The Florida Public Service Commission’s Multi-faceted Approach to Storm Hardening

A Presentation for the NARUC Critical Infrastructure Committee

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November 11, 2018
Overview

- Background
- Legislative and Florida Public Service Commission (FPSC) Actions
- FPSC’s Multi-faceted Approach to Storm Hardening
- FPSC Outreach
- 2017-18 FPSC Hurricane Review
Background

- Reliable electric service is the cornerstone of Florida’s economy.

- The Legislature has charged the FPSC with ensuring the provision of adequate electricity at a reasonable cost.

- Damages from the 2004 & 2005 hurricanes resulted in a strong public outcry to strengthen electric utility infrastructure.
2004 Hurricane Paths
Legislative Actions

➢ In 2006, the Legislature required the FPSC to:

✓ Conduct a review to determine what should be done to enhance the reliability of Florida’s transmission and distribution grids during extreme weather events.

✓ The FPSC initiated a multi-faceted approach to hardening the electric infrastructure. The FPSC filed its review with the Legislature on March 1, 2007.

FPSC Actions

- In July 2007, the FPSC filed a second report with the legislature detailing its approach to storm hardening.

- Goal of storm hardening is to balance the desire to minimize storm damage, reduce outages and restoration time while mitigating excessive rate increases to customers.

FPSC Actions

The July, 2007 report concluded that:

- Floridians should maintain a high level of storm preparedness.

- Strengthening Florida’s electric infrastructure should include a wide range of activities that will take years to complete.

- A need remains to develop additional planning tools to identify circumstances where undergrounding is appropriate as a means of storm hardening.

FPSC’s Multi-faceted Approach

- Annual hurricane preparedness briefings.
- Formal pole inspection and reporting.
- Additional distribution reliability reporting for IOUs, Munis, and Coops.
FPSC’s Multi-faceted Approach

- Ten storm preparedness initiatives, including:
  - Enhanced vegetation management.
  - Forensic data collection.
  - Collaborative research.
  - Increased coordination with local governments.
FPSC’s Multi-faceted Approach

- New rule to place distribution facilities in readily accessible and safe locations.
- New rules that require IOUs to file storm hardening plans for review every 3 years.
- New rules and tariffs to promote the undergrounding of distribution facilities.
FPSC Outreach

Since 2006, the FPSC has conducted annual hurricane preparedness meetings with Florida’s Investor-Owned Electric Utilities.

- Report of inspections, maintenance and repairs completed and scheduled.
- Changes made to hurricane drills and to storm preparedness plans.
- Status update on storm hardening plans.
- Identify any lessons learned if the utility was involved in any relief efforts in other areas.
- Current utility outreach programs.
FPSC Outreach

- In 2017, the Presidents and CEOs of the five IOUs provided an overview on their utilities’ hurricane preparedness.

- Focus was on customer outreach, storm hardening efforts, and lessons learned from hurricanes Hermine and Matthew.

- The current and past presentations are available on the FPSC’s website.

http://www.floridapsc.com/ElectricNaturalGas/HurricanePreparationWorkshops
FPSC Outreach

➢ The FPSC’s website contains links to resources to help residents prepare for storm season.

http://www.floridapsc.com/ConsumerAssistance/HurricaneHouse


➢ The FPSC also provides hurricane preparation material to customers during customer meetings and consumer outreach events.
2017-18 FPSC Hurricane Review

➢ Despite the goal of reducing outages, even storm hardened facilities can suffer damage due to events beyond a utility’s control.
2017-18 FPSC Hurricane Review

- On October 3, 2017, the FPSC opened Docket No. 20170215-EU to review electric utility storm preparedness and restoration actions associated with recent hurricanes.

- The objective was to identify potential damage mitigation options and restoration improvements. The FPSC also critically evaluated its rules and processes for potential improvements.
The FPSC collected data from all 57 utilities, customers, and other stakeholders relating to storm preparation and restoration for Hurricane Irma and other storms.

Over 700 customer comments received through portal on FPSC website. Common themes were frustration with timely communication, cost responsibility for restoration, and support of solar distributed generation.
The FPSC’s findings included:

- Florida’s aggressive storm hardening programs are working.
- The primary causes of power outages came from outside the utilities’ rights of way including falling trees, displaced vegetation, and other debris.
- The length of outages was reduced markedly from the 2004-2005 storm season.
- Hardened overhead distribution facilities performed better than non-hardened facilities.
FPSC’s findings continued:

- Very few transmission structure failures were reported.
- Underground facilities performed much better compared to overhead facilities.
- Rising customer expectations are that resilience and restoration will have to continually improve.

The Commissioners directed the staff to collect additional details regarding:

- Meetings with local governments regarding vegetation management and the identification of critical facilities.
- Alternatives considered before selecting a particular storm hardening project.
- The impact of non-electric utility poles on storm recovery.
- Electric utility targeted undergrounding projects.
The Commissioners also directed the staff to initiate management audits focused on:

- The procedures and processes used by the IOUs to estimate and disseminate outage restoration times following a major storm.

- The procedures and processes used by the IOUs to inspect and schedule maintenance on transmission structures.
Questions?

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