BEFORE THE PUBLIC SERVICE COMMISSION

In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation cost estimates.	DOCKET NO. 060198-EI ORDER NO. PSC-06-0947-PAA-EI ISSUED: November 13, 2006

The following Commissioners participated in the disposition of this matter:

LISA POLAK EDGAR, Chairman
J. TERRY DEASON
ISILIO ARRIAGA
MATTHEW M. CARTER II
KATRINA J. TEW

NOTICE OF PROPOSED AGENCY ACTION
ORDER ON REVISED STORM PREPAREDNESS PLANS OF
PROGRESS ENERGY FLORIDA INC. AND GULF POWER COMPANY

BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

BACKGROUND

On January 23, 2006, our staff conducted a workshop to discuss damages to electric utility facilities resulting from recent hurricanes and to explore ways of minimizing future storm damages and customer outages. State and local government officials, independent technical experts, and Florida's electric utilities participated in the workshop. On January 30, 2006, some participants filed post-workshop comments.

At our February 27, 2006, internal affairs conference, our staff briefed us on recommended actions to address the effects of extreme weather events on electric infrastructure. We also heard comments from interested persons and Florida's electric utilities regarding the staff's recommended actions. We modified various aspects of our staff's proposal. In brief, we decided the following:

1) All Florida electric utilities, including municipal utilities and rural electric cooperative utilities, would provide a 2006 Hurricane Preparedness Briefing at our June 5, 2006, internal affairs conference;

2) Staff would file a proposed agency action recommendation for the April 4, 2006, agenda conference requiring each investor-owned electric utility to file plans and estimated implementation costs for ongoing storm preparedness initiatives;

3) A docket would be opened to initiate rulemaking to adopt distribution construction standards that are more stringent than the minimum safety requirements of the National Electrical Safety Code; and

4) A docket would be opened to initiate rulemaking to identify areas and circumstances where distribution facilities should be required to be constructed underground.

On April 25, 2006, in this docket, we issued Order No. PSC-06-0351-PAA-EI, requiring the investor-owned electric utilities to file plans and estimated implementation costs for ten ongoing storm preparedness initiatives on or before June 1, 2006. The ten ongoing initiatives are:

1) A Three-year Vegetation Management Cycle for Distribution Circuits;
2) An Audit of Joint-Use Attachment Agreements;
3) A Six-year Transmission Structure Inspection Program;
4) Hardening of Existing Transmission Structures;
5) A Transmission and Distribution Geographic Information System;
6) Post-Storm Data Collection and Forensic Analysis;
7) Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems;
8) Increased Utility Coordination with Local Governments;
9) Collaborative Research on Effects of Hurricane Winds and Storm Surge; and
10) A Natural Disaster Preparedness and Recovery Program.

The initiatives listed above are not intended to encompass all reasonable ongoing storm preparedness initiatives. Rather, we viewed these initiatives as the starting point of an ongoing process. The docket was kept open for us to address the adequacy of the utilities' plans.

Regarding the first initiative, as specified in Order No. PSC-06-0351-PAA-EI, we required each investor-owned electric utility (IOU) to provide plans to implement a three-year trim cycle for all distribution feeders and a three-year trim cycle for distribution laterals, but allowed the utilities the opportunity to file an alternative to the three-year lateral trim cycle. More specifically, we allowed the IOUs the flexibility to propose an alternative plan for lateral circuits if the alternative could be shown to be equivalent to or better than a three-year trim cycle in terms of costs and reliability.

On June 1, 2006, each IOU filed storm hardening plans addressing each of the ten ongoing storm initiatives. Tampa Electric Company (TECO) and Florida Public Utility Company (FPUC) filed storm hardening plans which included vegetation management plans featuring a three-year trim cycle for both distribution feeders and laterals. Florida Power & Light Company

(FPL) filed an alternative vegetation management plan with trim cycles for lateral circuits longer than three years (six years). Progress Energy Florida, Inc. (PEF) and Gulf Power Company (Gulf) also filed alternative vegetation management plans with trim cycles for lateral circuits longer than three years (six years and five years, respectively).

On September 19, 2006, in this docket, we issued Order No. PSC-06-0781-PAA-EI. By that Order, we found TECO and FPUC's vegetation management plans to be in compliance with the requirements of Order No. PSC-06-0351-PAA-EI. We found FPL's vegetation management plan to be reasonably consistent with the compliance options provided by Order No. 06-0351-PAA-EI based on the data and analysis provided by the Company. Our proposed decision to accept FPL's vegetation management plan has been timely protested by the City of North Miami and a hearing has been scheduled on the matter.

Also by Order No. PSC-06-0781-PAA-EI, we required PEF and Gulf to file revised vegetation management plans by September 28, 2006, due to the lack of sufficient data necessary to determine those utilities' compliance with Order No. PSC-06-0351-PAA-EI. We also required PEF and Gulf to supply a method of conducting the necessary ongoing review of the alternative plans to determine whether they are equivalent to or better than a feeder and lateral three-year trim cycle program.

PEF and Gulf filed their revised vegetation management plans prior to September 28, 2006, and our staff issued data requests to the utilities regarding such plans and engaged the utilities in discussions regarding the plans and the utilities' responses to staff's data requests. This Order addresses the compliance of PEF and Gulf's revised vegetation management plans with the requirements of Order No. PSC-06-0351-PAA-EI.

We have jurisdiction pursuant to Sections 366.04(2)(c), (2)(f), and (5), and 366.05(7), Florida Statutes.

PROGRESS ENERGY FLORIDA INC.

Order No. PSC-06-0781-PAA-EI required PEF's revised vegetation management plans to include an appropriate means of evaluating the effectiveness of the plan in achieving compliance with Order No. PSC-06-0351-PAA-EI. Specifically, we required PEF to provide quantitative estimates of the costs and reliability benefits of its alternative plan, which is based on a three-year trim cycle for distribution feeders and a five-year trim cycle for distribution laterals, compared to our original proposal for a three-year trim cycle for both distribution feeders and laterals. We also required PEF to supply a method of conducting the necessary ongoing review of the alternative plan to determine whether it continues to be equivalent to or better than a three-year trim cycle program for both feeders and laterals.

PEF's Revised Vegetation Management Plan

PEF's revised vegetation management plan is more specific and more complete than the plan it originally filed on June 1, 2006. It more clearly identifies the types of vegetation management activities to be completed, the costs, the trim cycles, the estimated reliability

benefits, and other supporting data and information. PEF refers to its plan as a fully integrated vegetation management (IVM) program. Its components include:

- All feeders trimmed on a three-year cycle;
- All laterals trimmed on a five-year average cycle, with trimming activity prioritized based on a combination of rotation schedule and reliability performance;
- Annual pre-hurricane season patrols of all feeders with corrective spot trimming; and
- Other vegetation management activities, such as mowing and herbicide, removal of hazard trees, and public education.

PEF began its vegetation management storm hardening initiatives after its assessment of 2004-2005 hurricanes impacts. PEF fully implemented its IVM program in 2006. In addition to the components of the program identified above, PEF states that it now achieves better vegetation management by having revised its vegetation management contracts to address items such as: (1) Cutting brush within an eight-foot radius of all device poles; (2) Felling "dead danger trees" within 25 feet of the closest conductor that have a high likelihood of falling on the conductors, to the extent practical; and (3) Cutting underbrush instead of topping it. PEF states that it has improved oversight and enforcement of its contracts relative to previous years. In summary, PEF believes its IVM program enables more effective management of its tree trimming resources.

PEF's Method of Assessing Costs and Benefits of its IVM Program

PEF provided a comparison of its IVM program's estimated costs and benefits with a three-year cycle program for all distribution circuits. PEF's estimated benefits are measured in terms of annual avoided storm Customer Interruptions (CI). PEF's estimated costs are measured as the incremental costs of the vegetation management programs using 2005 actual costs as a baseline. PEF's comparison of the two programs is summarized below:

	Annual Storm CI Avoided	Annual Cost Increment ($M's)	Cost per Avoided Storm CI
3-year Cycle for All Distribution Circuits	40,500	12.0	$296
PEF's IVM Plan	34,600	5.0	$145

Compared with its vegetation management practice before implementing its IVM program, PEF estimates that moving to a three-year tree trim cycle for all distribution circuits would result in an average incremental annual cost of $12 million, while providing a potential incremental benefit of 40,500 fewer storm-related CI. Therefore, the cost per avoided storm CI to implement a three-year trim cycle for all distribution circuits would be approximately $296. PEF estimates its proposed alternative would result in an average incremental annual cost of $5 million, while providing a potential incremental benefit of 34,600 fewer storm-related CI. Therefore, the cost per avoided storm CI would be approximately $145, which indicates PEF's IVM program is more cost effective.

PEF's methodology for estimating program benefits, or its annual avoided storm CI, is based on estimates of the percentage of total storm CI which occur due to tree conditions in the right-of-way and the impact of various tree management activities in reducing annual tree-related CI. PEF's metric for the latter estimation is its Tree System Average Interruption Frequency Index (Tree SAIFI), calculated by dividing the number of annual tree CI by number of customers.

The cost estimates provided by PEF were based on the incremental costs of its IVM program compared to the costs of vegetation management incurred in the base year, 2005. PEF estimated an incremental annual cost of $5.0 million for its alternative IVM program compared to the 2005 base year costs, allocated to the following activities:

- Production trimming of $2.0 million;
- Mowing and herbicide application of $0.9 million;
- Removal of hazard trees of $0.5 million; and
- Hardening patrols, public education, and labor and fuel costs of $1.6 million.

PEF's projected annual cost of a vegetation management program based on a three-year trim cycle for all distribution circuits is $7.0 million greater than its projected costs of its IVM program. Not surprisingly, the projected cost difference between the two programs is due primarily to the increased lateral trimming associated with a three-year, rather than a five-year, lateral trimming cycle.

In defense of its IVM program's five-year lateral trim cycle, PEF states that more frequent trimming of laterals results in a higher incremental cost of projected reductions in storm-related CI because laterals (1) have significantly lower customer exposure; (2) have higher tree density; (3) are less prone to preventable tree impacts from within the right-of-way; and (4) are more prone to non-preventable impacts from outside the right-of-way. Additionally, PEF states that, in recent years, it has experienced availability challenges within the tree trimming labor force in Florida. Increased trimming would result in PEF competing for an already scarce resource. Such demand could be expected to inflate costs for all utilities and raise significant barriers to full implementation.

Assessment of PEF's Estimate of Costs and Benefits of Its IVM Program

PEF presented a credible method of estimating the cost-effectiveness of achieving reduced storm CI for various vegetation management activities. The methodology used by the Company requires expert judgment to assign Tree SAIFI impacts to various activities. Careful data collection and analysis of PEF's IVM program is warranted to address the subjectivity inherent in these estimates.

We are uncertain whether PEF's IVM program represents a material increase in vegetation management activity. We note that the IVM's projected feeder and lateral production trimming (4,107 miles) is a significant increase over 2005 production trimming (2,800 miles). However, PEF's production trimming miles were low in 2005 due to PEF's large and frequent

off-system tree resource deployments to other Gulf region utilities which had suffered more direct hurricane damage. PEF's projected IVM production trimming miles for 2007 (4,107 miles) are 21 percent lower than the average annual production trimming conducted in the 1999 through 2003 period (5,165 miles).

We cannot determine at this time how much more effective PEF's per mile production trimming is under its new vegetation management contracts in reducing storm CI versus its effectiveness under contracts in previous years because PEF has relied upon subjective, though informed, reliability performance estimates. PEF's primary method of reducing storm related outages is production trimming, but the impact of hazard trees outside the right-of-way may have a large impact on storm CI as suggested by the Company. The removal of hazard trees as proposed by PEF is laudable. Whether hazard tree removals, other incremental activities (season patrols, herbicide treatments, etc.), and the impact of revised vegetation management contracts will completely offset the reduction in production trimming miles and yield the improvement in Tree SAIFI can only be determined, in our view, by post hoc analysis of the results of PEF's IVM program. Prospectively, PEF needs to ensure through its forensic reviews that it can objectively distinguish the reliability performance of each vegetation program activity and thus properly fund the more cost-effective program activities.

We have compared PEF's IVM program to the other IOUs' proposed vegetation management programs. PEF's IVM program's five-year trim cycle for distribution laterals is more frequent than FPL and Gulf's planned trim cycles (six years) but less frequent than TECO and FPUC's planned trim cycles (three years). All the utilities have a three-year distribution feeder trim cycle program. We found TECO, FPUC, and FPL's vegetation management programs to be reasonable for initial implementation by Order No. PSC-06-0781-PAA-EI. As previously noted, our decision with respect to FPL's vegetation management program has been protested. Gulf's vegetation management program is addressed below.

Conclusion

We believe PEF's cost/benefit comparison in its revised plan is an indication that lateral trimming cycles more frequent than a five-year cycle may increase costs significantly with diminishing benefits. We note there are various assumptions contained in the calculation of benefits which emphasize the need for comparison of forecasted performance to actual results. We believe PEF's methodology should not be relied upon as the only way to evaluate the effectiveness of PEF's IVM program. On October 30, 2006, as part of this docket, our staff conducted a workshop with all electric IOUs to establish the necessary vegetation management performance metrics to be reported each March 1 by the utilities. We believe the use of a standard set of consistent metrics across utilities may allow us to better assess the tree vegetation management performance of each utility and more reliably identify best practices.

We find PEF's revised plan for vegetation management initiative is reasonably consistent with the compliance options provided by Order No. PSC-06-0351-PAA-EI for initial implementation. We find that PEF has adequately demonstrated a methodology for evaluation of the cost-effectiveness of its program and the revised plan is reasonable for initial

implementation. However, the actual cost-effectiveness of PEF's IVM program in reducing storm CI versus a three-year trim cycle for all feeders and laterals shall be reevaluated annually, consistent with the requirements of Order No. PSC-06-0351-PAA-EI.

GULF POWER COMPANY

By Order No. PSC-06-0781-PAA-EI, we required Gulf's revised vegetation management plans to include an appropriate means of evaluating the effectiveness of the plan in achieving compliance with Order No. PSC-06-0351-PAA-EI. Specifically, we required Gulf to provide quantitative estimates of the costs and reliability benefits of Gulf's alternative plan compared to the Commission's original requirement for a three-year trim cycle for both distribution feeders and laterals. The Commission also required Gulf to supply a method of conducting the necessary ongoing review of the alternative plan to determine whether it continues to be equivalent to or better than a three-year trim cycle program for both feeders and laterals.

Gulf's Revised Vegetation Management Plan

Gulf plans to begin implementing its proposed vegetation management plan in January 2007. Gulf proposes to incorporate additional enhancements to its present reliability-based plan to improve the plan's performance in relation to hardening the distribution system against future storms while continuing to ensure day-to-day reliability of the system. Gulf's plan includes the following enhancements in routine maintenance:

- A three-year trim cycle on feeders.
- An annual inspection and corrective-action program for feeders not treated by cyclical trimming.
- A reliability-based management program for all laterals which will achieve a maximum cycle of six years.

Under this revised plan, Gulf will establish a cyclical approach for vegetation management. Vegetation on feeders will be maintained on a three-year cycle. Each year, one third of the feeders will be systematically pruned, while the remaining two thirds are either inspected with follow-up pruning to correct deficiencies, or inspected for hazard-tree removal with the appropriate follow-up trimming. Gulf believes this will focus program resources on the area where tree caused outages have the greatest impact.

Laterals will be managed through the use of a reliability-based vegetation management procedure, but trimming for all laterals will occur with a maximum cycle of six years. The reliability-based vegetation management procedure will be implemented by categorizing facilities for trim operations based on tree caused outages and customer density. Field inspections will determine the amount and type of vegetation management needed to improve reliability. Gulf will also use scheduled inspections to ensure that every lateral is either pruned or inspected with follow-up corrective action a minimum of once every six years.

In addition, Gulf's program includes the following enhancements for storm hardening:

- A program for removing hazard trees located outside the normally maintained pruning zone, with emphasis placed on feeders;
- Increased storm hardening of new distribution lines by modifying initial vegetation clearing practices during construction;
- Local coordination with code enforcement officials in those instances where customer-owned trees threaten Gulf's facilities but the customer refuses to assist in remediation of the problem;
- Employment of forensic foresters to analyze tree caused storm outages; and
- Public education on the planting the right trees to avoid power outages.

Gulf's Method of Assessing Costs and Benefits of Its Program

Gulf provided a comparison of its plan with the three-year cycle for all distribution circuits based on the annual incremental costs and of the annual incremental benefits measured by avoided CI for the two programs. Gulf's revised plan includes the new Danger Tree Program, with a projected annual cost of $1.5 million, that it believes will be more cost-effective in delivering the desired benefits (avoided CI) over the long term than a plan requiring three year trimming of all circuits. Gulf's comparison of the two programs is summarized in the table below.

	Annual CI Avoided	Annual Cost Increment ($M's)	Cost per Avoided CI
3-year Cycle for All Distribution Circuits	28,395	4.2	$148
Gulf's Proposed Plan	23,005	1.5	$65

The comparison above is based on Gulf's historical tree CI data samples which shows additional trimming will mainly benefit day-to-day reliability. Gulf estimates that moving to a three-year tree trim cycle for all distribution circuits would result in an incremental annual cost of $4.2 million, while providing a potential incremental benefit of 28,395 fewer CI in its day-to-day operations. Therefore, the cost per avoided CI to implement a three-year trim cycle would be approximately $148.

On the other hand, Gulf estimates its proposed alternative would result in an average incremental annual cost of $1.5 million, while providing a potential incremental benefit of 23,005 fewer CI. Therefore, the cost per avoided CI would be approximately $65 for the alternative. The potential incremental benefit of 23,005 fewer CI is based on Gulf's analysis of control center notes relating to actual outages that led Gulf to believe that a minimum of fifteen percent of Gulf's feeder interruptions under normal day-to-day operations are caused by tree failures outside the pruning zone. Gulf believes its plan retains the flexibility necessary to target resources on the vegetation management activities where the highest measure of benefits relative to costs will be recognized.

In addition, Gulf believes its Danger Tree Program can deliver measurable benefits in storm outage avoidance. Gulf believes that measures of customer interruption time, such as Customer Minutes of Interruption, or CMI, provide further evidence of its Danger Tree Program benefits in storm outage avoidance because:

- Under storm conditions, a single feeder may be physically impacted by multiple downed trees. Avoidance of one downed tree through a utility trimming program may not prevent an outage from occurring somewhere else on the feeder. However, removing each of the most hazardous trees threatening the feeder in advance of the storm through the Danger Tree Program will reduce the number of downed trees that require removal from the feeder, thus significantly reducing CMI due to the storm; and

- The removal of danger trees will have a cumulative positive effect on outage avoidance with each additional year the program is implemented. Trees removed during year one of the program will continue to contribute to avoided outages in year five of the program.

Assessment of Gulf's Plan and Its Methodology

We find that the revised vegetation management plan filed by Gulf is reasonably consistent with the compliance options provided by Order No. PSC-06-0351-PAA-EI. Gulf has revised its plan to include enhancements to its present reliability-based program. We believe the Danger Tree Program as proposed by Gulf is laudable. This represents a material increase in vegetation management activity. Although the Danger Tree Program is not a program for trim cycle improvement, Gulf's demonstration of its benefits and costs is based on reasonable assumptions. However, the methodology used by the Company requires expert judgment. Due to this subjectivity, it is essential that the Company conduct careful data collection and analysis of its program during the implementation phase in order to address the subjectivity inherent in Gulf's estimation of benefits.

We have compared Gulf's vegetation management plan to the other investor-owned electric utilities' proposed vegetation management plans. Gulf's six-year trim cycle for distribution laterals is the same frequency as FPL's planned trim cycle, but less frequent than PEF's (five years), TECO's (three years), and FPUC's (three years) planned trim cycles. All the utilities have a three-year distribution feeder trim cycle program. We found TECO, FPUC, and FPL's vegetation management programs to be reasonable for initial implementation by Order No. PSC-06-0781-PAA-EI. As previously noted, our decision with respect to FPL's vegetation management program has been protested. PEF's vegetation management plan is addressed above.

Conclusion

We note that Gulf's method of calculating benefits include assumptions based on Gulf's industry knowledge and experience, but such assumptions introduce a degree of subjectivity and therefore emphasize the need for a comparison of forecasted performance to actual results. Gulf's methodology should not be relied upon as the only way to evaluate the effectiveness of

Gulf's vegetation management plan. On October 30, 2006, as part of this docket, our staff conducted a workshop with all electric IOUs to establish the necessary vegetation management performance metrics to be reported each March 1 by the utilities. We believe the use of a standard set of consistent metrics across utilities may allow us to better assess the tree vegetation management performance of each utility and more reliably identify best practices.

Based on the foregoing, we find that the revised vegetation management plan filed by Gulf is reasonably consistent with the compliance options provided by Order No. PSC-06-0351-PAA-EI. We find that Gulf has adequately demonstrated a methodology for evaluation of the cost-effectiveness of its program and the revised plan is reasonable for initial implementation. However, the actual cost-effectiveness of Gulf's plan in achieving reliability benefits equal to or greater than a three-year trim cycle plan for all circuits shall be reevaluated annually, consistent with the requirements of Order No. PSC-06-0351-PAA-EI.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that Progress Energy Florida Inc. and Gulf Power Company's revised vegetation management plans are deemed reasonable for initial implementation. The actual cost-effectiveness of Progress Energy Florida Inc. and Gulf Power Company's plans in achieving reliability benefits equal to or greater than a three-year trim cycle plan for all circuits shall be reevaluated annually, consistent with the requirements of Order No. PSC-06-0351-PAA-EI. It is further

ORDERED that the provisions of this Order, issued as proposed agency action, shall become final and effective upon the issuance of a Consummating Order unless an appropriate petition, in the form provided by Rule 28-106.201, Florida Administrative Code, is received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on the date set forth in the "Notice of Further Proceedings" attached hereto. It is further

ORDERED that if no timely protest to a proposed agency action contained herein is filed by a person whose interests are substantially affected, this docket shall be closed upon the issuance of a Consummating Order.

By ORDER of the Florida Public Service Commission this 13th day of November, 2006.

BLANCA S. BAYÓ, Director
Division of the Commission Clerk
and Administrative Services

By: Marcia Sharma
Marcia Sharma, Assistant Director
Division of the Commission Clerk
and Administrative Services

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NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing that is available under Section 120.57, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on December 4, 2006.

In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.