

# Hublic Serbice Commission

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

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

DATE:

July 31, 2014

TO:

Office of Commission Clerk (Stauffer)

FROM:

Division of Economics (Garl) # 69 / T. W.D

Office of the General Counsel (Brown) MCS

RE:

Docket No. 140066-EI - Petition for approval of amendment to underground

residential and commercial differential tariffs, by Florida Power & Light

Company.

AGENDA: 08/12/14 - Regular Agenda - Tariff Filing - Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

PREHEARING OFFICER:

Administrative

**CRITICAL DATES:** 

12/01/14 (8-Month Effective Date)

SPECIAL INSTRUCTIONS:

None

# Case Background

On April 1, 2014, Florida Power & Light Company (FPL) filed a petition for Commission approval of revisions to its Underground Residential Distribution (URD) Tariff and its Underground Commercial/Industrial Distribution (UCD) Tariff and associated charges. The URD and UCD tariffs apply to new residential and commercial developments and represent the additional costs FPL incurs to provide underground distribution service in place of overhead service.

The Commission suspended FPL's proposed tariffs in Order No. PSC-14-0254-PCO-EI. During its evaluation of the petition, staff issued two data requests to FPL. The Commission has

<sup>&</sup>lt;sup>1</sup> Issued May 22, 2014, in Docket No. 140067-EI, <u>In re: Petition for approval of amendment to underground</u> residential and commercial differential tariffs, by Florida Power & Light Company.

jurisdiction in this matter pursuant to Sections 366.03, 366.04, 366.05, and 366.06, Florida Statutes (F.S.).

### **Discussion of Issues**

**Issue 1**: Should the Commission approve FPL's proposed URD tariffs and associated charges?

<u>Recommendation</u>: Yes. The Commission should approve FPL's proposed URD charges and associated tariffs. (Garl)

<u>Staff Analysis</u>: Rule 25-6.078, Florida Administrative Code (F.A.C.), defines investor-owned utilities' (IOU) responsibilities for filing updated URD tariffs. The URD tariffs provide standard charges for underground service in new residential subdivisions and represent the additional costs the utility incurs to provide underground service in place of overhead service. The cost of standard overhead construction is recovered through base rates from all ratepayers. In lieu of overhead construction, customers have the option of requesting underground facilities. Costs for underground construction historically have been higher than for overhead construction, and the additional cost is paid by the customer as a contribution-in-aid-of-construction (CIAC). The URD customer typically is the developer of the subdivision.

Three standard model subdivision designs traditionally have been the basis upon which each IOU submits URD tariff changes for Commission approval: (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 176-lot high density subdivision with a density of six or more dwelling units per acre taking service at ganged meter pedestals. Examples of this last subdivision type include mobile home and recreational vehicle parks. While actual construction may differ from the model subdivisions, the model subdivisions are designed to reflect average overhead and underground subdivisions.

Table 1-1 below shows the current and proposed per service lateral URD differential charges for the low and high density subdivisions. The current and proposed URD differential for a ganged meter installation (groups of meters at the same physical location) is \$0.

Table 1-1

Comparison of Differential Per Service Lateral					
Types of Subdivision	Number of Service Laterals in Subdivision	Current URD Differential	Proposed URD Differential <sup>2</sup>		
Low Density	1 – 200 or more	\$82.55	\$165.99		
	2 – 85 – 199	2 – 85 – 199 \$312.55			
	3 – less than 85	\$389.55	\$498.99		
High Density	1 – 300 or more	\$0	\$0		
	2 – 100 – 299	\$0	\$105.71		
	3 – less than 100	\$71.88	\$188.71		

<sup>&</sup>lt;sup>2</sup> The calculation of the proposed URD differentials per service lateral for each subdivision is shown in Table 1-4.

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In comparison with FPL's 2011 URD filing, the proposed URD differentials show an increase for both the low and high density subdivisions. The calculation of FPL's proposed URD charges includes two components: (1) updated labor and material costs and the associated loading factors expressed as a percentage of labor and materials, and (2) calculation of operational costs. As discussed further below, the differential for total material and labor costs decreased. However, a 2010 settlement agreement resolving a protest of FPL's non-storm operational cost differential expired January 1, 2013. That agreement set the undergrounding non-storm operational cost differential at zero.<sup>3</sup> Since the stipulated timeframe expired, FPL has now incorporated the non-storm operational cost differential in its URD charges, as required by Rule 25-6.078, F.A.C. The inclusion of the non-storm operational cost differential is the primary factor driving the increase in the differential.

## Labor and Material Costs and Associated Loading Factors

The installation costs of both overhead and underground facilities include the labor and material costs to provide primary, secondary, and service distribution lines, and transformers. The cost to provide overhead service also includes poles. The cost to provide underground service includes the cost of trenching and backfilling. The utilities are required to use current cost data. The current URD charges are based on 2011 labor and material costs, and the proposed charges are based on 2014 costs. Table 1-2 compares 2011 and 2014 per service lateral overhead and underground labor and material costs for the three subdivisions. The total labor and material costs are also referred to as pre-operational costs.

As indicated in Table 1-2 below, the total labor and material cost differentials decreased for all three model subdivisions. The primary reasons for the decrease in the labor and material cost differential are a decrease in underground labor costs and a decrease in the engineering overhead (EO) loading factor. Changes in material costs only had a minor impact on the differential. Changes in labor and material costs and the associated loading factors are discussed below.

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<sup>&</sup>lt;sup>3</sup> See Order No. PSC-10-0247-FOF-EI, issued April 22, 2010, in Docket No. 070231-EI, In re: Petition for approval of 2007 revisions to underground residential and commercial distribution tariff, by Florida Power & Light Company, and Docket No. 080244-EI, In re: Petition for approval of underground conversion tariff revisions, by Florida Power & Light Company, and Docket No. 080522-EI, In re: Petition and Complaint of the Municipal Underground Utilities Consortium, the Town of Palm Beach, the Town of Jupiter Inlet Colony, and the City of Coconut Creek for relief from unfair charges and practices of Florida Power & Light Company.

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Table 1-2

Labor and Material Costs per Service Lateral (Pre-operational costs)						
Low Density	<b>2011 Costs</b>	2014 Costs	Difference			
Underground labor/material costs	\$2,491.20	\$2,325.60	-\$165.60			
Overhead labor/material costs	\$2,024.65	\$1,951.61	-\$73.04			
Per service lateral differential	\$466.55	\$373.99	-\$92.56			
High Density						
Underground labor/material costs	\$1,684.91	\$1,590.63	-\$94.28			
Overhead labor/material costs	\$1,536.03	\$1,510.92	-\$25.11			
Per lot differential	\$148.88	\$79.71	-\$69.17			
Ganged Meter						
Underground labor/material costs	\$1,075.30	\$1,052.50	-\$22.80			
Overhead labor/material costs	\$1,223.46	\$1,213.77	-\$9.69			
Per lot differential*	-\$148.16	-\$161.27	-\$13.11			

<sup>\*</sup>Since the differential calculation is negative, the differential is set at \$0.

#### Labor

FPL's labor costs for overhead and underground construction are comprised of costs associated with work performed by FPL employees and by contract labor. Rates for overhead labor increased slightly (0.54 percent) while rates for underground labor decreased by 6.24 percent. In addition, FPL states that a greater percentage of underground work is being done by contract labor. Since the reduced underground labor rate is applied to more underground construction hours, the result is a decrease in the differential. Specifically, of the \$92.56 differential reduction for the low density subdivision, the labor rate reduction contributed \$67.02 (72.39 percent) to the total reduction. For the high density subdivision the labor rate reduction was \$38.45 (55.58 percent) of the total \$69.17 reduction.

#### Materials

Changes in material costs resulted in an \$11 increase in the differential. The main factor driving the increase in the material cost is an increase in the price of underground conduit due to an increase in construction and resulting higher demand for conduit. Other changes in material costs include a decrease in the cost of underground transformers and an increase in the price of poles as a result of new vendor contracts.

#### **Loading Factors**

FPL has made adjustments to its loading factors that are applied to material and labor costs. The actual 2011 and 2014 loading factors are shown in Table 1-3 below:

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Table 1-3

Comparison of Loading Factors					
	2011 Loading Factors	2014 Loading Factors			
Engineering Overhead (EO) (labor & material)	26.94%	19.46%			
Stores – 12-mo. average (material only)	8.34%	9.30%			
Corporate Overhead (labor & material)	9.10%	6.98%			

The reduction in the EO loading factor from 26.94 percent to 19.46 percent reduced the cost differentials since the factor is applied to a higher underground base. The EO factor is calculated by dividing engineering support costs by total capital construction costs. Total capital costs increased more than engineering costs due an increase in new construction and an acceleration of storm hardening activities, resulting in a decrease in the EO factor. Of the total reduction of \$92.56 for the low density subdivision, the EO reduction is \$38.10, or 41.16 percent of the total reduction. For the high density lot reduction of \$69.17, the EO reduction is \$18.62 (26.92 percent).

The stores loading factor represents the cost of managing inventory (e.g., the cost of supervision, labor, and operation of storerooms) and is applied to material costs. The corporate overhead loading factor represents indirect non-engineering costs.

## Operational Costs

Rule 25-6.078, F.A.C., requires that the differences in Net Present Value (NPV) of operational costs between overhead and underground systems, including average historical storm restoration costs over the life of the facilities, be included in the URD charge. Operational costs include operations and maintenance (O&M) costs and capital costs. The inclusion of the operational cost is intended to capture longer term costs and benefits of undergrounding.

Pursuant to Order No. PSC-10-0247-FOF-EI, FPL's non-storm operational component of the URD calculation was set at \$0 for the three subdivisions until January 1, 2013. The non-storm operational costs represent the cost differential between maintaining and operating an underground versus an overhead system over the life of the facilities. FPL has now calculated the NPV of the operational cost differentials to be \$208 for the low density subdivision and \$192 for the high and ganged meter subdivisions. The storm cost component of the URD charge represents avoided storm restoration costs when an area is undergrounded, thereby reducing cost to restore an overhead system. The avoided storm cost is subtracted from the pre-operational costs and the non-storm operational cost, thus reducing the URD differential charge.

Table 1-4 below presents the pre-operational, operational, and storm restoration cost differentials between overhead and underground systems.

Table 1-4

Components of the URD Charges							
Type of Subdivision	Number of Service Laterals in Subdivision	Pre- Operational Costs (A)	Non-storm Operational Costs (B)	Avoided Storm Costs (C)	Proposed URD Differentials (A)+(B)+(C)		
Low Density	Tier 1 – over 199	P4000 2000 000 000 1400	\$208	(\$416)	\$165.99		
	Tier 2 – 85 - 199	\$373.99		(\$166)	\$415.99		
	Tier 3 – under 85			(\$83)	\$498.99		
High Density	Tier 1 – over 299		\$192	(\$416)	\$0		
	Tier 2 – 100 - 299	\$79.71		(\$166)	\$105.71		
	Tier 3 – under 100			(\$83)	\$188.71		
Ganged Meter	Tier 1 – over 299		\$192	(\$416)	\$0		
	Tier 2 – 100 - 299	\$0		(\$166)	\$0		
	Tier 3 – under 100			(\$83)	\$0		

FPL's methodology to calculate the non-storm and storm operational costs was approved in Order No. PSC-08-0774-TRF-EI.<sup>4</sup> As shown in Table 1-4 above, FPL's URD tariff provides for a tiered approach to reflect greater avoided storm restoration costs the larger the area undergrounded.

#### Additional Charges and Credits

FPL's proposed URD tariff also provides for updated charges to reflect current labor and material costs for additional customer-requested equipment such as feeder mains or switch packages. Finally, FPL's tariff provides for a credit if the customer installs certain equipment, such as a splice box, handhole, or concrete pad for a transformer.

The charges shown in Table 1-1 apply if FPL supplies and installs all the equipment and materials. FPL's URD tariff provides for reduced URD charges if the customer provides the trench and installs the conduit. Staff notes that Rule 25-6.078(7), F.A.C., provides that any credit shall be no more in amount than the total charges applicable.

#### Conclusion

Staff has reviewed FPL's proposed URD charges and associated tariffs, their accompanying work papers, and data request responses. Staff believes the proposed URD charges are reasonable and recommends approval.

<sup>&</sup>lt;sup>4</sup> Order No. PSC-08-0774-TRF-EI, issued November 24, 2008, Docket No. 070231-EI, <u>In re: Petition for approval of 2007 revisions to underground residential and commercial distribution tariff, by Florida Power & Light Company.</u>

<u>Issue 2</u>: Should the Commission approve FPL's revised Underground Commercial Distribution (UCD) tariffs and their associated charges?

<u>Recommendation</u>: Yes. FPL's proposed UCD charges and associated tariffs, and their accompanying work papers are reasonable and should be approved. (Garl)

<u>Staff Analysis</u>: The UCD charges represent the additional costs FPL incurs to provide commercial and industrial customers underground distribution service in place of overhead service. Generally, the UCD charges are tailored to specific equipment and materials that are utilized to provide underground service to a single or limited number of commercial buildings in distinct and widely varying circumstances. The UCD tariffs are not governed by Rule 25-6.078, F.A.C.; however, FPL has incorporated the cost effects of hardening its overhead system in the calculations of its UCD charges.

The UCD tariff contains charges for commercial underground distribution facilities such as laterals, risers, pad-mounted transformers, and hand-holes. In addition, the UCD tariff provides for credits that apply if the applicant provides trenching and backfilling. The UCD charges are derived from cost estimates of underground commercial facilities and their equivalent overhead designs. These cost estimates are based on FPL's standard design, estimating practices, and the system costs that were in use at the end of 2013.

Unlike the URD tariffs, the UCD tariffs are not governed by Rule 25-6.078, F.A.C, and utilities are not required to file them; however, staff believes the filing of the standard charges promotes transparency, efficiency, and reduces controversy regarding the UCD charges. Staff believes FPL's proposed URD charges and associated tariffs, and their accompanying work papers are reasonable and recommends approval.

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

Recommendation: Yes. If issues 1 and 2 are approved, the tariffs should become effective on August 12, 2014. If a protest is filed within 21 days of the issuance of the order, the tariffs 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. (M. Brown)

<u>Staff Analysis</u>: If issues 1 and 2 are approved, the tariffs should become effective on August 12, 2014. If a protest is filed within 21 days of the issuance of the order, the tariffs 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.