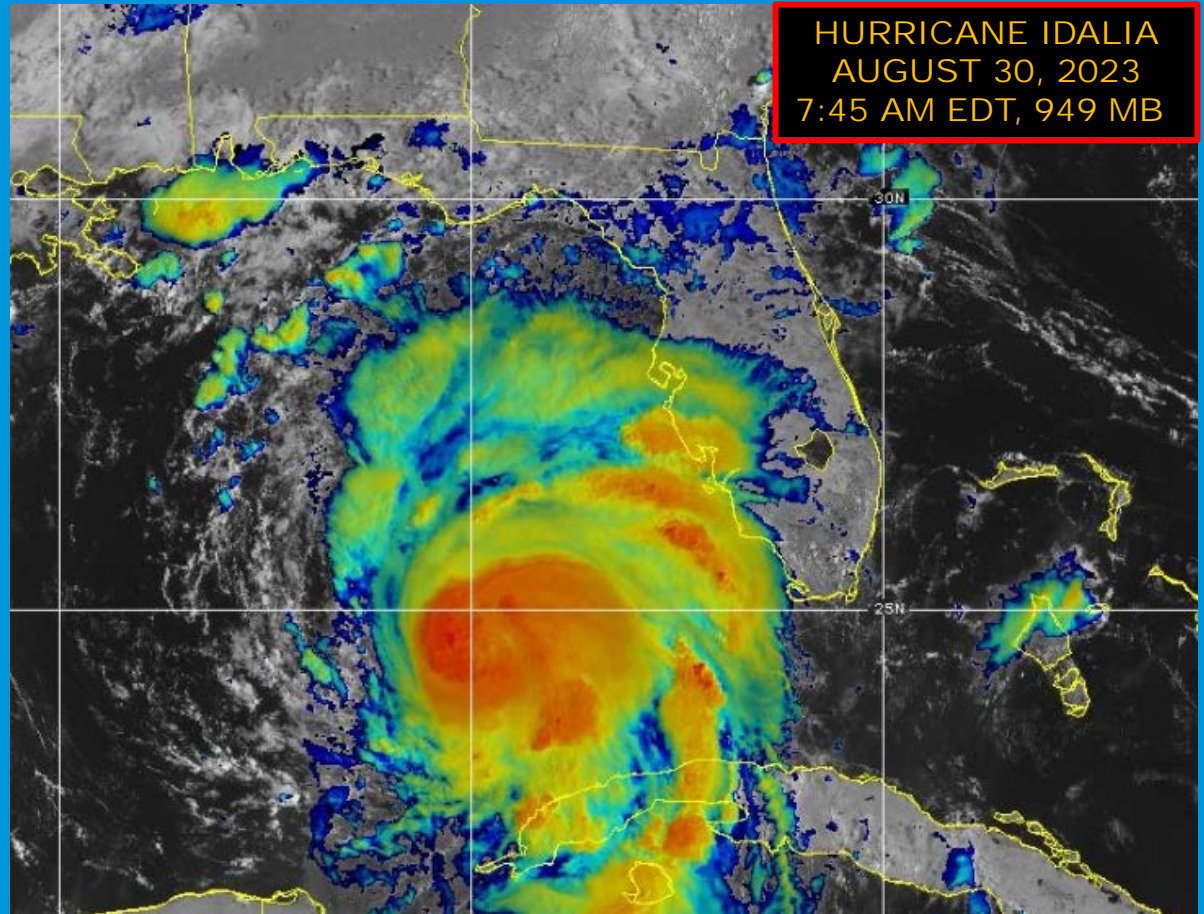




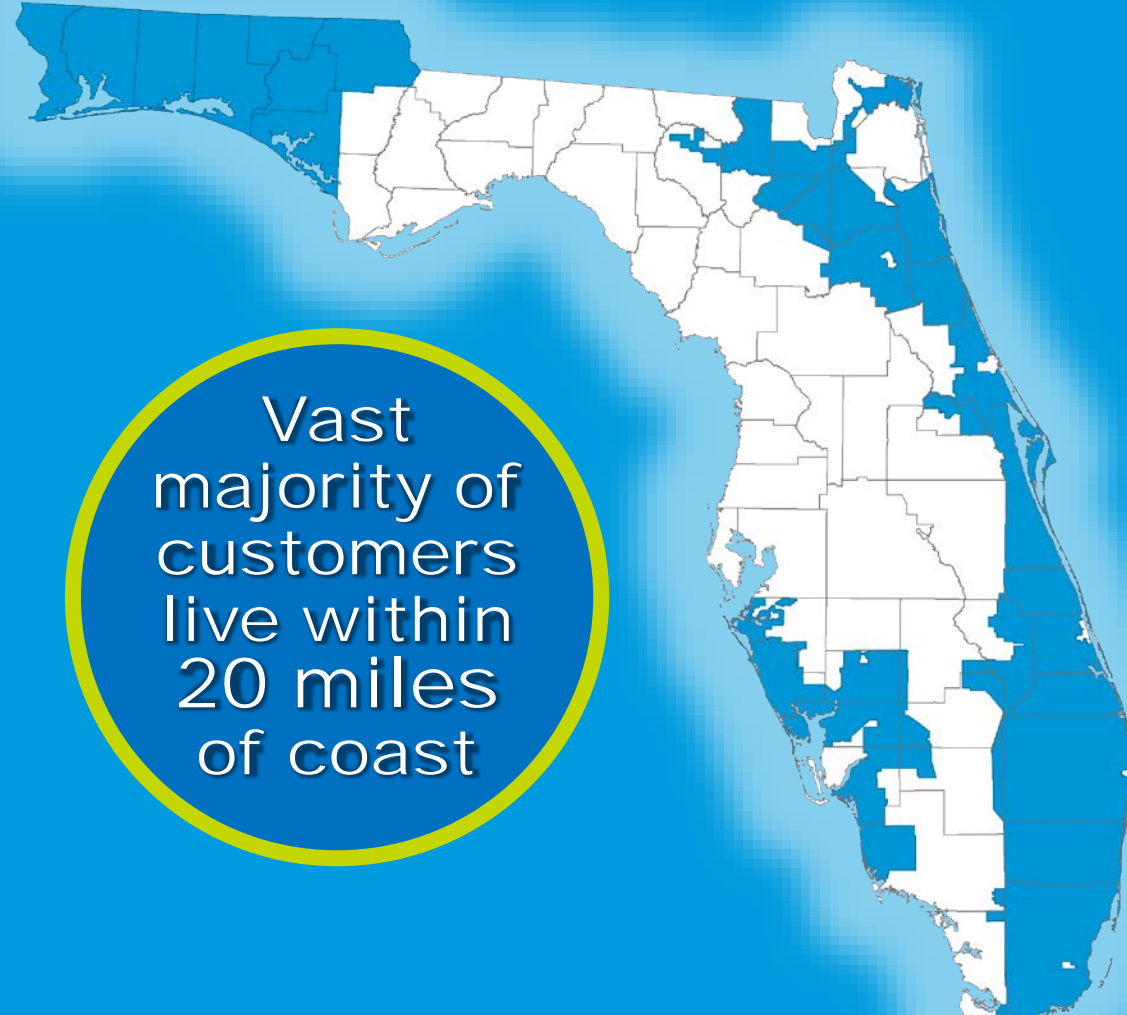
# FPSC Hurricane Preparedness Workshop

Armando Pimentel  
President and CEO  
May 21, 2024



# FPL serves more than half of Florida's population

**5.9 million** customers  
**43** counties served  
**35,550** square miles  
**80,422** miles of distribution lines  
**9,487** miles of transmission lines  
**1.4 million** poles  
**1.1 million** transformers  
**883** substations



# Topics for Discussion

- ▶ **Storm Preparation and Restoration Processes**
- ▶ **Customer/Stakeholder Outreach and Communication**
- ▶ **Vegetation Management**
- ▶ **Pole / Structure Inspections**
- ▶ **2023 Storm Season and Mutual Aid**

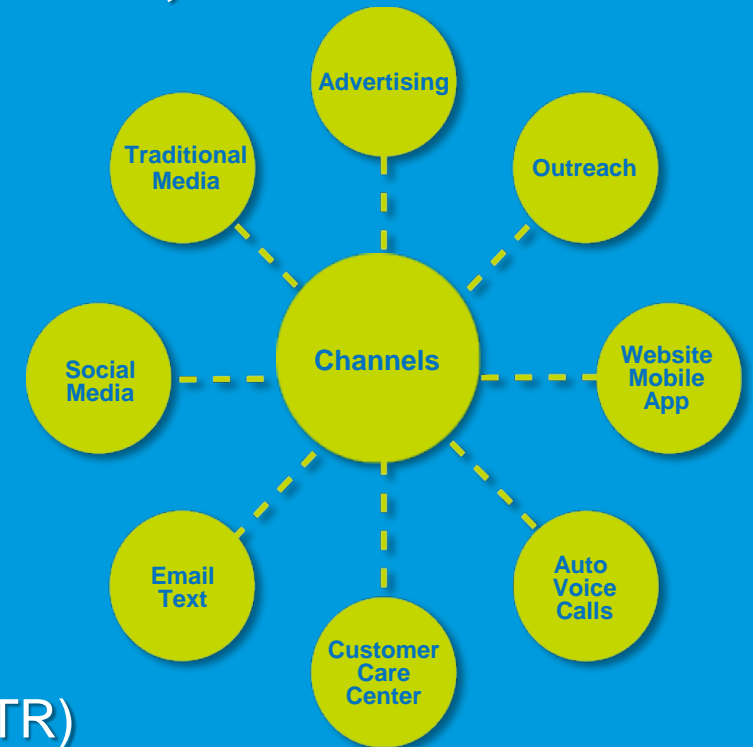
# Storm Preparation and Restoration Processes

- ▶ **FPL prepares year-round for storm season**
  - ▶ Corporate-wide storm dry-run: week of May 6-10
    - ▶ Engage key partners at both the local and national level
    - ▶ Pressure test technology improvements and evaluate storm damage forecasting/planning/restoration processes
    - ▶ Incorporate lessons learned from previous storms
  - ▶ Conduct incident management training workshops for all critical storm response roles
- ▶ **We work with our fellow utilities in Florida and across the country**
  - ▶ 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 traditional and digital channels/methods to communicate key messages to customers and stakeholders – before, during, and after a storm**
  - ▶ News releases and news conferences
  - ▶ Media interviews in hardest-hit areas
  - ▶ Social media and targeted advertisements
  - ▶ Regular updates on the website and FPL app
  - ▶ Customer emails, phone calls and text messages
  - ▶ Storm-specific Customer Care Center messaging
  - ▶ Send Community Action Teams to the hardest-hit areas
- ▶ **Key messages may include:**
  - ▶ Restoration progress and Estimated Times of Restoration (ETR)
  - ▶ Relevant safety messages
  - ▶ How customers can stay informed



# Customer/Stakeholder Outreach and Communication

- ▶ **Provide daily emails/updates to Government Portal website (where applicable) – includes localized outage/restoration info**
- ▶ **Conducting annual storm preparedness meetings with county EOCs**
  - ▶ Establishing 2024 plans for support at county 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**

# FPL's Storm Protection Plan (SPP) improves resiliency across our entire transmission and distribution grid

- ▶ FPL has been hardening its system for two decades
- ▶ The SPP Statute was approved in 2019, and requires utilities to develop and implement hardening plans to reduce restoration costs and outage times
- ▶ FPL's FPSC-approved SPP includes the following eight programs:
  - ▶ Distribution Inspection Program
  - ▶ Transmission Inspection Program
  - ▶ Distribution Feeder Hardening Program
  - ▶ Distribution Lateral Hardening Program
  - ▶ Transmission Hardening Program
  - ▶ Distribution Vegetation Management Program
  - ▶ Transmission Vegetation Management Program
  - ▶ Substation Storm Surge/Flood Mitigation Program



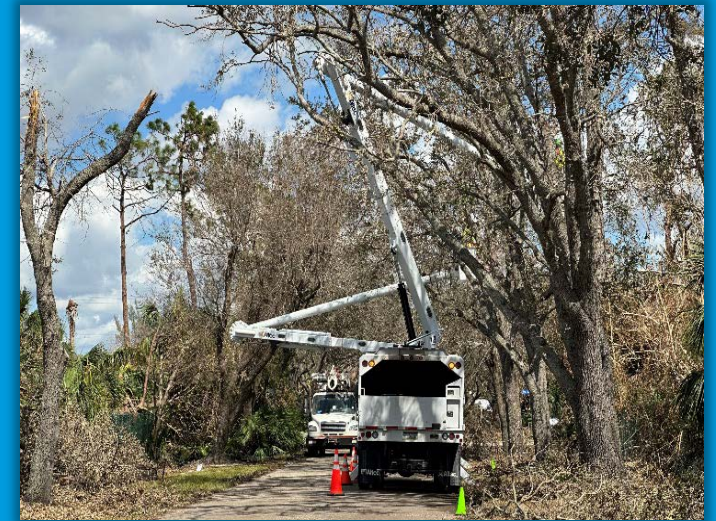
# Vegetation Management

## ▶ Distribution

- ▶ Feeders: 3-year avg. cycle (+ mid-cycle maintenance)
- ▶ Laterals: 6-year avg. cycles
- ▶ Miles maintained (2023)
  - ▶ Feeders: 13,095 miles (4,452 cycle; 8,643 mid-cycle)
  - ▶ Laterals: 3,944 miles
- ▶ Before peak of storm season – inspect/maintain Critical Infrastructure Facilities (CIFs)

## ▶ Transmission

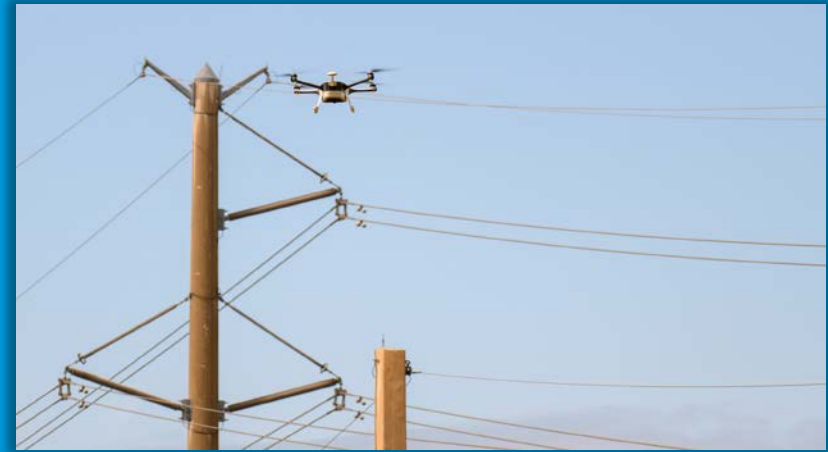
- ▶ Inspect and Protect Program
  - ▶ Inspect right-of-way at least two times per year
  - ▶ Maintain clearances (2023): 9,370 miles
  - ▶ Meet mandatory NERC-established requirements
- ▶ Before peak of storm season – perform aerial patrols





# Pole/Structure Inspections

- ▶ **1.4 million distribution poles**
  - ▶ 8-year inspection cycle
  - ▶ In 2023 – 180,261 total poles inspected
    - ▶ Wood: 157,028 poles
    - ▶ Concrete: 23,233 poles
- ▶ **83,295 transmission structures**
  - ▶ 100% annual visual inspection
  - ▶ Detailed inspection cycles:
    - ▶ Wood: 6-year cycle
    - ▶ Concrete/steel: 10-year cycle
  - ▶ ~96% of FPL's transmission structures have been hardened



# 2023 Storm Season and Mutual Aid

## ▶ One hurricane affected FPL in 2023

- ▶ Hurricane Idalia – Aug. 30, 2023

## ▶ Mutual assistance provided in 2023

### ▶ March – Severe Weather

- West Virginia – AEP
- Kentucky – LGE-KU
- Texas – Oncor

### ▶ July & August – Severe Weather

- Georgia
  - Georgia Power
  - Sawnee Electric Membership Corp

### ▶ September – Hurricane Idalia

- Suwannee Valley Electric Co-op
- Tri-County Electric Co-op



# Hurricane Idalia by the Numbers

- ▶ **Category 3 storm**
- ▶ **Aug. 30 landfall in Big Bend Region**
- ▶ **~200K customers impacted**
- ▶ **Restoration workforce: 12,000 men and women**
  - ▶ From Florida and 16 states
- ▶ **All customers essentially restored within 2 days**
  - ▶ Nearly 70,000 outages avoided through smart grid technology



# What went well



**Pre-securing Vault Doors**



**Drone Deployment**  
Further refined deployment process



**Resource Mutual Aid**  
IOU/Muni & Co-op collaboration



**Night Work**  
Overnight execution efficiency



**Mobile Sleepers**  
Primary lodging for crews

# What we learned

~55 mph  
intensification  
in 24 hours

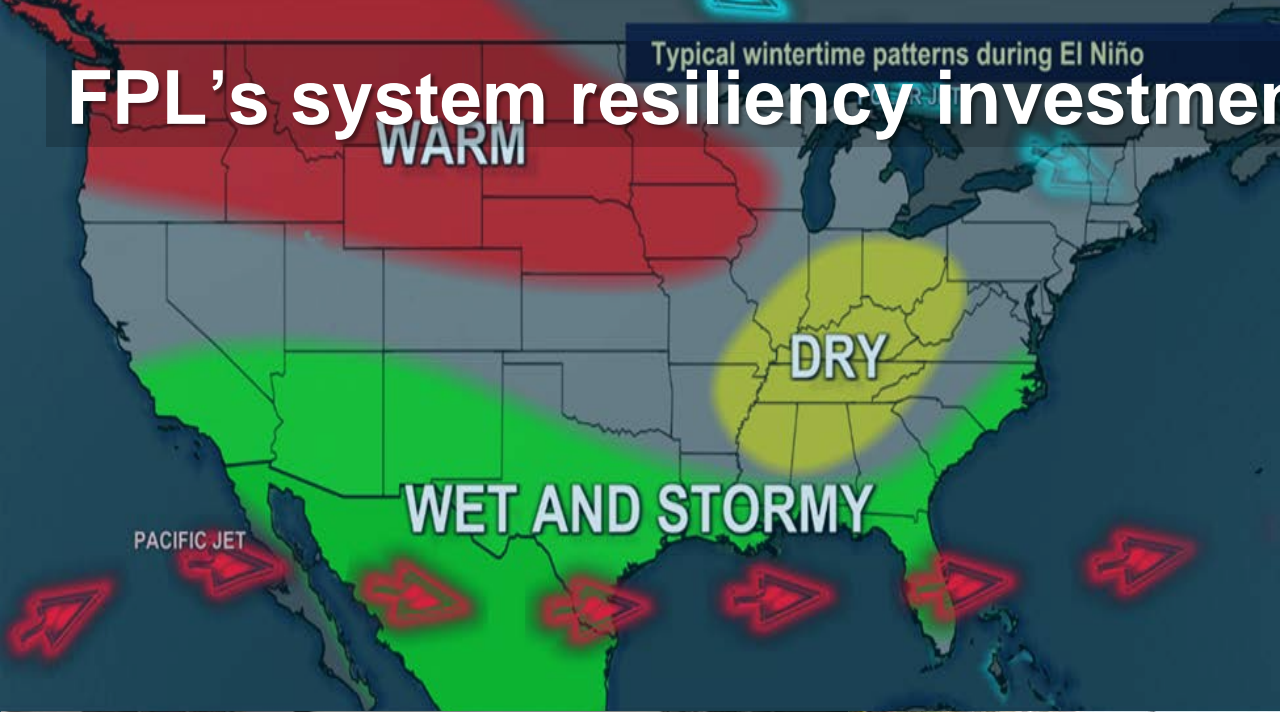
HURRICANE IDALIA  
AUGUST 30, 2023  
7:45 AM EDT, 949 MB

**Rapid Intensification**  
Very difficult to accurately predict



**External Crew Processing Efficiency**  
Internal process review to help eliminate bottlenecks

# FPL's system resiliency investments are tested year-round



We cannot do it alone





**FPL**®