



# FPSC Hurricane Preparedness Workshop May 19, 2020

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# FPL Power Delivery (Transmission and Distribution)

3,000 employees

79,000 miles of power lines

1.3 million poles and structures

645 substations

serving more than

half of Florida

> vast majority of customers live within 20 miles of coast



- **▶** Storm Preparation and Restoration Processes
- ► Customer/Stakeholder Outreach and Communication
- **▶** Vegetation Management
- **▶** Pole Inspections
- **▶** Lessons Learned
- Restoration Process Changes Resulting from Pandemic



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### **Storm Preparation and Restoration Processes**



#### Annual Drills

- ► Corporate-wide dry-run week of June 22 26
  - Incorporate pandemic-related lessons and industry guidelines into storm processes
- Implementing technology improvements to enhance storm damage forecasting/restoration processes
- Conducted incident management training workshops



#### Mutual Aid Organizations/Agreements

- Southeastern Electric Exchange (SEE)
- Edison Electric Institute (EEI)
- Florida Electric Power Coordinating Group, Inc. (FCG)
- Association of Edison Illuminating Companies (AEIC)
- Pre-negotiate contracts with restoration vendors



### **Storm Preparation and Restoration Processes**



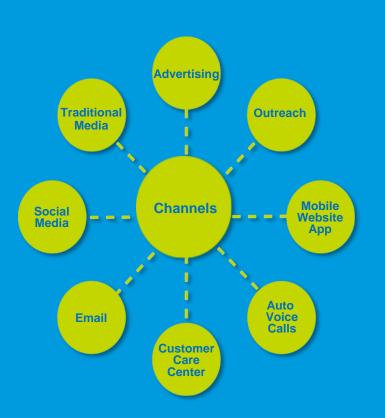
- Actions taken to address potential roadway congestion, motor fuel availability and lodging for restoration personnel
  - Continue coordination with FDOT and FHP
  - Increase fuel inventories prior to storm season
  - Utilize all forms of lodging including hotels, mobile sleepers and tents
- Availability and inventory of equipment needed for restoration
  - Increase materials inventories/pre-stage materials prior to storm season



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#### Customer/Stakeholder Outreach and Communication



- Use multiple channels/methods for customer communications – before, during and after storm
  - News releases and daily press conferences
  - Targeted ads and customer emails
  - Media interviews and opportunities in hardest hit areas
- Use digital/face-to-face communications
  - Social media for prep and safety messages, as well as restoration updates
  - FPL App available from the App Store or Google Play
  - Community response kiosks in hardest hit areas
- Provide daily e-mails/hourly updates to Gov't. Portal
  Website includes localized outage/restoration info



#### Customer/Stakeholder Outreach and Communication

- ► Have conducted annual storm preparedness meetings with all EOCs
- Continuing customer outreach meetings/presentations
  - 900-1,000 presentations annually
  - Presentations cover various topics (e.g., storm readiness, reliability, RTRP)
- Meet with third-party attachers, joint use partners, and local governments
- FPL provides information on how to safely operate private generation systems (generators and private solar systems) after a power outage



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#### **Vegetation Management**



#### **Distribution**

- Feeders: 3-year avg. cycle (+ mid-cycle trimming)
- Laterals: 6-year avg. cycle
- Miles trimmed (2019)
  - Feeders: 11,454 (4,256 cycle; 7,198 mid-cycle)
  - Laterals: 3,822 miles
- Before peak of storm season inspect/trim CIFs



#### **Transmission**

- Inspect and Protect Program
  - Inspect right-of-way at least 2 times per year
  - Maintain clearances annually 7,100 miles.
  - Meet mandatory NERC-established requirements
- ▶ Before peak of storm season perform aerial patrols



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## Pole/Structure Inspections





- Annually inspect/test for strength and loading
- ► 1.2 million distribution poles
  - 8-year cycle (wood and concrete)
  - In 2019 149,783 inspected; 129,163 (W); 20,620 (C)
- ► 67,819 transmission poles/structures
  - Visually inspect 100% annually
  - Strength/load test cycles: wood: 6-year / concrete: 10-year
    - In 2019 432 (W); 8,138 (C/S)



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#### **Lessons Learned – 2019 Storm Season**

- Hurricane Dorian threatened FPL's territory, but did not make direct landfall
  - Flexibility of pre-deployed resources
  - Storm rider plan
  - Staging site challenges with an uncertain forecast
- Mutual assistance provided in 2019:
  - Fires (California)
  - Hurricane Barry (LA)
  - Tornadoes (TX)
  - Experiences reinforce FPL's processes/initiatives
    - Need well developed plan
    - Pre-staging resources/materials
    - Hardening beneficial









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### Restoration Process Changes Resulting from Pandemic

#### Every process requires review and revision

- Critical roles will require multiple teams at separate locations
- Maximize the use of working remote for some roles
- Less mutual aid/outside support may be available
- Reducing staging site personnel and increasing the number of micro sites to minimize crew movement
- Increases in logistical support will be necessary (e.g., one person per hotel room)
- Incorporate COVID testing at Command Centers and temperature testing at staging sites (have pandemic PPE available)
- The Company is actively seeking ways to mitigate certain impacts to restoration that will necessarily occur as a result of a pandemic







# **Questions?**

