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August 18, 2006

### **BY HAND DELIVERY**

Ms. Blanca S. Bayo, Director Division of Commission Clerk and Administrative Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Proposed amendments to rules regarding overhead electric facilities to allow more stringent construction standards than required by National Electric Safety Code; Docket No. 060173-EU

Dear Ms. Bayo:

Enclosed for filing in the above referenced are the original and fifteen (15) copies of Comments of behalf of Tampa Electric Company on Rule 25-6.0342, Florida Administrative Code. We will also submit this filing today in electronic format.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning the same to this writer.

Thank you for your assistance in connection with this matter?

Sinc erelv Led L. Willis

LLW/bjd Enclosures

cc: All Parties of Record (w/encl.)

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#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Proposed amendments to rules Regarding overhead electric facilities to allow more stringent construction standards than required by National Electric Safety Code.

DOCKET NO. 060173-EU FILED: August 18, 2006

### COMMENTS TAMPA ELECTRIC COMPANY <u>ON RULE 25-6.0342, FLORIDA ADMINISTRATIVE CODE</u>

The purpose of Tampa Electric's Comments is to support the Commission's proposed Rule 25-6.0342 Third-Party Attachment Standards and Procedures and to supplement the Joint Comments of Florida Power and Light Company, Progress Energy Florida, Tampa Electric Company and Gulf Power Company filed August 18, 2006.

### The Commission's Basic Theme in the Various Infrastructure Related Dockets and the Proposed Rule 25-6.0342

The Commission has <u>unequivocally concluded that nothing should be attached to a pole</u> <u>that is not engineered to be there in advance</u>. It reached this conclusion based on findings that <u>pole attachments can have a significant wind loading and stress effect on a pole and can cause</u> <u>overloading</u>. The Commission further found that <u>some attachments are being made without</u> <u>notice or prior engineering</u>. The Commission has logically concluded that steps should be taken to ensure that attachments do not occur prior to an assessment of the effect the pole attachment will have on individual poles. The Commission's conclusion that third party attachments should not be made unless they are engineered in advance to be there is squarely based on the Commission's concern for the safety and reliability of the system.

The proposed rules are an appropriate step to address a serious issue affecting the safety and reliability of electric infrastructure. It is crucial for the Commission to help electric utilities deal with the threat to electrical distribution facilities in a fair and reasonable way. Part of the solution is the establishment, under the Commission's direction, of attachment standards and procedures and a requirement that the attachment must be engineered to meet or exceed the National Electric Safety Code (NESC) before the attachment is made to the facility. The rules provide a reasonable means of requiring all attachers to ensure that their attachment will not overload the pole and risk pole failure and resulting outages.

#### Pole Attachment Wind Loading and Stress Effect on a Pole.

As discussed in detail in Section III of the Joint Reply Comments, the facilities which are attached to a pole have a wind loading and stress effect on the pole. It is obvious that this wind loading and stress effect on poles must be considered in assessing whether the pole is appropriately sized and spaced.

#### **Illustrations of Various Overlashings**

Perhaps the best way to illustrate this is through the photographs included as Documents 1 - 27 in Exhibit 1 attached hereto. These documents show the size of various cable attachments and their affect on Tampa Electric's poles. Furthermore, these examples are not isolated occurrences but are present all over Tampa Electric's service area.

Document 1 shows the condition of a pole found in the field while working on another project. It is obvious that the third party attachment at the center of the pole is overloading the pole. This was caused by a cable television (CATV) company installing an unnoticed 300 foot span of cable over eight lanes of vehicle traffic with two additional overlashings of fiber. The cable had inadequate guying to hold up the additional weight of the cable and caused the pole to split. The pole was replaced with a special order spun concrete pole as shown in Documents 2 and 3.

Document 4 is a close up of an array of cable and communications attachments on a pole located on 30<sup>th</sup> Street, just south of Fletcher Avenue in Tampa. Notice the size of the overlashed cable relative to other attachments.

Document 5 is a full view of the  $30^{th}$  Street pole showing all of the wires and cables attached to the pole.

Document 6 taken at the intersection of Harney Road and Fowler Avenue/Main Street illustrates a number of cables in a bundle together with various items of equipment. This array of cable and equipment significantly affects wind stress and pole loading. Document 7 shows these same attachments at the Harney Road intersection looking to the east and Document 8 shows the western view of the entire pole at the Harney Road intersection.

Document 9 taken on Knights Griffin Road at the Knight's Creek Bridge illustrates the size of various overlashed cables which can be 3'' - 4'' in diameter. Documents 10 and 11 show the significant sag these cables have over a span.

Document 12 details a bundle of cables overlashed three or four times and attached to a wooden pole located on Fletcher Avenue near  $42^{nd}$  Street. Documents 13 and 14 show a concrete pole that replaced a wooden pole, because of an overloaded condition caused by an attacher.

Document 15 taken at Taylor Road just north of Thonotosassa Road shows another overlash detail with approximately a 3" diameter. Document 16 illustrates a sag of 3' - 4' across a span as a result of the additional weight caused by the attachment.

Documents 17 is a photograph of facilities on Thonotosassa Road west of McIntosh Road that shows the sag and stress placed on poles with both a short span crossing the road and a long span along the road. Documents 18 and 19 are photographs of facilities on Thonotosassa Road just west of Stone Lake Ranch which show how larger cable trunks that are attached to Tampa Electric poles adds weight that sags significantly at mid-span.

Documents 20 - 23 are photographs of facilities on North B Street west of Boulevard North near the University of Tampa. Documents 20 - 21 show a detail of an attachment with 10 - 12 cables in a larger bundle with a diameter of 3'' - 4''. Documents 22 - 23 illustrate the sag

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effect these attachments have on our poles. The cable shown in Document 23 illustrates a 6' - 8' sag at mid-span.

Documents 24 - 26 provide another example of an overlashed cable with numerous cables in a bundle with a diameter of 4" or more and has equipment attached.

Document 27 shows the size of various cable attachments compared with Tampa Electric's street light bracket. These attachments are larger than the street light bracket which has a diameter of 2".

### **Overlashing**

Overlashing is the bundling of cables together with wire wrapped around a number of cables. An overlashing may begin with lashing just two cables but typically third party pole attachers continue to add cables as their system grows in an area. Tampa Electric has seen as many as seven cables lashed together. The result is that what began as a single cable may end up as a cable almost as big as your leg. Each overlashing adds wind loading and stress effects on the pole. Cable companies typically do not give notice of overlashing contending that such notice is unnecessary and not required because the pole attachment rental rate for a single cable or a seven-cable overlash is the same. This practice, of course, ignores the considerable additional wind loading and stress effect that the larger heavier cable has on the pole. During the initial installation of a third party cable, supporting guys and anchors are required to hold the weight of the cable and the effects of structural stress. As additional cables are overlashed onto the initial cable without notice, the guys and anchors are not changed out to ones that are strong enough to hold the additional weight. As discussed above, Tampa Electric has experienced instances where an unnoticed overlashed attachment has literally pulled the midsection out of the pole at the attachment causing the pole to fail.

#### **Unnoticed Pole Attachments**

Notification of attachment by third parties is inconsistent, sporadic and incomplete. Tampa Electric also has experienced attachments by third parties who do not have a pole

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attachment agreement with the company. Overlashings are not typically noticed at all. During the last Tampa Electric pole attachment count in the field, over 21,000 unreported telephone attachments were discovered and over 26,000 unreported cable television attachments were discovered. Despite contractual and other written agreements with third parties which require advanced authorization of new attachments prior to installation, unauthorized and unreported attachments continue to be a problem.

### Need for Pole Attachment Standards and Procedures

There is certainly a need to develop pole attachment standards and procedures. This requirement is an essential tool in addressing pole attachment issues and is entirely consistent with the Commission's initiatives requiring pole inspections and audits of pole attachment agreements.

Pole attachment standards and procedures will reduce the number of unauthorized and unnoticed attachments which could lead to overloaded conditions on poles. The pole inspections and pole attachment audits are designed to identify poles that may be compromised or vulnerable to failure in extreme weather conditions. It is entirely reasonable for the Commission to have a multifaceted approach to assure requiring pole attachment standards be designed such that nothing is attached to a pole that is not engineered to be there in advance and then require pole inspections and audits to identify poles that may be compromised.

Florida Cable Telecommunications Association's (FCTA) consultant, M. T. Harrelson, in his August 4, 2006 comments acknowledges a need to develop attachment standards and observes:

"There is certainly a need to develop reasonable attachment standards..."

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"Power company construction standards should be available to attaching companies for reference during construction and maintenance activities."

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#### **Summary**

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There is no question that third-party pole attachments increase wind loading and stress on a pole and can be the cause of the failure of a pole. This concern is particularly acute in Florida. It is critical that the proposed rule be added as another means of Florida's defense against hurricanes. The proposed rules are an important additional step in protecting the safety and reliability of critical infrastructure for provision of electric service. The joint objective of this Commission and electric utilities is to make facilities storm ready and the rules are an important part of the overall plan in accomplishing this objective. Tampa Electric urges that this rule be adopted.

Respectfully submitted this 18<sup>th</sup> day of August, 2006./

ZEE L. WILI and

LEE L. WILLIS and JAMES D\_BEASLEY Ausley Law Firm P. O. Box 391 Tallahassee, FL 32302 (850) 224-9115

#### **CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing Comments of Tampa

Electric Company has been furnished by Hand Delivery\* or U. S. Mail this 18th day of August,

2006 to the following:

Mr. Larry Harris \* Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Alex Glenn and John Burnett Progress Energy Florida, Inc. Post Office Box 14042 St. Petersburg, FL 33733

Jeffrey A. Stone and Russell Badders Beggs & Lane Post Office Box 12950 Pensacola, FL 32576-2950

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DOCKET NO. 060173-EU EXHIBIT NO. \_\_\_(TEC-1)

### EXHIBIT OF

### TAMPA ELECTRIC COMPANY























# DOCOMENT 11































