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Public Service Commission

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TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: May 10, 2006

TO: Kay B. Flynn, Chief of Records, Division of the Commission Clerk & Administrative Services

FROM: Craig Hewitt, Economic Analyst, Division of Economic Regulation

RE: Docket No. 060173-EU

Please place in the above referenced docket the attached letter dated May 3, 2006, from John T. Butler, Florida Power & Light Company, responding to data requests. Thank you.

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Florida Power & Light Company, P.O. Box 029100, Miami, FL 33102-9100

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May 3, 2006

- VIA ELECTRONIC DELIVERY –

Mr. Craig B. Hewitt
Division of Economic Regulation
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399

Re: Docket Nos. 060172-EU and 060173-EU

Dear Mr. Hewitt:

At the April 17, 2006 rule development workshop in the above dockets, Staff made three data requests to the investor-owned utilities concerning the economic impacts of "storm hardening" amendments to Rules 25-6.034, 25-6.0345, 25-6.064, 25-6.078 and 25-6.115, F.A.C. I am enclosing Florida Power & Light Company's response to those data requests, which specifically addresses the proposed amendments that FPL is submitting to Staff today under separate cover. Please note that FPL's proposed amendments incorporate many of Staff's preliminary proposals, but also address the issues and concerns that FPL expressed at the workshop.

FPL has quantified the costs and benefits of its proposed rule amendments to the extent presently possible. Considerable uncertainty remains as to many of the costs and benefits, however, so FPL has presented most of its estimates as ranges rather than single values. Moreover, because the construction standards contemplated by FPL's proposed rule amendments are currently under development, FPL simply does not have enough information available at this time to provide meaningful quantitative estimates of some of the costs and benefits. FPL is continuing to evaluate the economic impacts of infrastructure hardening and will provide Staff additional information on those impacts as it becomes available.

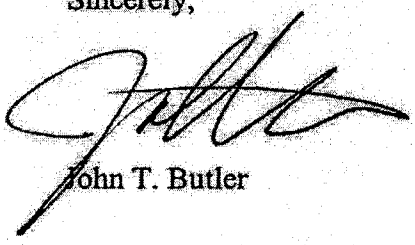
FPL's is proposing to add a subsection (7)(d) to Rule 25-6.115, which would provide for a Government Adjustment Factor ("GAF") to be applied in certain circumstances to the calculation of the Contribution In Aid of Construction ("CIAC") for conversion of existing overhead distribution facilities to underground. A utility would use the GAF when the applicant is a local government that is subject to the utility's tariff and meets applicability requirements specified in the utility's tariff. The GAF represents the percentage of an applicant's total CIAC that is to be invested by the utility and added to Plant In Service rather than collected from the applicant. FPL's proposal contemplates that each utility would specify the GAF percentage in its utility's tariff. Of course, this means that the cost, and hence the cost-effectiveness, of the GAF

proposal will vary among utilities depending upon the GAF percentage that each one specifies in its tariff.

FPL has previously filed a petition for approval of a 25% GAF, which is being considered in Docket No. 060150-EI. The Commission suspended FPL's tariff filing to allow for careful review and to coordinate with the Commission's consideration of amendments to Rule 25-6.115. If the Commission approves a GAF mechanism for this rule, FPL expects the Commission then to address FPL's 25% GAF tariff filing. FPL's experience in the 2004 and 2005 storm seasons was that underground facilities experienced fewer interruptions than overhead facilities and that, therefore, conversion to underground facilities can be an effective mitigation strategy for severe weather events. In spite of these benefits, FPL heard from community leaders that the up-front cost of conversion has been and remains a significant obstacle. These comments are corroborated by FPL's experience with a tariff provision filed in 2003 that facilitated a local government's collection of underground conversion costs from customers within its boundaries through the FPL electric bills: to date, not a single local government has availed itself of that tariff provision. The GAF is intended to reduce these obstacles for the type of contiguous areas where significant restoration cost savings can be expected. FPL believes that a 25% GAF will strike the right balance between providing a sufficient incentive to communities for underground conversion, while at the same time minimizing the potential impact to all customers from future storms. FPL's evaluation to date of the costs and benefits of implementing a 25% GAF suggests that it would be beneficial and cost-effective to the general body of customers under certain reasonable assumptions about future storm activity, the relative levels of storm damage to overhead and underground facilities, and the resulting differential in restoration costs.

FPL looks forward to the opportunity to discuss the economic impacts of its proposed rule amendments with Staff and interested persons at the May 19 rule development workshop.

Sincerely,



John T. Butler

Enclosure
Cc: Lawrence Harris, Esq. (w/encl.)
Interested persons (w/encl.)

Rules 25-6.034, 25-6.064, 25-6.078 and 25-6.115
Costs and Benefits

Rule 25-6.034 (4) - Standard of Construction (Overhead)

Consistent with FPL's Storm Secure proposal filed in January 30, 2006 with the FPSC, FPL proposes the following rule language:

"For distribution construction, a utility shall exceed the normal requirements of NESC by adopting the extreme wind loading standards, to the extent reasonably practical and feasible, for specific portions of the infrastructure for:

(a) New construction;

(b) Major planned work, including expansion, rebuild, or relocation of existing facilities, assigned on or after the effective date of this rule; and

(c) Targeted critical infrastructure facilities and major thoroughfares taking into account political and geo-graphical boundaries and other applicable operational considerations."

Assumptions:

FPL will harden the targeted distribution infrastructure according to the various wind-loading zones as defined in the NESC. Analysis is continuing, but is not yet finalized, as to how to adopt the NESC extreme wind criteria into FPL's construction and design practices taking into account standardization, operational and material considerations. Through this hardening effort, FPL is confident that new materials (e.g., stronger poles) will ultimately be introduced, which will allow different construction techniques to be used in the field. Although FPL has reached out to vendors for assistance in this area, it is still early in the alternative material evaluation process.

Another uncertainty is what the availability of personnel for engineering and construction, as well as the supply of materials needed for the hardening initiatives, will be as FPL ultimately implements its hardening plan. Lastly, to cost effectively implement the hardening plan, FPL is working aggressively at developing a detailed 10-year "hardening roadmap" that will provide the framework for determining what (and when) various parts of the overhead infrastructure will be made more resilient.

Costs:

Because of all of the outstanding issues and unknowns that still exist with the overhead hardening proposal; it is extremely difficult to estimate cost information

at this point. However, listed below are general ranges of estimated costs to provide an order of magnitude perspective on the costs involved.

New Construction

It is estimated that the approximate average incremental annual cost for new construction will range from $10,000,000-$60,000,000, factoring in all of the assumptions listed above.

Major Planned Work

It is estimated that the approximate average incremental annual cost of hardening the relocated infrastructure will range from $5,000,000-$25,000,000, factoring in all of the assumptions listed above.

Critical Infrastructure Facilities (CIF) and Major Thoroughfares

It is estimated that the approximate average incremental annual cost of hardening the CIF circuits will range from $35,000,000 - $165,000,000, factoring in all of the assumptions listed above. FPL's Storm Secure Proposal is, in the first five years, targeting circuits serving top CIF's and major thoroughfares.

Total Cost of Hardening

It is estimated that the approximate average incremental annual cost of hardening new construction, major planned work and targeted CIF circuits will range from $50,000,000 - $250,000,000, over the first five years and then is expected to decline once the initial hardening of CIF and major thoroughfares is completed.

Benefits:

FPL continues its analysis to quantify benefits associated with the overhead hardening proposal. Benefits are to be estimated by a simulation analysis based on the increased ability of more resilient construction to withstand winds associated with extreme weather events. FPL's analysis so far has shown that building distribution overhead facilities to the NESC extreme wind criteria will make a positive difference. This point is further supported by the following:

- KEMA's post-Hurricane Wilma study identified that 50% of FPL-owned pole failures were due to wind only. FPL is confident that pole breakage due to wind alone will not be as likely with a hardened overhead circuit.
- Currently, FPL's transmission system is built to the NESC extreme wind criteria and experienced extremely good performance with respect to wind

only failures during Hurricane Wilma. FPL believes a hardened distribution system will mirror this same higher performance.

- FPL's new overhead distribution feeders are currently being built to a higher standard than required by the NESC. Analyses conducted after both the 2004 and 2005 hurricane seasons have shown that these new circuits performed better than the older ones that were built before the current criteria were in effect. Increasing the construction criteria further to meet the NESC extreme wind requirement should yield additional resiliency improvements.

Therefore, hardening of FPL's distribution infrastructure to the extreme wind-loading criteria specified in the NESC is likely to help FPL achieve the following benefits:

- Increased ability to withstand damage caused by extreme wind events and the resulting mitigation of restoration time and cost.
- Assurance that CIF are more resilient to damage from extreme wind events and therefore able to provide service to the general public with minimal or no interruption.

Rule 25-6.034(5) - Standard of Construction (Underground)

FPL has proposed the following rule amendment concerning hardening underground construction: "Each utility shall establish construction standards, to the extent reasonably practical and feasible, for underground electrical facilities to enhance reliability and reduce restoration costs and outage times associated with extreme weather events."

Presently, underground pad mounted equipment is installed on a six inch thick pad within an easement that is required to be brought to within 6 inches of final grade by the developer of an underground subdivision. This final grade is usually determined by local building and zoning flooding ordinances as recommended in the Florida Building Code. These local building and zoning flooding ordinances are usually based on FEMA 100 year flood criteria.

Although FPL recognizes the need for any underground system to be resilient to extreme weather events, this has not been a significant issue in recent hurricane events that FPL has experienced. As a result, no analysis has been done to date by FPL regarding hardening of underground, and therefore, no estimate of costs or benefits is available at this time.

Rule No. 25-6.034(8)–(13) - Standard of Construction (Attachments by Others)

FPL proposes changes which would require establishing and maintaining safety, reliability, capacity and engineering standards and procedures for attachments by others to electric distribution poles.

Costs associated with these proposed changes would be minimal. For utilities, the costs would be primarily administrative in nature. Attaching parties will continue to have access to appropriate portions of poles to make reasonable attachments, so there should be only limited impact on their attachment costs. Benefits have not yet been quantified but could be substantial, as a result of avoided hardening requirements and/or improved overhead distribution system resilience.

Rules 25-6.064 and 25-6.115 – Impact of Hardened Overhead Construction Standard on CIAC Calculations

FPL does not foresee significant costs or benefits directly from its proposed revisions to these rules. However, if a new hardened overhead construction standard is established as FPL proposes in Rule 25-6.034, CIAC calculations for overhead versus underground service will be impacted in these rules. As stated previously, there are several unknowns related to adopting a new harden overhead standard at FPL, and therefore current cost estimates can only provide an order of magnitude.

The approximate impact to CIAC collected pursuant to Rules 25-6.064 and 25-6.115 is not yet determinable due the unique nature, wide variability in size of these projects, and the application of the proposed standards. For example, current construction standards may already be adequate to meet the NESC extreme wind criteria in the north part of FPL's service territory, and therefore the resulting CIAC would not change. As the analysis is finalized regarding the impact on FPL's system of adopting NESC extreme wind criteria, these differences in the CIAC calculations will be better understood.

Rule 25-6.078 – Impact of Hardened Overhead Construction Standard on CIAC Calculation in Schedule of URD Charges

FPL does not foresee significant costs or benefits directly from its proposed revisions to these rules. However, various "Estimated Average Cost Differential" figures in Rule 25-6.078 could be affected by the impact on CIAC calculations identified above if a new hardened overhead construction standard is established as FPL proposes in rule 25-6.034. As stated previously, there are several unknowns related to adopting a new hardened overhead standard at FPL, and therefore current cost estimates can only provide an order of magnitude.

The approximate reduction in funds collected based on the existing "Underground Distribution Facilities for Residential Subdivisions and

Developments" tariff could range from 0 – 10%. The reason for the range is that subdivisions built in different parts of FPL's service territory may have different overhead construction standards in effect today. For example, a new subdivision in the north part of FPL's service territory may already meet the NESC extreme wind criteria, and therefore the tariff values would not change. As stated above, as the analysis is finalized regarding how to adopt the NESC extreme wind criteria to FPL's system, these differences in the calculations will be better understood.