

State of Florida



# Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

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

**DATE:** August 6, 2009

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

**FROM:** Division of Economic Regulation (Draper) *EAD*  
Office of the General Counsel (Brubaker, Williams) *AWJ TJD JSB*

**RE:** Docket No. 080719-EI – Petition to modify Tariff Sheet Nos. 4.113 and 4.122 regarding conversion of and construction of underground residential facilities by Progress Energy Florida, Inc.

**AGENDA:** 08/18/09 – Regular Agenda – Tariff Filing – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Administrative

**CRITICAL DATES:** 08/19/09 (8-Month Effective Date)

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\ECR\WP\080719A.RCM.DOC

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### Case Background

Rule 25-6.078, Florida Administrative Code (F.A.C.), defines investor-owned utilities' responsibilities for filing updated underground residential distribution (URD) tariffs for new subdivisions at least every three years. In Order No. PSC-08-0786-TRF-EI, the Commission approved Progress Energy Florida, Inc.'s (PEF) current URD tariffs; however, the Commission directed PEF to refile its URD tariff to include lost pole attachment revenues in the URD calculation.<sup>1</sup> Pole rental revenues are revenues paid to PEF for use of the utility's poles by third-

<sup>1</sup> See Order No. PSC-08-0786-TRF-EI, issued December 2, 2008, in Docket No. 080186-EI, In re: Petition for approval of revised underground residential distribution tariffs, by Progress Energy Florida, Inc.

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party attachers, such as cable and telephone companies. PEF's proposed Tariff Sheet No. 4.113 implements the Commission's order.

Rule 25-6.115, 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 PEF. Rule 25-6.115, F.A.C., was amended in February 2007 to require that the calculation of CIAC include the difference in the net present value (NPV) of operational costs between underground and overhead systems over the expected life of the facilities.<sup>2</sup> The proposed revisions to Tariff Sheet No. 4.122 are designed to implement the requirements of the amended rule.

By Order No. PSC-09-0119-PCO-EI, issued on March 2, 2009, the Commission suspended PEF's proposed tariffs. On July 14, 2009, PEF provided certain minor corrections to its calculations. 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>2</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.

### Discussion of Issues

**Issue 1:** Should the Commission approve PEF's proposed URD tariff (Tariff Sheet No. 4.113) and its associated charges?

**Recommendation:** Yes. PEF revised its URD charges to include lost pole rental revenues in the calculation of operational costs between underground and overhead as required by Order No. PSC-08-0786-TRF-EI. (Draper)

#### Staff Analysis:

The URD charges represent the additional costs PEF incurs to provide underground distribution service in place of overhead service, and they are calculated as differentials between the cost of underground and overhead service. The cost of standard overhead construction is recovered through base rates of all ratepayers. In lieu of overhead construction, customers may request underground service. Costs for underground service have historically been higher than those for standard overhead construction, and the additional cost is paid by the customer as a CIAC. Typically, the URD customer is the developer of the subdivision.

URD charges are based on three standard model subdivisions: (1) a 210-lot low-density subdivision with a density of one or more, but less than six, dwelling units per acre; (2) a 176-lot high-density subdivision with a density of six or more dwelling units per acre; and (3) a high-density subdivision where service is provided using grouped meter pedestals.

In 2007, the Commission amended Rule 25-6.078, F.A.C., to require that the differences in NPV of operational costs between underground and overhead systems, including average historical storm restoration costs over the life of the facilities, be taken into consideration in determining the URD differential.<sup>3</sup> Prior to the rule revision, URD charges were based on initial installation costs only and did not include the costs of maintenance or storm restoration activities over time. On April 1, 2008, PEF filed a petition in Docket No. 080186-EI to incorporate for the first time the requirements of amended Rule 25-6.078, F.A.C., and included the difference in operational and storm restoration costs between underground and overhead facilities. The Commission approved PEF's URD charges effective November 13, 2008. However, the Commission also ordered PEF to refile its URD tariff by April 1, 2009, to include lost pole rental revenues in the calculation of operational expenses. PEF had not included lost pole rental revenues in Docket No. 080186-EI.

Pole rental revenues are revenues paid to PEF for use of the utility's poles by third-party attachers, such as cable and telephone companies. Revenues from pole attachments are included as other operating revenues in a utility rate case. Other operating revenues increase the utility's current revenues and decrease the amount of any increase in rates, thereby reducing rates to all ratepayers. For subdivisions which have all underground facilities, there is no opportunity to generate these revenues, which benefit all ratepayers. In Order No. PSC-08-0786-TRF-EI, the Commission found that if the URD differential is reduced to recognize savings to the general

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<sup>3</sup> See Order No. PSC-07-0043-FOF-EU.

body of ratepayers from potential avoided storm restoration costs, then lost revenues from potential pole attachments are appropriate to be included as operational costs of undergrounding.

The following table shows PEF's current and proposed URD differentials, which include the lost pole attachment revenues. Since the attachments would be attaching to overhead lines, they represent lost revenues when facilities are installed underground, and thus increase the URD differential. The charges shown are per-lot charges.

	Current URD differential per lot	Proposed URD differential per lot	Percent Change
210-lot low density	\$524	\$646	+23%
176-lot high density	\$465	\$528	+14%
176-lot ganged meters	\$245	\$306	+25%

In support of its petition, PEF provided workpapers showing that it received the following distribution pole attachment revenues for the years 2002 through 2006.

Year	Pole attachment revenues (dollars)
2002	8,177,067
2003	8,309,584
2004	10,425,994
2005	11,364,123
2006	10,884,819

PEF recalculated its URD differential using the same methodology as in Docket No. 080186-EI. Inclusion of the 5-year average lost pole rental revenues increases the NPV differential from \$5,968 (amount approved in Docket No. 080186-EI) to \$13,030 per mile (i.e., over the 38-year life of the facilities, underground is more expensive to operate and maintain than overhead by \$13,030 per mile). The URD charges shown in Table 1 vary between the subdivisions because of the difference in miles of line and number of lots in each subdivision.

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Conclusion. Staff has reviewed the proposed charges and their accompanying work papers and believes the charges are reasonable. Staff believes that PEF has correctly included the lost revenues from potential pole attachments as operational costs of undergrounding as required by Order No. PSC-08-0786-TRF-EI, and PEF's proposed URD charges should therefore be approved.

**Issue 2:** Should the Commission approve PEF's proposed underground conversion tariff (Tariff Sheet No. 4.122)?

**Recommendation:** Yes. The proposed tariff revision implements the requirements of Rule 25-6.115(11)(a), F.A.C. (Draper)

**Staff Analysis:**

Rule 25-6.115(11)(a), F.A.C., was amended in February 2007 to require that the CIAC paid by applicants for underground conversions include the operational cost differential between underground and overhead, including storm restoration costs. The same provision was also approved for Rule 25-6.078 as discussed in Issue 1. In order to comply with the amended rule, PEF proposes an additional charge of \$13,030 per mile (or \$2.47 per foot) of overhead facilities that are converted as the operational cost differential. The amount represents the NPV value of the lifecycle operational costs differential including storm restoration. This 38-year amount represents an annual differential of approximately \$340 per pole-line mile.

PEF used the same methodology as in Docket No. 080186-EI to calculate the operational cost difference between underground and overhead, which is described below.<sup>4</sup> PEF modified the calculation only to add a 38-year NPV of the lost pole rental revenues.

Calculation of non-storm operational cost difference. PEF used its actual operational expenses for the period 2002 through 2006 to calculate the NPV of non-storm operational difference for underground and overhead facilities. In order to calculate operational costs per mile, i.e., unit costs, PEF divided the annual total operational costs for the years 2002 through 2006 for underground and overhead facilities by the number of miles of underground and overhead distribution lines in PEF's service territory. Finally, PEF calculated a 5-year average of the underground and overhead operational costs per mile for the years 2002 through 2006. The resulting 5-year average operational costs per mile are \$3,580 for overhead and \$4,902 for underground. To calculate the NPV of the overhead and underground operational unit costs, PEF escalated the unit cost at 2.5 percent to adjust for inflation over a period of 38 years. The 38-year cash flows are then discounted back to arrive at the NPV for overhead operational costs per circuit mile of \$56,196 and \$76,946 for underground, resulting in a NPV differential of \$20,750 per mile.

Calculation of storm restoration costs. The inclusion of the storm restoration costs in the CIAC calculation lowers the CIAC, since an underground distribution system incurs less damage than an overhead system as a result of a storm. Thus, restoration costs are less when compared to an overhead system. Inclusion of the storm restoration differential lowers the per-mile NPV differential from \$20,750 to \$13,030, a \$7,720 reduction. As in Docket No. 080186-EI, PEF used an expected annual storm damage cost of \$21.4 million.<sup>5</sup>

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<sup>4</sup> While both Rules 25-6.078 and 25.6115, F.A.C., were amended in 2007 to include the operational cost difference between underground and overhead, PEF only implemented the requirements of Rule 25-6.078 in Docket No. 080186-EI.

<sup>5</sup> The \$21.4 million annual storm damage cost was originally calculated and provided by PEF in Docket No. 050078-EI, PEF's 2005 rate case.

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Conclusion. PEF's proposed Tariff Sheet No. 4.122 implements amended Rule 25-6.115, F.A.C. PEF's analysis is consistent with the methodology the Commission approved in Order No. PSC-08-0786-TRF-EI and appears reasonable. Staff recommends approval of PEF's proposed tariff.

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**Issue 3:** Should this docket be closed?

**Recommendation:** Yes. If Issues 1 and 2 are approved, this tariff should become effective on August 18, 2009. If a protest is filed 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. (Williams)

**Staff Analysis:** If Issues 1 and 2 are approved, this tariff should become effective on August 18, 2009. If a protest is filed 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.