BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Review of 2010 Electric Infrastructure Storm Hardening Plan filed pursuant to Rule 25-6.0342, F.A.C., submitted by Florida Public Utilities Company.	DOCKET NO. 100264-EI ORDER NO. PSC-10-0687-PAA-EI ISSUED: November 15, 2010

The following Commissioners participated in the disposition of this matter:

ART GRAHAM, Chairman
LISA POLAK EDGAR
NATHAN A. SKOP
RONALD A. BRISÉ

NOTICE OF PROPOSED AGENCY ACTION
ORDER APPROVING FLORIDA PUBLIC UTILITIES COMPANY'S
STORM HARDENING PLAN

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 (F.A.C.).

Background

The hurricanes of 2004 and 2005 that made landfall in Florida resulted in extensive storm restoration costs and lengthy electric service interruptions for millions of electric investor-owned utility (IOU) customers. On January 23, 2006, we conducted a workshop to discuss the damage to electric utility facilities resulting from these 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 February 27, 2006, we issued Order No. PSC-06-0144-PAA-EI, requiring the IOUs to begin implementing an eight-year inspection cycle of their respective wooden poles.[1] In that Order, we noted:

> The severe hurricane seasons of 2004 and 2005 have underscored the importance of system maintenance activities of Florida's electric IOUs. These efforts to maintain system components can reduce the impact of hurricanes and tropical

[1] Docket No. 060078-EI, In re: Proposal to require investor-owned electric utilities to implement ten-year wood pole inspection program.

> storms upon utilities' transmission and distribution systems. An obvious key component in electric infrastructure is the transmission and distribution poles. If a pole fails, there is a high chance that the equipment on the pole will be damaged, and failure of one pole often causes other poles to fail. Thus, wooden poles must be maintained or replaced over time because they are prone to deterioration. Deteriorated poles have lost some or most of their original strength and are more prone to fail under certain environmental conditions such as high winds or ice loadings. The only way to know for sure which poles are acceptable, which poles must be treated or braced, and which poles must be replaced is through periodic inspections.

At the February 27, 2006 internal affairs meeting, we took comments from our staff, interested persons, and Florida's electric utilities regarding the need to address the effects of extreme weather events on electric infrastructure. Ultimately, we decided:

1. All Florida electric utilities, including municipal utilities and rural electric cooperative utilities, would provide an annual Hurricane Preparedness Briefing.

2. A proposed agency action recommendation would be filed by our staff for the April 4, 2006 Agenda Conference requiring each IOU 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 (NESC).

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, we issued Order No. PSC-06-0351-PAA-EI, requiring all IOUs to file plans and estimated implementation costs for 10 ongoing storm preparedness initiatives (Ten Initiatives) on or before June 1, 2006.[2] The Ten 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

[2] Docket No. 060198-EI, In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation cost estimates.

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

10. A Natural Disaster Preparedness and Recovery Program.

These Ten Initiatives were not intended to encompass all reasonable ongoing storm preparedness activities. Rather, we viewed these initiatives as the starting point of an ongoing process.[3] By Order Nos. PSC-06-0781-PAA-EI (addressing Tampa Electric Company and Florida Public Utilities Company), PSC-06-0947-PAA-EI (addressing Progress Energy Florida, Inc. and Gulf Power Company), and PSC-07-0468-FOF-EI (addressing Florida Power & Light Company), we addressed the adequacy of the IOUs' plans for implementing the Ten Initiatives.

We also pursued rulemaking to address the adoption of distribution construction standards more stringent than the minimum safety requirements of the NESC and the identification of areas and circumstances where distribution facilities should be required to be constructed underground.[4] Rule 25-6.0342, F.A.C., was ultimately adopted.[5]

Rule 25-6.0342, F.A.C., requires each IOU to file an Electric Infrastructure Storm Hardening Plan for review and approval by the FPSC. The Rule also requires a description of construction standards, policies, practices, and procedures to enhance the reliability of overhead and underground electrical transmission and distribution facilities. The Rule requires, at a minimum, that each IOU's plan address the following items:

(a) Compliance with the NESC.

(b) Extreme wind loading (EWL) standards for: (i) new construction; (ii) major planned work, including expansion, rebuild, or relocation of existing facilities; and (iii) critical infrastructure facilities and along major thoroughfares.

(c) Mitigation of damage due to flooding and storm surges.

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[3] Order No. PSC-06-0947-PAA-EI, page 2, issued November 13, 2006, in Docket No. 060198-EI, In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation cost estimates.

[4] Order No. PSC-06-0556-NOR-EU, issued June 28, 2006, in Docket No. 060172-EU, In re: Proposed rules governing placement of new electric distribution facilities underground, and conversion of existing overhead distribution facilities to underground facilities, to address effects of extreme weather events, and Docket No. 060173-EU, In re: Proposed amendments to rules regarding overhead electric facilities to allow more stringent construction standards than required by National Electric Safety Code.

[5] Order No. PSC-07-0043A-FOF-EU, issued January 17, 2007, in Docket No. 060172-EU, In re: Proposed rules governing placement of new electric distribution facilities underground, and conversion of existing overhead distribution facilities to underground facilities, to address effects of extreme weather events, and Docket No. 060173-EU, In re: Proposed amendments to rules regarding overhead electric facilities to allow more stringent construction standards than required by National Electric Safety Code.

(d) Placement of facilities to facilitate safe and efficient access for installation and maintenance.

(e) A deployment strategy including: (i) the facilities affected; (ii) technical design specifications, construction standards, and construction methodologies; (iii) the communities and areas where the electric infrastructure improvements are to be made; (iv) the impact on joint use facilities on which third-party attachments exist; (v) an estimate of the costs and benefits to the utility of making the electric infrastructure improvements; and (vi) an estimate of the costs and benefits to third-party attachers affected by the electric infrastructure improvements.

(f) The inclusion of Attachment Standards and Procedures for Third-Party Attachers.

On May 7, 2007, the storm hardening plans were filed by Tampa Electric Company (TECO), Progress Energy Florida, Inc. (PEF), Gulf Power Company (Gulf), and Florida Power & Light Company (FPL). Docket Nos. 070297-EI (TECO), 070298-EI (PEF), 070299-EI (Gulf), and 070301-EI (FPL) were opened to address each filing. On June 19, 2007, we voted to set the dockets directly for a formal administrative hearing, with the additional mandate to our staff to conduct a series of informal workshops to allow the parties and staff to identify disputed issues and potential areas for stipulation. By Order No. PSC-07-0573-PCO-EI, issued July 10, 2007, the dockets were consolidated for purposes of the hearing with the understanding that each utility's plan would be ruled on separately. FPUC requested to file its storm hardening plan as part of its petition for a general rate increase and have it addressed in its rate case.[6] FPUC's storm hardening plan was approved May 19, 2008.[7]

A formal administrative hearing was held October 3-4, 2007. During the course of the hearing, the parties reached agreement on a number of issues and the dockets were subsequently stipulated. The parties also presented us with a stipulated agreement entitled "Process to Engage Third-Party Attachers." This process, as designed, would allow for the exchange of information between the parties. Per the stipulation, information would be shared among the parties and annual status reports would be filed with us.[8] In addition, the stipulation stated that we would resolve any disputes or challenges to issues related to a utility's plan in accord with Rule 25-6.0342(7), F.A.C. A customer, applicant for service, or attaching entity could file a request for dispute resolution at any time.

On May 3, 2010, FPUC filed its 2010-2012 storm hardening plan update as required by Rule 25-6.0342(2), F.A.C. FPUC filed an amended storm hardening update on May 28, 2010.

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[6] Order No. PSC-08-0019-PCO-EI, issued January 4, 2008, in Docket No. 070300-EI, In re: Review of 2007 Electric Infrastructure Storm Hardening Plan files pursuant to Rule 25-6.0342 F.A.C., submitted by Florida Public Utilities Company, and in Docket No. 070304-EI, In re: Petition for rate increase by Florida Public Utilities Company.

[7] Order No. PSC-08-0327-FOF-EI, issued May 19, 2008, in Docket No. 070300-EI, In re: Review of 2007 Electric Infrastructure Storm Hardening Plan files pursuant to Rule 25-6.0342 F.A.C., submitted by Florida Public Utilities Company, and in Docket No. 070304-EI, In re: Petition for rate increase by Florida Public Utilities Company.

[8] Order Nos. PSC-07-1020-FOF-EI, PSC-07-1021-FOF-EI, PSC-07-1022-FOF-EI, PSC-07-1023-FOF-EI, issued December 28, 2007, in Docket Nos. 070297-EI, 070298-EI, 070299-EI, and 070301-EI, and Order No. PSC-08-0327-FOF-EI, issued May 19, 2008, in Docket No. 070300-EI.

Docket No. 100264-EI was opened to address the updates. On June 10, 2010, we conducted a workshop to better understand FPUC's plan. In addition to the workshop, we sent data requests to FPUC to obtain clarification and additional information. We considered FPUC's plan updates at our October 26, 2010 Commission Conference. This Order addresses FPUC's plan updates as required by Rule 25-6.0342. Attachment A to this Order describes the storm hardening requirements. Attachment B contains a comparison of the provisions of FPUC's previously approved and updated storm hardening plans, and the costs of implementing the approved and updated plans. Attachment C is a glossary of terms used in this Order. We have jurisdiction over this matter pursuant to Sections 360.04 and 366.05, Florida Statutes (F.S.).

Review of FPUC's Plan Updates

Wooden Pole Inspection Program

FPUC will continue its eight-year wooden pole inspection as required by Order No. PSC-07-0078-PAA-EU. However, FPUC proposes to visually inspect, sound, and selectively bore (if internal decay is suspected) all CCA poles under 16 years of age. Unless a pole fails sound and bore, a full excavation will not be performed on these poles. These inspections include visual inspections, sound and bore, excavation, testing, and strength and loading assessments. FPUC will continue to file the results of these inspections in FPUC's Annual Electric Utility Distribution Reliability Report.

Ten Initiatives

Initiative One – Three-Year Vegetation Management Cycle for Distribution Circuits

In its updated plan, FPUC will continue its previously approved plan for Initiative One. Currently, FPUC has a three-year average trim cycle for feeders and a six-year average cycle for laterals. FPUC also will continue annual inspections of feeders serving critical customers prior to storm season to identify and perform any mid-cycle trimming, to address danger trees located outside the normal trim zone that threaten main feeders, and to educate the public regarding maintenance and placement of trees.

Initiative Two – Audit of Joint-Use Attachment Agreements

In its updated plan, FPUC will continue conducting a review of joint-use audits every five years. However, audits with joint-use attachers have not yet been completed as allowed by FPUC's pole attachment contracts. FPUC stated in its 2009 Annual Reliability Report, that joint-use contracts were either under review or being re-written. FPUC will begin initiating audits in 2010 of all joint-use attachers. FPUC will continue pole strength assessment and stress calculations for all FPUC-owned and third-party-owned poles through its eight-year wooden pole inspection cycle.

Initiative Three – Six-Year Transmission Structure Inspection Program

FPUC will continue inspecting all transmission facilities owned by FPUC. FPUC states that it plans to have climbing inspections completed on all transmission facilities by year end 2010. The Company believes it is prudent and more cost-effective to retain a contractor to perform all or most of the inspections in a one or two year time period, rather than over a six-year period. FPUC also will continue inspecting all of its substations once a year.

Initiative Four – Hardening of Existing Transmission Structures

FPUC's current plan requires that when it becomes necessary to replace a wooden pole due to construction requirements or concerns with the integrity of the pole, a concrete pole that meets current NESC codes and storm hardening requirements will be used. FPUC will continue this plan.

Initiative Five – Transmission and Distribution Geographic Information System

Since January 2008, both divisions of FPUC have GIS capabilities. FPUC's GIS currently is being used for engineering new construction and for existing system maintenance projects. The Company's GIS also interfaces with its Customer Information System to function as a Customer Outage Management System (OMS). FPUC's OMS allows for data collection and retrieval capabilities for analyzing and reporting reliability indices. FPUC's Northwest Division will begin analyzing trends in 2010 when three years' worth of data is available to gauge the effectiveness of storm hardening programs.

Initiative Six – Post-Storm Data Collection and Forensic Analysis

In its updated plan, FPUC will continue employing contractors for post-storm data collection and forensic analysis, should a significant storm occur in either division. FPUC states that if damage caused by a storm is significant, forensic analysis will be performed after post-data collection is completed. Since FPUC has not experienced a hurricane event during 2007-2009, no significant forensic data is available at this time. The costs associated with this initiative will vary depending upon the degree of damage associated with the storm.

Initiative Seven – Collection of Detailed Outage Data Differentiating Between the Reliability Performance of Overhead and Underground Systems

FPUC currently has the ability to report performance information differentiating between overhead and underground facilities. FPUC will continue collecting outage data for overhead and underground systems in order to evaluate the reliability indices associated with the two construction types. In addition, FPUC believes this data will further improve the operation of its automated Customer Outage Management system. FPUC has had no severe storm-related outages since 2007; therefore, no reliability performance comparisons between overhead and underground facilities were provided.

Initiative Eight – Increased Utility Coordination with Local Governments

FPUC will continue coordinating with local city and county emergency service agencies within its service areas. FPUC also will continue its participation in regularly scheduled communication events with county emergency response organizations. FPUC will continue to cooperate with local government in actively discussing both undergrounding and tree trimming issues as they arise.

Initiative Nine – Collaborative Research on Effects of Hurricane Winds and Storm Surge

The electric utilities previously established a non-profit, member-financed organization to coordinate all research efforts through the PURC, located in the Warrington College of Business at the University of Florida. PURC's work is focused on three main areas of concern: hurricane wind effects, vegetation management, and undergrounding of electric infrastructure. FPUC entered into a Memorandum of Understanding with PURC that extends PURC's research efforts for the IOUs through December 31, 2011.

Initiative Ten – Natural Disaster Preparedness and Recovery Program

FPUC will continue refining its Disaster Preparedness and Recovery plan, which identifies how FPUC will operate in emergency conditions and efficiently restore service. The plan also covers the roles and responsibilities of FPUC's employees. FPUC's plan is contained within its Emergency Procedures and updated on an annual basis, if required.

National Electric Safety Code Compliance

FPUC's updated plan addresses the extent to which, at a minimum, FPUC complies with the NESC pursuant to Rule 25-6.0345(2), F.A.C. FPUC's distribution facilities comply with, and in most cases exceed, the minimum requirements of the NESC. FPUC's transmission structures also comply with the NESC.

Extreme Wind Loading Standards

New Construction – In its updated plan, FPUC states that its existing distribution, transmission, and substation facilities continue to be in compliance with the NESC. FPUC notes that new specifications for distribution facilities have been developed that will allow certain future installations to exceed the NESC by utilizing the EWL standards. FPUC states that all of its remaining wooden transmission poles will be replaced with concrete poles that meet or exceed the NESC EWL standards. Although FPUC does not state how long this process will take, the Company asserts that when it becomes necessary to replace a wooden pole due to construction requirements or concerns with the integrity of the pole, a concrete pole meeting the current NESC requirements will be utilized. Work has been completed around certain substations that will reduce the possibility of wind blown debris damaging substation facilities.

Major Planned Work – FPUC's updated plan proposes to continue incorporating EWL standards described by the NESC code. These standards will continue to be evaluated along with

a cost/benefit analysis when new construction and major planned projects are being designed to determine the overall value and contribution to the reliability of the system.

Critical Infrastructure – FPUC states that it will focus on using EWL standards for distribution facilities along major highways and where service is provided to critical infrastructure, such as hospitals, water plants and sewage treatment plants. FPUC provides in the updated plan a list of CIF projects for the 2010-2012 time period.

Mitigation of Flooding and Storm Surge Damage

FPUC will develop an expanded specifications book. This book will include details on how to mitigate damage of underground and overhead distribution and overhead transmission facilities. In the Northeast Florida Division, transmission lines are currently located near and across coastal waterways. To mitigate damage, FPUC will use foundations and casings to stabilize the structures due to soil conditions. FPUC does not currently have transmission facilities in its Northwest division.

In both divisions, FPUC states that overhead distribution lines are subject to flooding and storm surge because lines are located near the coast or inland rivers. FPUC will continue evaluating these areas and take the necessary actions to minimize damage. As for underground distribution lines, storm surges and flooding are most likely in the Northeast Florida Division. FPUC does not propose any changes to its underground distribution lines at this time. The Company states that a significant amount of underground infrastructure is in place and it is impractical to make any significant changes to what is currently installed. If it is determined in the future that storm surges may impact these facilities, FPUC will reevaluate its installation practices.

Facility Placement

Pursuant to Rule 25-6.0341, F.A.C., FPUC's updated plan includes provisions for safe and efficient access for installation and maintenance placement of new and replacement distribution facilities. FPUC will promote placement of facilities adjacent to public roads; to utilize easements, public streets, roads, and highways; to obtain easements for underground facilities; and to use right-of-ways for conversions of overhead to underground. Placement of facilities along rear lot lines will not occur except in certain commercial applications when open access concrete/asphalt driveways are located at the rear of the development.

Deployment Strategies

Facilities Affected, Including Specifications and Standards – FPUC states in its updated plan that all areas of FPUC service territory are affected and benefit by infrastructure improvements. Transmission line inspections and transmission pole replacements will only affect the Northeast Florida Division, since there are no transmission facilities in the Northwest Florida Division. However, FPUC's distribution line rebuilding will equally benefit both divisions and comply with the NESC EWL standards.

Areas of Infrastructure Improvements – FPUC's updated plan provides a detailed description of communities and areas where electric infrastructure improvements will be made, including facilities identified by the utility as CIF.

Joint-Use Facilities – FPUC identifies several projects intended to upgrade existing facilities to CIF. Significant numbers of poles to be upgraded will have one or more joint-use attachments. FPUC provided a list of projects for the 2010-2012 time period in its updated plan. The design phase of these projects will include application of NESC EWL standards to all poles being installed and all joint use attachments.

Utility Cost/Benefit Estimates – FPUC states that it does not have the supporting data to develop the cost/benefit analysis for these programs. However, as these programs are implemented, data will be collected that can be used in the future to develop the associated benefits. Refer to Attachment B for a comparison of the costs associated with implementing FPUC's current and updated storm hardening plans.

Attachers Cost/Benefit Estimates – FPUC sent notification to third party attachers of its updated and amended plan. At this time, no third party attachers submitted information regarding FPUC's plan. However, FPUC states that it will forward estimates of costs and benefits from third party attachers when they are received.

Attachment Standards and Procedures

FPUC's updated plan includes attachment standards and procedures addressing safety, reliability, and pole loading capacity. The updated plan also addresses engineering standards and procedures for attachments by others to the utility's transmission and distribution poles that meet or exceed the NESC pursuant to Rule 25-6.034, F.A.C.

Conclusion

FPUC's updated plan is largely a continuation of its previously-approved plan. Since Florida has not been affected by any named storms in the past few years, no data are available to evaluate the effects of hardening efforts on FPUC's infrastructure. However, FPUC is taking proactive steps to improve its system to withstand severe weather events and thus presents a reasonable approach to storm hardening that has the potential to enhance reliability and reduce restoration costs and outage times. Therefore, we approve FPUC's amended updated storm hardening plan.

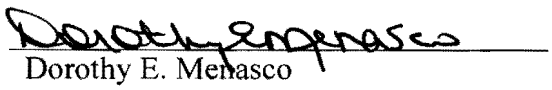
Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that Florida Public Utilities Company's Storm Hardening Plan is hereby approved as set forth in this Order. It is further

ORDERED that if no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order.

By ORDER of the Florida Public Service Commission this 15th day of November, 2010.

ANN COLE
Commission Clerk

By: 
Dorothy E. Menasco
Chief Deputy Commission Clerk

(S E A L)

LCB

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 Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on December 6, 2010.

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.

Storm Hardening Requirements: Wooden Pole Inspection Program & 10 Initiatives

Eight-Year Wooden Pole Inspection Program
1. Implement an eight-year wooden pole inspection cycle by Order Nos. PSC-06-0144-PAA-EI, PSC-07-0078-PAA-EU.
2. File an annual report with the Commission.
3. Provide cost estimates.

Initiative 1- A Three-Year Vegetation Management Cycle for Distribution Circuits
1. Three-year tree trim cycle for primary feeders (minimum).
2. Three-year cycle for laterals as well, if not cost-prohibitive.
3. Provide cost estimate.

Initiative 2- Audit of Joint-Use Attachment Agreements
1. (a) Each investor-owned electric utility shall develop a plan for auditing joint-use agreements that includes pole strength assessments.
(b) These audits shall include both poles owned by the electric utility and poles owned by other utilities to which the electric utility has attached its electrical equipment.
2. The location of each pole, the type and ownership of the facilities attached, and the age of the pole and the attachments to it should be identified.
3. Each investor-owned utility shall verify that such attachments have been made pursuant to a current joint-use agreement.
4. Stress calculations shall be made to ensure that each joint-use pole is not overloaded or approaching overloading for instances not already addressed by Order No. PSC-06-0144-PAA-EI.
5. Provide compliance cost estimate and cost estimate for alternative action, if any.

Initiative 3- Six-Year Transmission Inspection Program
1. Develop a plan to fully inspect all transmission towers and other transmission supporting equipment (such as insulators, guying, grounding, splices, cross-braces, bolts, etc.).
2. Develop a plan to fully inspect all substations (including relay, capacitor, and switching stations).
3. Provide compliance cost estimate and cost estimate for alternative actions, if any.

Initiative 4- Hardening of Existing Transmission Structures
1. Develop a plan to upgrade and replace existing transmission structures. Provide a scope of activity, limiting factors, and criteria for selecting structure to upgrade and replace.
2. Provide a timeline for implementation.
3. Provide compliance cost estimate and cost estimate for alternative actions, if any.

Initiative 5- Transmission and Distribution Geographic Information System
1. To conduct forensic review.
2. To assess the performance of underground systems relative to overhead systems.
3. To determine whether appropriate maintenance has been performed.
4. To evaluate storm hardening options.
5. Provide a timeline for implementation.
The utilities have the flexibility to propose a methodology that is efficient and cost-effective.

Initiative 6- Post-Storm Data Collection and Forensic Analysis
1. Develop a program that collects post-storm information for performing forensic analyses.
2. Provide a timeline for implementation.
The utilities have the flexibility to propose a methodology that is efficient and cost-effective.

Initiative 7- Collection of Detailed Outage Data Differentiating between the Reliability Performance of Overhead and Underground Systems
1. Collect specific storm performance data that differentiates between overhead and underground systems, to determine the percentage of storm-caused outages that occur on overhead and underground systems, and to assess the performance and failure mode of competing technologies, such as direct bury cable versus cable-in-conduit, concrete poles versus wooden poles, location factors such as front-lot versus back-lot, and pad-mounted versus vault.
2. Provide a timeline for implementation.
The utilities have the flexibility to propose a methodology that is efficient and cost-effective.

Initiative 8- Increased Coordination with Local Governments
1. Each utility should actively work with local communities year-round to identify and address issues of common concern, including the period following a severe storm like a hurricane and also ongoing, multihazard infrastructure issues such as flood zones, areas prone to wind damage, development trends in land use and coastal development, joint-use of public right-of-way, undergrounding facilities, tree trimming, and long-range planning and coordination.
2. Incremental plan costs.

Initiative 9-Collaborative Research
1. Must establish a plan that increases collaborative research.
2. Must identify collaborative research objective.
3. Must solicit municipals, cooperatives, educational and research institutions.
4. Must establish a timeline for implementation.
5. Must identify the incremental costs necessary to fund the organization and perform the research.

Initiative 10- A Natural Disaster Preparedness and Recovery Program
1. Develop a formal Natural Disaster Preparedness and Recovery Plan that outlines the utility's disaster recovery procedures if the utility does not already have one.

Florida Public Utilities Company

Eight-Year Wooden Pole Inspection Program	
Current Plan	Updated plan
1. Implement an eight-year wooden pole inspection cycle for distribution poles.	1. No change
2. File the progress of this inspection in the Annual Reliability Report.	2. No change
3. Costs for 2007-2009 are unknown at this time.	Costs for 2010-2012 are estimated to be $470,000.

Initiative 1- A Three-Year Vegetation Management Cycle for Distribution Circuits	
Current Plan	Updated Plan
1. All feeders on a three-year trim cycle	1. No change
2. Laterals are on a six-year trim cycle.	2. No change
3. Costs for 2007-2009 were $1,781,109.	3. Costs for 2010-2012 are estimated to be $2,132,000.

Initiative 2- Audit of Joint-Use Attachment Agreements	
Current plan	Updated Plan
1. (a) Perform pole strength assessment during the eight-year wooden pole inspection cycle.	1. (a) No change
(b) Audit all FPUC-owned and third-party poles during the eight-year wooden pole inspection cycle.	(b) FPUC plans to conduct a thorough joint-use audit once every five year in addition to the eight-year pole inspection.
2. All required data collected during inspections and stored in a database.	2. No change
3. Verify attachments have been made pursuant to current joint-use agreement during the eight-year wooden pole inspection cycle.	3. No change
4. Perform stress calculations during the eight-year wooden pole inspection cycle.	4. No change
5. Costs for 2007-2009 were not available.	5. Costs for 2010-2012 are estimated to be $78,000.

Initiative 3- Six-Year Transmission Inspection Program	
Current plan	Updated Plan
1. Develop procedures for climbing inspections of Company-owned 69 and 138 KV structures. Coordination/process for customer-owned 69KV lines to be developed.	1. No change
2. No plan provided for substations.	2. Substations are fully inspected at least once a year.
3. FPUC's current accounting method could not provide the costs for 2007-2009.	5. Costs for 2010-2012 are estimated to be $123,600.

Initiative 4- Hardening of Existing Transmission Structures	
Current plan	Updated Plan
1. Replacement of 180 wooden poles on 69 KV lines with concrete as necessary and when economically practical.	1. Continues to replace wooden poles on 69 KV lines.
2. Plan is on-going with no completion date.	2. No change
3. Costs for 2007-2009 were approximately $516,400.	3. Costs for 2010-2012 are estimated to be $152,000.

Initiative 5- Transmission and Distribution Geographic Information System	
Current plan	Updated plan
1. FPUC's plan includes forensic reviews.	1. No change
2. FPUC's plan includes underground versus overhead.	2. No change
3. FPUC's plan includes determination of appropriate maintenance.	3. No change
4. FPUC's plan includes evaluation of storm hardening options.	4. No change
5. Currently being implemented	5. Continues to be implemented.

Initiative 6- Post-Storm Data Collection and Forensic Analysis	
Current plan	Updated Plan
1. FPUC has procedures developed to track all specific hurricane outages, post-storm data collection, and forensic analysis.	1. No change
2. Data is dependent upon storm events in FPUC's service area.	2. No change

Initiative 7- Collection of Detailed Outage Data Differentiating between the Reliability Performance of Overhead and Underground Systems	
Current plan	Updated Plan
1. Collect outage data of overhead and underground facilities to evaluate reliability indices.	1. No change
2. Implementation is ongoing.	2. No change

Initiative 8- Increased Coordination with Local Governments	
Current plan	Updated Plan
1. Coordinate with local and county emergency service agencies within its service area. In addition, to provide personnel at the county EOCs, during emergencies.	1. No change
2. Costs for 2007-2009 were not provided.	3. Costs for 2010-2012 were not provided.

Initiative 9-Collaborative Research	
Current plan	Updated Plan
1. Collaborative research efforts, led by the PURC, began in 2007.	1. No change
2. Researching vegetation management during storm and non-storm times, wind during storm and non-storm events, and hurricane and damage modeling towards further understanding the cost and benefits of undergrounding.	2. No change
3. Solicit participation from municipal and rural electric cooperative utilities in addition to available educational and research organizations.	3. No change
4. Implementation is ongoing.	4. FPUC has entered into a Memorandum of Understanding with the University of Florida's PURC, which extends PURC's research efforts through December 31, 2011.
5. Costs for 2007-2009 were not provided.	5. Costs for 2010-2012 were not provided.

Initiative 10- A Natural Disaster Preparedness and recovery Program	
Currently Approved Plan	Updated Plan
Disaster Preparedness/Recovery Plan has been developed and filed.	Continues to refine

Glossary

1. Annual Electric Utility Distribution Reliability Report – A report, required by Rule 25-6.0455, Florida Administrative Code (F.A.C.), that contains data pertaining to distribution reliability. In the report, each utility is to provide information regarding established service reliability metrics or indices that are intended to reflect changes over time in system average performance, and sub-regional performance.

2. Extreme Wind Loading (EWL) – A construction standard defined by NESC section 25, Rule 250C. This standard details loading requirements for Grade B and Grade C construction and maps EWL standards for regions in North America.

3. Florida Emergency Operation Center (EOC) – A central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, or disaster management functions at a strategic level in an emergency situation, and ensuring the continuity of operation of a company, political subdivision or other organization.

4. Geographic Information Systems (GIS) – Any system that captures, stores, analyzes, manages, and presents data that are linked to locations.

5. Grade B Construction – In general, the National Electric Safety Code classifies Grade B construction as the highest construction grade and it is used for all supply circuits crossing over railroad tracks; for open-wire supply circuits of over 7500 volts (V) or constant-current circuits exceeding 7.5 amperes (A) where crossing over communication circuits; and in urban and suburban districts.

6. Grade C Construction – Grade C is typically the National Electric Safety Code minimum standard for most electrical distribution facilities. Grade C is specified for open-wire supply circuits of over 7,500V in rural districts where crossing over or in conflict with supply circuits of 0 to 750V, excluding services; and for open-wire supply circuits of 750V to 7,500V in urban districts under nearly all conditions except as noted for Grade B construction, and also where crossing over or in conflict with communication circuits.

7. Investor-Owned Electric Utilities (IOUs) – Utilities that are privately owned and organized as a tax paying business, usually financed by the sale of securities in the capital markets. There are five investor-owned electric utilities in Florida.

8. Mid-Cycle Trimming (also known as hot spot trimming, proactive trimming, etc) – Vegetation (e.g., tree) trimming that occurs outside of a regular schedule or cycle.

9. National Electric Safety Code (NESC) – Safety standards published exclusively by IEEE. The 2007 National Electric Safety Code, approved June 16, 2006 by the American National Standards Institute (ANSI), covers basic provisions for safeguarding of persons from hazards arising from the installation, operation, or maintenance of (1) conductors and equipment in electric supply stations, and (2) overhead and underground electric supply and communication lines. It also includes work rules for the construction, maintenance, and operation of electric supply and communication lines and equipment. The standards are applicable to the systems and equipment operated by utilities, or similar systems and equipment, of an industrial establishment or complex under control of qualified persons.

10. Public Utility Research Center (PURC) – A research institute located at the University of Florida. PURC is an internationally recognized academic center dedicated to research and providing training in utility regulation and strategy, as well as the development of leadership in infrastructure policy.