

# AUSLEY & McMULLEN

ATTORNEYS AND COUNSELORS AT LAW

123 SOUTH CALHOUN STREET  
P.O. BOX 391 (ZIP 32302)  
TALLAHASSEE, FLORIDA 32301  
(850) 224-9115 FAX (850) 222-7560

July 2, 2012

HAND DELIVERED

RECEIVED-FPSC  
12 JUL -2 AM 11:42  
COMMISSION  
CLERK

Ms. Ann Cole, Director  
Division of Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Petition of Tampa Electric Company for Approval of Revised Tariff Sheets for  
Underground Residential Distribution and Contribution-in-Aid-of-Construction;  
Docket No. 120073-EI

Dear Ms. Cole:

Enclosed for filing in the above-styled matter are the original and five (5) copies of Tampa Electric Company's responses to Staff's First Data Request (Nos. 1-5) dated June 18, 2012. Also enclosed is a CD containing the NPV life-cycle operational costs, with formulas intact.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,



James D. Beasley

JDB/pp  
Enclosures

COM	_____
APA	_____
ECR	_____
OCL	<u>1</u>
EAD	_____
KRC	_____
ADM	_____
GPC	_____
CLK	_____
Eco	<u>4 + CD</u>

RECEIVED - JUL 2 2012

04384 JUL -2 2

FPSC-COMMISSION CLERK

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 120073-EI  
STAFF'S FIRST DATA REQUEST  
REQUEST NO. 1  
PAGE 1 OF 2  
FILED: JULY 2, 2012**

1. Referring to paragraphs 6 and 7 of the petition and the NPV life-cycle operational expenses section of the back-up information note book:
  - a. Please provide a detailed explanation why the company shifted the impact of the NPV life-cycle operational costs from the variable "per foot" charge to a fixed "per service" charge for new single-phase UG services from OH distribution sources. Include in your explanation the reasons/rationale for believing this method is correct and the method used in your 2009 filing was incorrect.
  - b. Do you believe the methodology used in your 2012 filing more accurately captures how these costs should be recovered from the cost-causer?
  - c. Please provide an electronic copy of the tables and spreadsheets used to develop the NPV life-cycle operational costs, with formulas in tact, so staff may track the calculations.
  
- A.
  - a. In 2009, the company incorrectly applied the same \$/foot NPV life-cycle cost calculated for overhead (OH) and underground (UG) primary distribution systems to OH service drops and UG service laterals. The \$/foot NPV operational costs for OH and UG primary distribution systems are not representative of the NPV life cycle costs for OH and UG services. The \$/foot NPV life-cycle costs had been derived by escalating the 3-year average operational costs for the primary distribution system over its life, calculating the NPV of the total operational costs, and dividing that cost by the number of miles of existing distribution primary to develop a \$/mile NPV operational cost for primary distribution. Then the \$/mile cost was divided by 5,280 feet to obtain \$/foot cost. The \$/foot cost, while appropriate for use with primary distribution systems, was inappropriate for use with services as the costs were based on primary distribution operational costs instead of service operational costs. The \$/foot factor included many expenses that are not applicable to services such as tree-trimming (Tampa Electric does not trim trees for services), equipment repairs/replacements, (i.e., switches and switchgear, transformers, etc.). The net effect was an overstatement of NPV operational costs (both OH and UG) for services.

For 2012, the company is proposing a "per service" NPV operational cost for OH service drops and UG service laterals that more accurately reflects the operational costs associated with services.

DOCUMENT NUMBER: 120073-EI

04384 JUL -2 2012

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 120073-EI  
STAFF'S FIRST DATA REQUEST  
REQUEST NO. 1  
PAGE 2 OF 2  
FILED: JULY 2, 2012**

The company would have preferred to utilize a \$/foot NPV operational cost for services calculated in the same manner as 2009 using appropriate operational costs and mileage/footage for services; however, the company cannot determine with sufficient accuracy the number of miles/feet of existing OH and UG installed services. Therefore, the company has calculated its NPV operational costs on a "per service" basis as follows: the 3-year average operational costs for OH and UG services are escalated over the life of the service; the NPV of these operational costs are calculated; and the costs are divided by the number of OH or UG services. The total number of OH and UG services on the system is calculated by assuming a service is required for each meter. Meters for multi-family Customers are excluded from the calculation because several meters are served from a common service to the multi-family building. Meters for commercial Customers with UG service are also excluded from the calculation because the customer is responsible for installation and maintenance of the service lateral. This "NPV Life Cycle Cost/per Service" is then applied to the fixed cost portion of the new service installation.

- b. Yes.
- c. A CD with the file containing the electronic versions of the NPV tables and spreadsheets has been provided with this response.

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 120073-EI  
STAFF'S FIRST DATA REQUEST  
REQUEST NO. 2  
PAGE 1 OF 1  
FILED: JULY 2, 2012**

2. Referring to paragraph 9 of the petition and the UG Service Costs from OH Source-Non-Subdivision section of the back-up information note book:
  - a. The charges for OH service removal, when removal involves a service pole, have increased from \$387.85 to \$422.72. It appears that much of this increase is due to an increase in costs to "haul pole to job site." Please explain why this cost has increased and any other increases that impact this charge.
  
- A.
  - a. The pole hauling task was originally performed by one person. One person was able to roll the poles off the trailer. However, due to safety concerns associated with the size and weight of the larger poles used in system hardening and traffic safety issues, such as backing the pole hauler trailer out of driveways, the company has made pole hauling a two-person operation which has caused the increase in the pole hauling costs.

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 120073-EI  
STAFF'S FIRST DATA REQUEST  
REQUEST NO. 3  
PAGE 1 OF 2  
FILED: JULY 2, 2012**

3. Referring to page LD-1 of the back-up information note book, the UG Total with NPV Op. Costs are shown as \$3100.78; however, on the summary sheet in Exhibit D of the petition the total is \$3084.95. Please state which number is correct and if any corrections need to be made to the filing.
- A. The correct number for low density UG Total with NPV Operational Costs should have been \$3,084.95 as shown in the Form 13 originally submitted under Exhibit D of the petition. The summing formula in the cell containing the UG total NPV Op on page LD-1 was inadvertently overwritten with a value from an interim calculation resulting in the erroneous number. This error only affected values on Page LD-1 of the back-up for the original filing.

However, on June 26<sup>th</sup> the company filed replacement documents reflecting the correction of an unrelated error involving a discrepancy in the labor adders used in the calculation of both the low and high density "per lot" charges. The corrected version of page LD-1 submitted with the June 26<sup>th</sup> filing is attached to this response.

**COMPARISON OF 2012 AND 2009 LOW DENSITY COSTS**

**Underground Costs (per lot)**

ITEM	UG MATERIAL COST			UG LABOR COST			TOTAL UG COST			EXPLANATION OF % CHANGE
	2012	2009	% CHANGE	2012	2009	% CHANGE	2012	2009	% CHANGE	
SERVICE	222.96	242.60	-8.10%	195.77	173.83	12.62%	418.73	416.43	0.55%	Material down, Contractor overheads added (new)
PRIMARY	204.75	217.29	-5.77%	57.38	78.54	-26.94%	262.14	295.83	-11.39%	Material down, TEC overheads down
SECONDARY	38.47	39.36	-2.26%	46.42	63.53	-26.93%	84.89	102.89	-17.50%	Material down, TEC overheads down
TRANSFORMERS	319.62	278.81	14.64%	57.59	70.01	-17.74%	377.21	348.82	8.14%	Copper up, TEC overheads down
TRENCHING										
PRIMARY & SECONDARY SERVICES				313.86	265.16	18.37%	313.86	265.16	18.37%	Contractor overheads added (new)
				363.89	307.06	18.51%	363.89	307.06	18.51%	Contractor overheads added (new)
SUB-TOTAL	785.80	776.06	0.99%	1,034.93	958.13	8.02%	1,820.73	1,736.19	4.87%	
STORES HANDLING	162.35	187.28	-13.31%		0.00		162.35	187.28	-13.31%	Material Handling down
SUB-TOTAL	948.15	965.34	-1.78%	1,034.93	958.13	8.02%	1,983.07	1,923.47	3.10%	
ENGINEERING				65.66	71.98	-8.78%	65.66	71.98	-8.78%	TEC overheads down
<b>Total Materials and Labor</b>	<b>948.15</b>	<b>965.34</b>	<b>-1.78%</b>	<b>1,100.59</b>	<b>1,030.11</b>	<b>6.84%</b>	<b>2,048.73</b>	<b>1,995.45</b>	<b>2.67%</b>	

<b>NPV UG Operational Costs</b>	<b>987.84</b>	<b>776.67</b>	<b>27.19%</b>	
<b>UG Total with NPV Op. Costs</b>	<b>3,036.57</b>	<b>2,772.12</b>	<b>9.54%</b>	

**Overhead Costs (per lot)**

ITEM	OH MATERIAL COST			OH LABOR COST			TOTAL OH COST			EXPLANATION OF % CHANGE
	2012	2009	% CHANGE	2012	2009	% CHANGE	2012	2009	% CHANGE	
SERVICE	79.21	90.94	-12.90%	136.61	186.97	-26.94%	215.82	277.91	-22.34%	Material down, TEC overheads down
PRIMARY	11.08	11.55	-4.09%	33.28	45.56	-26.94%	44.36	57.11	-22.32%	Material down, TEC overheads down
SECONDARY	89.39	89.55	-0.17%	144.88	198.29	-26.93%	234.28	287.84	-18.61%	Material down, TEC overheads down
INITIAL TREE TRIM				0.00	0.00		0.00	0.00		
POLES	117.68	109.12	7.84%	173.30	237.19	-26.93%	290.98	346.31	-15.98%	Pole cost up, TEC overheads down
TRANSFORMERS	178.37	173.51	2.80%	77.52	106.10	-26.94%	255.89	279.61	-8.48%	Copper up, TEC overheads down
SUB-TOTAL	475.73	474.67	0.22%	565.59	774.11	-26.94%	1,041.33	1,248.78	-16.61%	
STORES HANDLING	98.29	114.26	-13.98%		0.00		98.29	114.26	-13.98%	Material Handling down
SUB-TOTAL	574.02	588.93	-2.53%	565.59	774.11	-26.94%	1,139.61	1,363.04	-16.39%	
ENGINEERING				65.66	71.98	-8.78%	65.66	71.98	-8.78%	TEC overheads down
<b>Total Materials and Labor</b>	<b>574.02</b>	<b>588.93</b>	<b>-2.53%</b>	<b>631.25</b>	<b>846.09</b>	<b>-25.39%</b>	<b>1,205.27</b>	<b>1,435.02</b>	<b>-16.01%</b>	

<b>NPV OH Operational Costs</b>	<b>1,391.00</b>	<b>764.10</b>	<b>82.04%</b>	Tree trimming and pole hardening/replacement activities
<b>OH Total with NPV Op. Costs.</b>	<b>2,596.27</b>	<b>2,199.12</b>	<b>18.06%</b>	

**Differential Costs (per lot)**

Differential Materials and Labor Costs	DIFFERENTIAL MATERIAL COST			DIFFERENTIAL LABOR COST			TOTAL DIFFERENTIAL COST		
	2012	2009	% CHANGE	2012	2009	% CHANGE	2012	2009	% CHANGE
	374.13	376.41	-0.61%	469.33	184.02	155.05%	843.46	560.43	50.50%

<b>Differential NPV Op. Costs</b>	<b>-404.02</b>	<b>12.57</b>	<b>-3314.16%</b>
<b>Differential with NPV Op. Costs</b>	<b>439.44</b>	<b>573.00</b>	<b>-23.31%</b>

**TAMPA ELECTRIC COMPANY**  
**DOCKET NO. 120073-EI**  
**STAFF'S FIRST DATA REQUEST**  
**REQUEST NO. 3**  
**FILED: JULY 2, 2012**

5

**TAMPA ELECTRIC COMPANY  
DOCKET NO. 120073-EI  
STAFF'S FIRST DATA REQUEST  
REQUEST NO. 4  
PAGE 1 OF 1  
FILED: JULY 2, 2012**

4. Referring to page LD-3 of the back-up information note book, Energy Delivery "2012" Adder Study, what does the acronym PSA stand for?
  - A. The acronym PSA stands for Project Scope Approval. A large Energy Delivery project over \$200,000 requires upper management approval and a Project Scope Approval document must be prepared and submitted in order to be considered for approval. The project scope approval adders are lower than other "adder" categories because employees from various departments who are involved in the project directly assign their time to the project.

**TAMPA ELECTRIC COMPANY**  
**DOCKET NO. 120073-EI**  
**STAFF'S FIRST DATA REQUEST**  
**REQUEST NO. 5**  
**PAGE 1 OF 1**  
**FILED: JULY 2, 2012**

5. Is the discount rate of 7.95% for the calculation of NPV a pre-tax or after-tax rate?
- a. Was the 7.95% rate the approved discount rate in your last rate case? If not, why should the 7.95% rate be used instead of the approved rate?
- b. Please show how the 7.95% discount rate was derived.
- A. The discount rate of 7.95% used in calculating the NPV is and after-tax discount rate.
- a. No. The after-tax discount rate approved in Tampa Electric's last rate case was 7.99%. The difference between the two discount rates is the assumed interest rate on debt. In the rate case, the approved interest rate on debt was 6.80% and the current assumption for interest on debt is 6.66%. All other financial assumptions are consistent with those approved in the company's last rate case. The company uses the current assumption for interest rate on debt in calculating discount rates which are used for present worth calculations to better reflect the time value of money.
- b. The derivation of the 7.95% discount rate is shown below.

	Ratio	Cost
Equity	53.96%	11.25%
Debt	46.04%	6.66%
Tax Rate	38.75%	
$0.5396 \times 0.1125\% = 0.0607 = 6.07\%$		
$0.4604 \times 0.0666 \times (1 - 0.38575) = 0.0188 = 1.88\%$		
$6.07\% + 1.88\% = 7.95\%$		