Florida Public Power

PSC Hurricane Preparedness Workshop 2019

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Florida Public Power

- 33 municipal electric utilities
- 1.4 million customer meters
- 14% of Florida’s population
- Large Utilities
  - JEA (Jacksonville): 404,000 customers
  - OUC (Orlando): 244,000 customers
  - Tallahassee: 122,000 customers
- Small Utilities
  - Moore Haven: 1,015 customers
  - Bushnell: 1,065 customers
- Combined, 3rd largest utility behind FPL & Duke Energy Florida
Public Power Nationally

2,011 PUBLIC POWER UTILITIES PROVIDE ELECTRICITY TO 49 MILLION PEOPLE* IN 49 STATES AND 5 U.S. TERRITORIES

1 IN 7 ELECTRICITY CUSTOMERS IN THE U.S. ARE SERVED BY PUBLIC POWER
Public Power Mutual Aid

FMEA coordinates mutual aid support for its members

- Serves as statewide mutual aid network coordinator
- Works directly with national association (APPA) and other network coordinators
  - Meet together in person twice a year
  - Hold table top exercises
- Member utilities communicate needs (or availability) to FMEA
Public Power Mutual Aid

- Florida Mutual Aid
  - Mutual Aid agreements in place between public power and all Florida electric utilities

- Southeastern Mutual Aid

- National Mutual Aid
  - More than 2,000 municipal electric utilities
  - More than 800 electric cooperatives
Mutual Aid – Near and Far
Disaster Preparedness

Year-Round Planning

• Public Power prepares year round
  – Review and Update Internal Plans
• FMEA conducts pre-season preparation workshop with members
• Participate in statewide FCG mutual aid workshop
• Individual utilities conduct exercises, briefings and meetings to discuss their preparation
  – FMECA participates in state EOC and national Association
• Municipal electric utilities coordinate with all city departments, including local EOCs
Disaster Preparedness

- All municipal utilities conduct pole inspections, at a minimum, on an 8-yr cycle.
  - Many more frequently

- Since 2007, pole replacement has been in the range of 2-10%
Disaster Preparedness

Vegetation Management

• FMEA members generally on a 3-year trim cycle

• Our local governing boards and customers seek the improved aesthetics and reliability from a 3-year cycle

• Right tree, right place
Disaster Preparedness

**Communications**

- Develop pre-written social media responses
  - Preparedness, pre-storm, post-storm, safety
- Use various platforms
  - Facebook, Twitter, News, Text-Alerts
- Communicate often
  - Restoration process
  - Areas being worked
Be Prepared for Hurricane Season

At Kissimmee Utility Authority, we're always preparing for the next storm season – and we're committed to helping you prepare, too.

Be prepared for this year's hurricane season by exploring KUA's 2018 Osceola Hurricane Handbook. You can download it by clicking on the image on the page.

To receive a copy of the printed handbook by mail, residents should contact KUA at 407-933-9838 or by e-mail at hurricane@kua.com.

Hurricane Season Links

KUA
- Web – www.kua.com
- Facebook – www.facebook.com/mykua
- YouTube – www.youtube.com/kuadirect
- Twitter – www.twitter.com/kuadirect
JEA

How JEA Restores Power After a Storm and How You Can Help

Before the Storm

Storm Warning
In the past five years, JEA has invested hundreds of millions of dollars in hardening our electric, water, and sewer systems to make them more resistant to storm-related disruptions. These critical repairs and improvements help us restore power and return to normal operations more quickly after a major storm.

Weather Information
While strong winds and heavy rains cause the greatest damage, water service outages result from tree branches falling on power lines. That's because, in our part of the city, trees are the most common cause of power outages. This service interruption requires extensive work to restore power to the service area.

We're Active 24 Hours
We've invested millions in upgrading our water and sewer facilities, and have installed backup generators to restore the risk of storm-related service interruptions.

During the Storm

At the height of a major storm, JEA personnel are in place, monitoring the weather and assessing the impact on our facilities. Our Emergency Operations Center works around the clock. Key personnel are deployed in the field to alert us to any system failures. And our teams are in position, waiting for weather conditions to improve to the point that it's safe for them to begin restoring power.

After the Storm

Once the height of the storm passes and weather reports indicate it's safe, JEA immediately enters the restoration phase of our emergency operations. Our "Restoration 1-2-3" process is designed to assess and repair our facilities and restore power across our service territory as quickly and safely as possible.

Disaster Preparedness

JEA Restoration 1, 2, 3

Phase 1: Public Safety

As soon as weather conditions permit, JEA begins assessing our facilities, making critical repairs to our power plants, transmission lines, substations, and water and sewer facilities. We then restore power to our local hospitals, shelters, and police and fire stations, and make repairs to the "backbone" of our electric grid that will bring the majority of our customers back into power as quickly as possible.

Phase 2: Individual Customers

As public safety repairs complete, JEA will move to Phase 2 and commence individual customers to report their power outages. Utility crews will begin making repairs by dividing "circuits" — servicing an entire circuit of approximately 2,500 homes before moving on to another circuit Priority is given to making repairs that will restore power to the most customers.

Phase 3: Final Repairs

When repairs to all major circuits are complete, JEA will enter Phase 3, targeting the few remaining isolated outages. With enough patience, the final phase can be the most frustrating for these few customers who are still without power, and we appreciate your continued patience as we direct all our resources toward completing the restoration process. Rest assured, we won't stop until everyone has power.

What You Can Do:

Stay Safe
Phase 1 is our public safety phase. If you don't need critical services first, please stay off the roads and avoid downed power lines.

Know Your Home
Just as you'd pull over on the highway to let an ambulance pass, you can help us save lives and restore power to everyone faster by waiting for the announcement that JEA is accepting outage reports from individual customers.

Call
Call (904) 665-6000 or visit jee.com/outage to report your power outage. We've already registered for JEA alerts, you can also text "OUT" to MyJEA (69532),

Final Repairs

If you are still without power:

Check Your Electric Panel
Have any switches been tripped? If so, call (904) 665-6000 to report it.

Check Your Electrical Panel
Is there any visible damage to your weatherhead — the place where electric wires attach to your home? If so, call (904) 665-6000 to report it.

If You're Still Without Power:

Turn off appliances at a time to prevent power surges.

Florida Public Power • Building Strong Communities
Gainesville Regional Utilities

Disaster Preparedness

STORM CENTRAL GUIDE

STORM SEASON IS JUNE 1 TO NOVEMBER 30.

PREPARE
• Maintain trees that may threaten your home's electric lines.
• Make plans to evacuate before a major storm if you need medically essential electric service.
• Contact Alachua County Emergency Management at (352) 343-4000 for special needs evacuation information. Special needs forms must be filled prior to an approaching storm.
• If a state-wide evacuation occurs, make sure to fill your gas tank.

IMMEDIATELY BEFORE
• Turn off or disconnect all outside electric appliances.
• Leave gas valve turned on at the meter.

STORM SEASON IS JUNE 1 TO NOVEMBER 30.

INSTRUCTIONS CAREFULLY
• Appliances should be plugged directly into generator using properly rated/grounded extension cords if necessary.

PORTABLE GENERATOR SAFETY
• Place your generator outside of your house, away from the house in a well-ventilated area to avoid carbon monoxide poisoning.
• Before using a portable electric generator, read the operating instructions carefully.

MEES PROGRAM
• If you're enrolled in the MEES program, go to a shelter as soon as possible.

HURRICANE SUPPLY CHECKLIST

Essentials
• Battery-operated radio or television
• Flashlights
• Extra batteries
• Lanterns/matches

Water
• Water for cooking and sanitation (7 gallons of water per person are recommended)

Food
• Insect and rodent-killing materials for food storage
• One-week supply of non-perishable food that requires no refrigeration or preparation (lilu or no water)

First Aid Kit
• Non-prescription medications, such as aspirin
• Antiseptic

Important Papers
• Maps to evacuation shelters or hospitals
• Identification, such as passports, drivers licenses and Social Security cards
• Family records, such as birth, death and marriage certificates

For real-time storm updates follow us on Twitter @GRUStormCentral

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#FLPublicPower

FLORIDA MUNICIPAL ELECTRIC ASSOCIATION
METER CENTER RESPONSIBILITIES

- **WEATHERHEAD**
- **SERVICE LINE**
- **RISER**
- **METER CAN**
- **METER**

**Responsibility:**
- **Customer**
- **KEYS ENERGY**
Disaster Preparedness

• We are local governments
• Work closely with all city and county departments and officials
  – In planning, preparations, and during storms
• Direct communications with local emergency management personnel and local emergency operations centers
Hurricane Michael

Wednesday, October 10, 2018 - 1:40 pm
Category 4: Mexico City Beach
2 mph short of Category 5

Michael Track History
October 10, 2018

Hurricane
Cat 3+

Tuesday, October 9, 2018
Strengthens to Category 3 hurricane

Monday, October 8, 2018
Tropical Storm forms as Category 1

Key West

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FMEA
Florida Municipal Electric Association
Hurricane Michael

- Mutual aid agreements in place with munis and coops across the country and Florida’s IOUs.
- State and southeast mutual aid put on standby weekend before.
- Tallahassee:
  - ~120 line resources staged pre-storm
  - ~300 line resources to arrive post-storm
  - ~225 tree resources secured
- Blountstown, Chattahoochee, Quincy, Havana
  - Mutual aid placed on standby; ready to deploy day after storm
Hurricane Michael

Public Power Impacts

• 400,000 Customers out region wide
  • 122,000 from public power
• Tallahassee (122,000 customers):
  – 114,000 customers without power
• Blountstown (1,300 customers), Chattahoochee (1,100 customers), Quincy (4,700 customers), Havana (1,300 customers):
  – All 100% without power
  – Transmission out
  – Significant damage
**Hurricane Michael**

- More than 600 public power personnel from 16 states and more than 80 utilities
  - Tallahassee: 430 Mutual aid
  - Havana: 21 Mutual aid
  - Chattahoochee: 88 Mutual aid
  - Quincy: 124 Mutual aid
  - Blountstown: 60 Mutual aid

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Hurricane Michael

- Tallahassee:
  - 90% restored in 4 days
  - 98% restored in 6 days
  - 100% restored in 9 days

- Havana:
  - Transmission out for 3 days; 100% restored in 4 days

- Quincy and Chattahoochee:
  - Transmission out for 3 days; 100% restored in 12 days

- Blountstown:
  - Transmission out for 7 days; 100% restored in 12 days
Hurricane Michael

Quincy Social Media
Hurricane Michael

Mutual Aid Social Media

Beaches Energy @BeachesEnergy • Oct 18
Our linemen have been working hard to help restore power for residents of Quincy, FL #HurricaneMichael.

Hazlewood Utilities @Hazlewood • Oct 14
We’ve received so many wonderful notes and comments from #Salvationist residents expressing their appreciation for our working utility crews helping to restore power in their community following #HurricaneMichael.

Belmont Light @belmontlight • Oct 16
Crews from Belmont Light and @HolyokeCity work in Tallahassee, FL following #HurricaneMichael. Mutual connections and prove what it means to be #Commit @NAPPA_Littleton @CTTNews #PublicPower

Lincoln Electric Sys @ELStandards • Oct 17
MUTUAL AID UPDATE! Our guys are coming home! Our crews have been released from #Florida, & making the long trek back to CATN. We announced they reached 99% restoration & restored power to more than 110,000 neighbors & businesses.

Orlando Utilities @OUCrelibleone • Oct 19
16 OUC electric line technicians continue to work in Chattahoochee, FL today helping restore power to the area following #HurricaneMichael. These crews will continue to work diligently throughout the weekend.

Huntsville Utilities @HSVUtilities • Oct 17
HURRICANE MICHAEL UPDATE! Our crews in Florida continue their work in Chattahoochee, where they report 1,500 utility poles down or damaged.

M&M Energy Services @MMEnergyServices • Oct 17
Up in the air... It’s a bird... It’s a plane... It’s actually a Lineman! We see you Billy, #ConvoCanvay #MutualAid #FLPublicPower #PublicPower #HurricaneMichael

#PublicPower #HumHealth

“I want to thank you all for your efforts for getting our neighborhood back on the grid after going the extra mile to help even though we have some of the most (aka Godzilla) out of town. Wahalaw Nene! He had been on that tree for 3 days with no power. You guys are the tops! Mahalo!”

~ Julie Powers
Disaster Preparedness

• Communications is critical
  – Communicate often
  – Factual and realistic

• Pre-planning mutual aid is critical

• Mutual aid agreements in place before storms

• Consider mutual aid of different kinds
  – Assessors, engineers, social media, documenters
Disaster Preparedness

• Preparations are key!
• Review your internal procedures
  – Logistics – food, laundry, accommodations
• Conduct exercises
• Work with County EOC
  – Review priority restoration lists
• Prepare for worst case scenario!
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