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May 3, 2010

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Ms. Ann Cole Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

100264-ET

# Re: Petition Of Florida Public Utilities Company for Approval of Updated Storm Hardening Plan

Dear Ms. Cole:

Enclosed for filing, please find the original and 7 copies of Florida Public Utilities Company's Petition for Approval of Updated Storm Hardening Plan, along with its 2010-2012 Storm Hardening Plan, submitted in accordance with Rule 25-6.0342, Florida Administrative Code.

Please kindly confirm receipt by stamping the enclosed extra copy of this cover letter and

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Ms. Ann Cole May 3, 2010 Page 2

returning it to me. Thank you for your assistance with this filing. As always, if you have any questions whatsoever about this filing, please do not hesitate to contact me.

Sincerely,

Lett Keating

Beth Keating AKERMAN SENTERFITT 106 East College Avenue, Suite 1200 Tallahassee, FL 32302-1877 Phone: (850) 224-9634 Fax: (850) 222-0103

Enclosures

cc: Office of Public Counsel

#### **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In Re: Petition of Florida Public Utilities Company for approval of its 2010 Storm Hardening) Plan. ) Docket No.

Filed: May 3, 2010

#### PETITION OF FLORIDA PUBLIC UTILITIES COMPANY FOR APPROVAL OF UPDATED STORM HARDENING PLAN

Florida Public Utilities Company ("FPUC" or "Company"), pursuant to Rule 25-6.0342(2), Florida Administrative Code, and Order No. PSC-08-0327-FOF-EI, hereby files its updated Storm Hardening Plan and petitions the Florida Public Service Commission (PSC) to

approve the Company's 2010 Storm Hardening Plan.

In support of this Petition, FPUC states:

1. The Company is a utility with its principal office located at:

> Florida Public Utilities Company 401 South Dixie Highway West Palm Beach, FL 33401

2. The name and mailing address of the persons authorized to receive notices are:

Beth Keating	Mr. P. Mark Cutshaw
Akerman Senterfitt	Florida Public Utilities Company
106 East College Avenue	P.O. Box 418
Suite 1200	Fernandina Beach, FL
Tallahassee, Florida 32301	32035-0418

3. Rule 25-6.0342(2), Florida Administrative Code, provides as follows:

> (2) Storm Hardening Plans. Each utility shall, no later than 90 days after the effective date of this rule, file with the Commission for its approval a detailed storm hardening plan. Each utility's plan shall be updated every 3 years, unless the Commission, on its own motion or on petition by a substantially affected person or utility, initiates a proceeding to review and, if appropriate, modify the plans. In a proceeding to approve a utility's plan, the Commission shall consider whether the utility's plan meets the desired objectives of enhancing reliability and reducing restoration costs and outage DOCUMENT NUMBER-DATE

times in a prudent, practical, and cost-effective manner to the affected parties.

4. Attached hereto as Exhibit 1, is FPUC's 2010-2012 Storm Hardening Plan, which is filed in accordance with Rule 25-6.0342, Florida Administrative Code. The attached Exhibit 1 includes FPUC's updated storm hardening specifications. In addition, included as Exhibit 2 are the "Process to Engage," as well as the stipulation between FPUC and the Florida Cable Telecommunications Association, which were entered into, and approved, in Docket No. 070300-EI. FPUC continues to conform with these agreements.

5. In filing its updated Storm Hardening Plan, FPUC notes and brings to the Commission's attention, that later amendments to the Plan may be necessary because the Florida Reliability Coordinating Council (FRCC) is conducting an audit of FPUC's compliance with FERC/NERC standards.

6. The FRCC audit is the first of its kind for FPUC and is of critical importance for FPUC. Consequently, the Company has been engaged in extensive pre-audit preparation efforts over the past few months, as well as recent extensive document and evidence submissions for the FRCC audit.

7. Because Company resources have been unavoidably diverted by the FRCC audit, the audit process has impaired, to some degree, FPUC's ability to confirm and finalize certain portions of the Storm Hardening Plan. FPUC is, nevertheless, working aggressively to ensure that all updated information is verified and incorporated in this Plan.

8. To the extent that updated information will likely necessitate later supplementation of this Plan, areas where modification may be necessary are:

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- + Pole inspection of newer CCA poles using data from recent inspections.
- ✤ Tree trimming efficiencies and accomplishments for 2009.
- ✤ Joint Use attachments for each division.
- Storm hardening projects, critical customer, cost, poles replaced, etc.
- \* Communications with Third Party Attachers.

9. Although FPUC anticipates that it may be necessary to update some portions of its 2010-2012 Storm Hardening Plan, FPUC will nonetheless be able to participate in a constructive and meaningful way at the Commission's May 17, 2010 Hurricane Season Preparation Briefing and in the June 10, 2010 Storm Hardening Workshop.

10. FPUC is actively working to ensure that updates or corrections to this Plan, if any, will be filed with the Commission on or before June 10, 2010.

11. FPUC's 2010-2012 Plan will provide storm resilience benefits cost-effectively consistent with the requirements of Rule 25-6.0342, Florida Administrative Code.

WHEREFORE, Florida Public Utilities Company hereby respectfully submits its 2010-2012 Storm Hardening Plan for review and approval.

RESPECTFULLY SUBMITTED this 3rd day of May, 2010.

Catin

Beth Keating Akerman Senterfitt Attorneys at Law 106 East College Avenue, Suite 1200 Tallahassee, FL 32301 (850) 224-9634

Attorneys for Florida Public Utilities Company

# FLORIDA PUBLIC UTILITIES COMPANY

# 2010 – 2012 STORM HARDENING PLAN

# EXHIBIT 1

STORM HARDENING PLAN AND GENERAL RULES AND SPECIFICATIONS FOR JOINT USE



# Florida Public Utilities Company

Storm Hardening Plan 2010 - 2012

Rule 25-6.0342 F.A.C.

May 2010

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#### FLORIDA PUBLIC UTILITIES COMPANY

#### **INTRODUCTION**

This filing is to fulfill the Requirement for Investor Owned Electric Utilities to File Ongoing Storm Preparedness Plans and Implementation Cost Estimates as set forth in FPSC Order PSC-07-0043A-FOF-EU, Rule 25-6.0342(2), F.A.C., and Order No. PSC-08-0327-FOF-EI.

FPUC is currently in the process of developing a specification manual that will take into consideration all the plans shown below. Based on this, some of the information requested has not yet been developed but will be provided to all interested parties upon completion.

#### **<u>1.0 Wood Pole Inspection Plan</u>**

Florida Public Utilities Company (FPUC) will implement an eight year inspection cycle on all wooden transmission and distribution poles based on the requirements of the National Electric Safety Code (NESC). The results of this inspection will be reported annually, by March 1, to the Commission regarding the results of the prior calendar year inspections of its wooden transmission and distribution poles.

FPUC will perform inspections, in accordance with the predetermined cycles, of all wooden transmission and distribution poles. Cycles will be established, by division, based on a logical and efficient method of inspecting poles and considering previous inspection cycles. The cycles may fluctuate year to year based on other factors but will ensure that all poles are inspected at a minimum of eight year intervals.

Experience of previous visual inspections has suggested that newer CCA poles do not need the extensive inspection as has been proposed. Factual data has been collected, but has not yet been consolidated, that will validate the assertion that new CCA poles should be excluded from certain aspect of the inspections. This data will be submitted within the next few months along with the critieria for certain types of poles that will be excluded from inspection.

#### Inspection Process

The inspection will consist of a visual inspection to determine if any defects are found that would require that the pole be replaced. Should this test indicate that the pole is not suited for continued use, it will be rejected and the appropriate corrective action (replacement, bracing, etc.) will be planned.

If the pole is found acceptable on the visual inspection, the pole will be sound and bored to determine the internal condition of the pole. (Note: Based on approval of criteria to exempt certain poles from inspection, this section will be modified) Should this test indicate that the pole is not suited for continued use, it will be rejected and the appropriate corrective action (replacement, bracing, etc.) will be planned.

If the pole is found acceptable in the sound and bored test, all non-CCA poles and all CCA poles will be excavated and tested. (Note: Based on approval of criteria to exempt certain poles from inspection, this section will be modified) If this test indicates the pole is suitable for continued service, the pole will be treated and backfilled. Should this test indicate that the pole is not suited for continued use, it will be rejected and the appropriate corrective action (replacement, bracing, etc) will be planned. Methods are available from Contractors that will allow below ground inspection of poles in concrete or asphalt areas. These methods will be utilized to inspect in accordance with procedures above.

FPUC will perform both strength and loading assessments on each pole inspected should the above mentioned test indicate that the pole is suitable for continued use.

#### Strength and Loading Assessment

The Strength Assessment will compare the current measured circumference to the original circumference of the pole. The effective circumference of the pole will be determined to ensure that the current condition of the pole meets the NESC requirements in Table 261-1A of the NESC. Should this test indicate that the pole is not suited for continued use, it will be rejected and the appropriate corrective action (replacement, bracing, etc.) will be planned.

The Loading Assessment will consider actual attachments on the pole. In performing this test field measurements, span lengths, attachment heights, wire sizes and other attachments (including 3<sup>rd</sup> party attachments) will be analyzed in order to determine if current FPUC specifications are met and if this application meets NESC requirements. Should this test indicate that the pole is not suited for continued use, it will be rejected and the appropriate corrective action (replacement, bracing, etc.) will be planned.

Should poles be encountered that are of the same size, condition and construction, sampling will be conducted in order to ensure the strength and loading characteristics are sufficient.

FPUC will collect all relevant information on the pole inspections on an annual basis for all FPUC owned poles. Information will be maintained in a spreadsheet format by location, pole size, pole class, test results, etc. and be in such a form that summary information can be developed. Poles owned by other companies will be inspected in accordance with their specific procedures and FPUC will cooperate with any work caused by pole replacements. FPUC will work closely with 3<sup>rd</sup> party owners to share information on all poles in order to ensure work in completed in a timely manner.

In order to ensure the integrity of the pole inspection procedure, the contractor will be requirement to perform quality control assessments of work in order to ensure pole inspection requirements are being met and provide documentation that this has occurred. FPUC will also random sample the results presented in order to verify and document results.

FPUC will submit a summary report, as required, to the Division of Economic Regulation by March 1 of each year outlining results of the previous year's inspection. The summary will include type of inspection, poles inspected, pole data, poles rejected, reasons for rejection, and poles replaced or braced. This information will be analyzed on a continuing basis to determine trends associated with pole replacements in order to improve the overall inspection program. Annual costs to perform the inspections as indicated above are approximately \$152,000. The inspections will involve approximately 3800 poles per years. Initial expectations are of the poles inspected, approximately 10% (380 poles) will require replacement. The associated cost to replace or brace the poles will be approximately \$456,000 per year

### 2.0 Ten Part Storm Preparedness Plan

#### 2.1 Vegetation Management

FPUC is currently working towards the accomplishment of a three year vegetation management cycle on main feeders beginning effective beginning in June 2008. The plan also includes a six year vegetation management cycle on laterals on the system. Although data is not readily available for the FPUC system, other companies with the necessary data have justified this increased trim cycle based on that data.

The program will include the following:

- 1. Three year vegetation management cycle on all main feeders.
- 2. Six year vegetation management cycle on all laterals.
- 3. Increased participation with local governments to address vegetation management and alternatives in order to improve overall reliability due to tree related outages.
- 4. Information will be made available to customers regarding the maintenance and placement of trees.

Based upon the current tree trimming crew level, the Company will work make reasonable efforts to address the following items if and when tree trimming crews become available.

- 1. Annual inspection of main feeders to critical infrastructure prior to the storm season to identify and perform the necessary trimming.
- 2. Address danger trees located outside the normal trim zone and located near main feeders as reported.

Based on 2007 information, as shown below, the total system to be maintained in the vegetation management program involves 723 miles of distribution lines and 21.5 miles of transmission lines. The distribution lines are made up of 147 miles of main feeders and 576 miles of laterals. Below is an analysis of the resources necessary to achieve the desired results for either a complete a three year main feeder and six year lateral cycle. The overall year to date average for 2007 is 36 miles per year per crew in Northwest Florida and 17 miles per year per crew in Northeast Florida. (Note: Updated data from 2009 actual results is currently being compiled. This information will be added to this plan when available)

#### Number of tree trimming crews for main feeder three year cycle and six year lateral cycle

Line Miles

36 miles/crew

147 miles (feeders)	1.7
576 miles (laterals)	3.0
Total Resources	4.7
Line Miles (NW FL)	36 miles/crew
112 miles (feeders)	1.0
514 miles (laterals)	2.4
Total Resources	3.4
Line Miles (NE FL)	17 miles/crew
35 miles (feeders)	0.7
62 miles (laterals)	0.6
Total Resources	1.3

Based on the available 2007 average trim rate and the three year main feeder and six year lateral cycle, a total of five crews are required in order to maintain this cycle. Transmission lines in NE FL will be accomplished as possible with the existing tree trimming crews. As indicated above regarding completion of danger tree removal and annual inspection and trimming of critical infrastructure, the company will make reasonable efforts to address these if and when tree trimming crews become available.

FPUC will make reasonable efforts to increase the data collected for the vegetation management program. This data will include the miles of line trimmed annually to ensure the program meets the objectives outlined. Data collected will include detail on trees trimmed, tree density, danger trees removed, etc. which will be used to begin comparing vegetation management productivity with the number of tree related outages. This information will be used to either justify or modify the existing program to ensure maximum cost benefits and reliability improvements.

#### 2.2 Joint-Use Pole Attachment Audit

FPUC currently has joint use agreements with multiple telecommunication and cable television providers. Although the agreements allow joint use attachments audits, these audits have not been completed as allowed in the contracts. Beginning in 2010, audits will be initiated with all joint use attachers in order to identify the total number of attachments and identify any violations that may exist. GIS mapping information is now available and will be used and as a basis when conducting the audits.

FPUC currently has identified a total of 4,449 (2950 – NW FL and 1599 – NE FL) telecommunication attachments and 8,949 (6343 – NW FL and 2606 – NE FL) cable television attachments within the distribution system. FPUC is also attached to 512 (102 – NW FL and 410 – NE FL) telecommunication poles.

During the inspection process, the following data will be collected for use in analyzing the integrity of joint use poles. Based upon the significant length of time since the last joint use audit, strength and loading assessments will not be completed in this audit. The assessments will be conducted in the pole inspection program described above.

- 1. Pole Location (GPS information from mapping system)
- 2. Owner of the pole
- 3. City/County location
- 4. Pole type
- 5. Pole height
- 6. Pole class
- 7. Pole treatment
- 8. Date manufactured
- 9. Date Inspected (if known)
- 10. Date retreated (if known)
- 11. Joint use attachers (company name)
- 12. Type of joint use attachment
- 13. Violations
- 14. Miscellaneous Comments

The information collected in the audit will be compiled and handled in accordance with the specific joint use agreement for that attachment. Any dangerous conditions identified that could result in a failure of the pole will be addressed immediately. The cost to manage the joint use audit and attachment process will be approximately \$25,000 on an annual basis. The joint use audits will be conducted in accordance with the contracts for the third party attachers.

Data collected during the audit process will be analyzed in order to determine the number of poles found to be overloaded, the number of unauthorized joint use attachments and customer outages related to these situations.

#### 2.3 Inspection Cycle of Transmission Structures

Transmission inspections will be completed on all transmission facilities and will include climbing patrols of the 138 KV and 69 KV transmission lines owned by FPUC. This inspection will ensure that all structures have a detailed inspection performed at a minimum of every six years. The inspection will include ninety five (95) 138 KV structures and two hundred twelve (212) 69 KV structures. A local industrial customer who own 69 KV transmission line structures connected to the FPUC will be strongly encouraged to complete a similar type inspection. Total cost to perform a complete inspection on all structures will be approximately \$123,600 (\$20,600 annually).

Transmission substation equipment will also be inspected annually to document the integrity of the facility and identify any deficiencies that require action.

The inspections will ensure that all transmission towers and other transmission line supporting equipment such as insulators, guying, grounding, conductor splicing, cross-braces, cross-arms, bolts, etc structurally sound and firmly attached. Similarly, all transmission substations will be inspected to ensure that all structures, buss work, insulators, grounding, bracing, bolts, etc are structurally sound and firmly attached.

Each inspection will be fully documented in order to provide information in accordance with FPSC guidelines and will reported annually.

#### 2.4 Storm Hardening Activities for Transmission Structures.

FPUC's existing 138 KV system is constructed using concrete and steel poles or towers and generally comply with the new storm hardening requirements. This system will continue to be inspected as outlined above to ensure the integrity of the system.

FPUC's 69 KV system consist of a total of 212 poles of which 39 are concrete poles. All installations met the NESC code requirements at the time of construction. A policy of replacing all existing wood poles with concrete has been in place for some time. This policy requires that when it becomes necessary to replace a wood pole due to construction requirements or concerns with the integrity of the pole, a concrete pole meeting the current NESC requirements will be utilized.

#### 2.5 Geographic Information System (GIS)

FPUC has implemented a GIS mapping system in both divisions and had the systems completed and operational in January 2008. The UAI system is an ESRI based system using ArcGIS to identify the distribution and transmission facilities overlaid on a land base system. The system locates the facilities on the land base while allowing the ability to enter data on all physical assets within the system. The system also communicates with the Customer Information System to identify usage information and functions as a Customer Outage System that will allow for collection of outage information for use in determining reliability indices.

The GIS will be used as an integral part of the data collection in many of the programs mentioned in this document. This system will also collect information regarding joint use attachments which will provide additional information in conducting joint use audits.

#### 2.6 Post-Storm Data Collection and Forensic Analysis

FPUC will employ contractors to perform both the post-storm data collection and forensics analysis should a significant storm occur in either division. The contractors will be provided with system mapping information and requested to collect post-storm damage information on areas as defined by the company. The areas will be selected in order to survey the areas in which the most damage occurs in order to gain the most information.

Damage will be identified so that the cause of the outage is identified as it relates to trees, wind, debris, conductor failure, pole failure, etc. which will be identified on the map. Depending upon the degree of damage, forensic analysis may be collected during this process. However, if the damage is extensive the forensics analysis will be performed as soon as possible after the post-storm data collection is completed.

Data collected during the collection process will be analyzed after completion of all storm related work has been completed. This analysis will summarize the type damage and failure modes of outages in order to determine methods to improve reliability in the future. The cost associated with this will vary widely dependent upon the degree of damage associated with the storm.

#### 2.7 Outage Data for Overhead and Underground Systems

FPUC will continue to collect outage data for overhead and underground systems in order to evaluate the reliability indices associated with the two systems. The systems are in place for this type analysis and will be further improved with the installation of the automated Customer Outage system.

#### 2.8 Coordination with Local Governments

FPUC actively participates with local governments in planning for emergency situations and necessary communications are established for these situations. Past practice has not included having FPUC personnel at certain government locations at all times during an emergency situation. However, futures plans are to have personnel located at the county EOC's on a 24 hour basis in the future in order to ensure good communications. This will also allow for improved updating of outage information as the storm restoration occurs.

FPUC will also continue to cooperate with local governments in actively discussing both undergrounding and tree trimming issues as they arise. Involvement and discussion regarding both undergrounding and vegetation management issues have allowed for additional communication and education of both parties.

#### 2.9 Collaborative Research

FPUC is currently participating with The Public Utility Research Center (PURC) as well as other investor owned, cooperative and municipal electric utilities in order to perform beneficial research regarding hurricane winds and storm surge within the state PURC has demonstrated the ability to lead and coordinate multiple groups in the research activity. FPUC will continue to support this effort but does not intend to conduct other types of research at this time.

#### 2.10 Disaster Preparedness and Recovery Plans

The primary objective of the Disaster Preparedness and Recovery Plan is to provide guidelines under which Florida Public Utilities Company will operate in emergency conditions. This information is contained with the Emergency Procedures that are updated on an annual basis. The following objectives are included to ensure orderly and efficient service restoration.

- 1. The safety of employees, contractors and the general public will have the highest priority.
- 2. Early damage assessment is required in order to develop manpower requirements.
- 3. Request additional manpower as soon as conditions and information indicate the need.
- 4. Provide for orderly restoration activities in order to provide efficient and rapid restoration.
- 5. Provide all logistical needs for employees and contractors.

- 6. Provide ongoing preparation of our employees, buildings, equipment and support function in advance of an emergency.
- 7. Provide support and additional resources for employees and their families should they need assistance to address injury or damage as a result of the emergency situation.

FPUC will utilize the plan to prepare for storms annually and will ensure all employees are aware of their responsibilities should the need arise. Based on the location of the storm, the division office in that area will be designated as the operations center and all restoration and logistical activities will be coordinated from that location. Restoration activities will be handled in the following manner:

- 1. During the early stages of the emergency, restoration will be handled in the usual manner. All service will be restored as soon as possible.
- 2. As the storm intensifies and trouble reaches major proportions, the main restoration activities will be limited to keeping main feeders energized by clearing trouble without making repairs.
- 3. When the intensity of the storm is such that work can no longer be done safely, all work will cease and personnel will report to the office or other safe locations.
- 4. When the storm has subsided to a reasonable level and it is safe to begin restoration activities damage assessment and restoration of main feeders to critical customers will begin.
- 5. Restoration activities will continue in an effort to restore service in the following manner:
  - a) Substations
  - b) Main feeders to critical customers
  - c) Other main feeders
  - d) Undamaged primary
  - e) Damaged primary, secondary, service, street lights, security lights

These guidelines are not intended to prevent responding to emergency situations. Any life threatening emergency will be handled immediately, in such a manner as to not endanger the lives of others.

Communication efforts with local governments, County EOC's and the media will be a key in ensuring a safe and efficient restoration effort. Key personnel will be designated as the media liaison and will ensure that communications regarding the status of the restoration activities are available on a scheduled basis.

# 3.0 Compliance with NESC Overhead Requirements

# 3.1 Distribution

FPUC distribution facilities have been installed in accordance with NESC requirements in effect at the time of installation. New specifications have been developed that will allow for certain future installations to exceed the NESC by utilizing the extreme wind loading standards.

#### 3.2 Transmission

FPUC transmission facilities have been installed in accordance with NESC requirements in effect at the time of installation. This plan includes a provision that all remaining wood transmission poles will be replaced with concrete poles that will meet or exceed the NESC extreme wind loading standards. This requires that when it becomes necessary to replace a wood pole due to construction requirements or concerns with the integrity of the pole, a concrete pole meeting the current NESC requirements will be utilized.

#### 3.3 Substation

FPUC substation facilities have been installed in accordance with NESC requirements in effect at the time of installation. Work has been completed around certain substations that will reduce the possibility of wind blown debris impacting the substation facilities. Efforts will continue to address these situations as practical.

#### 3.4 Extreme Wind Loading for Distribution Facilities

As required by commission order, FPUC has developed plans to begin incorporating the extreme wind loading standards shown in Figure 250-2(d) of the 2007 NESC code. These standards will be evaluated when new construction and major planned projects are being designed to determine the overall value and contribution to the reliability of the system. If it is determined through a cost benefit analysis that these standards are prudent in the design, they will be incorporated into the design.

The primary focus using the extreme wind loading standards is for distribution facilities along major highways and providing service to critical infrastructure such as hospitals, water plants and sewer treatment plants. FPU is currently developing the list of projects for the 2010 - 2012 time period. This information will be provided when available.

2010	Division	Critical Load	Feeder	Miles	Estimated Cost
2011	Division	Critical Load	Feeder	Miles	Estimated Cost
2012	Division	Critical Load	Feeder	Miles	Estimated Cost

# 4.0 Mitigation of Damage Due to Storm Surge and Flooding

FPUC is currently beginning the development of an expanded specifications book that will include details on mitigating damage of underground/overhead distribution and overhead transmission facilities.

Transmission facilities are located only in the Northeast Florida Division. The transmission lines are constructed near and across coastal waterways and were originally designed to meet NESC requirements for these applications. Where necessary, foundations and casings were used stabilize the structures due to the soil conditions.

Overhead distribution lines in both divisions could be subject to storm surges and flooding. Lines located near the coast or inland rivers that are subject to storm surges or flooding will be evaluated and additional supporting mechanisms placed on them if needed and practical. This may include storm guys or pole bracing where necessary. The storms guys or bracing will be placed so that additional support is achieved perpendicular the distribution line. Should the affected lines include reclosers, capacitors or regulators that require electronic controls, the controls shall be mounted above maximum surge or flood levels.

Underground distribution lines that could be subject to storm surges and flooding are mainly located in the Northeast Florida Division. Based upon the significant amount of underground infrastructure in place, it is impractical to make a significant impact on what is installed. Current specifications include the use of pads that are placed approximately two feet into the ground that provide additional stability to the installation. Equipment can then be securely attached to the pad. At this time, underground distribution lines are placed in conduit but are not typically encased in concrete. Future installations of underground distribution feeders will be evaluated based on the location. Should a possibility exist that storm surges may impact these facilities, the installation will be evaluated and may be encased in concrete ducts if necessary.

#### 5.0 Placement of New and Replacement Facilities

FPUC agrees that having facilities located in areas that are easily accessible and pursuant to Rule 25-6.0341, F.A.C. Facilities will be placed along public rights of way or located on private easements that are readily accessible from public streets. These requirements are necessary in order efficiently and safely perform all necessary installation and maintenance on those facilities. Placement of facilities along rear lot lines will not occur except in certain commercial applications were open access concrete/asphalt driveways are located at the rear of the development.

#### 6.0 Deployment Strategy

#### 6.1 Description of Facilities Affected

During the deployment of storm hardening strategy, many changes will be instituted that may have an impact on future storm restoration activities. The changes have been developed; however, the detail specifications and necessary engineering review have not been completed. The technical detail is yet to be developed and is not available for inclusion in this document.

As previously mentioned, these initiatives should be implemented on or before May 2008. The significant areas of implementation are as follows:

- 1. Wood poles will be inspected so that all poles are inspected at least every eight years. (Note: Based on approval of criteria to exempt certain poles from inspection, this section will be modified)
- 2. Vegetation management activities will be increased in order to trim main feeders every three years, laterals every six years.
- 3. Joint use audits will be conducted in an effort to identify pole loading issues. These audits will be conducted once every five years. Additional detailed inspection of pole loading will be completed in conjunction with the wood pole inspection program.
- 4. Detailed climbing inspections on all transmission line will be conducted so all poles are inspected at least once every six years.
- 5. The company will continue to replace wood transmission structures with concrete based on development or business needs.
- 6. A plan has been developed to begin rebuilding distribution lines to critical infrastructure incorporating the extreme wind loading criteria into the design of these systems. The details of this are shown in Section 4.4 above.
- 7. As new specifications are developed for underground facilities, consideration will be given to techniques that will mitigate damage for storm surges and floods.
- 8. FPUC will continue the current practice of attempting to place facilities on public rights of way and will ensure private easements are secured if this is not possible.

#### 6.2 Communities and Areas Affected by Electric Infrastructure Improvements

The majority of the items listed in 6.1, Description of Facilities Affected, will affect all areas of the FPUC service territory. The intent is to ensure all areas benefit from these strategies over the term of the work. The 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. The distribution line rebuilding to comply with the NESC extreme wind loading standards will equally benefit both divisions. It should also be noted that the storm hardening to facilities serving the Hospital located in the Northwest Florida division is still being evaluated due to the possibility of relocation in the near future. The situation will be monitored and will be reevaluated after the final decision is made on the location of the Hospital.

#### 6.3 Upgrading of Joint Use Facilities

FPUC currently proposes that several projects be considered for 2010 - 2012 time period that are intended to upgrade existing facilities to critical infrastructure. It is anticipated that a significant portion of the poles upgraded will have one or more joint use attachments. FPU is currently developing the list of projects for the 2010 -2012 time period. This information will be provided when available.

2010 Division Critical Load Feeder Miles Pole Est.

2011	Division	Critical Load	Feeder	Miles	Pole Est.
2012	Division	Critical Load	Feeder	Miles	Pole Est.

During the design phase of these projects, the NESC extreme wind loading standards will be applied to all poles to be installed and will include all joint use attachments. Current contract language for the joint use attachers involved will be used as a guide for this rebuilding process.

#### 6.4 Estimated Cost and Benefits

Below are shown the items and the associated cost during the 2010 - 2012 time period. Each item should have an impact on the reliability and restoration during storms as well as the normal reliability indices. As previously mentioned, FPUC does not have the supporting data to develop the benefits 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.

Item	Description	2010	2011	2012	Comments
1.0	Pole Inspections	\$152,000	\$156,000	\$162,000	3800 poles/year
2.1	Vegetation Management	\$625,000	\$643,000	\$663,000	
2.2	Joint Use Audits	\$25,000	\$26,000	\$27,000	
2.3	Transmission Inspections	\$20,600	\$21,200	\$21,900	
2.4	Trans. Storm Hardening	\$60,000	\$46,000	\$46,000	
2.5	GIS	\$4,000	\$4,000	\$4,000	
2.6	Post Storm Forensics	TBD	TBD	TBD	Dependant on Storm
2.7	OH/UG Data	N/A	N/A	N/A	No Incremental Cost
2.8	Coordination Local Govt.	\$0	\$0	\$0	
2.9	Collaborative Research	\$1,000	\$1,000	\$1,000	
2.10	Disaster Preparedness	N/A	N/A	N/A	No Incremental Cost
3.4	Extreme Wind Loading	TBD	TBD	TBD	Distribution Upgrade

#### 7.0 Joint Use Impacts

#### 7.1 Wood Pole Inspections

During the wood pole inspection process, FPUC will inspect company owned poles in accordance with this plan while all third party poles will be inspected by the owner of those poles. The wood pole inspection process will evaluate the structural soundness of existing poles and perform strength and load test. Documentation will be developed on poles that do not meet the current requirements and corrective actions scheduled.

Based on past experience it anticipated that approximately 300 joint use poles will be identified annually that need to be replaced. Although it is possible to consider additional bracing for certain poles, most will require replacement. As this occurs, the current contacts with the joint use parties will be utilized to develop the procedures for the replacement and transfer of necessary attachments.

#### 7.2 Joint Use Audits

Joint use audits will be scheduled with all joint users in order to determine attachment amounts and to identify possible loading issues that need to be addressed. All parties should be available for participation in the audits in accordance with the joint use agreements. Due to the length of time since the last audit, it is important that all parties participate.

#### 7.3 Attachment Standards and Procedures

FPUC currently has contracts with each third party attacher that contains the Attachment Standards and Procedures. These contracts will continue in effect and will govern the standards and procedures at this time. As previously mentioned, additional construction specifications will be developed that can be used in conjunction with the contracts. As the additional specifications are developed, third party attachers will have the ability to provide input into the new specifications. Attached to this document are the current Joint Use Attachment Specifications.

#### 7.4 Soliciting Input from Third Party Attachers

At this time, FPUC has not sent notification to the following third party attachers concerning the Storm Hardening Plan for the years 2010 - 2012. The has been no information submitted by third party attachers regarding the plans. However, the "Process to Engage Third Party Attachers" stipulation filed January 29, 2008 and signed by all parties below is still in place. and The following attachers were notified.

- Florida Cable Telecommunications Association (FCTA)
- Bellsouth / AT&T
- Embarq

An additional stipulation and agreement with the Florida Cable Telecommunications Association regarding overlashing, pole strength assessments and pole inspections is currently in place but will expire with the approval of this plan.

As information is received from third party attachers regarding this plan, the information will be assembled forwarded to the appropriate parties.

#### 7.5 Estimate of Costs and Benefits from Third Party Attachers

The estimate of costs and benefits from third party attachers will be forwarded after receipt from third party attachers.





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#### ATTACHMENT OF TV DISTRIBUTION

#### SISTEM IU POLES

#### ADDITIONAL REQUIREMENTS

1. Clearance to ground as per National Electrical Safety Code:

to manual over succes or alleys

- 27' minimum over railroad tracks
- ... Metal case on amplifier and terminal boxes and metal case of service switch to be effectively grounded.
- n. No amplifiers, distribution terminals and/or fused disconnect switches may be mounted directly to pole, but shall be installed upon a suitable crossarm in approved manner.
- s. receptione and television contacts shall maintain same relative position on polocy.
- o, onderground capie risers man be instance on road quarter of pole but shall not conflict with telephone attachments.
- i. no amplifier, unstribution terminal or fused disconnect switch to be installed upon transformer poles.

# FLORIDA PUBLIC UTILITIES COMPANY

By\_\_\_\_\_

#### EXHIBIT V

# FLORIDA PUBLIC UTILITIES COMPANY

# 2010 – 2012 STORM HARDENING PLAN

# EXHIBIT 2

"Process to Engage" Agreement and Stipulation with FCTA

# **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

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In re: Review of 2007 Electric Infrastructure Storm Hardening Plan filed pursuant to Rule 25-6.0342, F.A.C., submitted by Florida Public Utilities Company

Docket No.: 070300-EI

In re: Petition for rate increase by Florida Public Utilities Company. Docket No. 070304-EI

Filed: January 29, 2008

#### **PROPOSED STIPULATION**

Florida Public Utilities Company ( the "Company")' BellSouth Telecommunications, Inc. d/b/a AT&T Florida, Embarq Florida, Inc. and the Florida Cable Telecommunications Association, Inc. ("Third Party Attachers") stipulate to the following Process to Engage Third Party Attachers, and respectfully request that it be approved by the Florida Public Service Commission in the above-referenced consolidated dockets. The Office of Public Counsel has no objections to this proposed stipulation.

#### PROCESS TO ENGAGE THIRD PARTY ATTACHERS

1. The Company and Third Party Attachers will engage in a continuous dialogue on the status of the Company's storm hardening plans. A third-party attacher that wishes to be part of this process ("Participant") shall provide notification in writing to the Company, providing the name and address of the person designated to receive communications from the election utility. The Company may, no more than once a year, request that Participants confirm that they wish to continue being part of the process and update the name and address of the person designated to receive communication.

- 2. By September 5 of each year, the Company shall provide the Participants with a list of the projects identified in the Company's approved storm hardening plan on file with the Commission ("Plan") that the Company proposes to undertake in the following calendar year, pending internal budget approval. The Company shall provide the Participants with a list of such projects receiving final budget approval promptly as it becomes available.
- 3. Prior to engineering a job relative to a storm hardening project identified in its Plan, the Company shall initiate a meeting with Participants to discuss the Company's preliminary ideas for the scope of work ("Pre-Design Meeting"). At the Pre-Design Meeting, the Company shall (a) identify the poles involved; (b) identify whether the Company plans to replace poles, change from wood poles to poles of another material (*e.g.*, steel or concrete), place poles in locations different from the existing poles, relocate overhead facilities or underground existing aerial facilities, and; (c) provide the projected commencement date, and; (d) upon request by a Participant, provide other available information that would enable the Participants to make necessary preparations and evaluate whether to seek dispute resolution pursuant to Rule 25-6.0342(7) F.A.C. During this pre-design phase of a project, the Company shall also seek input from Participants as required by Rule 25-6.0342(6) F.A.C.

- 4. The Company shall provide Participants with final engineering plans promptly upon completion. Prior to beginning construction, the Company shall initiate a meeting with Participants to discuss coordination of work and a construction schedule.
- 5. Information submitted to Participants pursuant to section 2,3, or 4 above regarding projects identified in the Company's Plan will not be docketed unless a protest is filed in accordance with Rule 25-6.0342(7) F.A.C, or it is otherwise deemed necessary by the Commission.
- 6. If the Company seeks to amend its Plan by, for example, adding a project not previously identified in its Plan, it shall file a petition with the Commission requesting that the Plan be modified in accordance with Rule 25.6.0342(2) F.A.C.
- 7. The Company will file with the Director of Division of Economic Regulation by March 1 each year a status report of its implementation of its Plan. Included in this status report shall be the name of storm hardening projects commenced and/or completed by the Company, the routes and circuits affected, and any comments on the project received from Third Party Attachers.

WHEREFORE, the above-referenced parties and intervenors of record request that the Proposed Stipulation set forth above be approved by the Florida Public Service Commission in this proceeding.

Respectfully submitted this 29<sup>th</sup> day of January, 2008.

# BELLSOUTH TELECOMMUNICATIONS, INC. d/b/a AT&T FLORIDA

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COUNSEL FOR FLORIDA PUBLIC UTILITES, INC.

#### STIPULATION AND AGREEMENT

This Stipulation and Agreement ("Agreement") is between Florida Public Utilities Company ("FPUC") and the Florida Cable Telecommunications Association ("FCTA"), on behalf of its member-operators with attachments to FPUC poles. The purpose of this Agreement is to resolve concerns raised by FCTA concerning the Storm Hardening Plan 2007-2009 submitted by FPUC for approval in Docket No. 070300-EI ("Plan").

1. **Overlashing**. The parties agree as follows:

a. The Overlashing Notification process, set forth as Appendix A ("Notification Process"), shall supersede any conflicting existing contractual agreement between the parties;

b. The Overlashing Notification Process shall not apply to situations in which a party does not increase the weight or diameter of the existing attached bundle; and

c. The parties will incorporate the process and timetables set forth in this part 1. in any future construction specifications or pole attachment agreements to be executed between FPUC and FCTA member operators.

2. <u>Pole Strength and Loading Analysis</u>. FCTA has inquired about the extent to which FPUC, in assessing the strength and loading of its poles and deploying EWL to its pilot projects, will account for the potential guying effect of existing lateral lines on the pole and the sheltering effect of nearby trees. The parties agree as follows:

a. FPUC will evaluate and attempt in good faith to incorporate any methodology proposed by FCTA to account for the guying effect of existing lateral lines on the pole, so long as such methodology is consistent with generally accepted engineering practices and the NESC;

b. FPUC will take into account, if deemed appropriate by FPUC and to the extent possible, the sheltering effect of nearby trees when applying EWL design to distribution poles and lines 60 feet or less in height;

c. In evaluating the loading impact of any third-party facilities, FPUC and/or its contractor shall employ a reasonably practicable approach and shall consult with any third-party attacher deemed responsible for overloading; and

d. Any charges imposed by FPUC and its contractor in performing the pole strength and loading analysis shall not exceed the reasonable and actual cost of such analysis without a mark-up and shall not be recovered as a direct reimbursement if it is also recovered in the pole rent.

{TL146855;1} (Stipulation and Agreement)

3. <u>Pole Inspection Program</u>. FCTA has raised concerns about certain aspects of FPUC's planned inspection of joint use poles set forth in FPUC's Plan. The parties agree as follows:

a. FPUC shall notify, and consult with, FCTA and its cable-operator members as to the specific purpose(s), procedures, and standards of the pole loading assessment component of its planned Pole Inspection Program;

b. To the extent that FPUC seeks to recover the costs of its Pole Inspection Program from third-party attachers including FCTA member operators, FPUC shall recover such costs only as a flow-through from any applicable FERC accounts to the FCC pole rental formula calculation. FPUC shall not seek direct reimbursement of the costs of its planned Pole Inspection Program from FCTA member operators;

c. Upon discovering a pole that does not meet applicable standards, FPUC will consider where practical the use of guying, bracing, trusses and/or rearrangement of existing facilities prior to changing out the pole in order to meet the applicable standards; and

d. Third-party attachments with an approved permit application and existing Overlashing as of the date of this Agreement will not be deemed to have caused any non-compliance with governing standards, including loading violations.

4. **FCTA Objections to FPUC Plan**. FCTA, on behalf of its member operators, agrees to withdraw Testimony filed in opposition to FPUC's Plan and will not conduct cross examination of FPUC witnesses as to the plan filed in Docket #070300.

5. <u>Attachment Standards and Procedures</u>. FPUC agrees, and hereby clarifies that FPUC is not seeking the approval of the FPSC of its attachment standards and procedures for third-party attachments beyond a finding that FPUC has attachment standards and procedures for third-party attachments that meet or exceed the NESC.

6. <u>Existing Agreements</u>. Other than as specifically agreed to herein, the parties will continue to operate pursuant to the terms and conditions of their existing Pole Attachment Agreements.

7. <u>Term.</u> This Agreement shall remain effective: (1) unless otherwise agreed to by FPUC and FCTA member operators, or (2) until Florida Public Service Commission ("FPSC") approval of FPUC's storm hardening plan submitted pursuant to F.A.C. 25-6.0342 covering the second three year plan period, 2010 to 2012.

8. <u>No Waiver</u>. FCTA does not waive any rights it may have to challenge those of FPUC's construction or attachment standards that exceed the requirements of the NESC as unreasonable of the FCC.

9. <u>Authority to Bind FCTA Member-Operators</u>. The FCTA represents that it has authority to bind the FCTA member operators with attachments to FPUC poles (Comcast Cable Communications, LLC and Bright House Networks, LLC).

Signed: anira

Norman H. Horton, Jr., on behalf of Florida Public Utilities Company

31/08 Date:

Signed:\_fert

Beth Keating, on behalf of Florida Cable Telecommunications Association and its member-operators Date: \_\_\_\_\_/3//08

# APPENDIX "A"

#### **Overlash Notification**

- At a minimum, the third-party attacher shall submit to FPUC a 5-day pre-notification for overlash consisting of a list of pole numbers and an accompanying map. Pre-notification shall not be required for maintenance overlashing or when service requirements prohibit such notice, but such notification shall be given within 15 days after an overlash in any such situations. Overlash means lashing additional fiber or coaxial cable to an existing bundle such that the size and/or weight of the existing bundle is increased. In no case will FCTA member operators overlash where such overlashing would overload any pole or pole line. Temporary attachments to FPUC poles for rebuild purposes will be allowed for a maximum of 90 days.
- Within 15 days after such overlashing is complete, third-party attachers shall submit to FPUC post-construction notification which shall include the location of the structure that was overlashed; identification of any necessary make ready work; or certify that the poles are within loading specifications and meet all governing specifications.
- Within 15 days after post-construction notification is received, FPUC may conduct an inspection of the affected poles. The inspection may include loading analysis of poles, if deemed necessary by FPUC, in order to verify adherence to the NESC and FPUC attachment standards. FCTA member operators shall be informed if FPUC will conduct an inspection of the affected poles and shall be allowed to participate fully in the inspection process.
- Should it be determined after consultation with the FCTA member operator that the applicable pole loading standards have been exceeded by the FCTA member operator's overlash, an estimate of make ready costs will be determined and presented to the FCTA member operator. Both parties agree to meet in order to determine cost effective solutions for avoiding excessive make ready costs.