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August 14, 2014

Ms. Carlotta S. Stauffer, Commission Clerk
Office of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

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COMMISSION
CLERK

**Re: Docket No. 140082-EI – *Petition for Change to Pole Inspection & Load Assessment Requirements*
FPL’s Response to Staff’s Third Data Request**

Dear Ms. Stauffer:

Enclosed for filing on behalf of Florida Power & Light Company (“FPL”) are the original and five copies of FPL’s responses to Staff’s Third Data Request dated July 31, 2014, relating to FPL’s Petition for Change to Pole Inspection & Load Assessment Requirements.

If you have any questions regarding this filing, please do not hesitate to contact me at (561) 304-5633 or scott.goorland@fpl.com. Thank you for your assistance.

Respectfully submitted,

Scott A. Goorland
Principal Attorney

Attachment

COM _____
AFD 1
APA _____
ECO _____
ENG 2
GCL 1
IDM _____
TEL _____
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Florida Power & Light Co.
Docket No. 140082-EI
Staff's Third Data Request
Data Request No. 1, Page 1

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5 Q1.

6 FPL's response to Staff's First Data Request, Question 1, indicates that FPL will continue
7 to do visual and sound and bore inspections on all wooden poles.

8 a. In addition to sound and bore inspection on all wooden poles, are there any other types
9 of inspections that FPL performs on its wooden poles? If so, what are the different
10 types of inspections?

11 b. Please state what is the cost associated for each type of wooden pole inspection,
12 including sound and boring?

13 A.

14 a. Consistent with its FPSC-approved 8-year cycle pole inspection plan, FPL performs: (1)
15 visual inspections from the ground line to the top of the pole to identify visual defects (e.g.,
16 woodpecker holes, split tops, decayed tops, etc.); (2) above ground line sound and bore
17 inspections; (3) excavations, with below ground line sound and bore inspections; (4) strength
18 assessments (comparing the current measured circumference to the original circumference to
19 ensure the pole continues to meet NESC strength requirements); and (5) load assessments
20 (utilizing various actual field measurements, e.g., pole strength, span length, attachment
21 heights, and wire sizes to ensure the pole is not overloaded). Note: If a pole fails one of the
22 above inspection types, no other remaining inspection types, if any, are conducted.

23 FPL notes that while it is seeking exemptions for two selected inspection types (see (3) and
24 (5) above) for a selected population of poles (CCA poles < 28 years and poles that tested <
25 80% of full load during the recently completed initial 8-year cycle), every distribution pole in
26 its system will continue to be visited and inspected on an 8-year cycle utilizing at least three
27 of the five inspection types described above.

28 In addition to its 8-year cycle pole inspection program, FPL poles are also inspected
29 (primarily visual and sounding) as a result of processes contained within certain other
30 reliability programs (e.g., priority feeder and overhead line inspections) as well as daily
31 work activities (e.g., repairs, maintenance and restoration).

32 b. <u>Inspection Type</u>	<u>Current Cost</u>	<u>Inspection Time</u>
33 Above ground-visual/strength	[REDACTED]	[REDACTED]
34 Above ground-visual/strength/sound	[REDACTED]	[REDACTED]
35 Above ground-visual/strength/sound/bore	[REDACTED]	[REDACTED]

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Florida Power & Light Co.
Docket No. 140082-EI
Staff's Third Data Request
Data Request No. 1 *PAGE 2*

5 Excavation-visual/strength/sound/bore



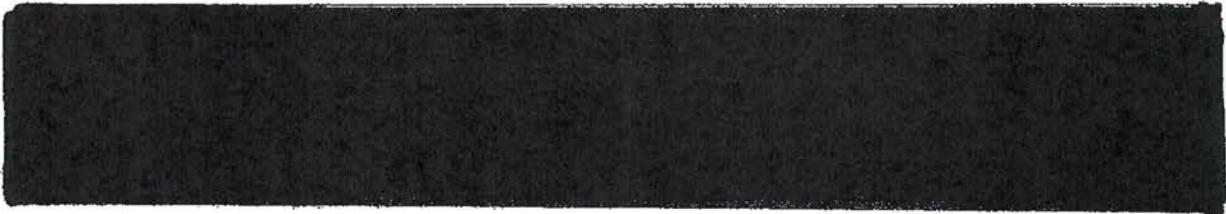
6 Load Assessment (initial screening)



7 Load Assessment (additional screening)



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**Florida Power & Light Co.
Docket No. 140082-EI
Staff's Third Data Request
Data Request No. 2**

Q2.

FPL's response to Staff's First Data Request, Question 2, indicates that FPL would continue to perform a one percent sampling of chromium copper arsenate (CCA) poles less than 28 years.

- a. Please explain the method used to determine what poles are included in the sample size?**
- b. Could sampling be performed using specific pole ages, i.e. poles that are between 20 to 28 years? Please explain your response.**

A.

- a. All CCA poles less than 28 years old, inspected but not excavated, would first be identified and then further segregated by geographic area (e.g., North, South, East and West) and age (e.g., 0-10 years, 11-20 years and 21-28 years). A one percent sample would then be obtained from these further segregated categories.**
- b. Yes. See FPL's response to Data Request Question 2(a.) above.**

**Florida Power & Light Co.
Docket No. 140082-EI
Staff's Third Data Request
Data Request No. 3**

Q3.

FPL's response to Staff's First Data Request, Question 4, indicates that of the 6,191 CCA poles that failed inspection in 2013, 316 failed due to below ground strength.

- a. What type of inspection was used to determine that these poles failed due to below ground strength?**

A.

- a. Below ground strength failures resulted from excavation, sound and bore inspections. Also, only 102 of the CCA poles that failed were <28 years old, a failure rate of only 0.13% (102 failures / 76,623 CCA poles inspected). For the first 8-year cycle, the cumulative excavation failure rate for CCA poles < 28 years was only 0.07%, however, annual failures rates ranged from 0.05%-0.13%.

**Florida Power & Light Co.
Docket No. 140082-EI
Staff's Third Data Request
Data Request No. 4**

Q4.

FPL's response to Staff's First Data Request Question 5 indicates that FPL has processes and procedures in place for additional attachments added to its poles.

- a. If procedures are followed, please explain how poles could fail the load assessment by additional attachments?**
- b. Does FPL have issues with unauthorized third party attachers? If so, please explain.**
- c. Does FPL inspect or verify the load assessment of poles after an additional attachment is made by a third party?**
- d. Does FPL inspect or verify the load assessment after it makes an attachment themselves?**

A.

- a. Certain conditions (e.g., unusual/excessive shell rot) could also contribute to a pole failing the load assessment over time. However, FPL has anticipated this possibility with its proposed "<80% of full load" threshold. This threshold is intended to provide a "buffer" that is sufficient to address such conditions, because it would accommodate up to a 20% increase in the calculated loading on a pole over the next pole-inspection cycle without exceeding the pole's load-carrying capacity. The sufficiency of the proposed "<80% of full load" threshold is demonstrated by both FPL's pole sample (zero failures on poles that originally tested at <80% of full load) and Monte Carlo analysis results (0.07% failure rate).
- b. No. In fact, for the last three years, FPL has reported that its annual pole attachment survey results indicate zero unauthorized attachments (see FPL's 2012-2014 Annual March 1 Filings, Storm Preparedness Initiative No. 2 – Joint Use Pole Attachment Audits).
- c. Yes. In addition to requiring the submittal of wind load analyses for review/approval prior to adding attachments to poles, once constructed, third party attachments are field checked to ensure the attachments were constructed consistent with approved attachment requests.
- d. Prior to installing any new or additional FPL facilities on poles, FPL's processes/standards require new load calculations to be performed on the affected poles. This ensures the poles will continue to meet or exceed NESC requirements / FPL's construction standards.