



# Hurricane Preparedness Workshop

**To the Florida Public Service Commission**

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# Vegetation Management

- Distribution
  - Four-year cycle for feeders and laterals
  - Completed year three of the cycle in 2019
  - 1,665 miles trimmed
  - 3,983 hotspots trimmed
- Transmission
  - Two-year cycle on Bulk (230kV, 138kV)
  - Three-year cycle on non-Bulk (69kV)
  - 523 miles trimmed
  - 2,554 acres of right-of-way mowed



# Pole Inspections

- Distribution
  - Eight-year cycle
  - 38,940 poles inspected
  - 1,726 poles failed
  - 3,376 poles replaced
  - 775 reinforced
- Transmission
  - Eight-year cycle
  - 808 poles inspected (groundline)
  - 116 poles failed (groundline)
  - 144 poles replaced (groundline)
  - Other pole/circuit inspection methods: aerial infrared and ground patrols.



# Hardening & Reliability Projects

- 149 transmission structures hardened.
- 110 distribution live-front critical switchgears replaced with dead-front, submersible gears.
- 58 three-phase reclosers installed; 127 single-phase reclosers installed.
- 1,249 new fuse installations/coordination
- 404 lightning arrester installations/repairs



# Storm Plan & Mock Drill

- Storm Plan changes:
  - ARCOS is fully functional for foreign crew tracking.
  - We have plans in place should we experience a reduction in support from foreign crews due to the Coronavirus but based on calls with other groups in the industry, we do not anticipate that happening.
  - Utilizing industry standard guidelines from the ESCC on mutual assistance and participating in working groups.
- Annual mock hurricane drill changes:
  - Incident bases reviewed and updated as necessary
  - Smaller-scale, local storm preparation exercises planned.

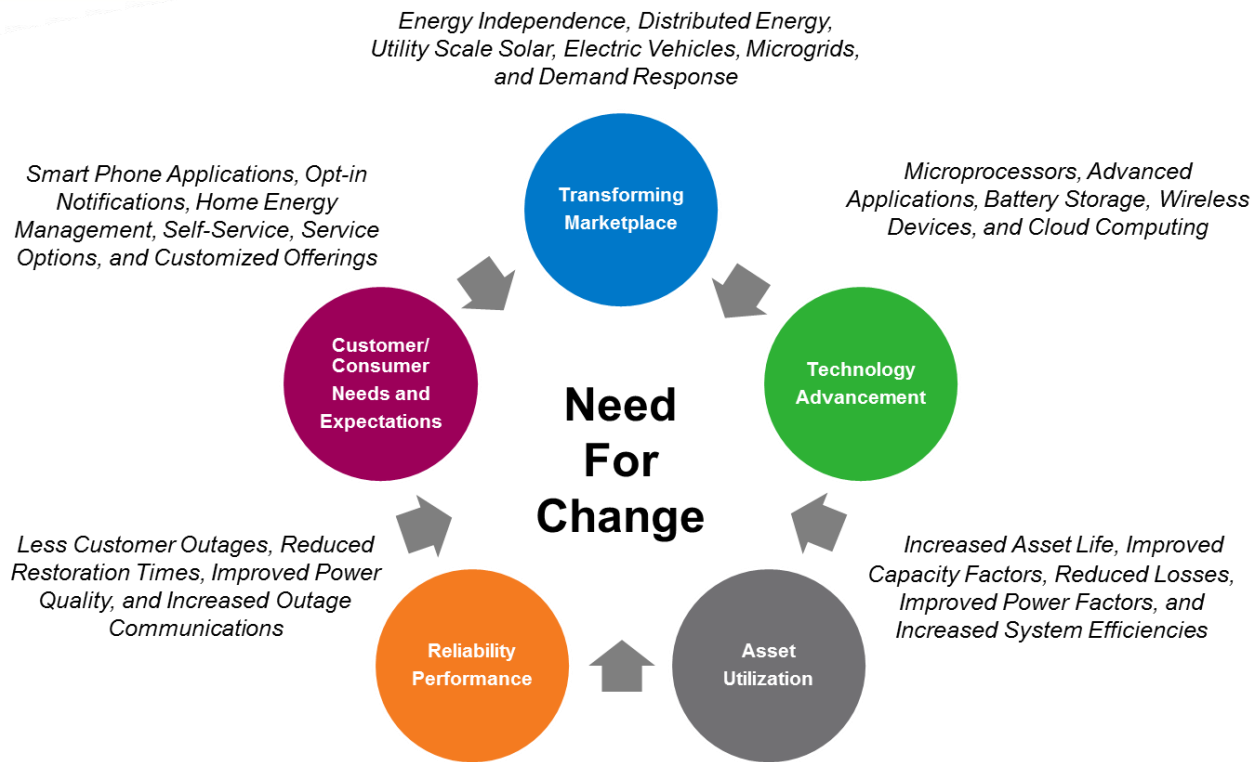


# Mutual Aid & Readiness Outreach

- Mutual aid agreements:
  - One with Southeastern Electric Exchange (SEE)
  - One with Edison Electric Institute (EEI)
  - Seven with municipalities within Florida
  - SEE & EEI gives access to over 100 utilities
  - Robust, storm-tested mutual assistance group
- Storm readiness outreach:
  - Outreach sessions to Emergency Management officials and first responder agencies conducted in 2019 for Hillsborough and Polk Counties.
  - List of critical customers updated for 2020.
  - In-person sessions will not be held in 2020 due to the Coronavirus pandemic response, but communication lines have been opened remotely.



# Advanced Distribution Management System (ADMS)



# Customer Outreach

- Customer outreach during restoration:
  - Significant updates to Tampa Electric's outage map in 2019 and 2020 to improve communication to customers
  - Outage map continually updated throughout restoration about damage assessment, restoration progress percentage, Estimated Times of Restoration (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.

The screenshot displays the Tampa Electric Emergency Broadcast System website. At the top, there is a navigation bar with the TECO logo, a search bar, and options for language and user account management. Below the navigation bar is a banner for the Tampa Electric Emergency Broadcast System, stating that significant strides are being made to bring customers back in service by the end of the weekend. The main content area features a navigation menu with options for Residential, Business, and Company, and a 'Connect to Us' link. Below the menu is a photograph of a building at night. The central focus is the 'Outage Map' section, which includes a title, a description of power outages within the service area, and a map showing the number of customers affected by outage. The map uses color-coded pins to indicate the severity of the outage: Large (100+), Medium (51-100), Small (1-100), and Very Small (1-100). A legend below the map provides details for each category. To the right of the map is a text box explaining the restoration process, emphasizing safety and the goal of restoring service as quickly as possible. Below the map, there is a section for 'Power out?' with a list of options for reporting an outage, including online reporting, phone calls, and social media. At the bottom right, a green box displays the 'Percentage of customers with power' as 59%.

Sign in or Register Your Account

Search site with Google

Select Language

Tampa Electric Emergency Broadcast System

We are making significant strides to bring many customers back in service every day and expect almost all customers to be restored by the end of the weekend. Thank you for your patience.

Residential Business Company Connect to Us

HOME / RESIDENTIAL / POWER OUTAGES / OUTAGE MAP

## Outage Map

Power outages within our service area\*

Map data updated every 5 minutes, last updated: 3/11/17 8:11 AM

Number of customers affected by outage:

- Large (100+)
- Medium (51-100)
- Small (1-100)
- Very Small (1-100)

Service Area

Map

Number of customers without power: 299,066

\* Information is an estimation of outages and location within our service area.

We are estimating that essentially all customers will be back in service by the end of this weekend. Due to the significant rebuilding of the system required, some customers may take longer to restore.

To restore service safely, efficiently and as quickly as possible, restoration efforts must be prioritized in a systematic manner. We are committed to public safety, fair enforcement and essential services, as well as working outages that impact the largest numbers of customers. If smaller outages can be completed quickly, those are working first. Smaller and more complex outages will take longer to resolve.

We have over 200,000 man hours of work to repair the damage to get customers back in service. We understand customers are looking for specific restoration information to plan and we will work to provide that information as restoration progresses and further damage is assessed.

Visit Us Often

### Power out?

Choose from any of these convenient options to let us know:

- Enroll in [tecoaccount.com](#), and report your outage with one click.
- Report your outage online.
- Sign up for Power Updates through [tecoaccount.com](#). Once you're signed up, you can text OET to 35069 to report future outages or UPDATE for updates.
- Call 1-877-588-7676 to report your outage at any time.

Percentage of customers with power

59%



# Lessons Learned

- More resources for wires down & streamline process.
- Train internal and external management teams to operate additional incident bases.
- Develop enhanced granularity on ETRs to meet customer expectations.
- Implement technology to gather more frequent damage assessment and restoration data from field and incorporate into Outage Management and Work/Resource Management Systems more efficiently.
- Use better technology to enhance tracking of crews and progress.
- Streamline outage communication technologies.
- Improve storm documentation and invoice review process.

