Hurricane Preparedness Workshop

To the Florida Public Service Commission

Ed Mora, P.E.
Director, Energy Control Center
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Vegetation Management

- Distribution
  - Four-year cycle for feeders and laterals
  - Completed year two of the cycle in 2022
  - 1,464 miles trimmed
  - Additional VM on 683 miles trimmed – Storm Protection Plan (SPP)
  - 548 hazard trees removed
- Transmission
  - Two-year cycle on Bulk (230kV, 138kV)
  - Three-year cycle on non-Bulk (69kV, 34kV)
  - 514 miles trimmed
  - 6,683 acres of right-of-way mowed

Pole Inspections

- Distribution
  - Eight-year cycle
  - 35,779 wood poles inspected
  - 1,410 poles failed
  - 1,584 poles replaced

- Transmission
  - Eight-year cycle
  - 398 poles inspected
  - 130 poles failed
  - 717 poles replaced
    - 191 Non-SPP
    - 526 SPP
  - Other pole/circuit inspection methods: aerial infrared and ground patrols.

SPP, Hardening & Reliability Projects

- Hurricane Ian - Zero outages a result of failed assets that were hardened or undergrounded through SPP.
- 50.3 miles of distribution laterals undergrounded.
- 526 transmission structures hardened.
  - 87.0% of the Transmission System is non-wood
- 1,167 distribution pole replacement/ upgrades.
- 38 three-phase reclosers and 202 single-phase reclosers installed.
- 575 new fuse installations/coordination.

Always On Vision – Customer Experience

- Tampa Electric aspires to build and operate a safe, clean, modern grid that is always on.
- Our system storm hardening and grid modernization programs are designed to minimize outages, outage durations and affected customer counts.
- Developing a private Long-Term Evolution (LTE) communication network designed to enable our Fault Location Isolation Service Restoration (FLISR) control and distribution automation system.

Create an "Always On" customer experience

Leverage asset management to eliminate outages and improve efficiencies

Build additional grid and telecommunications capacity

Fully automate the grid

Bearss Operations Center

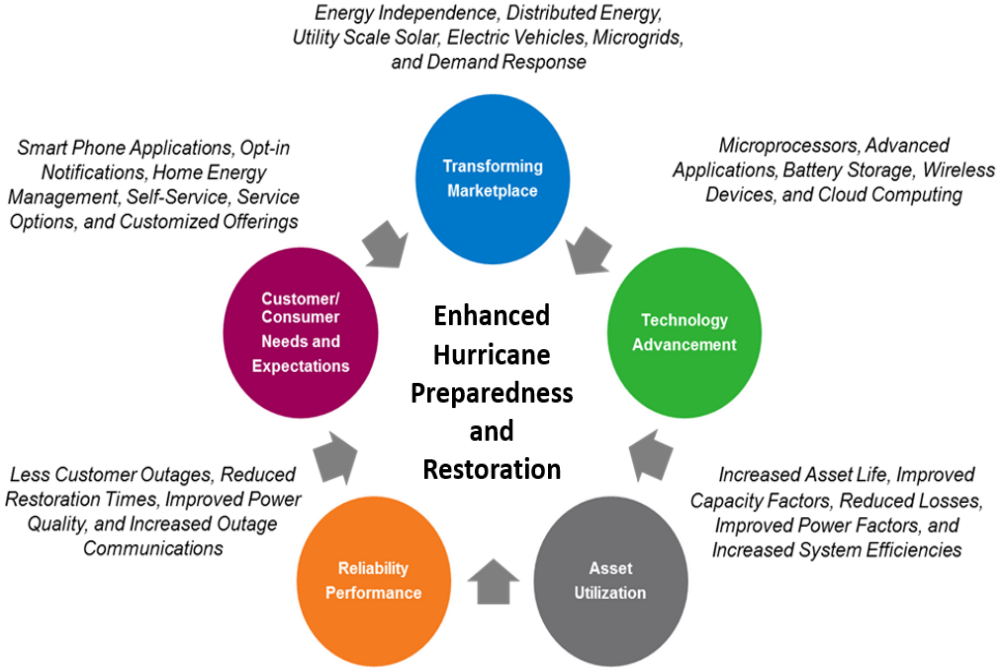
- Tampa Electric's new Energy Control Center. Completion projected for 2025.
- Location moved from Zone "B" evacuation area to 12 miles inland.
- Designed for enhanced restoration capabilities to decrease the number of outages and to improve storm control resiliency.
- Modern facility with enhanced capabilities to maximize visibility, control and performance of the grid.
- Enhance our ability to provide a more adaptive and resilient grid that is "Always On".

Storm Plan & Mock Drill

- Storm Plan changes:
  - Automated Resource Callout System (ARCOS) is fully functional for foreign crew tracking.
  - Continue enhancement efforts of the new Advanced Distribution Management System (ADMS).
  - Signed service level agreements with multiple turnkey logistics providers (base camps).
- Annual mock hurricane drills:
  - April and May 2023
  - Hurricane preparedness mock storms conducted to promote use of personalized emergency response procedures.
  - Incident bases reviewed and updated.
  - Develop communication strategy for amateur radio protocols to provide backup communications ability.

ADMS Provides Improved Storm Capabilities

- 2023 upgrade
- Upgrade effectively provides improved:
  - Switching Orders
  - Archive performance
  - Ability to move forward with Distributed Energy Resource Management
  - Ability to move forward with decentralized dispatching
- Links in power on / power off notifications- saving our customers the need for our customers to call.
- Improves our reporting capabilities for Emergency Operations Centers (EOC) and FPSC purposes.



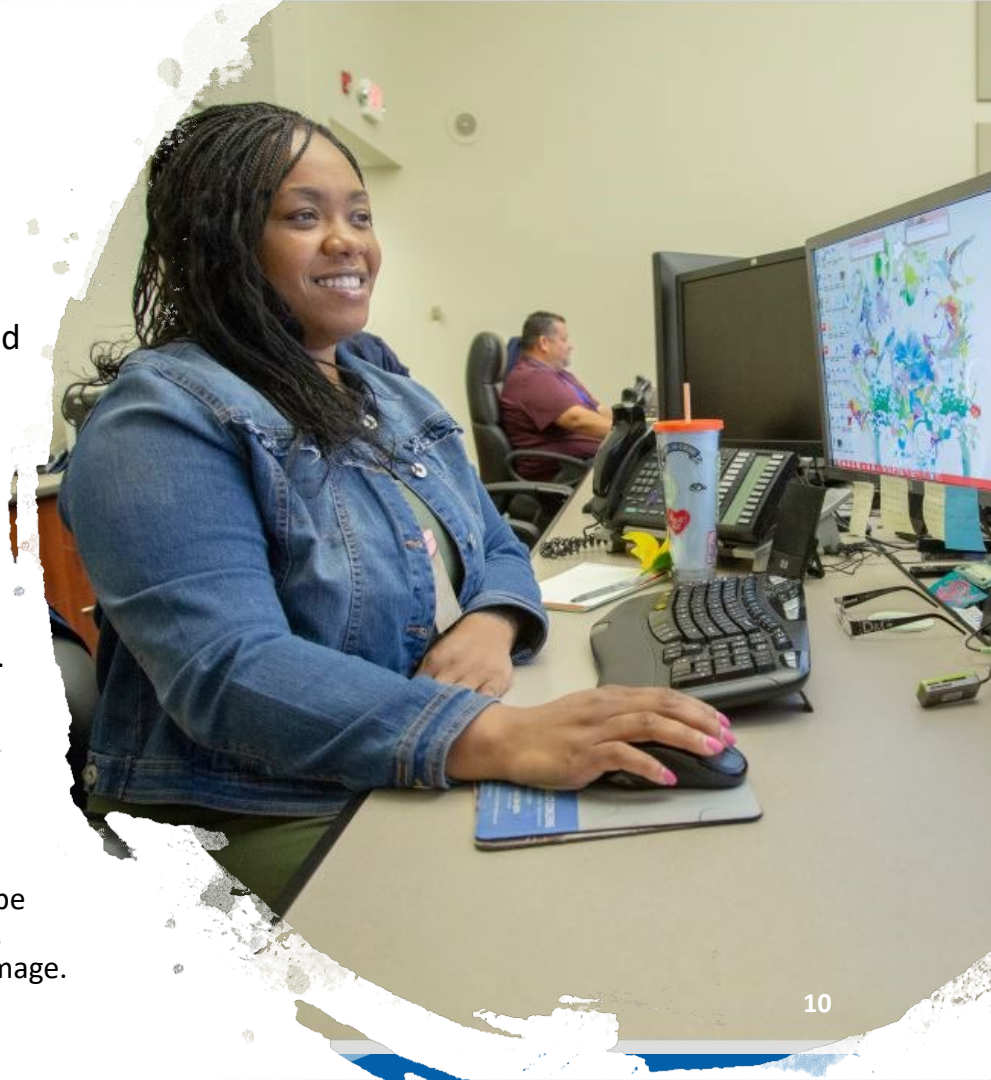
Mutual Aid & Readiness Outreach

- Mutual aid agreements:
  - One with Southeastern Electric Exchange (SEE)
  - One with Edison Electric Institute (EEI)
  - SEE & EEI give access to over 100 utilities
  - Agreements with municipalities within Florida
  - Robust, storm-tested mutual assistance group
  - With company affiliates whose contact center representatives assist in processing a portion of the outage call traffic during electric service restoration
- Storm readiness outreach:
  - Discuss preparedness and review of critical facilities with County Emergency Management Agencies. List of critical facilities updated for 2023.
  - Participated in numerous community outreach events promoting hurricane preparedness.
  - Staffing plans annually reviewed for each County and Municipality EOCs served; personnel prepared to report to assigned EOC, as requested.
  - Templates created for external communications (pre-storm, post-storm, and generator safety).

Customer Communication Campaigns

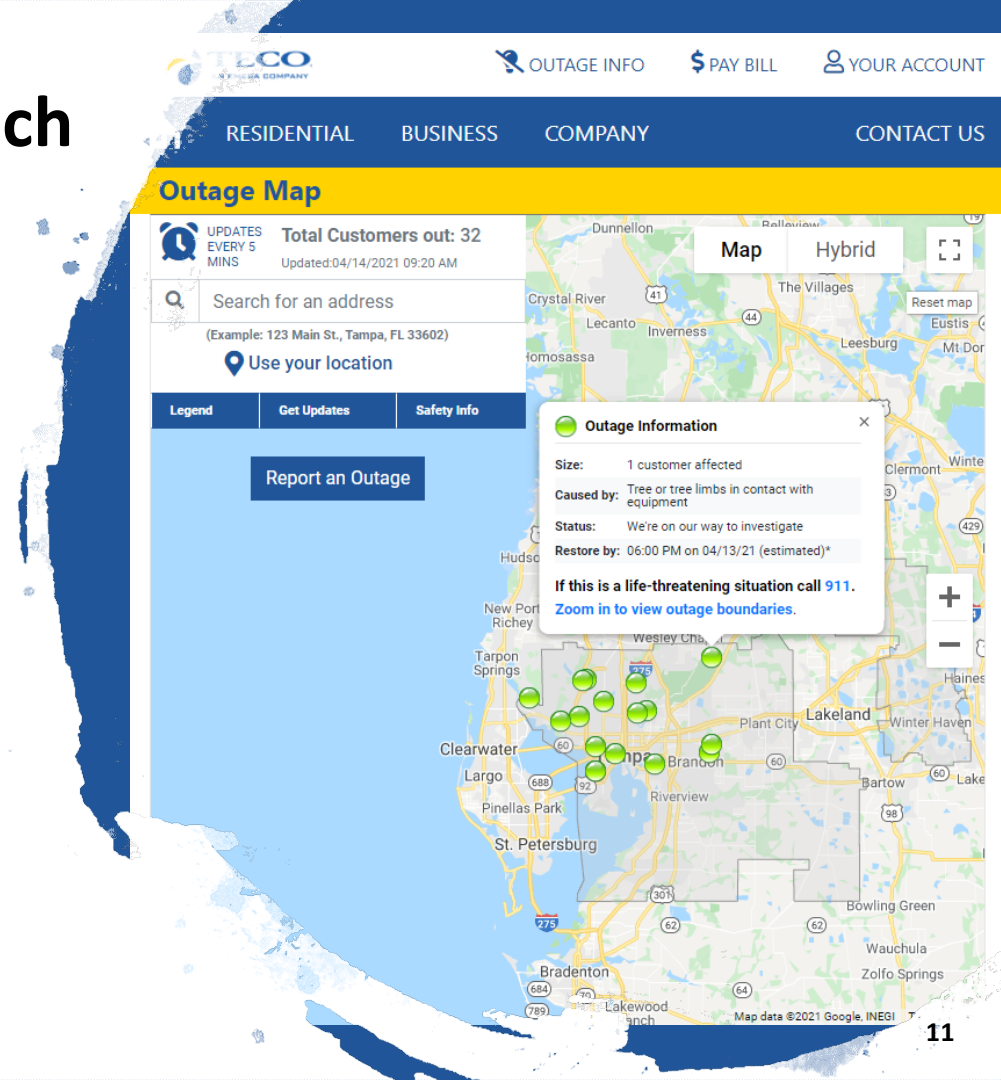
Communications are available across multiple channels including phone calls, emails, and text messages, and languages (English or Spanish) per customer preference. Also, through social media, our online customer portal, and public websites.

- **Outage Reporting**
  - Automated IVR, 2-way text messaging, online customer portal/outage map, and live customer service agent.
- **Proactive Outage Communications**
  - Acknowledgement that we are aware of a new outage.
  - Provide known information including initial time of restoration, # of customers impacted, cause, and status.
- **Restoration Notifications**
  - When ETR changes by more than 2+ hours.
  - Updated cause or status (if known).
  - When an outage has been restored.
  - Ability to re-report outages, if necessary.
- **General Communications During Hurricanes**
  - Pre-Hurricane prep messaging reminding customers to be ready and what our process is leading up to restoration.
  - Post-hurricane messaging advising we are assessing damage.



Continued Customer Outreach

- Customer outreach during restoration:
  - Continuous updates to Tampa Electric's outage map to improve communication to customers.
  - Outage map continually updated throughout restoration about damage assessment, restoration progress percentage, ETRs, customer safety and outage reporting messages.
  - Twitter, Facebook, YouTube, Blog, email, media coverage with outage reporting solicitations, wire down & generator safety, restoration progress, restoration videos, and thank you messages.



Lessons Learned

- Added more field and dispatching resources to our wire down team to address life safety issue promptly.
- Train internal and external management teams to operate incident bases and base camps.
- Implemented Lessons Learned
  - Mobile safety orientation for greater efficiency.
  - New logistics contracts with third party base camp providers (provides flexibility based on storm conditions).
  - Outage map enhancement project.

Questions?

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