



080256

May 7, 2008

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COMMISSION  
CLERK

VIA HAND DELIVERY

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

Re: Petition to modify Wood Pole Inspection Plan by Progress Energy Florida, Inc.;  
Docket No. 080256

Dear Ms. Cole:

Please find enclosed for filing on behalf of Progress Energy Florida, Inc. the original and seven (7) copies of its petition to modify Wood Pole Inspection Plan.

Thank you for your assistance in this matter. Should you have any questions, please feel free to call me at (727) 820-5184.

Sincerely,

*John T. Burnett* LMS  
John T. Burnett

- CMP \_\_\_\_\_
- COM \_\_\_\_\_
- CTR \_\_\_\_\_
- ECR \_\_\_\_\_
- DDL 1 \_\_\_\_\_
- GPC 1 \_\_\_\_\_
- PCA \_\_\_\_\_
- SEL \_\_\_\_\_
- SGA \_\_\_\_\_
- SEC \_\_\_\_\_
- CLK 1 \_\_\_\_\_
- OTH \_\_\_\_\_

Progress Energy Florida, Inc.  
1061 College Avenue  
Suite 800  
Tallahassee, FL 32301

DOCUMENT NUMBER-DAY  
03763 MAY -7 08  
FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Petition to modify Wood Pole  
Inspection Plan by Progress Energy  
Florida, Inc.

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Docket No.: \_\_\_\_\_

Date Filed: May 7, 2008

**PETITION TO MODIFY WOOD POLE INSPECTION PLAN**

For the reasons stated herein, Petitioner, Progress Energy Florida, Inc. ("PEF"), hereby files this request to modify wood pole inspection method for concrete-encased wood poles as set forth in PEF's Wood Pole Inspection Plan filed on September 20, 2006. In support of this petition, the Petitioner states the following:

1. PEF is an investor-owned utility subject to the jurisdiction of the Commission under Chapter 366, Florida Statutes. PEF's general offices are located at 299 First Avenue North, St. Petersburg, Florida 33701.
2. All notices, pleadings and other communications required to be served on Petitioner should be directed to:

John T. Burnett, Esquire  
Progress Energy Florida, Inc.  
Post Office Box 14042  
St. Petersburg, FL 33733-4042  
Telephone: (727) 820-5184  
Facsimile: (727) 820-5249

Paul Lewis, Jr.  
Director, Regulatory Affairs  
Progress Energy Florida, Inc.  
106 East College Avenue, Suite 800  
Tallahassee, FL 32301  
Telephone: (850) 222-8738

For express deliveries by private courier, the address is as stated in paragraph 1.

3. In this petition, PEF is seeking authorization to modify its current Commission-approved wood pole inspection plan. Specifically, PEF seeks to modify its resistograph inspection method used to inspect concrete-encased wood poles as set forth in

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PEF's Wood Pole Inspection Plan filed on September 20, 2006.

4. In PEF's Wood Pole Inspection Plan, wooden poles are inspected using methods such as: visual inspection, excavation, prodding, and sound and bore. Where excavation at the ground level cannot be used due to concrete-encased poles, PEF uses a drilling resistance device ("resistograph") instead of the more traditional sound and bore inspection that is commonly used for such poles. PEF makes reference to the resistograph method for both transmission and distribution wood poles in its Wood Pole Inspection Plan. For Transmission, on page 4, PEF's Plan states:

*"Where excavation at the ground line cannot be achieved due to concrete or similar barriers, pole integrity will be assessed using a drilling resistance measuring device. These devices are now available on the market and are able to accurately detect voids and decay in poles at and below the ground where excavation is not possible."*

For Distribution, on pages 7 and 8, PEF's Plan states:

*"In order to improve the results provided by traditional sound and bore on such poles, PEF plans to use a drilling resistance measuring device where excavation at the ground line cannot be achieved. These devices are now available on the market and are able to accurately detect voids and decay in poles at and below the ground where excavation is not possible."*

5. In 2007, PEF utilized Osmose to perform resistograph inspections on concrete-encased wooden poles. In reviewing Osmose's inspection data for the year, PEF found that resistograph inspection results were equivalent, but not superior, to results obtained by traditional methods used for inspection. Comparing the costs of utilizing the resistograph methodology versus traditional sound and bore methods, PEF has found that on a per pole basis, the resistograph inspection costs approximately an additional \$17.00 per pole.

6. Given the fact that inspection and cost data show that sound and bore inspections for concrete-encased wood poles is currently the most cost-effective option for

PEF, PEF proposes to modify its wood pole inspection plan so the plan will allow PEF to maintain the flexibility to use the resistograph or sound and bore inspection method on concrete-encased poles depending on which method provides PEF the most reliable and cost-effective inspection option based on relevant facts and circumstances.

7. Attached hereto as Exhibit A is PEF's proposed modifications to its current Wood Pole Inspection Plan in both legislative and final format. Other than the changes reflected in this Exhibit, no other sections of PEF's current Wood Pole Inspection Plan have been changed.

WHEREFORE, PEF respectfully requests the Commission to enter an order granting this petition and approving the changes set forth in Exhibit A.

Respectfully submitted,

  
\_\_\_\_\_  
John T. Burnett, Esq.

Associate General Counsel  
Progress Energy Service Company, LLC  
Post Office Box 14042  
St. Petersburg, FL 33733-4042  
Telephone: (727) 820-5184  
Facsimile: (727) 820-5519

Attorney for Progress Energy Florida, Inc.

# Exhibit A

REVISED Wood Pole Inspection Plan – Pages 4 & 8

(legislative version)

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## Comprehensive Wood Pole Inspection Plan

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- Above Ground Observations - Visual inspection of the exterior condition of the pole and visual inspection of components hanging from the pole.
- Sound with Hammer – The exterior of the pole is tested with a hammer and the inspector listens for “hollowness” of the pole.
- Bore at Ground Line – The pole is bored at a 45 degree angle below the ground line. This inspection method helps to determine internal decay at the base as well as measure the amount of “good wood” left on the interior of the pole.
- Excavate to 18 inches (Full Ground Line Inspection) – The soil is removed 18 inches below ground line. Decay pockets are identified and bored to determine the extent of decay.
- Removal of Surface Decay – Identified areas of decay are removed down to “good wood” using a sharp pick.
- Assessment of Remaining Strength – All data collected from the inspection will be used to determine effective circumference and remaining strength of the pole. In evaluating pole conditions, deductions shall be made from the original ground line circumference of a pole to account for hollow heart, internal decay pockets, and removal of external decay. The measured effective critical circumference shall be at the point of greatest decay removal in the vicinity of the ground line taking into account the above applicable deductions. A pole circumference calculator shall be used to determine the measured effective critical circumference. To remain in service “as-is,” the pole shall meet minimum NESC strength requirements. The measured effective critical circumference will be compared to the minimum acceptable circumference for the applicable class pole listed in the latest version of ANSI 05.1-1992, American National Standard for Wood Poles and NESC-C2-1990(1). Poles below the minimum acceptable circumference shall be rejected and will be marked in the field for replacement as either a State 4 or State 5 pole.
- Where excavation at the ground line cannot be achieved due to concrete or similar barriers, pole integrity will be assessed using a drilling resistance measuring device. These devices are now available on the market and are able to accurately detect voids and decay in poles at and below the ground where excavation is not possible. However, PEF maintains the flexibility to use the resistograph or sound and bore inspection method on concrete-encased poles depending on which method provides PEF the most reliable and cost-effective inspection.

### (iii) Structural Integrity Evaluation

As part of the visual inspection of the poles, the inspector will note and record the type and location of non-native utility pole attachments to the pole or structure. This information will be used by the Joint Use Department to perform a loading analysis on certain poles or structures, where necessary, as more fully described in the Joint Use section of this Plan. In such cases, the loading information obtained from this analysis will be used along with the strength determined in the ground-line inspection. If the loads exceed: a) the strength of the structure when new and b) the strength of the existing structure exceeds the strength required at replacement, according to the NESC, the structure will either be braced to the required strength or will be replaced with a pole of sufficient strength. Specific information on this process is contained in the Joint Use section of this Plan.

DOCUMENT NUMBER-DATE

## Comprehensive Wood Pole Inspection Plan

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poles, it is estimated that potentially 18 poles out of the 2,869 concrete encased poles inspected in one wood pole inspection year would go undiscovered as “reject poles.” In order to improve the results provided by traditional sound and bore on such poles, PEF plans to use a drilling resistance measuring device where excavation at the ground line cannot be achieved. These devices are now available on the market and are able to accurately detect voids and decay in poles at and below the ground where excavation is not possible. However, PEF maintains the flexibility to use the resistograph or sound and bore inspection method on concrete-encased poles depending on which method provides PEF the most reliable and cost-effective inspection.

(iii) Data Collection

All data collected through the inspection process will be submitted to PEF’s Distribution Department in electronic format by inspection personnel. This data will be used to determine effective circumference and remaining strength of the pole. In evaluating pole conditions, deductions shall be made from the original ground line circumference of a pole to account for hollow heart, internal decay pockets, and removal of external decay. The measured effective critical circumference shall be at the point of greatest decay removal in the vicinity of the ground line taking into account the above applicable deductions. A pole circumference calculator shall be used to determine the measured effective critical circumference. To remain in service “as-is,” the pole shall meet minimum NESC strength requirements. The measured effective critical circumference will be compared to the applicable minimum acceptable circumference listed in the most current versions of ANSI 05.1-1992, American National Standard for Wood Poles, and NESC-C2-1990(1). Poles below the minimum acceptable circumference shall be rejected and will be marked in the field for replacement.

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- Poles not meeting the required strength for loading will be processed in the same manner as loss of strength due to decay.

(v). Records and Reporting

# Exhibit A

REVISED Wood Pole Inspection Plan – Pages 4 & 8

(clean copy)

DOCUMENT NUMBER-DATE

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## Comprehensive Wood Pole Inspection Plan

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