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May 13, 2013

## HAND DELIVERED

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

Re: Petition for Approval of Revisions to Standard Offer Contract and Rate Schedules COG-1 and COG-2 by Tampa Electric Company; FPSC Docket No. 130073-EQ

Dear Ms. Cole:

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Enclosed for filing are the original and five copies of Tampa Electric Company's answers to Staff's First Data Request dated April 22, 2013.

\* Also enclosed are the original and fifteen copies of Revised Tariff Sheet No. 8.416 in both standard and legislative formats to replace the one filed on April 1 in this docket. Since filing the revised Standard Offer Contract, Tampa Electric's Resource Planning Department has received updated assumptions regarding the maintenance schedule of frame 7F CTs based on projected unit starts and run hours. Tampa Electric's avoided unit is a frame 7F CT so the company could create Revised Tariff Sheet 8.416 to reflect these updated maintenance assumptions.

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,

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James D. Beasley

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JDB/pp Enclosures

cc: Lee Eng Tan (w/encls.)

\* ON 02615-13

TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 1 PAGE 1 OF 1 FILED: MAY 13, 2013

- 1. Please refer to proposed revised tariff sheet No. 8.422. Explain the reason for a 39 percent increase in annual Fixed O&M expenses between the previous avoided unit and the proposed avoided unit.
- A. The primary reason for the 39 percent increase in the annual Fixed O&M expenses for the proposed 2013 avoided unit is Tampa Electric's decision to include annual contract service agreement (CSA) costs for CT maintenance in the annual fixed O&M expense of the avoided unit. These costs, which are based on unit starts and run hours, were formerly included in the variable O&M expense of the avoided unit.

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The 2013 CSA costs for unit starts are also higher than those assumed in 2012 and reflect current market prices.

DOCUMENT NUMBER-DATE D2614 MAY 13 º FPSC-COMMISSION CLERK.

TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 2 PAGE 1 OF 1 FILED: MAY 13, 2013

2. Please refer to proposed revised tariff sheet No. 8.436. Explain the reason for a 56 percent decline in Variable O&M expenses between the previous avoided unit and the proposed avoided unit.

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A. Please see Tampa Electric's response to Request No. 1. The primary reason for the decline in annual Variable O&M expenses for the proposed 2013 avoided unit is Tampa Electric's decision to remove the estimated CSA maintenance expense associated with unit starts from the Variable O&M expense. These costs have been updated and are now included in the annual Fixed O&M expense of the avoided unit.

TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 3 PAGE 1 OF 2 FILED: MAY 13, 2013

3. Please refer to proposed revised tariff sheet No. 8.416. Please explain the change in maintenance scheduling, for annual maintenance (4 days to 7 days), and periodic maintenance (12 weeks per 15 years, to 4 weeks per five years).

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A. Please see the attached replacement to proposed revised tariff sheet No. 8.416 filed concurrently with this response.

The annual maintenance for a simple cycle frame 7F combustion turbine encompasses about 7 to 13 days depending on whether some maintenance can be performed on-line. The periodic, major maintenance for a simple cycle frame 7F combustion turbine is based on unit starts, so depending on the utilization of the CT, it takes 4 to 6 weeks for a hot gas path or major inspection, respectively, every 9 to 15 years.

The previous maintenance schedule (i.e., 4 days per year and 12 weeks every 15 years) was a holdover from the 2011 avoided unit, an aeroderivative CT which should have been updated in 2012 to reflect the maintenance schedule of a 7F CT.

TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 3 PAGE 2 OF 2 FILED: MAY 13, 2013



## SECOND REVISED SHEET NO. 8.416 CANCELS FIRST REVISED SHEET NO. 8.416

#### Continued from Sheet No. 8.414

- 4. Annual Scheduled Maintenance: Each year the CEP shall prepare, coordinate, and provide by April 1st all planned maintenance with the Company. The Company will review and approve annual/major scheduled maintenance by July 1st for the balance of the current year and following calendar year. A maximum of 13 days 312 hours) each year for annual maintenance and a maximum of 6 weeks (1,008 hours) every fifteenth year for major maintenance will be allowed. Scheduled maintenance shall not be planned during December through February without prior written consent from the Company. At the option of the CEP and by written notification to the Cep's Availability and Capacity Factors and such scheduled outage hours will be disregarded from the Monthly Availability Factor and Capacity Factor calculations. However, once allowable maintenance hours have been utilized, all other hours during the year will be considered in Availability and Capacity Factor calculations.
- 5. Monthly Capacity Payment: Starting with the CEP's Commercial In-Service Date, for months when the CEP unit has been dispatched (provided that CEP has achieved at least a 90% Monthly Availability Factor), the Monthly Capacity Payment for each Monthly Period shall be calculated according to the following:
  - a. In the event that the Monthly Capacity Factor is less than 80%, no Monthly Capacity Payment shall be paid to the CEP. That is:

#### MCP= \$0

b. In the event that the Monthly Capacity Factor is greater than or equal to 80% but less than 90%, the Monthly Capacity Payment shall be calculated from the following formula:

Continued on Sheet No. 8.418

DATE EFFECTIVE:

## TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 4 PAGE 1 OF 1 FILED: MAY 13, 2013

- **4.** Please refer to proposed revised tariff sheet No. 8.725. Please explain how the option to self-insure would be evaluated by the Company.
- A. Tampa will evaluate the customer's financial ability to self-insure as well as the customer's plans to prevent and manage losses.

The customer must provide the following documentation:

- 1. Three (3) years of audited financial statements,
- 2. Organizational structure and management background,
- 3. A brief description of claims and administration process, and
- 4. A brief description of safety and loss control programs.

Tampa Electric will evaluate the customer's ability to self-insure on an annual basis; however, if the customer files bankruptcy or Tampa Electric becomes aware that the customer's financials have deteriorated substantially, Tampa Electric may require the customer to secure insurance rather than rely on the prior self-insurance.

Please note that this self-insurance option was approved by the Florida Public Service Commission in Order No. PSC -10-0435-TRF-EQ (Docket No. 100043-EQ) for Tampa Electric's standard interconnection agreements for non-export parallel operators and Tier 2, and Tier 3 customer-owned renewable generators. The insurance language on Revised Tariff Sheet No. 8.725 under the "General Standards for Safety and Interconnection of Cogeneration and Small Power Production Facilities to the Electric Utility System" was overlooked by the company at the time of the 2010 filing. The company is proposing to make the insurance terms within its state tariffed interconnection agreements consistent.

## TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 5 PAGE 1 OF 6 FILED: MAY 13, 2013

- 5. Please complete the tables below describing payments to a renewable provider based on the proposed tariffs included in the company's revised standard offer contract. Please assume a renewable generator with 50 MW providing firm capacity with an in-service date of January 1, 2014, operating at a 90 percent capacity factor, for a duration of 20 years. Please provide the following scenarios:
  - No Standard Offer Contract As-Available Energy Only
  - Normal Capacity Payments
  - Levelized Payments
  - Early Payments
  - Early Levelized Payments

Year	Energy	Capacity Rate	Total Capacity Payments	Energy Rate	Total Energy Payments	Total Payments
	(MWh)	(\$/kw-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2014			}			
2015						
2016						
2017						
2018						
2019						
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2033			<u>+</u>		· · · · · · · · · · · · · · · · · · ·	1
Sum					100	
NPV			·····			

## TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 5 PAGE 2 OF 6 FILED: MAY 13, 2013

# A. See the completed Tables on Pages 2 through 6.

Year	Energy	Capacity Rate	Total Capacity Payments	Energy Rate	Total Energy Payments	Total Payments
	(MWh)	(\$/kw-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2014	394,200	-	-	37.38	14,733,887	14,733,887
2015	394,200	-	-	39.83	15,701,102	15,701,102
2016	395,280	-	-	44.78	17,700,494	17,700,494
2017	394,200	-	-	37.92	14,948,900	14,948,900
2018	394,200	-	-	39.87	15,718,669	15,718,669
2019	394,200	-	-	42.98	16,944,061	16,944,061
2020	395,280	-	-	45.18	17,858,465	17,858,465
2021	394,200	-	-	48.37	19,065,888	19,065,888
2022	394,200	-	-	48.70	19,198,793	19,198,793
2023	394,200		-	56.59	22,309,137	22,309,137
2024	395,280	-	-	59.95	23,697,951	23,697,951
2025	394,200	-	-	60.50	23,847,170	23,847,170
2026	394,200	-	-	59.75	23,554,483	23,554,483
2027	394,200	-	-	68.65	27,061,467	27,061,467
2028	395,280	-	-	69.91	27,632,453	27,632,453
2029	394,200	-	-	70.75	27,891,549	27,891,549
2030	394,200	-	-	72.11	28,427,699	28,427,699
2031	394,200	-	-	79.89	31,493,108	31,493,108
2032	395,280	-	-	83.26	32,909,700	32,909,700
2033	394,200	-	-	83.55	32,935,438	32,935,438
Sum	7,889,400		1		453,630,414	453,630,414
NPV					199,664,374	199,664,374

## No Standard Offer Contract - As-Available Energy Only

## TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 5 PAGE 3 OF 6 FILED: MAY 13, 2013

Year	Energy	Capacity Rate	Total Capacity Payments	Energy Rate	Total Energy Payments	Total Payments
	(MWh)	(\$/kw-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2014	394,200	-	-	37.38	14,733,887	14,733,887
2015	394,200	-	-	39.83	15,701,102	15,701,102
2016	395,280	-	-	44.78	17,700,494	17,700,494
2017	394,200	-	-	37.92	14,948,900	14,948,900
2018	394,200	-	-	39.87	15,718,669	15,718,669
2019	394,200	-	-	42.98	16,944,061	16,944,061
2020	395,280	7.76	3,104,179	45.23	17,878,910	20,983,089
2021	394,200	7.99	4,791,919	48.85	19,255,465	24,047,383
2022	394,200	8.22	4,931,542	48.84	19,254,277	24,185,818
2023	394,200	8.46	5,075,254	57.40	22,626,892	27,702,146
2024	395,280	8.71	5,223,176	60.63	23,966,081	29,189,257
2025	394,200	8.96	5,375,432	61.53	24,256,686	29,632,119
2026	394,200	9.22	5,532,149	60.32	23,779,880	29,312,029
2027	394,200	9.49	5,693,459	69.47	27,383,617	33,077,075
2028	395,280	9.77	5,859,496	70.85	28,003,777	33,863,273
2029	394,200	10.05	6,030,399	72.14	28,436,319	34,466,718
2030	394,200	10.34	6,206,313	72.85	28,719,381	34,925,694
2031	394,200	10.65	6,387,384	81.10	31,968,655	38,356,039
2032	395,280	10.96	6,573,764	84.53	33,414,695	39,988,459
2033	394,200	11.28	6,765,610	85.59	33,740,355	40,505,966
Sum	7,889,400		77,550,076		458,432,103	535,982,179
NPV			27,587,805		201,197,640	228,785,446

#### **Normal Capacity Payments**

Notes:

1) The capacity factor used in this example is 90%. The minimum capacity factor required to obtain a full capacity payment would be approximately 90% of the average capacity factor of the avoided unit and other existing and future CTs of the same type in each year of the contract.

2) The capacity payment under the Normal payment option begins May 1st of 2020 which is the in-service date of the avoided unit.

## TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 5 PAGE 4 OF 6 FILED: MAY 13, 2013

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Year	Energy	Capacity Rate	Total Capacity Payments	Energy Rate	Total Energy Payments	Total Payments
A STREET	(MWh)	(\$/kw-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2014	394,200		-	37.38	14,733,887	14,733,887
2015	394,200	-	-	39.83	15,701,102	15,701,102
2016	395,280	-	-	44.78	17,700,494	17,700,494
2017	394,200	-	-	37.92	14,948,900	14,948,900
2018	394,200	-	-	39.87	15,718,669	15,718,669
2019	394,200	-	-	42.98	16,944,061	16,944,061
2020	395,280	8.98	3,592,096	45.23	17,878,910	21,471,006
2021	394,200	9.01	5,404,358	48.85	19,255,465	24,659,822
2022	394,200	9.03	5,420,896	48.84	19,254,277	24,675,172
2023	394,200	9.06	5,437,831	57.40	22,626,892	28,064,723
2024	395,280	9.09	5,455,172	60.63	23,966,081	29,421,253
2025	394,200	9.12	5,472,930	61.53	24,256,686	29,729,616
2026	394,200	9.15	5,491,114	60.32	23,779,880	29,270,994
2027	394,200	9.18	5,509,734	69.47	27,383,617	32,893,351
2028	395,280	9.21	5,528,801	70.85	28,003,777	33,532,578
2029	394,200	9.25	5,548,326	72.14	28,436,319	33,984,645
2030	394,200	9.28	5,568,319	72.85	28,719,381	34,287,700
2031	394,200	9.31	5,588,792	81.10	31,968,655	37,557,448
2032	395,280	9.35	5,609,757	84.53	33,414,695	39,024,452
2033	394,200	9.39	5,631,225	85.59	33,740,355	39,371,580
Sum	7,889,400		75,259,350		458,432,103	533,691,453
NPV			27,587,844		201,197,640	228,785,485

#### **Levelized Payments**

Notes:

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1) The capacity factor used in this example is 90%. The minimum capacity factor required to obtain a full capacity payment would be approximately 90% of the average capacity factor of the avoided unit and other existing and future CTs of the same type in each year of the contract.

2) The capacity payment under the Levelized payment option begins May 1st of 2020 which is the in-service date of the avoided unit.

## TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 5 PAGE 5 OF 6 FILED: MAY 13, 2013

Year	Energy	Capacity Rate	Total Capacity Payments	Energy Rate	Total Energy Payments	Total Payments
	(MWh)	(\$/kw-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2014	394,200	3.76	2,257,523	37.38	14,733,887	16,991,409
2015	394,200	3.87	2,323,272	39.83	15,701,102	18,024,373
2016	395,280	3.98	2,390,945	44.78	17,700,494	20,091,440
2017	394,200	4.10	2,460,601	37.92	14,948,900	17,409,500
2018	394,200	4.22	2,532,296	39.87	15,718,669	18,250,965
2019	394,200	4.34	2,606,091	42.98	16,944,061	19,550,153
2020	395,280	4.47	2,682,048	45.23	17,878,910	20,560,958
2021	394,200	4.60	2,760,230	48.85	19,255,465	22,015,695
2022	394,200	4.73	2,840,703	48.84	19,254,277	22,094,980
2023	394,200	4.87	2,923,534	57.40	22,626,892	25,550,427
2024	395,280	5.01	3,008,793	60.63	23,966,081	26,974,874
2025	394,200	5.16	3,096,551	61.53	24,256,686	27,353,237
2026	394,200	5.31	3,186,881	60.32	23,779,880	26,966,761
2027	394,200	5.47	3,279,860	69.47	27,383,617	30,663,476
2028	395,280	5.63	3,375,565	70.85	28,003,777	31,379,342
2029	394,200	5.79	3,474,076	72.14	28,436,319	31,910,395
2030	394,200	5.96	3,575,477	72.85	28,719,381	32,294,858
2031	394,200	6.13	3,679,852	81.10	31,968,655	35,648,507
2032	395,280	6.31	3,787,289	84.53	33,414,695	37,201,984
2033	394,200	6.50	3,897,878	85.59	33,740,355	37,638,233
Sum	7,889,400		60,139,465		458,432,103	518,571,568
NPV			27,587,543		201,197,640	228,785,183

#### **Early Payments**

Notes:

1) The capacity factor used in this example is 90%. The minimum capacity factor required to obtain a full capacity payment would be approximately 90% of the average capacity factor of the avoided unit and other existing and future CTs of the same type in each year of the contract.

## TAMPA ELECTRIC COMPANY DOCKET NO. 130073-EI STAFF'S FIRST DATA REQUEST REQUEST NO. 5 PAGE 6 OF 6 FILED: MAY 13, 2013

Year	Energy	Capacity Rate	Total Capacity Payments	Energy Rate	Total Energy Payments	Total Payments
	(MWh)	(\$/kw-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2014	394,200	4.56	2,736,099	37.38	14,733,887	17,469,985
2015	394,200	4.57	2,744,007	39.83	15,701,102	18,445,108
2016	395,280	4.59	2,752,104	44.78	17,700,494	20,452,599
2017	394,200	4.60	2,760,396	37.92	14,948,900	17,709,296
2018	394,200	4.61	2,768,887	39.87	15,718,669	18,487,556
2019	394,200	4.63	2,777,582	42.98	16,944,061	19,721,643
2020	395,280	4.64	2,786,485	45.23	17,878,910	20,665,395
2021	394,200	4.66	2,795,602	48.85	19,255,465	22,051,067
2022	394,200	4.67	2,804,938	48.84	19,254,277	22,059,215
2023	394,200	4.69	2,814,498	57.40	22,626,892	25,441,390
2024	395,280	4.71	2,824,287	60.63	23,966,081	26,790,368
2025	394,200	4.72	2,834,312	61.53	24,256,686	27,090,998
2026	394,200	4.74	2,844,577	60.32	23,779,880	26,624,457
2027	394,200	4.76	2,855,088	69.47	27,383,617	30,238,705
2028	395,280	4.78	2,865,851	70.85	28,003,777	30,869,629
2029	394,200	4.79	2,876,873	72.14	28,436,319	31,313,192
2030	394,200	4.81	2,888,160	72.85	28,719,381	31,607,541
2031	394,200	4.83	2,899,717	81.10	31,968,655	34,868,372
2032	395,280	4.85	2,911,552	84.53	33,414,695	36,326,247
2033	394,200	4.87	2,923,670	85.59	33,740,355	36,664,026
Sum	7,889,400		56,464,686		458,432,103	514,896,789
NPV			27,587,543		201,197,640	228,785,183

#### **Early Levelized Payments**

Notes:

 The capacity factor used in this example is 90%. The minimum capacity factor required to obtain a full capacity payment would be approximately 90% of the average capacity factor of the avoided unit and other existing and future CTs of the same type in each year of the contract.