

State of Florida



Public Service Commission

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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. 050060-EI – Request to exclude December 26, 2004 outage event from annual distribution service reliability report by Progress Energy Florida, Inc.

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\050060.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, Progress Energy Florida, Inc. (“PEFI”) 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.

Tampa Electric Company (“TECO”) also filed on January 25, 2005, a request to exclude certain outages that occurred on December 26, 2004. TECO’s petition was assigned Docket No. 050058-EI, In Re: Request of Tampa Electric Company to Exclude Outage Event on December 26, 2004 from its Annual Distribution Service Reliability Report.

Unlike TECO, PEFI is subject to a performance stipulation. SAIDI, or System Average Interruption Duration Index, is an index reported in the Annual Distribution Service Reliability Report that is used to represent overall reliability performance. Each utility’s SAIDI value is impacted by the number and duration of the outages excluded. PEFI’s reliability performance in 2004 and 2005, as reflected by SAIDI, has rate implications. By Order No. PSC-02-0655-AS-EI, issued May 14, 2002, in Docket No. 000824-EI, In Re: Review of Florida Power Corporation’s earnings, including effects of proposed acquisition of Florida Power Corporation by Carolina Power & Light, the Commission approved the Stipulation and Settlement proffered by all parties as a complete resolution of all matters pending in that docket. Regarding Paragraph 13 of the stipulation, the Order states:

This provision provides that FPC will refund \$3 million to customers in the event that the utility’s SAIDI improvement is not achieved for calendar years 2004 and 2005. OPC has since clarified, and the other parties have agreed, that the proposed \$3 million refund to customers in the event that FPC does not achieve its distribution reliability objective during the years 2004 and 2005 applies separately for those years. FPC’s objective is to achieve a 20% improvement (decrease) compared to its 2000 SAIDI in each of those years. Thus, if the objective were not achieved in 2004, FPC would refund \$3 million to customers in 2005; and if the objective were not achieved in 2005, FPC would refund \$3 million to customers in 2006. (Page 5 of the Order)

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 PEFI's petition to exclude from its 2004 Annual Distribution Service Reliability Report 346 outage events that occurred due to a wind event on December 26, 2004.

Recommendation: No. PEFI 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 PEFI's service area did not exceed industry construction standards and (2) PEFI 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 PEFI 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: PEFI requests exclusion of certain reliability data due to a wind event on December 26, 2004.

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

Summary of PEFI's Petition

At approximately 3:00 a.m., on December 26, 2004, winds began causing customer outages within PEFI's service area in Pinellas County and in portions of southern Pasco County. The peak wind gust was 71 mph. Wind speeds in the Clearwater area reached 61 mph and sustained winds in the majority of the area were between 30 and 40 mph. The weather event resulted in 13 transmission outages, a substation outage, and various distribution outages. System wide, the weather event caused 527 outages affecting 60,111 customers. Service was restored to all affected customers by 11:00 p.m. that evening.

PEFI is requesting exclusion of only the 346 outage events caused by the weather event and located within the area most affected by the highest wind speeds. Excluding the 346 outage events reduces PEFI's SAIDI for 2004 by 2.3 minutes. For ongoing comparative trending purposes, PEFI will provide a revised 2004 Annual Distribution Service Reliability Report with and without the 346 outage events of December 26, 2004.

Construction Standards

PEFI'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 PEFI'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, there were wind gusts of 61 and 71 mph in PEFI's Pinellas County service area. The sustained wind speed was between 30 and 40 mph. PEFI provided no

evidence of pole and fixture failure due to sustained high wind speeds. Rather, the outages 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 winds can cause more outages if a utility elects to allow less clearance between trees and power lines. The converse is also true. In this way, utilities exercise control over wind/tree related outages.

PEFI's tree-to-power line clearance practice is currently based on various performance factors such as the number of outages and tree growth rates. PEFI's practice can be characterized as cyclical because PEFI targets a three year trim cycle. The amount of tree-to-power line clearance at any given time and place is a result of how aggressive PEFI 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 PEFI already incorporates into its decisions. If the number of outages is excessive, based on PEFI's internal review, then it may elect to implement a more aggressive line clearance practice. On the other hand, PEFI may elect to keep its practice the same or relax its practice if the number of resulting outages is not excessive.

PEFI's Annual Distribution Service Reliability Reports include the number of outages caused by trees and all other causes. PEFI's 2002, 2003, and 2004 reports indicate the number of tree caused outages and the percentage of tree outages of the total number of outages was 7,006 (17%), 8,609 (19%), and 6,793 (18%), respectively. The 2004 data includes all tree caused outages that PEFI seeks to exclude.

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

Historical Wind Events

Staff asked PEFI to provide reliability data for each day when wind speeds exceeded 40 mph for the past five years. PEFI's data for the Pinellas County area listed 18 days between January 1, 2000, and December 25, 2004, with wind speeds ranging from 52 to 69 mph. PEFI included outage statistics for all 18 days in its annual Distribution Service Reliability Reports for the years 2000 through 2004. Peak wind speeds exceeded PEFI's construction standard of 60 mph on five of the 18 days. PEFI's data associated with the five days when wind speeds exceeded 60 mph are listed in Table 1 below.

PEFI's method of recording crew jobs does not facilitate analysis of the level of work necessary to restore service for most historical events of this type. Consequently, staff shows "n/a" in the column of crew jobs. Also, the number of outages and number of customer interruptions represent all outage causes rather than just the direct storm or wind caused outages.

Table 1

Six historical outage events with wind speeds exceeding 60 miles per hour in Pinellas County.

Date	Peak Wind Speed (mph)	Number of Outages	Number of Crew Jobs	Customer Interruptions
June 28, 2002	63.3	197	n/a	44,621
July 29, 2002	69.1	186	n/a	13,100
June 28, 2003	63.3	138	n/a	10,425
July 8, 2003	66.8	98	n/a	4,215
June 8, 2004	63.3	160	n/a	15,581
Dec. 26, 2004 Current Petition	71-61	527	n/a	60,111

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

Conclusion

Staff believes PEFI 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 PEFI's service area did not exceed industry construction standards and (2) PEFI maintains control over its tree-to-power line clearance practices and can adjust those practices if it believes wind related outages are excessive.

If the Commission for comparability purposes approves the petition, PEFI should show the effects of including and excluding the wind caused outages in a revised 2004 Annual Distribution Service Reliability Report.

Docket No. 050060-EI

Date: May 19, 2005

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.