State of Florida



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CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD RECEIVED-FPSC TALLAHASSEE, FLORIDA 32399-0850 -M-E-M-O-R-A-N-D-U-M-AM 9: September 20, 2012 DATE: Office of Commission Clerk (Cole) TO: Division of Economics (King, Draper) FROM: Office of the General Counsel (Jaeger) Docket No. 120075-EI - Request by Gulf Power Company to modify its RE: underground residential differential tariffs. AGENDA: 10/02/12 - Regular Agenda - Tariff Filing - Interested Persons May Participate **COMMISSIONERS ASSIGNED:** All Commissioners Administrative **PREHEARING OFFICER:** 12/02/12 (8-Month Effective Date) **CRITICAL DATES: SPECIAL INSTRUCTIONS:** None S:\PSC\ECO\WP\120075.RCM.DOC FILE NAME AND LOCATION:

Case Background

Rule 25-6.078, Florida Administrative Code (F.A.C.), delineates investor-owned utilities' (IOU) responsibilities for filing updated underground residential distribution (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 rule requires IOUs to file updated URD charges for Commission approval at least every three years, or sooner if a utility's underground cost differential for the standard low-density subdivision varies from the last approved charge by 10 percent or more.

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Gulf Power Company's (Gulf or company) current URD charges were approved in Order No. PSC-10-0563-TRF-EI.¹ To comply with the filing requirement of Rule 25-6.078, F.A.C., Gulf filed its petition for approval of revisions to its URD tariff sheets and the associated charges on April 2, 2012. On July 20, 2012, Gulf provided responses to Staff's First Data Request.

The Commission suspended Gulf's proposed tariffs in Order No. PSC-12-0262-PCO-EI and has jurisdiction over this matter pursuant to Sections 366.03, 366.04, 366.05, and 366.06, Florida Statutes.

¹ Order No. PSC-10-0563-TRF-EI, issued September 14, 2010, in Docket No. 100165-EI, <u>In re: Request to revise</u> 2010 overhead/underground residential differential cost data by Gulf Power Company.

Discussion of Issues

Issue 1: Should the Commission approve Gulf's URD tariffs and associated charges?

<u>Recommendation</u>: Yes, the proposed URD tariffs and associated charges should be approved. (King, Draper)

<u>Staff Analysis</u>: The URD charges represent the difference in costs Gulf incurs to provide underground (UG) distribution facilities in place of overhead (OH) facilities. 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 have historically been higher than for standard overhead construction and recovered from the customer as a contribution-in-aid-of-construction (CIAC). Typically the URD customer is the developer of the subdivision.

Gulf's URD charges are based on two standard model subdivisions: (1) a 210-lot low density subdivision; and (2) a 176-lot high density subdivision. While actual construction may differ, the model subdivisions are designed to reflect typical OH and UG facility placement. The subdivision designs are the same as those used by the company in its 2010 filing.

Table 1					
	Current URD differential per lot	Proposed URD differential per lot			
210-lot low density	\$263	\$427 ²			
176-lot high density	\$259	\$458			

Table 1 below shows Gulf's current and proposed URD charges.

The above per lot charges apply if Gulf supplies and installs all equipment and materials. Gulf's URD tariff also provides for reduced charges if the customer chooses to supply and/or install the primary and secondary trench and duct system. The calculation of the proposed URD charges are based on 2011 labor, material, and operational costs. The predominant reason for the increase in the differentials is associated with Gulf's proposed change in the calculation of operational costs to cost per conductor foot basis. In addition, labor and material costs increased since Gulf's last URD filing. The specific costs and their impacts on the per lot differentials are addressed below.

Updated Labor and Material Costs

The installation costs of both underground and overhead facilities include the material and labor 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

 $^{^{2}}$ \$427 is calculated as follows: \$557 (Table 2) - \$130 (Table 3)

service includes the cost of trenching. The utilities are required to use current cost data. Table 2 shows the current and proposed per lot overhead and underground labor and material costs.

Table 2 – Total Material and Labor Costs Low Density/Per Lot					
Total UG Costs	\$2,019	\$2,258	\$239		
Total OH Costs	\$1,526	\$1,701	\$175		
Difference	\$493	\$557	\$64		
	High Dens	sity/Per Lot			
	Current	Proposed	Difference		
Total UG Costs	\$1,609	\$1,803	\$194		
Total OH Costs	\$1,185	\$1,325	\$140		
Difference	\$424	\$478	\$54		

Gulf's current URD charges are based on 2008 material and labor costs while its proposed URD charges are based on 2011 costs. As can be seen in Table 2, total OH and UG material and labor costs increased, however, the slightly higher increase in UG material and labor costs resulted in a \$64 increase in the URD charge for the low density subdivision, and a \$54 increase in the URD charge for the high density subdivision. Specifically, Gulf saw a 7.3 percent increase in OH material costs, and a 9.5 percent increase in UG material costs. Labor rates increased by approximately the same percentage, however, UG construction has higher labor requirements, and any change in the UG labor rate therefore has a more significant impact on the differential.

Gulf's labor rates are based upon actual labor costs negotiated in bargaining unit contracts which are negotiated typically every three years. Gulf uses contractor labor to perform trenching activities and install duct work for UG facilities while all OH activities are performed by Gulf labor.

Since no design changes were made to either subdivision, the increase in material and labor is solely attributed to the costs of goods and services increasing over time (2008 cost data vs. 2011 cost data).

Operational Costs

Subsection (4) of Rule 25-6.078, F.A.C., prescribes that the differences in Net Present Value (NPV) of operational costs, including average historical storm restoration costs, over the life of the facilities, between underground and overhead systems, be included in the URD charges. The inclusion of the operational costs is intended to capture longer term costs and benefits of undergrounding. Table 3 shows the per lot differential for the current and proposed NPV of operational costs.

	Table 3 – NPV of	Operational Costs			
Low Density/Per Lot					
	Current	Proposed	Difference		
Operational Cost	-\$230	-\$130	\$100		
	High Dens	sity/Per Lot			
	Current	Proposed	Difference		
Operational Cost	-\$165	-\$20	\$145		

Gulf's analysis of its historical operating expenses, including storm restorations costs, shows that OH facilities are more expensive to operate and maintain than equivalent UG facilities, resulting in a reduction in the URD charge of \$130 for the low density, and \$20 for the high density subdivisions. Gulf proposed two changes to its calculation of the operational costs, which are discussed below.

First, the proposed operational expenses are based on average operations and maintenance (O&M) expenses for the years 2009 through 2011. O&M expenses include vegetation maintenance, pole inspection, transformer maintenance, etc. In its prior URD filing, Gulf only used 2008 data to identify its O&M expenses. Gulf explained that using a 3-year average of historical expenses captures program expenditures that may cross years and reduces volatility between years, and is consistent with Rule 25-6.078, F.A.C., that requires that average historical costs be included in the derivation of operational costs. Staff notes that Progress Energy Florida, Inc. and Florida Power & Light Company use a 5-year average, while Tampa Electric Company uses a 3-year average.

Second, Gulf modified the way it calculates operational costs, which is the primary driver in the increase in the differential. In its prior URD filings, operational cost per lot was calculated based on the relationship of annual O&M costs to capital investment (e.g., poles, overhead conductors, underground conduit, transformers). The overhead operating cost multiplier was derived based on the ratio of overhead O&M cost to overhead distribution investment. Likewise, the underground operating cost multiplier was derived based on the ratio of underground O&M cost to underground distribution investment.

Gulf explained that it evaluated operational cost drivers, and determined that operational costs are more accurately based on the length of conductor³ in Gulf's service territory, instead of capital investment. Therefore, in this petition, operating cost per lot was calculated based on the relationship of O&M costs to conductor foot. Gulf explained that distribution operational costs are primarily required to repair and maintain conductors and their connections, therefore, conductor length is a more appropriate basis for allocating operating cost than investment. In addition, the company tracks its maintenance and repair costs based on conductor feet. Gulf's

³ Gulf stated in its response to staff's data request that conductor distances are determined by taking the circuit mile lengths and expanding into single-phase, two-phase and three-phase portions for each circuit. After expansion the measure is changed to conductor miles and then is converted to conductor feet. Detailed calculations were provided to staff.

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proposed use of conductor distance to calculate operational costs more closely aligns with the methodology used by other investor owned electric utilities in determining operational costs.

As a result of the change in methodology of calculating operating cost between 2010 and 2012, the operating cost per lot for both OH and UG subdivisions decreased. However, the operating cost dollar amount decrease per lot for OH subdivisions was greater than the operating cost dollar amount decrease per lot for UG subdivisions. Thus, the per lot cost differentials between the UG and OH subdivisions increased.

Other than the two changes discussed above, operational costs are calculated as previously approved. After determining the OH and UG historical operating expenses, Gulf escalated the expenses to adjust for inflation over a period of 32 years, which represents the expected life of the plant. To calculate the NPV of the operating expenses, Gulf used the after tax weighted average cost of capital, which reflects Gulf's currently authorized return on equity of 10.25 percent. Gulf then calculated operational cost multipliers for overhead and underground subdivisions, which are based on the NPV of the operating expenses as a percentage of feeder conductor length. The resulting multipliers are applied to the length of conductor in each subdivision, divided by the number of lots, to arrive at the proposed per lot operational costs, shown in Table 3.

Also, as required by rule, Gulf accounts for storm related costs. Staff notes that Rule 25-6.078, F.A.C., was modified in 2007 to include the NPV of operational costs for the first time. It was expected that utilities would continue to modify and improve the calculation as they gained more experience with the concept.

Conclusion

After reviewing Gulf's filing and the supporting documentation, staff believes the proposed URD tariffs and associated charges are reasonable and should be approved.

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Issue 2: Should this docket be closed?

Recommendation: Yes. If Issue 1 is approved, this tariff should become effective on October 2, 2012. 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. (Jaeger)

Staff Analysis: If Issue 1 is approved, this tariff should become effective on October 2, 2012. 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.