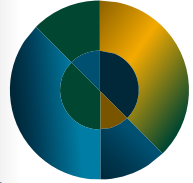
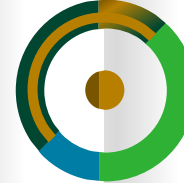
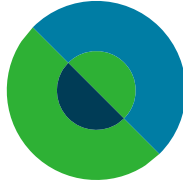
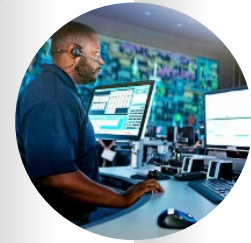


Public Service Commission Hurricane Workshop

May. 13, 2025

Todd Fountain
General Manager
Emergency Preparedness



Power Grid Operations



2024 Storm Season



2024 Hurricane Season: By the Numbers

Debby (Cat. 1)

- 350,000 outages reported
- 3,000 resources mobilized
- 320 damaged poles replaced
- 95% of outages restored within **24 hours**

Helene (Cat. 4)

- 800,000 outages reported
- 8,600 resources mobilized
- 925 damaged poles replaced
- 95% of outages (for those able to receive power) restored within **72 hours**

Milton (Cat. 3)

- 1 million outages reported
- 16,000 resources mobilized
- 1,640 damaged poles replaced
- 95% of outages (outside of hardest-hit areas) restored within **96 hours**

*approximate numbers



Self-Healing Technology

Over **75%** of Duke Energy Florida customers benefit from smart, self-healing technology, preventing hundreds of millions of outage minutes during storms:

Milton: ~200 million

Helene: ~113 million

Debby: ~12.5 million

Idalia: ~5 million

Ian: ~200 million

Michael: ~1.8 million

Irma: ~5 million

Total ~537 million minutes



Storm Preparedness



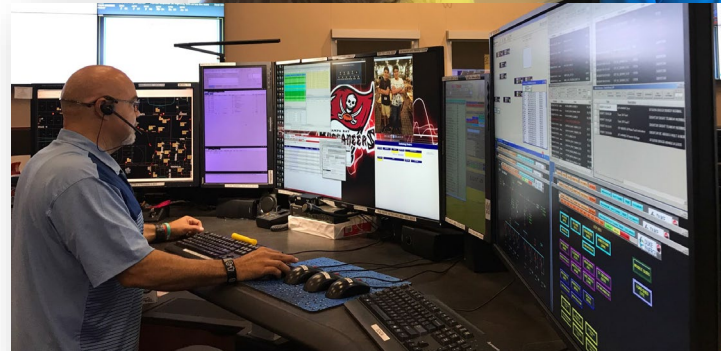
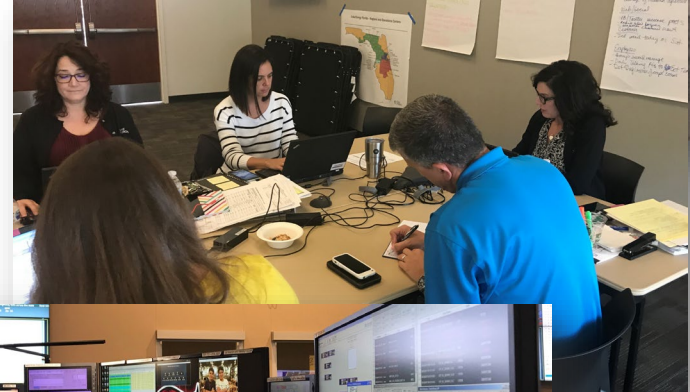
Hurricane Training

Major Storm Workshops

- May 1st – Communications
- June 17th – Logistics (Resource Management)
- June 18th – Logistics (Basecamps)
- June 19th – Operations and Planning

Mid-Level Event Training

- May 7th – South Central Zone
- May 12th – North Central Zone
- May 14th – North Coastal Zone
- June 10th – South Coastal Zone



Pre-Storm Planning

Staging (Mustering) Sites

- Positioned along the outside of the storm's path, but as close to the anticipated impact area as possible to allow for the quick deployment of crews and other resources
- On site:
 - Meals
 - Fuel
- Temporary lodging provided through hotels



Staging Sites vs. Basecamps

Basecamps

Located in the impacted area – only after the storm has cleared and when space is available – to save time and increase productivity

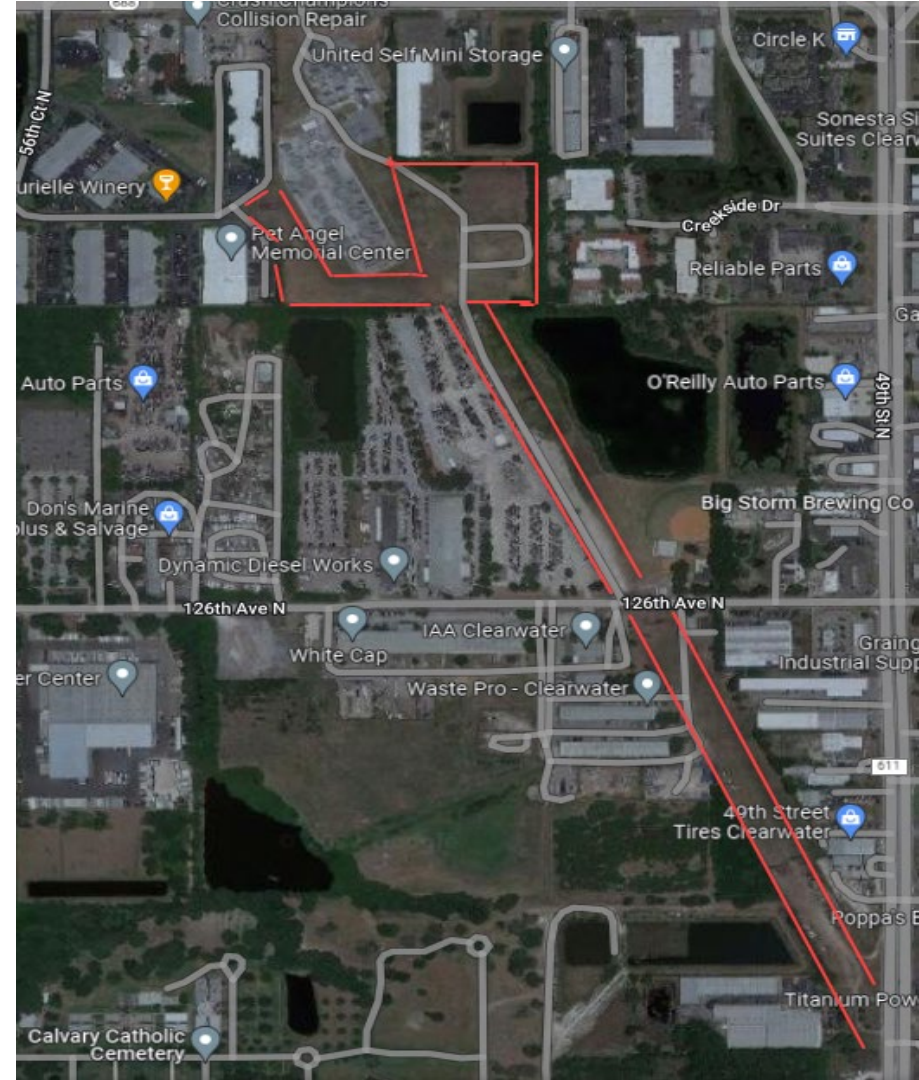
Usually take about 24 hours to set up

On site:

- Temporary lodging
- Meals
- Fuel
- Tools and equipment

Requirements:

- Ability to feed crews onsite
- Space to move resources in and out efficiently
- Dedicated egress and ingress locations
- Parking lanes with room to access the trucks at night for fueling or repairs



Blue Sky



- During blue sky days the inventory is utilized as working stock within the Op Centers
- This ensures the material is current with standards
- Ensures that inventory is within the manufacturers recommended shelf life

Red Sky



- During red sky days it is anticipated that our native line resources will come off their tools and run off-system contract resources
- The lockers are deployed to the basecamps
- Storm boxes that are supplied with the same material to the Op Centers to be utilized by native crews when performing restoration

Duke Energy Sister Utilities and Contract Crews

DUKE ENERGY SERVICE AREA



REGULATED UTILITIES

- 500+ line workers Duke Energy Florida
- Hundreds of Fla. contract line workers and tree trimming personnel
- Linemen in our Duke Energy sister utilities





Working Alongside the Communities We Serve

EOC Engagement

- Each County is assigned a Government & Community Relations Manager, and they work directly with the county EOC. The GCRMs and county leaders work together to ensure storm readiness.
- Conduct face to face meetings with each of our county EOCs prior to storm season.
- Conduct “Live Line” & Safety demonstrations with requesting counties.
- Aid counties in facilitating EOC drills that focus on annual readiness.



First Responder – Live Line Demonstrations



Continuous Improvements to Customer Communications

Proactive Outage Alerts Campaigns

There are three main 'campaigns' within Outage Alerts that are used to keep customers informed. Each can be turned on or off independently of one another.

1. Initial Out Campaign – This is the campaign that notifies customers the we are aware of their outage. If available, the system generated ITR can also be included here. Except for technical issues, this campaign will typically stay on.

2. ETR Campaigns – This campaign is what provides customers the majority of updates including ETR or updates to ETR, crew status, and cause. During large storm events, this campaign can be disabled – see slide 7 for details.

3. Restoration Campaigns – This campaign notifies the customer that we have restored power to their area. This can also be disabled during large storms.

Note: Only the first 8 characters of the address are sent for legal protection.

Duke Energy: There is a power outage in your area that may impact 123 Main. Estimated Restoration times are temporarily unavailable while we make repairs and assess damage. If your service is on Text 1. If you are without power, there is no need to report at this time. Visit <http://duk.us/05> for updates.

*Initial Out Campaign
(OMS ITRs Off)*

Duke Energy: Estimated time for power to be on is currently 02:30PM on Jan 22 for 123 Main; crew working; We apologize. Additional Outage Alerts may be delayed while repairs & damage assessment are underway. For updates visit <http://duk.us/05>

*ETR Campaign
(OMS ITRs Off)*

Duke Energy: Repairs are complete in the area of 123 MAIN as of 2:20 PM, Jan 22. Caused by public vandalism. Approx 16 customers impacted. If your power is still out, reply OFF.

*Restoration
Campaign*

Continuous Improvements to Customer Communications

Storm Mode “ad-hoc” Campaigns

While portions of Outage Alerts may be turned off, ad hoc customer communications are used to keep customers informed

Ad Hoc Messaging – We create custom messages to customers to share important information such as:

- Repairs to begin when conditions allow
- Damage Assessment underway
- Restoration progress updates
- How we restore power
- When to expect an update (i.e. ETA for ETR)
- Instructions for Reporting Outages, etc.

We send communications via the channel customers have selected as their preference (text, email and outbound calls). During major outage events, we also send communications to customers that are not actively enrolled if we have contact information.

Duke Energy Storm:
Crews are actively restoring power & continue to assess damage caused by ice in your area. The next update will be available no later than 9:30PM on Feb 13. Please visit duk.us/05 after that time for the latest information. Text STOP to cancel updates.

*Sample Ad-Hoc :
ETA for ETR*

Duke Energy Storm: The high winds & heavy rains from tropical storm Isaia significantly impacted your area. Crews have already begun assessing the damage & making repairs. For what to expect as this work begins visit duk.us/19. We will continue to provide updates on power restoration as we progress. Text STOP to cancel updates.

*Sample Ad-Hoc:
Damage Assessment*



Vegetation Management

Distribution

Trim Cycles

- On target to meet anniversary cycle commitments
 - 3-year / feeder backbone
 - Currently in year one of the three-year feeder cycle.
 - 5-year / laterals
 - Currently in year four of the five-year lateral cycle.
- Annual hurricane hardening completed by June 1st each year.

2024 Results

- Completed 4,006 miles of maintenance trimming.
- Performed vegetation work on 8,815 customer requests.
- Performed vegetation work to support approximately 6,674 design work orders.
- Removed 7,773 trees.





Transmission

Planned Transmission Vegetation Management work for DEF is based on identified threats and conditions. This work is prioritized and scheduled using data identified through patrols, inspections and assessments, while considering factors like the date of previous work activities and outage history. The condition-based approach allows for approximately 6 years of typical vegetation re-growth and support minimum safe worker distances.

VM – Transmission	2024 (Actuals)	2025 (Projected)
NERC (>200 kV)	197.62	166.39
Non-NERC (<200 kV)	484.32	490.13
Total Planned Work Mileage	681.94	656.52

Pole Inspections

Distribution

- Poles are inspected on an eight-year cycle
 - Currently in year four of our eight-year cycle.
- 90,328 poles were inspected in 2024
 - Less than one percent were priority ground line rejects.

Transmission

- Wood Poles are inspected on a four-year cycle
 - Sound & Bore inspections on wood poles are on an eight-year cycle
 - 4,010 wood poles were inspected in 2024
 - 24.26% were priority ground line rejects.
- Steel/Concrete Poles & Lattice Towers are inspected on a 6-year cycle
 - 7,645 Steel/Concrete Poles & Lattice Towers were inspected in 2024



Pole Replacement



- Duke Energy's year-round Storm Protection Plan helps keeps the lights on for our customers 365 days a year, not just during hurricane season.
- Grid-strengthening work and advanced technology helps reduce outage impacts for customers, enabling swift restorations.
- More than **40,000 power poles** have been hardened.
- Approximately **50%** of primary distribution power lines are now underground.

Third Party Attachments

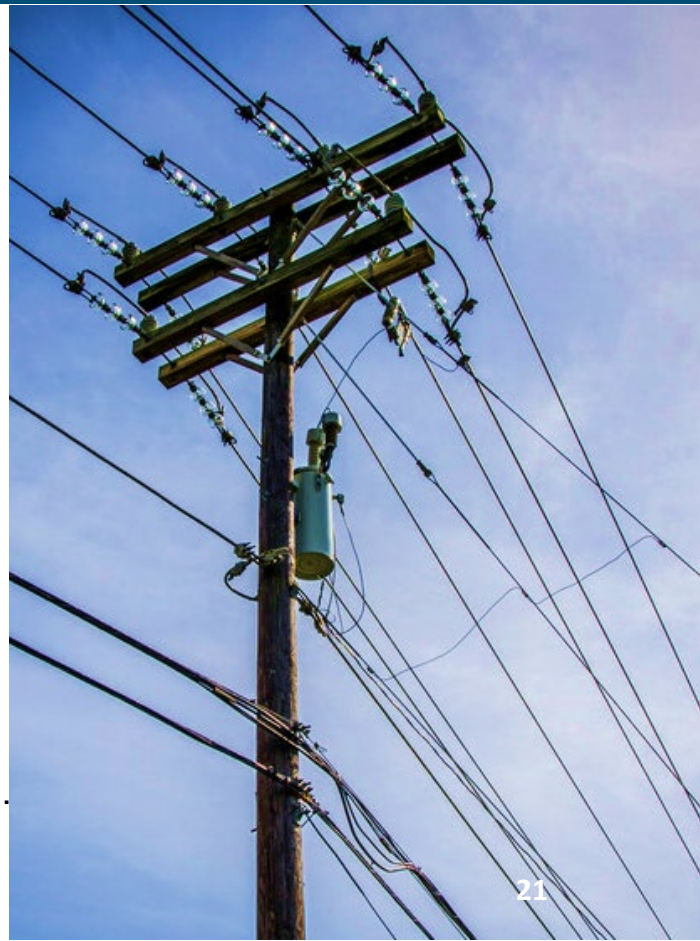
Joint-Use Equipment

Joint Use Equipment in DEF:

- Approx 1,000,000 poles throughout our distribution system.
- 800,000 have third-party attachments (80%).
- 16,000 are not owned by Duke Energy (1.6%).

Joint equipment usage coordination:

- Blue sky – Work with joint use affiliate to schedule equipment replacement.
 - Duke Energy maintains after hour phone numbers for emergency requests (vehicle accidents, etc.).
 - The third-party affiliate is contacted to inform them of work completion.
- Red sky – Attempt to contact joint use affiliate to inform them of restoration efforts.
 - Damaged equipment is removed / replaced during restoration.
 - Does not impact our restoration times.





Lessons Learned



Storm Surge Impacts on Underground Equipment



Partnership with Local Officials

- Working with the Fire Marshall and coordinating with local Fire Chiefs on restoration efforts. Ensuring adequate resources were available
- Working with the Building Inspectors on deenergizing dwellings that had been damaged
- Road closures and debris removal
- Law Enforcement
- Daily meetings to provide restoration updates to City Officials



Mobilizing the Command Center and Opening Pop-up Customer Care Kiosks

- Morning meetings with Pinellas County Sheriff's
- Meet with Fire Chiefs
- Providing customers with water and snacks
- Making resources available for customers to speak with face to face to discuss reconnection and disconnection options

