACT WITH PADMOUNT TRANSFORMERS WHEN PICKING UP DEBRIS.**



**CAUTION** Debris stacked in hauling trucks should be no higher than 13'-6" above road level OR at or below the top of the container holding the debris. Debris that is stacked above this level gets caught on power lines.



<13'-6" OR at or below the top of container

### Hurricane N

Believed to be in an effort to help families, following information. This is intended distribution list for:

Places to pick up water, food:

- Deerpoint Elementary School - 7324 State
- High Praise Church - 7324 State
- Rosemead High School - 924
- Panama City Seventh-Day Ad
- Kingdom Impact Center - 530
- Deane Boreman School - 1341

The Salvation Army is serving:

- Winn Drive Lynn Haven - 3122
- Walmart Callaway - 225 N. Ty
- Parking lot at MKC and 14th St
- Jinks Middle School - 600 W
- Old Mart (parking lot at the
- 7100 U.S. 98, Panama City Be
- Mexican Beach City Hall - 2019

Shelter Locations:

- Special Needs - Dean Boreman
- General - Ruthford High Sc

FEMA Mobile Registration number, current mailing address and insurance information, if a:

- Dean Boreman High School -
- Lynn Haven City Hall - 826 Callaway
- Parking Lot - 225 S. Tyndall Parkway, Panama City

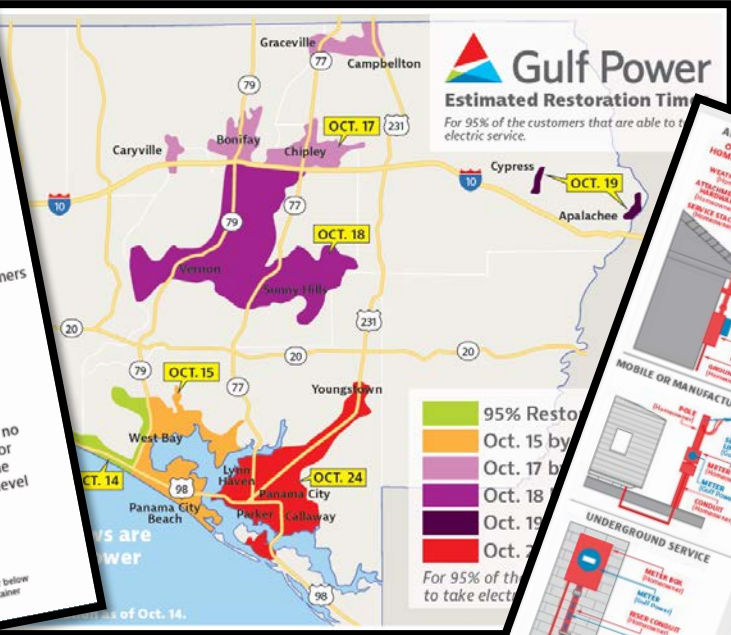
FEMA & US Army Corps of Engineers Temporary Roofing Locations:

Open daily from 8 a.m. - 6 p.m.

- 888-766-2138
- Panama City Square, 523 W 23rd Street, Panama City
- Panama City Beach Parkway, Panama City Beach
- Walmart, 16495 Panama City Highway 77 Lynn Haven

Florida Disaster Unemployment: 800-385-3920

Florida Free Tree Removal: 800-451-3954



**Gulf Power**  
Estimated Restoration Times

For 95% of the customers that are able to take electric service.

- 95% Restored Oct. 15 by
- Oct. 17 by
- Oct. 18 by
- Oct. 19 by
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### DAMAGE TO YOUR HOME'S SERVICE CONNECTION

Steps to restore power if your home's service connection is damaged.

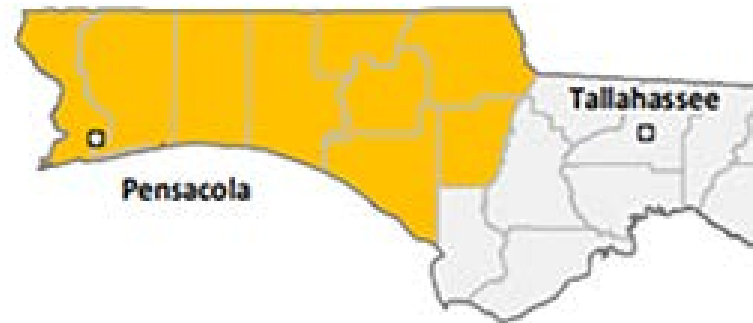
- Know what you need to repair for electrical equipment responsible for the house (service stack, attachment pole with an attached meter box and the mobile or manufactured home).
  - Gulf Power is responsible for the wire or service line to the house and the electric meter.
  - If the homeowner's equipment is damaged, repairs will be needed before Gulf Power can connect service.
- Seek a licensed electrician. Do not hire an unlicensed electrician. It could create safety hazards and possibly delay your power from being connected.
- Do not attempt to fix the damage yourself. It could create safety hazards and possibly delay your power from being connected.
- Make sure repairs pass required county inspections. Check with your county for inspection requirements related to Hurricane Michael.
- Notify Gulf Power at 1-800-225-5797 when you are able to receive power. Ensure all of the steps above are complete and you are safely able to receive power.

**Gulf Power**

# Communication

## Governmental Communication

- Pre-storm season identification of critical infrastructure
- Cooperation in planning and restoration
- Employees in County EOCs
- Employees in State EOC
- Participation in County and State Drills





# Communication

## Distribution Construction and Maintenance

- **Third-Party Attachers and Joint Use Partners**
  - Continue to meet with bi-annually across the system
  - Planned distribution major projects
  - Construction standards and pole loading
  - Pole inspection program
  - Pole removal program
  - Storm communications
- **Forestry Services**
  - Communications with members of the community and government officials concerning vegetation management projects, right of way maintenance, new construction projects, and company construction projects
  - Seven certified arborists on staff

# Restoration

## Post Storm Restoration Plans

- **2019 Storm Procedures are being updated**
  - FPL Best Practices and NextEra Support Model
- **Review of all contracts, contacts, and arrangements**
  - Catering
  - Accommodations
  - Staging Sites
  - Transportation
- **Material and fuel inventory levels are increased during storm season**
- **Mutual Assistance**
  - Southeastern Electric Exchange (SEE)
  - Edison Electric Institute (EEI)
  - 9 additional Agreements within the State through FCG
  - NextEra affiliate

# Restoration

## Forensic Data Collection

- **Distribution**
  - Contract with third party to assist with data collection
  - Data transfer tested annual
  - Designed to not slow down restoration efforts
  - Third party data analysis
- **Transmission**
  - Initial collection of data during aerial patrol
  - On-site details collected by engineering personnel
  - Post analysis and reporting



# Restoration

## Off-system Support 2018

- Hurricane Maria – Puerto Rico
- Severe Weather – Alabama Power





# Restoration

## Hurricane Michael – Panama City

**13 Day Restoration Effort**  
**6600 Outside Resources**  
**8 Staging Sites**  
**7000 Distribution Poles Replaced**  
**200 Miles of Dist. Line Replaced**  
**194 Trans. Structures Damaged**  
**~9000 still cannot take power**



# Restoration

EEI

## Emergency Response Awards Recovery Award

