

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: May 19, 2005

TO: Director, Division of the Commission Clerk & Administrative Services (Bayó)

FROM: Division of Economic Regulation (McNulty, Breman, Lee)
Office of the General Counsel (Keating)

RE: Docket No. 050058-EI – Request to exclude December 26, 2004 outage event from annual distribution service reliability report by Tampa Electric Company.

AGENDA: 05/31/05 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\050058.RCM.DOC

Case Background

Rule 25-6.0455, Florida Administrative Code, requires each investor-owned electric utility to file an Annual Distribution Service Reliability Report containing data that this Commission uses to assess changes in distribution reliability. Under subsection (2) of the rule, a utility may exclude specified outage events such as a storm named by the National Hurricane Center, a tornado recorded by the National Weather Service, ice on lines, and an extreme weather event causing activation of the county emergency operations center. In addition, under subsection (3), a utility may petition this Commission to exclude an outage event not specifically enumerated in subsection (2). However, the utility must “demonstrate that the outage was not within the utility’s control and that the utility could not reasonably have prevented the outage.” [Rule 25-6.0455(3), Florida Administrative Code.]

On January 25, 2005, Tampa Electric Company (“TECO”) filed a request for exclusion of outages associated with a wind event on December 26, 2004, pursuant to Rule 25-6.0455(3), Florida Administrative Code.

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Progress Energy Florida, Inc. ("PEFI") also filed on January 25, 2005, a request to exclude certain outages that occurred on December 26, 2004. PEFI's petition was assigned Docket No. 050060-EI, In Re: Request of Progress Energy Florida to exclude an Outage Event on December 26, 2004 from its Annual Distribution Service Reliability Report.

Unlike PEFI, TECO is not subject to a performance program. However, whether an outage event is included or not included in measuring TECO's electric distribution reliability may have consequences for the utility and its ratepayers in a future rate proceeding. No specific rate action is currently associated with approval or denial of TECO's petition.

The Commission has jurisdiction over this matter pursuant to Chapter 366, Florida Statutes, including Sections 366.04, 366.041, and 366.05, Florida Statutes.

Discussion of Issues

Issue 1: Should the Commission approve TECO's petition to exclude from its 2004 Annual Distribution Service Reliability Report 88 outage events that occurred due to a wind event on December 26, 2004?

Recommendation: No. TECO has not demonstrated that the outages on December 26, 2004, were not within its control and that it could not reasonably have prevented the outages because (1) sustained wind speeds in TECO's service area did not exceed industry construction standards and (2) TECO maintains control over its tree-to-power line clearance practices and can adjust those practices if it believes wind related outages are excessive. If, however, the Commission approves the petition, for ongoing comparative purposes TECO should show the effects of including and excluding the wind caused outages in a revised 2004 Annual Distribution Service Reliability Report. (McNulty, Breman, D. Lee)

Staff Analysis: TECO requests exclusion of certain reliability data due to a wind event on December 26, 2004.

Staff's analysis has five sections: Summary of TECO's Petition, Construction Standards, Tree-to-Power Line Clearances, Historical Wind Events, and Conclusion.

Summary of TECO's Petition

On December 26, 2004, at approximately 4:00 a.m. winds began impacting TECO's service area in Hillsborough County. The winds did not subside for 90 minutes. On December 26, 2004, TECO recorded 126 outages and 21,153 customer interruptions and issued a total of 73 crew jobs. Service was restored to all affected customers by 2:00 a.m. on December 27, 2004.

TECO's weather consultant, Mr. Sam Smith, a meteorologist with ImpactWeather, Inc., provided a description of the weather event including various reports of sustained wind speeds and gusts in the Tampa area where TECO provides service. The sustained wind speeds ranged from 11.5 mph at 2:53 a.m. to 41.4 mph at 4:36 a.m. The peak wind gust within TECO's service area was 51.8 mph. The highest sustained wind speed was 41.4 mph. Mr. Smith's analysis concludes that the weather event was abnormal due to wind speeds exceeding the recent five year history of recorded wind speeds for December by 20 mph.

In its petition, TECO initially sought to exclude all 126 outage events. However, in response to discussions between TECO and staff, TECO clarified that it is seeking to exclude only 88 outage events that were caused by the weather event and located within the area most affected by the weather. Excluding the 88 outage events reduces TECO's SAIDI for 2004 by 5.24 minutes. While not addressed in its petition, TECO is willing to provide a revised 2004 Annual Distribution Service Reliability Report with and without the 88 outage events of December 26, 2004, for ongoing comparative trending purposes.

Construction Standards

TECO's distribution construction standard for wind speed is based on compliance with the National Electric Safety Code, Section 24 "Grades of Construction." The construction standard is equivalent to designing for a sustained 60 mph wind. Sustained winds exceeding TECO's construction standard of 60 mph could result in outages caused by winds blowing poles down and stripping poles of the attached hardware.

On December 26, 2004, the peak wind gust of 51.8 mph within TECO's service area did not exceed the construction standard of 60 mph. The highest sustained wind speed was 41.4 mph. TECO provided no evidence of pole and fixture failure due to sustained high wind speeds. Rather, the outage events on December 26, 2004, were related to trees contacting power lines.

Tree-to-Power Line Clearances

Utilities implement changes to their respective vegetation maintenance programs that they determine appropriate at any time. All things being equal, the same level wind speed can cause more outages if a utility elects to allow less clearance between trees and power lines. The converse is also true. Thus, utilities exercise control over wind/tree related outages.

TECO's tree-to-power line clearance practice is currently based on various performance factors such as the number of outages and tree growth rates. TECO's practice can be characterized as performance based because TECO does not have a specific trim cycle. The amount of tree-to-power line clearance at any given time and place is a result of how aggressive TECO is in maintaining the maximum achievable tree-to-power line clearance. Thus, tree-to-power line clearances and the resulting number of outages are matters TECO already incorporates into its decisions. If the number of outages is excessive, based on TECO's internal review, then TECO may elect to implement a more aggressive line clearance practice. On the other hand, TECO may elect to keep its practice the same or relax its practice if the number of resulting outages is not excessive.

TECO's Annual Distribution Service Reliability Reports include the number of outages caused by all types of vegetation without separately listing the tree caused outages. TECO's 2002, 2003, and 2004 reports indicate that the number of vegetation caused outages and the percentage of total outages were 1,668 (14%), 2,003 (16%), and 1,880 (17%), respectively. This increasing trend does not appear to support TECO's claim of "beyond utility control." The 2004 data includes all vegetation caused outages that TECO seeks to exclude.

Staff believes that TECO's implementation of vegetation management practices demonstrates that TECO practices control over the number of outages resulting from winds that typically occur within its service area. If TECO believes the outages of December 26, 2004, were excessive in light of the wind speeds recorded for that day, then TECO can revisit its vegetation management practices.

Historical Wind Events

Staff asked TECO to provide reliability data for each day when wind speeds exceeded 40 mph for the past five years. TECO's data listed 32 days between January 1, 2000, and December 25, 2004, with wind speeds ranging from 52 to 72 mph within Hillsborough, Pasco, and Polk Counties. The peak wind speeds exceeded 60 mph on nine of the 32 days. The reliability statistics associated with all 32 days have been included in the statistics TECO reported in its annual distribution reliability reports.

In Table 1 below, staff lists five thunderstorm events that had wind speeds comparable to, and occurred in the proximity of, TECO's December 26th wind event. The number of outages and the number of customer interruptions represent all outage causes rather than just the direct storm or wind caused outages. The data suggests TECO's December 26th weather event was not as severe as other historical events because those other events resulted in more outages and required more crew jobs to restore service.

Table 1

Six historical outage events in Hillsborough County with wind speeds below 60 miles per hour.

Date	Peak Wind Speed (mph)	Number of Outages	Number of Crew Jobs	Customer Interruptions
July 25, 2002	57.6	167	108	14,356
June 6, 2003	57.6	199	101	21,505
June 13, 2004	57.6	169	79	15,205
June 24, 2004	57.6	127	87	12,964
June 25, 2004	57.6	128	84	3,431
Dec. 26, 2004 Current Petition	51.8	126	73	24,618

From Table 1, it is clear that TECO has historically included the outage statistics of weather events similar to December 26, 2004, in its reliability performance reports.

Conclusion

Staff believes TECO has not demonstrated that the outages on December 26, 2004, were not within its control and that it could not have reasonably prevented the outages because (1) sustained wind speeds in TECO's service area did not exceed industry construction standards and (2) TECO maintains control over its tree-to-power line clearance practices and can adjust those practices if it believes wind related outages are excessive. Therefore, TECO has not made the showing required by Rule 25-6.0455(3) and the petition should be denied.

If the Commission for comparability purposes approves the petition, TECO should show the effects of including and excluding the wind caused outages in a revised 2004 Annual Distribution Reliability Report because TECO traditionally includes comparable wind events in its reliability performance reports.

Issue 2: Should this docket be closed?

Recommendation: Yes, this docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the proposed agency action. (C. Keating)

Staff Analysis: If no timely protest to the proposed agency action is filed within 21 days, this docket should be closed upon issuance of a Consummating Order.