

State of Florida



## Public Service Commission

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

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**DATE:** October 30, 2008

**TO:** Office of Commission Clerk (Cole)

**FROM:** Division of Economic Regulation (Draper, Kummer, Springer)  
Office of the General Counsel (Jaeger, Sayler)

**RE:** Docket No. 080244-EI – Petition for approval of underground conversion tariff revisions, by Florida Power & Light Company.

**AGENDA:** 11/13/08 – Regular Agenda – Tariff Filing – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Skop

**CRITICAL DATES:** 12/30/08 (8-Month Effective Date)

**SPECIAL INSTRUCTIONS:** Request for Docket Nos. 070231, 080244 and 080186 be held sequentially.

**FILE NAME AND LOCATION:** S:\PSC\ECR\WP\080244A.RCM.DOC

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### Case Background

Rule 25-6.115, Florida Administrative Code (F.A.C.), addresses the contribution-in-aid-of construction (CIAC) to be paid by applicants for conversion of existing overhead electric distribution facilities to underground facilities. The CIAC represents the conversion costs incurred by Florida Power & Light Company (FPL). FPL's tariff implements this rule and provides the general provisions and terms under which FPL and an applicant may enter into a contract for the purpose of converting overhead facilities to underground.

On April 30, 2008, FPL filed a petition, requesting approval of its Third Revised Tariff Sheet 6.300, Third Revised Tariff Sheet 9.720, Original Tariff Sheet 9.721 and Original Tariff Sheet 9.722, in order to implement the requirement of amended Rule 25-6.115, F.A.C.

Rule 25-6.115, F.A.C., was amended in February 2007 to require that the calculation of CIAC paid by applicants for underground conversions include the net present value (NPV) of operational costs, including the average historical storm restoration costs for comparable facilities over the expected life of the facilities.<sup>1</sup> The Commission amended the rule to capture the longer term costs and benefits of undergrounding. Prior to the rule amendment, the CIAC was based on estimated work order costs and did not include the costs of maintenance or storm restoration activities over time.

After the rule amendment was adopted, FPL proposed a first step to capture the savings in storm restoration costs when an area is converted from overhead to underground service. On May 22, 2007, FPL received approval to revise the definition of CIAC to include a governmental adjustment factor (GAF) of 25 percent when the applicant for conversion is a local government meeting specified criteria.<sup>2</sup> The 25 percent GAF waiver is based on expected savings in storm restoration costs when large contiguous areas are converted from overhead to underground service. The 25 percent reduction is based on FPL's analysis of the 2004 and 2005 hurricane season. Based on the fewer interruptions experienced by underground facilities than overhead facilities, FPL concluded that converting overhead to underground facilities in large communities will reduce the amount of infrastructure damage requiring repair, thereby reducing restoration costs. The general body of ratepayers benefits from these avoided cost savings through the reduction in aggregate storm restoration costs shared by all. In addition, storm restoration overall may proceed more quickly if fewer areas require repair. In the order approving the GAF tariff, the Commission found that the 25 percent represents an average, and that some projects may provide greater or lesser savings to ratepayers. The GAF tariff is limited to large, contiguous areas because the storm restoration savings are likely to be less than 25 percent for small-scale isolated conversions. On May 22, 2007, the Commission approved the GAF and associated tariffs as a pilot program to be available for customers that sign undergrounding contracts on or before October 30, 2008.

On June 23, 2008, the Commission approved an extension of the GAF tariff for an additional year until October 30, 2009.<sup>3</sup> The Commission found that the absence of hurricanes in the last two years had not allowed FPL to gather additional data to quantify the storm restoration savings due to undergrounding. Because the Commission lacked this additional information, it found that it had no basis to modify the 25 percent reduction in the otherwise applicable CIAC.

On May 28, 2008, the Municipal Underground Utilities Consortium filed a petition to intervene, which was granted by Order No. PSC-08-0460-PCO-EI, issued on July 17, 2008. On

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<sup>1</sup> See Order No. PSC-07-0043-FOF-EU, issued January 16, 2007, in Docket No. 060172-EU, In re: Proposed rules governing placement of new electric distribution facilities underground, and conversion of existing overhead distribution facilities to underground facilities, to address effects of extreme weather events.

<sup>2</sup> See Order No. PSC-07-0442-TRF-EI, issued May 22, 2007, in Docket No. 060150-EI, In re: Petition for approval of revisions to contribution-in-aid-of-construction definition in Section 12.1 of First Revised Tariff Sheet No. 6.300, by Florida Power & Light Company.

<sup>3</sup> See Order No. PSC-08-0414-TRF-EI, issued June 23, 2008, in Docket No. 080223-EI, In re: Petition for extensions of governmental adjustment factors tariff and approval of sixth revised tariff sheet No. 9.725 by Florida Power & Light Company.

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June 5, 2008, the City of South Daytona filed a petition to intervene, which was granted by Order No. PSC-08-0461-PCO-EI, issued on July 17, 2008.

By Order No. PSC-08-0431-PCO-EI, issued July 1, 2008, the Commission suspended FPL's proposed tariff in this docket.

FPL's original filing used a pre-tax discount rate for the operational cost NPV analysis. After discussions with staff, FPL agreed to recalculate the proposed NPV for operating expenses using an after-tax discount rate. Use of the after-tax discount rate is consistent with the discount rate used in previous need determinations<sup>4</sup> and standard offer contracts.<sup>5</sup> The \$11,300 NPV amount for the underground versus overhead non-storm operational costs differential shown in the recommendation reflects this recalculation.

The Commission has jurisdiction over this matter pursuant to Sections 366.03, 366.04, 366.05, and 366.06, Florida Statutes.

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<sup>4</sup> See Order No. PSC-08-0021-FOF-E1, issued January 7, 2008, in Docket No. 070602-EI, In re: Petition for determination of need for expansion of Turkey Point and St. Lucie nuclear power plants, for exemption from Bid Rule 25-22.082, F.A.C., and for cost recovery through the Commission's Nuclear Power Plant Cost Recovery Rule, Rule 25-6.0423, F.A.C.; see also Order No. PSC-08-0237-FOF-E1, issued April 11, 2008, in Docket No. 070650-E1, In re: Petition to determine need for Turkey Point Nuclear Units 6 and 7 electrical power plant, by Florida Power & Light Company.

<sup>5</sup> See Order No. PSC-01-2512-PAA-EQ, issued December 24, 2001, in Docket No. 011200-EQ, In re: Petition for approval of standard offer contract and revised COG-2 tariff, and for ruling that waiver of a portion of Rule 25-17.0832(4), F.A.C., is unnecessary, by Florida Power & Light Company.; see also Order No. PSC-00-0621-CO-EG, issued March 31, 2000, in Docket No. 990249-EG, In re: Petition by Florida Power & Light Company for approval of a standard offer contract and revised COG-2 tariff.

### **Discussion of Issues**

**Issue 1:** Should the Commission approve FPL's proposed revisions to its underground conversion tariff (Tariff Sheet Nos. 6.300, 9.720, 9.721, and 9.722)?

**Recommendation:** Yes. (Draper)

**Staff Analysis:**

Rule 25-6.115(11)(a), F.A.C., requires two components to the operational cost differential between underground and overhead: 1) the differential in non-storm operational costs, and 2) the differential in average historical storm restoration costs. In order to comply with the amended rule, FPL proposes an additional charge of \$11,300 per pole-line mile of overhead facilities that are converted as the non-storm operational cost differential. FPL's proposed tariff refers to the differential for storm restoration costs as Avoided Storm Restoration Costs (ASRC). The ASRC component is expressed as a percentage reduction to the CIAC. FPL's proposal on each component is discussed separately below.

For clarity, the components of the overhead to underground conversion CIAC formula as required by Rule 25-6.115, F.A.C., are listed below. Components 1) through 5) are based on the traditional installed cost of the specific project and are not at issue in this docket. Components 6) and 7) are new pursuant to subsection (11)(a) of the conversion rule, and FPL proposes now to incorporate the calculation of components 6) and 7) in its tariff.

CIAC =

- 1) The estimated cost to install the requested underground facilities
- 2) + The estimated cost to remove the existing overhead facilities
- 3) + The net book value of the existing overhead facilities
- 4) - The estimated cost that would be incurred to install new overhead facilities (hypothetical overhead facilities)
- 5) - The estimated salvage value of the existing overhead facilities to be removed
- 6) + The 30-year NPV of the estimated underground vs. overhead non-storm operational costs differential, \$11,300 per pole line mile (new per rule)
- 7) - The 30-year NPV of the estimated average avoided storm restoration costs of overhead facilities over 30 years (new per rule)

**Component 6) of CIAC formula: the non-storm operational cost differential**

FPL proposes to reflect the non-storm operational costs differential as an additional charge of \$11,300 per pole-line mile of overhead facilities that are converted to underground. This 30-year amount represents approximately an annual differential of \$370 per pole-line mile.

To calculate the non-storm operational cost difference between underground and overhead, FPL utilized the 5-year average of its actual, historical capital, and operating and maintenance (O&M) expenses, i.e., operational costs, for operating, maintaining, and repairing its overhead and underground distribution facilities. The data were based on the years 2003 through 2007. The historical figures presented by FPL show that underground facilities are more expensive to operate, maintain, and repair than the overhead distribution system.

FPL then converted the total system overhead and underground 5-year average figures to an average amount for a single pole-line mile to arrive at unit cost. Pole-line miles represent the actual installed underground and overhead distribution system. Specifically, FPL divided the 5-year average operational cost for overhead and underground by the respective pole-line miles. FPL then used a 30-year period to represent the life of the facilities, adjusting the per pole-line mile unit costs for inflation in each year. The 30-year cash flows are then discounted to arrive at the differential NPV amount of \$11,300.

In place of historical costs, FPL incorporated projected vegetation management and pole inspection costs in the NPV calculation of the non-storm operational cost differential. Vegetation management and pole inspection costs are operational costs for overhead facilities, which FPL will no longer incur when facilities are converted to underground. Vegetation management and pole inspection costs are projected to change as a result of the Commission decision in the following two orders. By Order No. PSC-07-0468-FOF-EI, the Commission ordered FPL to implement system-wide average trim cycles of three years for distribution feeder circuits and six years for distribution lateral circuits.<sup>6</sup> By Order No. PSC-06-0144-PAA-EI, the Commission ordered FPL to implement eight-year pole inspection cycles.<sup>7</sup> FPL states that the vegetation management and pole inspection costs it used in its calculation of the non-storm operational differential are consistent with these two orders and these costs are up-to-date with current information.

In addition, FPL included average lost pole rental revenues (per pole-line mile) as an operational cost. The pole rental revenues are revenues paid to FPL for use of the company's poles by third-party attachers such as cable and telephone companies. The lost pole rental revenues have the effect of increasing the non-storm operational costs, thereby, raising the CIAC paid by the customer. If FPL were to exclude the lost pole rental revenue from the operational cost calculation, the NPV differential would be reduced by approximately \$6,500 per pole-line mile. Historically, the revenues coming from third-party attachers had the effect of offsetting some of the base rate costs incurred by the general body of ratepayers. Underground systems do not receive these revenues, as there is no pole for attachment. The financial offset represented by the third-party-attachment revenue is no longer there, and the costs formerly offset have to be assumed by the ratepayers.

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<sup>6</sup> See Order No. PSC-07-0468-FO-EI, issued May 30, 2007, in Docket No. 060198-EI, In re: Requirement for investor-owned electric utilities to file ongoing storm preparedness plans and implementation costs estimates.

<sup>7</sup> See Order No. PSC-06-0144-PAA-EI, issued February 27, 2006, in Docket No. 060078-EI, In re: Proposal to require investor-owned electric utilities to implement ten-year wood pole inspection program.

Component 7) of CIAC formula = avoided Storm Restoration Costs (ASRC)

FPL's current GAF tariff provides for a 25 percent reduction in the CIAC amount when the applicant for conversion is a local government and meets certain eligibility criteria. The 25 percent waiver provided by the GAF waiver is based on estimated avoided storm restoration cost savings to the general body of ratepayers when facilities in large areas are placed underground. In this docket, FPL proposes to also allow non-governmental applicants and smaller sized conversion areas to receive a reduction in the CIAC to capture storm restoration benefits, but recognizes that the size of the undergrounding project affects the benefits received. FPL proposes a tiered approach intended to apply to all underground conversions.

FPL proposes three tiers of ASRC credits in order to capture different levels of storm restoration benefits. Applicants who qualify for Tier 1 will receive a 25 percent reduction in the otherwise applicable CIAC; applicants who qualify for Tier 2 will receive a 10 percent reduction in the otherwise applicable CIAC; and applicants who qualify for Tier 3 will receive a 5 percent reduction in the otherwise applicable CIAC. The otherwise applicable CIAC is the amount calculated using steps 1 through 5 of the CIAC formula.

Tier 1 is for large conversion projects which would satisfy the GAF tariff size and eligibility requirements with the exception of government sponsorship which is required under the GAF tariff. The ASRC for Tier 1 projects reflects the same savings that were used to quantify the 25 percent GAF tariff waiver, and therefore, use the same percentage reduction in the CIAC. The Tier 1 eligibility criteria are outlined in FPL's proposed tariff. A Tier 1 conversion must include a minimum of 3 pole-line miles or approximately 200 detached dwelling units with contiguous areas.

Tier 2 is for projects that are smaller in size, encompassing from one to less than three pole-line miles, or a minimum of approximately 85 detached dwelling units within contiguous geographic areas. Finally, Tier 3 is for small projects that do not qualify for either Tiers 1 or 2, and are less than one pole-line mile. Tier 3 projects have essentially no eligibility criteria and could serve as little as one lot.

The Commission concluded in Order No. PSC-07-0442-TRF-EI that the 25 percent GAF waiver is designed to represent the average storm restoration savings by undergrounding projects in large contiguous areas. If a large area is underground, there would be no need for overhead restoration crews to do repairs in that area following a storm, resulting in storm restoration savings. It appears reasonable to assume that the expected benefits will decline with smaller-sized area, since crews would have to be deployed potentially in fewer numbers or for a shorter duration. The proposed Tier 2 and Tier 3 ASRC credits are based on the 25 percent GAF waiver. Tier 1 projects will receive an ASRC of 25 percent, the equivalent to 100 percent of the GAF waiver. Tier 2 projects will receive an ASRC of 10 percent, which equates to 40 percent of the GAF waiver. Tier 3 projects will receive an ASRC of 5 percent, or 20 percent of the GAF waiver.

Conclusion

In February 2007, Rule 25-6.115, F.A.C., was amended to include the NPV of operational costs in determining the CIAC to be paid by applicants for conversion from overhead to underground distribution facilities to gain a more accurate cost comparison between overhead and underground installations. FPL has proposed tariffs that implement that rule requirement, and staff believes FPL's analysis is reasonable and consistent with the methodology used in Docket 070231-EI, In re: Petition for approval of 2007 revisions to underground residential and commercial distribution tariff, by Florida Power & Light Company. Staff does recognize that the proposed tariffs require assumptions concerning costs and savings that may change over time. FPL's calculation should be fine-tuned in future filings, as more information on the costs and benefits of underground become available, especially with respect to storm restoration costs. FPL states that it proposes to update the analysis coincident with URD tariff filings, which are typically done every three years.

**Issue 2**: Should this docket be closed?

**Recommendation**: Yes. If Issue 1 is approved, this tariff should become effective on November 13, 2008. If a protest is filed by a substantially affected person within 21 days of the issuance of the order, this tariff should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order. (Sayler, Jaeger)

**Staff Analysis**: If Issue 1 is approved, this tariff should become effective on November 13, 2008. If a protest is filed by a substantially affected person within 21 days of the issuance of the order, this tariff should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order.