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.
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.
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.