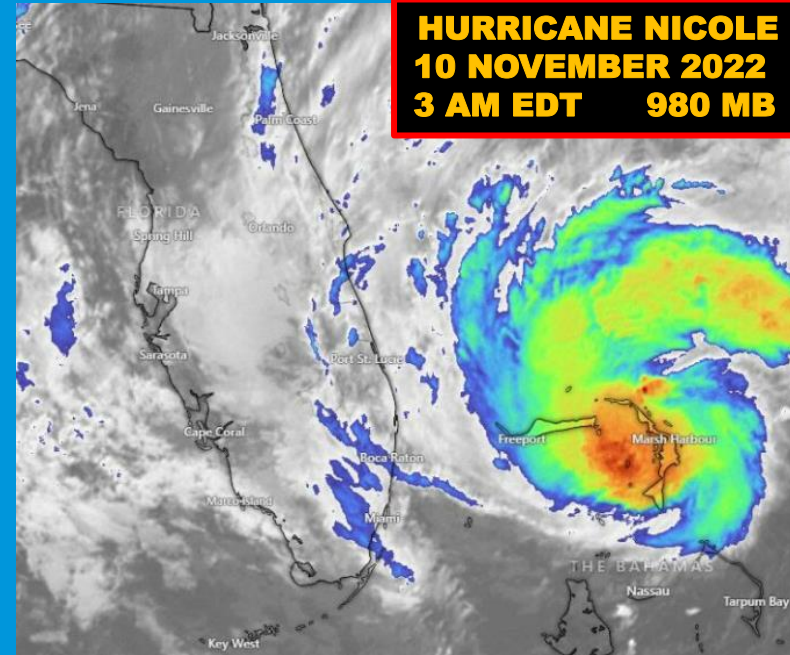
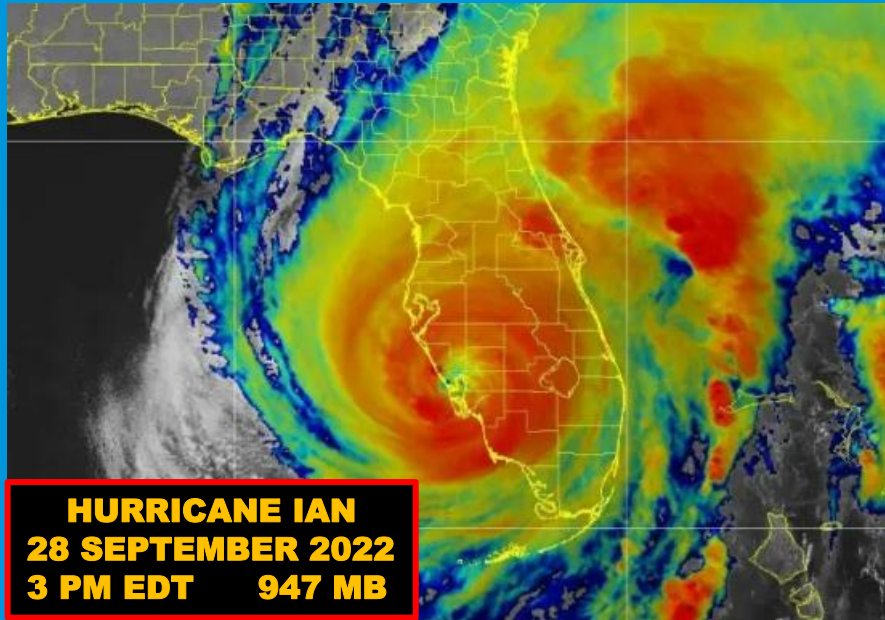




FPL®



FPSC Hurricane Preparedness Workshop May 23, 2023

Andy Pankratz, Sr. Director Emergency Preparedness – Power Delivery

FPL is the state's largest utility, serving more than half of Florida's population

5.8 million customers

43 counties served

35,550 square miles

78,800 miles of distribution lines

9,400 miles of transmission lines

1.4 million poles

1.1 million transformers

871 substations



Topics for Discussion

- ▶ Storm Preparation and Restoration Processes
- ▶ Customer/Stakeholder Outreach and Communication
- ▶ Vegetation Management
- ▶ Pole / Structure Inspections
- ▶ 2022 Storm Season and Mutual Aid

Storm Preparation and Restoration Processes

▶ Annual Preparation

- ▶ Corporate-wide dry-run drill – week of April 17 – 21
 - ▶ Engage strategic partners
- ▶ 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



Customer/Stakeholder Outreach and Communication

- ▶ **Use multiple channels/methods for customer communications**
– before, during, and after a storm

- ▶ News releases and daily press conferences
- ▶ Communicating Estimated Time of Restoration (ETR) and restoration progress
- ▶ Targeted ads and customer emails
- ▶ Media interviews in hardest hit areas

- ▶ **Use digital/face-to-face communications**

- ▶ Social media for prep and safety messages, as well as restoration updates
- ▶ FPL Mobile App available from the App Store or Google Play
- ▶ Community response kiosks in hardest hit areas



Customer/Stakeholder Outreach and Communication

- ▶ **Provide daily emails/updates to Govt. Portal Website (where applicable) – includes localized outage/restoration info**
- ▶ **Conducting annual storm preparedness meetings with all EOCs**
 - ▶ Establishing 2023 plans for support at local EOCs, including staffing of embedded FPL employees at EOCs during events
 - ▶ Updating the Critical Infrastructure Facility and priority list
- ▶ **Continuing customer outreach meetings/presentations**
 - ▶ More than 1,000 presentations annually
 - ▶ Presentations cover various topics (e.g., storm readiness and Right Tree Right Place)
- ▶ **FPL provides information on how to safely operate private generation systems (generators and private solar systems) after a power outage**

Vegetation Management

► Distribution

- Feeders: 3-year avg. cycle (+ mid-cycle maintenance)
- Laterals: 6-year avg. cycles
- Miles maintained (2022)
 - Feeders: 15,228 miles (4,562 cycle; 10,667 mid-cycle)
 - Laterals: 4,055 miles
- Before peak of storm season – inspect/maintain CIFs

► Transmission

- Inspect and Protect Program
 - Inspect right-of-way at least 2 times per year
 - Maintain clearances (2022): 9,303 miles
 - Meet mandatory NERC-established requirements
- Before peak of storm season – perform aerial patrols



Pole / Structure Inspections

- ▶ **1.4 million distribution poles**
 - ▶ 8-year inspection cycle
 - ▶ In 2022 – 190,275 inspected
 - Wood: 172,378 poles
 - Concrete: 17,897 poles
- ▶ **82,089 transmission structures**
 - ▶ 100% annual visual inspection
 - ▶ Inspection cycles:
 - Wood: 6-year cycle
 - Concrete/steel: 10-year cycle



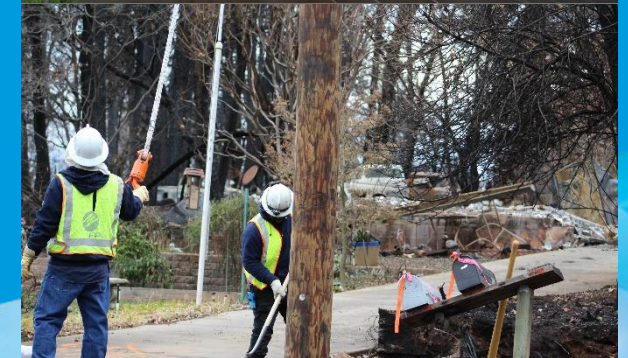
2022 Storm Season and Mutual Aid

▶ Two hurricanes affected FPL in 2022:

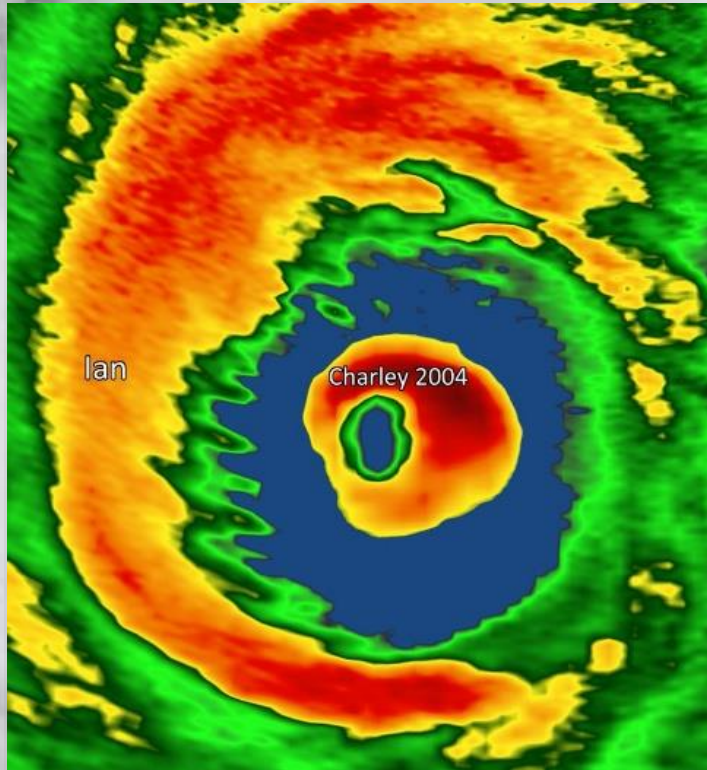
- ▶ Hurricane Ian – September 28, 2022
- ▶ Hurricane Nicole – November 10, 2022

▶ Mutual assistance provided in 2022:

- ▶ January Winter Storm Frida (Virginia, North Carolina, South Carolina)
- ▶ February Winter Storm Landon (Texas, Oklahoma)
- ▶ March & April Severe Weather (Alabama)
- ▶ September Severe Weather (Texas)
- ▶ December Winter Storm Elliott (Indiana & Ohio)



Hurricane Ian was one of the most powerful storms to ever make landfall in Florida



Hurricane Ian	
Storm Strength	Category 4
Wind Speed	150 mph
Landfall	Sept. 28, 2022 Lee County
FPL customers affected	~2.2 million

Hurricane Nicole impacted Florida just six weeks after Hurricane Ian

**Category 1
hurricane**

**Nov. 10
landfall**

**Near
Vero Beach**



Hurricanes Ian and Nicole left extensive damage



Sarasota County



Volusia County



Charlotte County

Our workforce encountered difficult conditions



Charlotte County



Volusia County



Martin County



Collier County



Lee County

FPL mobilized a significant restoration workforce

Hurricane Ian
~21,000
men and
women

Hurricane Ian
38
sites
to stage, process
and park resources

Hurricane Nicole
~13,000
men and
women

Hurricane Nicole
Mutual
assistance
16 states

The substantial workforce required a robust and strategic logistics plan



525,000
meals served

2.7 million
pounds of ice

3.2 million
bottles of water

2.4 million
gallons of fuel

FPL's investments in storm hardening are making a significant difference for our customers

Hurricane Ian

~2.2M customers

Essentially restored within

8 days

Restored 2/3 customers

EOD 1

Hurricane Nicole

480,000+

customers

Essentially
restored within

24 hours

550,000+

outages avoided

due to smart grid
technology

What went well



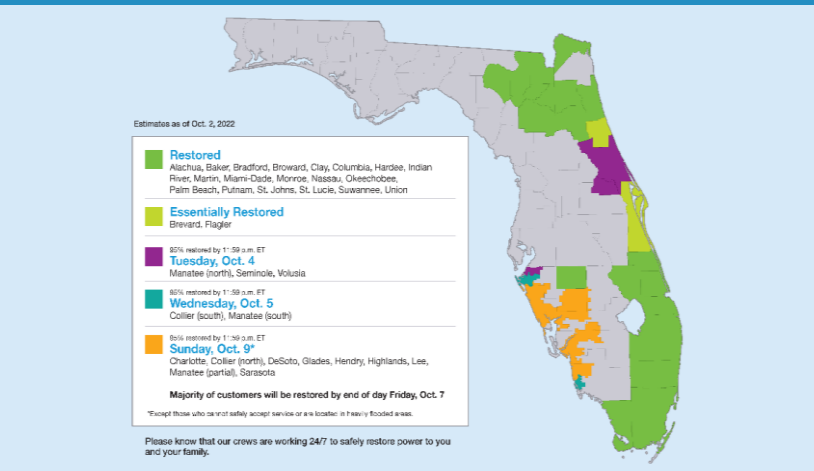
Substation Flood Monitors
Mitigate Significant Damage



Storm Resiliency Investments
Speed Restoration Times



Pre-storm Equipment Inventory
Prevents Restoration Delays



Customer & Employee Channels
A bigger presence & daily updates



FPL Air One
First storm response

Estimated Times of Restoration
Met or Exceeded

What we learned



Coastal Communities
Future hardening guidelines



Staging Sites
Improve pre-site conditions



New Technologies
Leverage emerging tools

FPL's rapid response did not and could not happen alone

