Hurricane Preparedness Workshop

Florida Public Service Commission Update

Archie Collins
President and CEO
May 21, 2024

TECO
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AN EMERA COMPANY

Our Focus

- We prepare year-round for severe weather.
- We are enhancing assets and leveraging technology to achieve a stronger, smarter grid – an intelligent grid that has improved visibility and enables faster restoration.
- We strive to continuously improve storm preparation and readiness.
- We aim to be good partners – all the time.
- Our employees recognize that customers count on us every minute of every day – and that this responsibility is amplified during storm season.

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SPP Investments Increase Resilience AND Improve Reliability

- Distribution system is ~52% underground today, with a goal to move ~100 miles of overhead assets in outage prone areas underground each year.
- 89.5% of the transmission system is non-wood – goal is to migrate to 100% in the next few years.
- Raising low lying substations that are located in areas vulnerable to storm surge.
- The vast majority of hurricane related outages are the direct result of tree damage. Over the past couple of years, the vegetation management program has been enhanced – and the improvements are showing up in the day to day reliability performance.

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Vegetation Management

DISTRIBUTION

- Historically maintained a four-year cycle for feeders and laterals.
- However, that has increased in recent years. In 2023, 2,898 miles trimmed.
- 912 hazard trees removed in 2023.

TRANSMISSION

- Two-year cycle on Bulk (230kV, 138kV)
- Three-year cycle on non-Bulk (69kV, 34kV)
- 536 miles trimmed in 2023
- 6,251 acres of right-of-way mowed

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Pole Inspections

DISTRIBUTION

- Eight-year cycle
- 36,601 wood poles inspected
- 1,363 poles ‘failed’
  - 3.24% failure rate
- 787 poles replaced in 2023

TRANSMISSION

- Eight-year cycle
- 448 poles inspected
- 141 poles ‘failed’
- 628 poles replaced

Pole/circuit inspection methods include aerial infrared and ground patrols.

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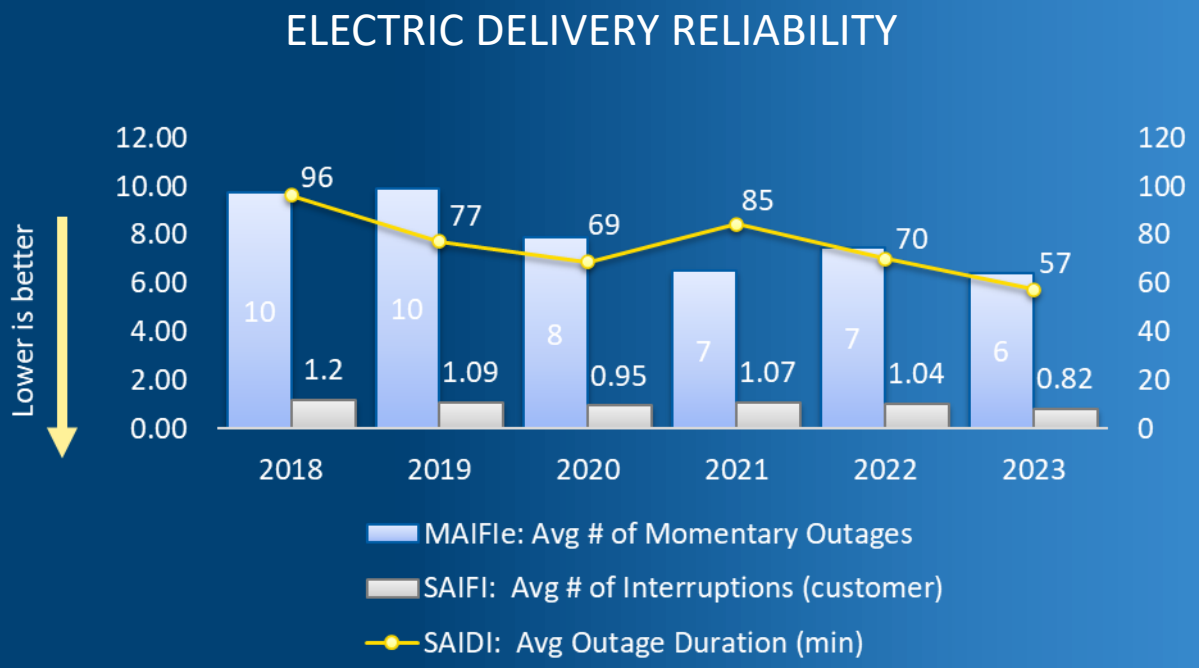
Smart Investments Yield Reliability Improvements



Improvements:
-41% SAIDI
-34% MAIFIe
-32% SAIFI

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Hurricane Ian vs Hurricane Irma

- A comparison of Hurricane Irma (2017) vs Hurricane Ian (2022) provides a good indication of how recent investments have yielded demonstrable customer benefit.
- Despite worse weather during Ian (8.5 hrs of sustained winds exceeding 40 mph winds vs. 1.5 hrs during Irma), restoration for Ian was completed one day quicker.
- SPP hardened circuits experienced 57% less outages during Ian vs Irma.
- There were zero pole or wire failures on all circuits that were hardened via the SPP program.
- Not surprisingly, there were no outages on the laterals that were undergrounded as part of SPP.

Striving For Continuous Improvement

- After all hurricanes – especially recent hurricanes like Idalia and Ian – Tampa Electric performs a post-storm review to identify opportunities to improve. Recent learnings include:
  - Better training is required with internal and external management teams to operate incident bases and base camps.
  - We would benefit from more accurate pre-storm weather information that focuses on storm surge (vs winds only).
- We have implemented the following changes in response:
  - Mobile safety orientation for mutual aid crews is now fully functional.
  - New logistics contracts with third party base camp providers and hotel disaster booking service. This now provides a one-stop shop for accommodations.
  - We have revised Substation operations and engineering storm surge plans.
  - Blue Skies – a Florida based meteorology group – has been retained throughout storm season to improve pre-storm weather data (in addition to our year round service provider).

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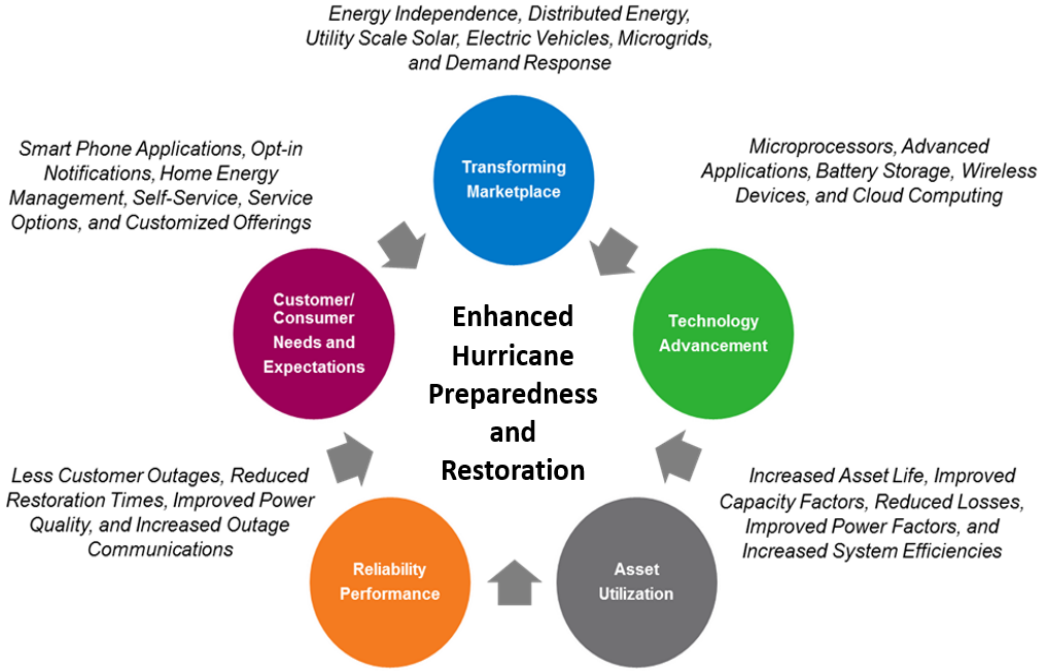
Advanced Distribution Management System Improves Restoration

- 2023 upgrade
- Upgrade effectively provides:
  - ➢ Improved switching orders
  - ➢ Ability to move forward with Distributed Energy Resource Management
  - ➢ Ability to move forward with decentralized dispatching
- Interfaces with power on/power off notifications - eliminating the need for customers to call us.
- Improves our reporting capabilities to Emergency Operation Centers (EOC) and the FPSC



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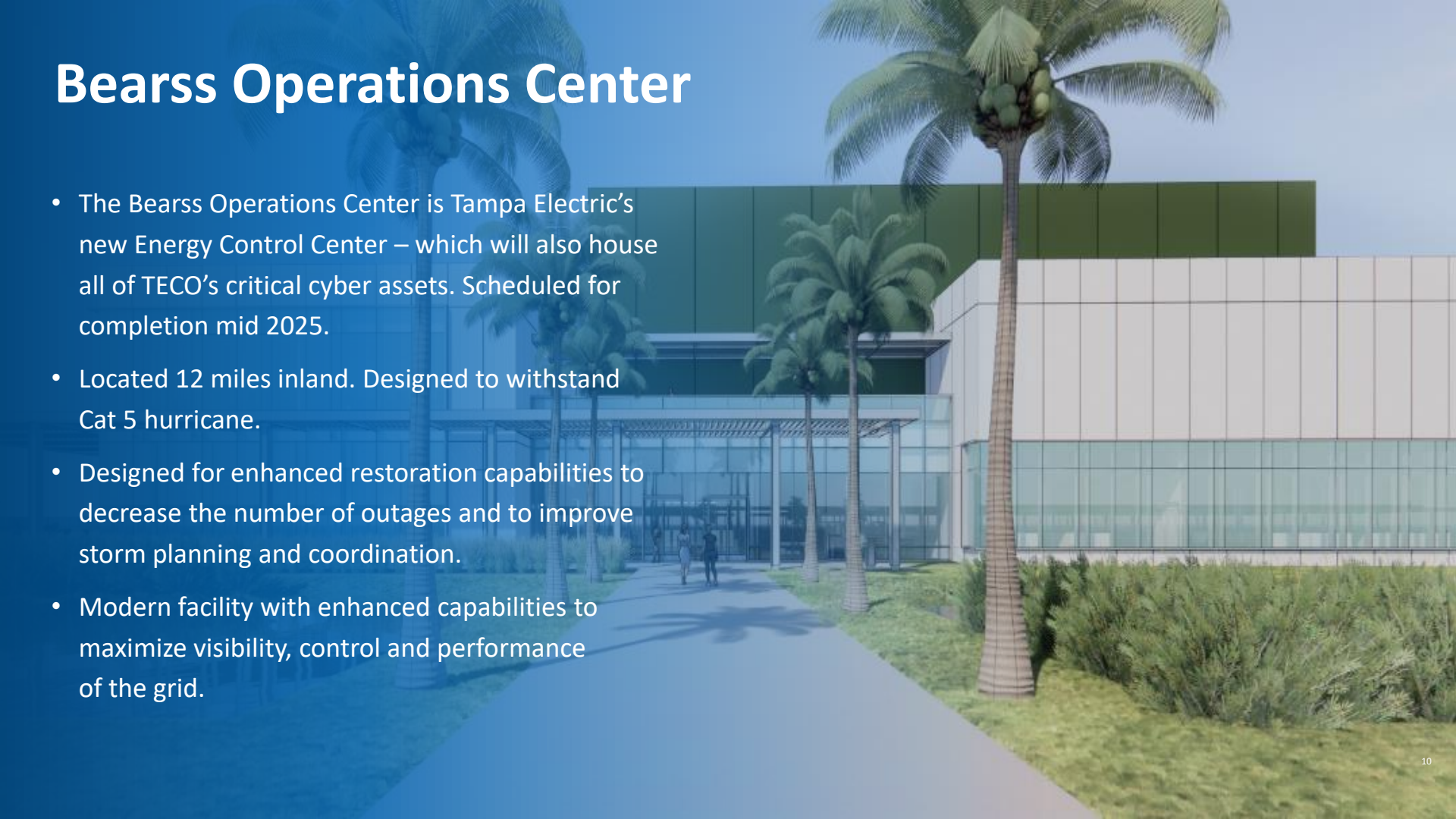
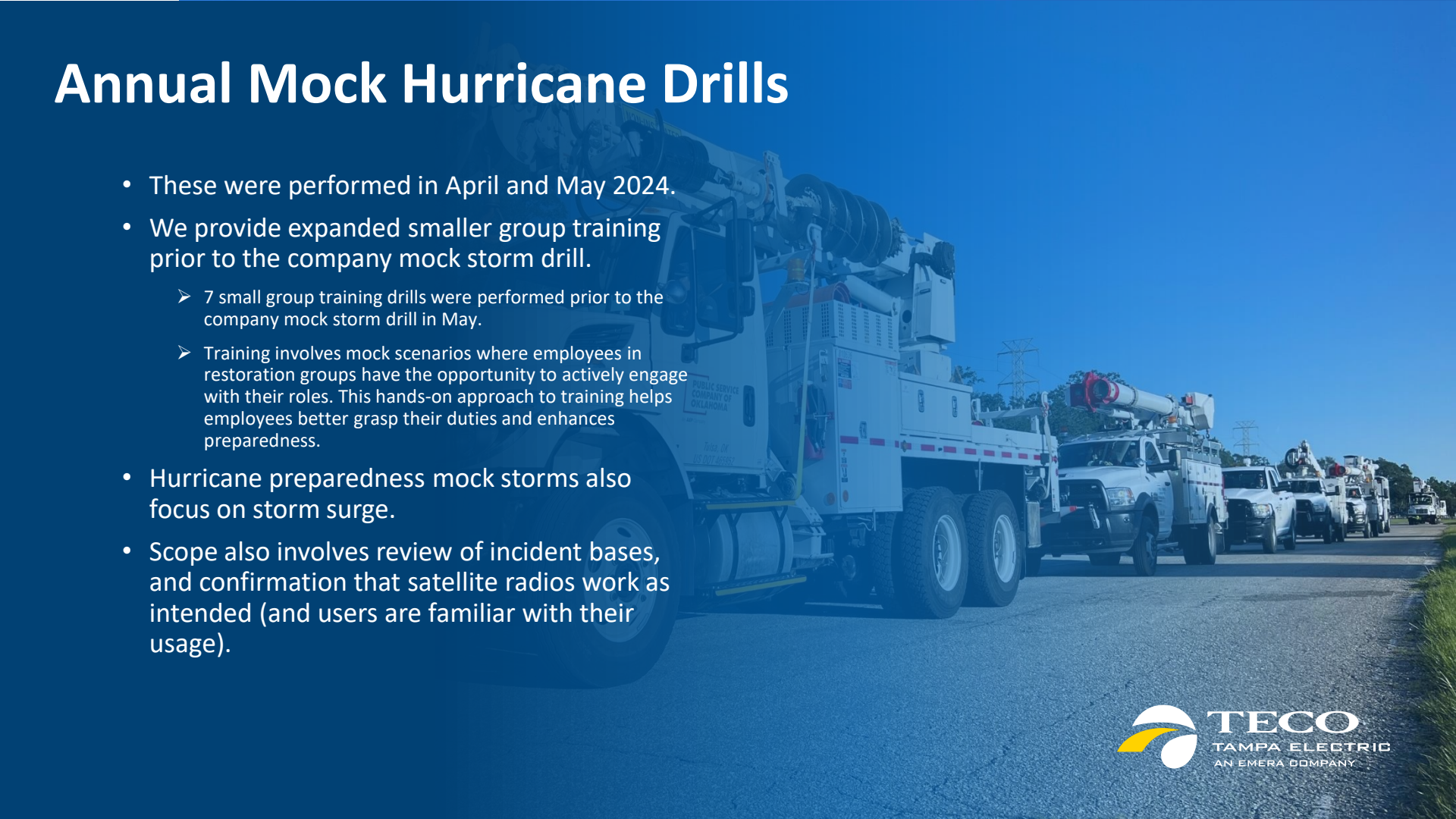
Bearss Operations Center

- The Bearss Operations Center is Tampa Electric's new Energy Control Center – which will also house all of TECO's critical cyber assets. Scheduled for completion mid 2025.
- Located 12 miles inland. Designed to withstand Cat 5 hurricane.
- Designed for enhanced restoration capabilities to decrease the number of outages and to improve storm planning and coordination.
- Modern facility with enhanced capabilities to maximize visibility, control and performance of the grid.



Annual Mock Hurricane Drills

- These were performed in April and May 2024.
- We provide expanded smaller group training prior to the company mock storm drill.
  - 7 small group training drills were performed prior to the company mock storm drill in May.
  - Training involves mock scenarios where employees in restoration groups have the opportunity to actively engage with their roles. This hands-on approach to training helps employees better grasp their duties and enhances preparedness.
- Hurricane preparedness mock storms also focus on storm surge.
- Scope also involves review of incident bases, and confirmation that satellite radios work as intended (and users are familiar with their usage).



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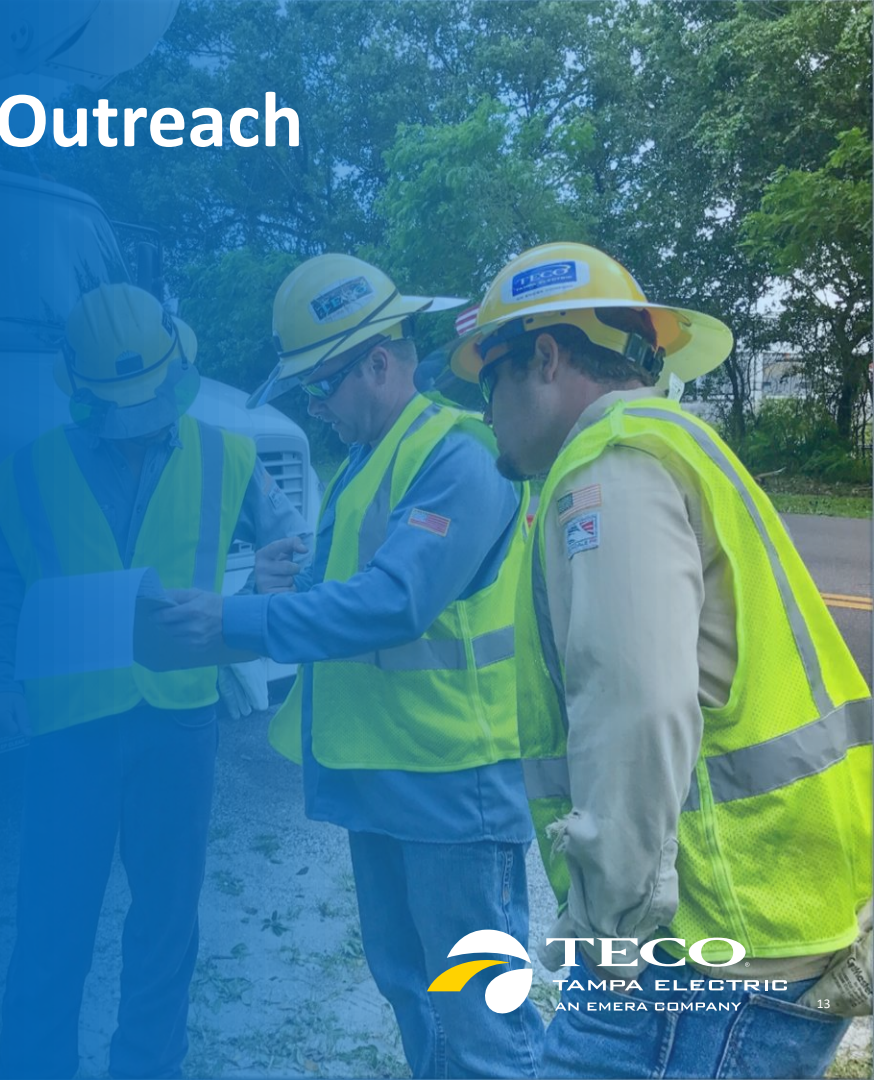
Mutual Aid Alliances

- Mutual aid agreements:
  - Members of the Southeastern Electric Exchange (SEE).
  - Members of the Edison Electric Institute (EEI).
  - SEE and EEI provide access to over 100 utilities.
  - These are robust, storm-tested mutual assistance groups.
  - We also have agreements in place with municipalities within Florida.
  - Also affiliated with third parties that provide any needed contact center support throughout a significant storm event.

Storm Readiness Community Outreach

- We are proud to have been recognized in 2024 as ‘Storm Ready’ by the National Weather Service.
- We review and update the list of critical facilities with County Emergency Management agencies annually.
- We review staffing plans annually for each County and Municipality EOC that we support. Every TECO employee has a storm assignment.
- We regularly participate in numerous community outreach events promoting hurricane preparedness.
- We have both internal and external communication plans for multiple levels of severity for all three stages of severe weather - including pre-storm, during-storm and post-storm. Safety campaigns are customized to fit the intensity and type of storm.



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Customer Communication Campaigns

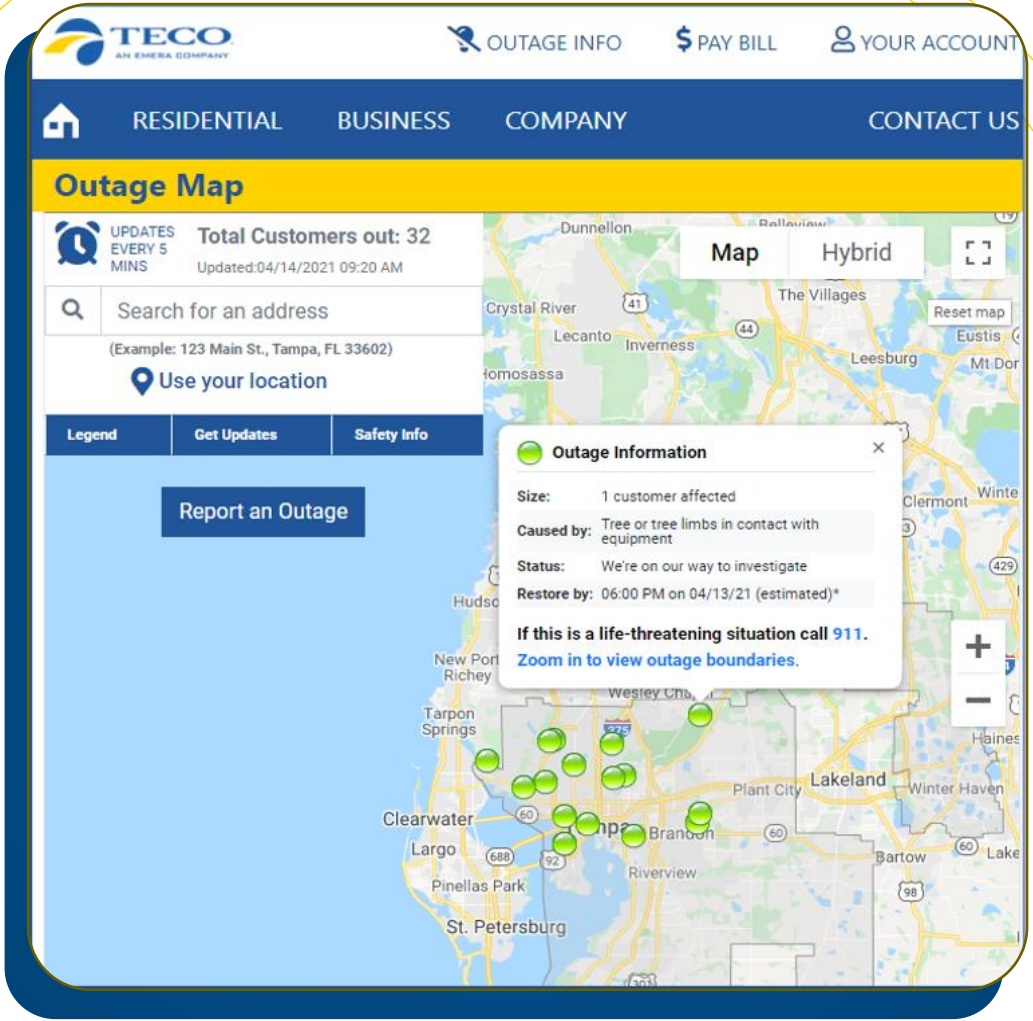
Communications are provided across multiple channels (phone calls, emails and text messages). In addition, customers receive information in preferred language (English or Spanish). Information is also available through social media, our online customer portal, and public websites.

- **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.
  - We provide known information - including initial time of restoration, # of customers impacted, cause, and status.
- **Restoration Notifications**
  - Provided when ETR changes by more than 2+ hours.
  - Confirmation when power has been restored.
- **General Communications Throughout 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.

Customer Outreach

OUTREACH DURING RESTORATION

- We provide continuous updates to Tampa Electric's outage map throughout restoration to keep customers informed.
  - Messages include damage assessment, restoration progress percentage, ETRs, customer safety, and outage reporting messages.
- We utilize social media (Twitter, Facebook, Nextdoor), our website (homepage sliders, blog), e-newsletters, and media coverage to provide restoration progress, wire down safety messaging, generator safety alerts, and thank you messages.



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Questions?