

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: July 1, 2009
TO: Ann Cole, Commission Clerk - PSC, Office of Commission Clerk
FROM: Erik L. Sayler, Senior Attorney, Office of the General Counsel
RE: 090164-EI: Petition for approval of revised tariff sheets for underground residential distribution service, by Tampa Electric Company.

A handwritten signature in black ink, appearing to be "Erik L. Sayler", written over the "RE:" line of the memorandum.

Please add the attached data request to docket number 090164-EI.

RECEIVED-PPSC
09 JUL -1 AM 9:22
COMMISSION
CLERK

DOCUMENT NUMBER-DATE

06602 JUL-18

PPSC-COMMISSION CLERK

AUSLEY & McMULLEN

ATTORNEYS AND COUNSELORS AT LAW

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June 24, 2009

HAND DELIVERED

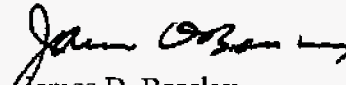
Ms. Christy Piper
Division of Economic Regulation
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Staff Informal Data Request regarding Tampa Electric Company's URD
FPSC Docket No. 090164-EI

Dear Christy:

Barbara Benton at Tampa Electric Company asked that we furnish you the attached answers to Staff's First Informal Data Request (Nos. 1-8) in response to your June 11, 2009 email to Ms. Benton.

Sincerely,


James D. Beasley

JDB/pp
Enclosure

cc: Paula Brown
Barbara Benton

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1. Please explain which three year period TECO used to calculate the non-storm operational difference for underground and overhead facilities.
 - A. The operational costs for the years 2006, 2007, and 2008 were used to calculate the 3-year average.

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- 2.** Does TECO's management accounting or the FERC account system use separate overhead and underground accounts or subaccounts to track costs used to calculate the differential? If not all costs are separately booked by overhead or underground, please explain which costs are tracked separately and which are not.
- A.** Separate accounts or sub-accounts are used by Tampa Electric to identify the installation of new assets or the replacement of existing assets as either overhead or underground. Therefore, all capital spending is identified as either overhead or underground. Most all repairs or other O&M-related maintenance are also identified as either overhead or underground work. The only costs not segregated between overhead and underground are line clearance and non-storm related troubleshooting.

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3. If all costs are not tracked through separate underground or overhead accounts, please explain how the materials component of the costs and labor costs are allocated to overhead and underground components.

A. In instances where costs are not tracked separately for overhead and underground systems, the metrics used to allocate the costs are detailed below:

The 3-Year Average Line Clearance - Tree Trimming cost allocation for overhead and underground systems was based on the number of overhead to underground system transitions (i.e., terminal poles) on the distribution system in 2008.

No. of Company-Owned Distribution Poles	313,506		
No. of Terminal Poles	13,498	4.3%	
Line Clearance - Tree Trimming Cost	\$ 9,764,237		
OH portion	\$ 9,342,471	95.7%	
UG portion	\$ 421,766	4.3%	

The 3-Year Average Trouble Calls Non-Storm cost allocation for overhead and underground systems was based on the number and duration of overhead and underground distribution system outages in 2008. Trouble shooting in the field (or initial outage response) is charged to a 587 FERC account and the cause for the time spent on this task is not segregated. Once the trouble has been identified, then the repair or asset replacement is identified as either overhead or underground work.

	# of Outage <u>Events</u>	Avg. Outage <u>Duration</u>	Weighted <u>Average</u>	
Entire System	10,098	143.78	1,451,890	
Overhead System	8,977	128.01	1,149,146	79.1%
Underground System	1,121	270.07	302,748	20.9%
3-Year Avg. Trouble Calls (Non-Storm)			\$2,415,476	
OH portion			\$1,911,807	79.1%
UG portion			\$ 503,676	20.9%

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The estimated annual storm cost of \$10,680,000 was based on the hurricane loss analysis exhibited in Tampa Electric's 2008 rate case.

Tampa Electric's OH and UG storm cost allocation percentages of 96% and 4%, respectively, are based on historical cost data - including labor and materials clearly identified as overhead distribution or underground distribution - from three hurricanes (i.e., Charley Frances, and Jeanne) that impacted Tampa Electric's service territory in 2004.

Estimated Annual Storm Cost	\$10,680,000	
Annual OH storm cost	\$10,252,800	96%
Annual UG storm cost	\$ 427,200	4%

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4. Please explain all costs included in the "three year average annual operational cost including lost pole attachment revenues" for both underground and overhead calculations in the NPV lifecycle cost calculation.
- A. The overhead and underground costs used in the calculation include all charges to the overhead and underground accounts and sub-accounts used by Tampa Electric which includes the following activities:

Overhead corrective (not specifically identified elsewhere), overhead preventive, overhead storm-related, pole inspections (and associated change-outs & reinforcements), overhead damage replacements based on property damage reports (PDRs), overhead capacitors, line clearance, trouble shooting, avian protection.

Underground corrective (not specifically identified elsewhere), underground preventive, underground storm-related, downtown network, underground damage replacements (PDRs), locating facilities, underground cable replacements.

The 3-Year Average Annual Pole Attachment Revenue was subtracted from the three-year average value for the overhead system to obtain the 3-Year Average Annual Operational Cost Including Lost Pole Attachment Revenue. The Annual Pole Attachment Revenue cost did not affect the 3-Year Average Annual Operational Cost for the underground system.

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- 5. Please explain why TECO chose to use the three year average cost for the NPV calculations.**

- A. The Company used the three-year average period 2006 through 2008 in the operational cost calculations to reflect the costs of ongoing storm preparedness initiatives required by the Commission and filed by Tampa Electric in its 2006 Storm Implementation Plan on June 1, 2006. Tampa Electric began ramping up its vegetation management program at the end of 2005 to support a three-year vegetation management initiative. In 2007, Tampa Electric initiated pole attachment audits and comprehensive loading analyses on distribution poles. Corrective measures to repair and replace non-compliant poles identified in the audit affect costs for the overhead system.**

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6. Please explain why TECO chose to use 35 years for the NPV calculations.
- A. The asset life and FERC plant account values for underground conduit, conductors and transformers were used to determine a composite book life for the underground distribution system of 35 years. A book life of 35 years was used in both the overhead and underground system NPV calculations.

Distribution <u>FERC</u>	Asset Life <u>(Yrs)</u>	\$ Plant <u>%</u>	Composite Book Life <u>(Yrs)</u>
366	50	33	16.5
367	33	42	13.9
368 (UG)	17	<u>25</u>	<u>4.3</u>
		100	34.6

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7. Please provide the 3-year average operational costs per circuit mile for overhead and underground and the supporting calculations.

A. The tables on pages 1-3 of this response contain calculations for the 3-year average overhead (OH) and underground (UG) operational costs as well as line clearance and non-storm trouble calls costs which are not tracked on an OH and UG basis. On page 4 of this response, the allocation of trouble call (non-storm) and line clearance costs between OH and UG is calculated; adjustment is made for lost opportunity revenue from joint use attachments; and a "cost per circuit mile" for OH and UG each is determined.

OH BLANKETS	2008 Actual \$	2007 Actual \$	2006 Actual \$	3-Yr Average \$
Distribution - Maint - OH System Improvements	4,966,143	4,565,667	4,568,914	4,706,975
Distribution - Maint - OH Corrective	3,525,315	3,293,622	2,207,402	3,008,780
Distribution - Maint - OH Preventative	1,520,070	625,286	510,147	885,168
Distribution - Maint - Trouble Calls - OH Storm	1,848,615	1,792,887	1,228,484	1,623,329
Distribution - Maint - Pole Inspections and Change-outs	3,667,609	3,103,575	1,309,527	2,693,570
Distribution - Maint - OH Damage Replacement	368,579	292,668	328,383	328,877
Distribution - Maint - Capacitor Work	881,800	345,233	521,390	582,808
Environmental - Inspections / Audits / Avian Protections	171,709	157,707	157,040	162,152
Distribution - Maint - Mgmt & Coordination	336,631	62,062	40,663	148,452
Pole Reinforcements	344,711	585,609	60,401	330,240
Total Blankets - Distribution OH	17,631,181	14,844,515	10,932,351	14,469,349
UG BLANKETS				
Distribution - Maint - UG System Improvements	1,901,447	3,678,284	\$4,188,981	3,256,237
Distribution - Maint - UG Corrective	5,519,904	4,269,442	\$2,041,427	3,943,691
Distribution - Maint - UG Preventative	129,363	31,693	\$34,558	65,205
Distribution - Maint - Network Corrective	553,356	233,467	\$25,451	270,758
Distribution - Maint - Network Preventative	580,188	0	0	193,396
Distribution - Locate Facilities	131,816	297,942	236,398	222,052

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	2008 Actual \$	2007 Actual \$	2006 Actual \$	3-Yr Average \$
Distribution - Maint - Mgmt & Coordination	336,631	62,062	40,663	146,452
Distribution - Maint - UG Cable Replacement - Planned	929,848	1,229,410	835,280	998,179
Distribution - Maint - Trouble Calls - UG Storm	827,339	905,629	976,680	903,283
Distribution - Maint - UG Damage Replacement	114,761	45,482	152,934	104,393
Distribution - Maint - UG Cable Replacement - Unplanned	222,253	377,968	16,220	205,480
Total Blankets - Distribution UG	11,246,907	11,131,578	8,548,592	10,309,026
OH O&M				
Distribution - Maint - OH System Improvements	1,395,323	1,492,740	1,277,205	1,388,423
Distribution - Maint - OH Corrective	3,341,156	2,871,399	2,576,717	2,929,757
Distribution - Maint - OH Preventative	150,066	65,731	73,412	96,403
Distribution - Maint - Trouble Calls - OH Storm	2,742,124	2,689,192	2,762,616	2,731,311
Distribution - Maint - Pole Inspections and Change-outs	1,314,361	1,474,139	628,395	1,138,965
Distribution - Maint - OH Damage Replacement	60,153	55,482	32,301	49,312
Distribution - Maint - Capacitor Work	233,742	59,066	87,391	126,733
Environmental - Inspections / Audits / Avian Protections	15,818	12,477	5,533	11,276
Distribution - Maint - Mgmt & Coordination	108,442	94,281	106,106	102,943
Pole Reinforcements	0	0	0	0
Total O&M - Distribution OH	9,381,185	8,814,507	7,549,678	8,575,123
UG O&M				
Distribution - Maint - UG System Improvements	755,421	964,829	\$2,663,395	1,461,215
Distribution - Maint - UG Corrective	1,309,545	2,030,070	\$252,900	1,197,505
Distribution - Maint - UG Preventative	8,248	4,430	\$61,873	24,850
Distribution - Maint - Network Corrective	505,721	338,973	\$382,453	409,049
Distribution - Maint - Network Preventative	128,514	8,207	\$3,437	46,719
Distribution - Locate Facilities	919,718	1,129,661	\$1,284,250	1,111,210

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	2008 Actual \$	2007 Actual \$	2006 Actual \$	3-Yr Average \$
Distribution - Maint - Mgmt & Coordination	108,442	94,281	\$106,106	102,943
Distribution - Maint - UG Cable Replacement - Planned	85,228	68,687	\$40,238	64,683
Distribution - Maint - Trouble Calls - UG Storm	525,984	34,278	\$70,328	210,190
Distribution - Maint - UG Damage Replacement	2,088	29,343	\$11,185	14,205
Distribution - Maint - UG Cable Replacement - Unplanned	(677)	19,544	0	6,289
Total O&M - Distribution UG	4,348,210	4,722,201	4,876,161	4,648,857

OH Blankets	17,631,181	14,844,515	10,932,351	14,469,349
OH O&M	9,361,185	8,814,507	7,549,678	8,575,123
Total Overhead*	26,992,366	23,659,022	18,482,029	23,044,472
UG Blankets	11,248,907	11,131,578	8,548,592	10,309,026
UG O&M	4,348,210	4,722,201	4,876,161	4,648,857
Total Underground*	15,595,117	15,853,780	13,424,754	14,957,883

* excludes line clearance costs and non-storm trouble calls

Line Clearance and Non-Storm Trouble Calls	2008 Actual \$	2007 Actual \$	2006 Actual \$	3-Yr Average \$
Total Distr. Maintenance - Trouble Calls (Non-Storm)	1,787,953	2,681,658	2,766,816	2,415,476
Unplanned Line Clearance	1,083,003	1,555,227	1,733,053	1,457,094
Planned Line Clearance	8,655,130	8,788,729	7,499,570	8,307,143
Total Line Clearance	9,738,133	10,321,196	9,232,623	9,764,237

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OH / UG Allocation of Line Clearance and Non-Storm Trouble Calls	3-Yr Avg. Cost	OH Ratio	UG Ratio	Allocated 3-Yr Avg. Operational Cost	
				Overhead	Underground
Distribution - Maint - Trouble Calls - Non-storm	\$2,415,476	79.1%	20.9%	\$1,911,807	\$503,678
Line Clearance - Tree Trim - Planned & Unplanned	\$9,764,237	95.7%	4.3%	\$9,342,471	\$421,766
3-Yr Average Annual Operational Cost (including trouble calls and line clearance)				\$34,298,750	\$15,883,325
Pole Attachment Revenue				-\$6,108,361	\$0
3-Yr Avg. Annual Operational Cost (adjusted for attachment revenue)				\$28,190,389	\$15,883,325
Circuit Miles				6,414	4,472
Total Cost / Mile				\$4,395	\$3,552

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8. Please explain how the 8.33% discount rate for the calculation of the NPV was calculated.
- A. The 8.33% discount rate represents Tampa Electric's after-tax cost of capital. The rate was calculated as follows:

Assumptions:

Return on Equity:	11.25 %
Interest Rate:	8.00 %
Tax Rate:	38.575 %
Common Equity:	53.9 %
Preferred Stock:	0.0 %
Debt:	46.1%

$$\begin{aligned}\text{Discount Rate} &= \text{Equity} \times \text{ROE} + \text{Debt} \times \text{Interest} \times (1 - \text{Tax Rate}) \\ &= 0.539 \times 0.1125 + 0.461 \times 0.08 \times (1 - 0.38575) \\ &= .0833\end{aligned}$$