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COMMISSION
CLERK

April 29, 2011

HAND DELIVERED

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

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. 110093-EI

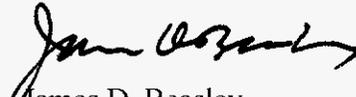
Dear Ms. Cole:

Pursuant to Staff's letter dated April 15, 2011, we enclose for filing the original and five (5) copies of Tampa Electric Company's responses to Staff's First Data Requests Nos. 1-5.

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
Enclosure

COM _____ cc: Pauline E. Evans (w/enc.)
APA _____ Paula K. Brown (w/o enc.)
ECR _____
GCL _____
RAD 3
SSC _____
ADM _____
OPC _____
CLK _____

DOCUMENT NUMBER-DATE
02955 APR 29 =
FPSC-COMMISSION CLERK

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 1
PAGE 1 OF 6
FILED: APRIL 29, 2011**

1. Please complete the tables below describing payments to a renewable provider based on the parameters included in TECO's revised standard offer contract. Please assume the renewable generator is a 50 MW facility providing firm capacity at the minimum capacity factor required for full capacity payments. Additionally, please assume an in-service date of January 1, 2012 and a contract duration of 20 years. Please provide this information for the following scenarios:
- Normal Payments
 - Levelized Payments
 - Early Payments
 - Early Levelized Payments

Committed Capacity (MW)	50
Capacity Factor (%)	
Payment Type:	

	Energy (MWh)	Capacity Rates (\$/kw-mo)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)¹
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						
2023						
2024						
2025						
2026						
2027						
2028						
2029						
2030						
2031						

¹ Please complete a table for each scenario on page 1. We anticipate receiving at least four tables.

DOCUMENT NUMBER-DATE
02955 APR 29 =
FPSC-COMMISSION CLERK

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 1
PAGE 2 OF 6
FILED: APRIL 29, 2011**

- A.** The tables below contain estimated payments to a renewable generator ("RG") under the four payment options, normal, levelized, early, and early levelized, based on corrected avoided unit parameters included in Tampa Electric's revised standard offer contract that were filed on April 29, 2011. The estimated payments assume a 20-year contract term for a 50 megawatt renewable generating facility with an in-service date of January 1, 2012.

In order to be paid full capacity payments under Tampa Electric's SOC, the RG is required to meet a 90% "capacity factor". However, under Tampa Electric's SOC, "capacity factor" is defined as: the sum of 80% of the monthly average on-peak operating factor and 20% of the monthly off-peak operating factor in the summer months and 90% of the monthly average on-peak operating factor and 10% of the monthly off-peak operating factor in the winter months. By this definition, it is the capacity received from the RG during those hours that the RG is dispatched (i.e., the hours that the avoided unit would have been dispatched) by Tampa Electric that will determine if the RG is eligible for full capacity payments. It is difficult to select a minimum capacity factor for full payment based on the normal definition of capacity factor because the minimum capacity factor would vary from year-to-year consistent with the projected capacity factor of the avoided unit.

For purposes of this response, a 90% capacity factor has been assumed for the RG although this capacity factor neither represents a minimum capacity factor for receiving a full capacity payment nor necessarily guarantees a full capacity payment.

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 1
PAGE 3 OF 6
FILED: APRIL 29, 2011**

Committed Capacity (MW)	50
Capacity Factor % ⁽¹⁾	90%
Payment Type:	Normal

	Energy (MWh)	Capacity Rates ⁽²⁾ (\$/kW-mo)	Total Capacity Payments (\$000)	Energy Rates ⁽³⁾ (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2012	395,280			51.49	20,354	20,354
2013	394,200	9.23	3,692	53.22	20,980	24,672
2014	394,200	9.41	5,644	53.77	21,198	26,842
2015	394,200	9.58	5,751	59.16	23,319	29,070
2016	395,280	9.77	5,860	63.27	25,010	30,870
2017	394,200	9.95	5,972	66.04	26,033	32,005
2018	394,200	10.14	6,085	66.06	26,042	32,127
2019	394,200	10.33	6,201	62.82	24,765	30,965
2020	395,280	10.53	6,319	62.82	24,830	31,148
2021	394,200	10.73	6,439	65.78	25,932	32,370
2022	394,200	10.93	6,561	65.08	25,656	32,216
2023	394,200	11.14	6,686	69.86	27,538	34,224
2024	395,280	11.35	6,813	71.12	28,114	34,926
2025	394,200	11.57	6,942	72.15	28,443	35,385
2026	394,200	11.79	7,074	73.12	28,824	35,898
2027	394,200	12.01	7,208	76.17	30,026	37,235
2028	395,280	12.24	7,345	76.30	30,161	37,506
2029	394,200	12.47	7,485	79.79	31,451	38,936
2030	394,200	12.71	7,627	80.70	31,812	39,439
2031	394,200	12.95	7,772	83.03	32,732	40,504

(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 (i.e., aero-derivative) in each year of the contract.

(2) The capacity payment under the Normal payment option begins May 1st of 2013 which is the in-service date of the avoided unit.

(3) The energy rate is a weighted blend based on the projected capacity factor of the avoided unit, the estimated avoided unit energy rate, and the estimated as-available energy rate.

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 1
PAGE 4 OF 6
FILED: APRIL 29, 2011**

Committed Capacity (MW)	50
Capacity Factor % ⁽¹⁾	90%
Payment Type:	Levelized

	Energy (MWh)	Capacity Rates ⁽²⁾ (\$/kW-mo)	Total Capacity Payments (\$000)	Energy Rates ⁽³⁾ (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2012	395,280			51.49	20,354	20,354
2013	394,200	10.31	4,126	53.22	20,980	25,106
2014	394,200	10.35	6,209	53.77	21,198	27,407
2015	394,200	10.38	6,230	59.16	23,319	29,549
2016	395,280	10.42	6,251	63.27	25,010	31,261
2017	394,200	10.45	6,273	66.04	26,033	32,306
2018	394,200	10.49	6,295	66.06	26,042	32,337
2019	394,200	10.53	6,317	62.82	24,765	31,082
2020	395,280	10.57	6,340	62.82	24,830	31,170
2021	394,200	10.61	6,363	65.78	25,932	32,295
2022	394,200	10.65	6,387	65.08	25,656	32,043
2023	394,200	10.69	6,411	69.86	27,538	33,950
2024	395,280	10.73	6,436	71.12	28,114	34,550
2025	394,200	10.77	6,461	72.15	28,443	34,904
2026	394,200	10.81	6,487	73.12	28,824	35,311
2027	394,200	10.86	6,513	76.17	30,026	36,539
2028	395,280	10.90	6,540	76.30	30,161	36,701
2029	394,200	10.94	6,567	79.79	31,451	38,018
2030	394,200	10.99	6,594	80.70	31,812	38,406
2031	394,200	11.04	6,623	83.03	32,732	39,354

(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 (i.e., aero-derivative) in each year of the contract.

(2) The capacity payment under the Normal payment option begins May 1st of 2013 which is the in-service date of the avoided unit.

(3) The energy rate is a weighted blend based on the projected capacity factor of the avoided unit, the estimated avoided unit energy rate, and the estimated as-available energy rate.

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 1
PAGE 5 OF 6
FILED: APRIL 29, 2011**

Committed Capacity (MW)	50
Capacity Factor % ⁽¹⁾	90%
Payment Type:	Early

	Energy (MWh)	Capacity Rates (\$/kW-mo)	Total Capacity Payments (\$000)	Energy Rates⁽²⁾ (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2012	395,280	8.08	4,847	51.49	20,354	25,201
2013	394,200	8.23	4,939	53.22	20,980	25,919
2014	394,200	8.39	5,033	53.77	21,198	26,231
2015	394,200	8.55	5,129	59.16	23,319	28,448
2016	395,280	8.71	5,226	63.27	25,010	30,237
2017	394,200	8.88	5,326	66.04	26,033	31,359
2018	394,200	9.04	5,427	66.06	26,042	31,469
2019	394,200	9.22	5,530	62.82	24,765	30,294
2020	395,280	9.39	5,635	62.82	24,830	30,465
2021	394,200	9.57	5,742	65.78	25,932	31,674
2022	394,200	9.75	5,851	65.08	25,656	31,507
2023	394,200	9.94	5,962	69.86	27,538	33,501
2024	395,280	10.13	6,076	71.12	28,114	34,190
2025	394,200	10.32	6,191	72.15	28,443	34,634
2026	394,200	10.51	6,309	73.12	28,824	35,133
2027	394,200	10.71	6,429	76.17	30,026	36,455
2028	395,280	10.92	6,551	76.30	30,161	36,712
2029	394,200	11.13	6,675	79.79	31,451	38,127
2030	394,200	11.34	6,802	80.70	31,812	38,614
2031	394,200	11.55	6,931	83.03	32,732	39,663

(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 (i.e., aero-derivative) in each year of the contract.

(2) The energy rate is a weighted blend based on the projected capacity factor of the avoided unit, the estimated avoided unit energy rate, and the estimated as-available energy rate.

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 1
PAGE 6 OF 6
FILED: APRIL 29, 2011**

Committed Capacity (MW)	50
Capacity Factor % ⁽¹⁾	90%
Payment Type:	Early Levelized

	Energy (MWh)	Capacity Rates (\$/kW-mo)	Total Capacity Payments (\$000)	Energy Rates ⁽²⁾ (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2012	395,280	9.04	5,424	51.49	20,354	25,778
2013	394,200	9.07	5,442	53.22	20,980	26,422
2014	394,200	9.10	5,460	53.77	21,198	26,658
2015	394,200	9.13	5,479	59.16	23,319	28,798
2016	395,280	9.16	5,497	63.27	25,010	30,508
2017	394,200	9.19	5,517	66.04	26,033	31,550
2018	394,200	9.23	5,536	66.06	26,042	31,579
2019	394,200	9.26	5,556	62.82	24,765	30,321
2020	395,280	9.29	5,577	62.82	24,830	30,407
2021	394,200	9.33	5,598	65.78	25,932	31,529
2022	394,200	9.36	5,619	65.08	25,656	31,274
2023	394,200	9.40	5,641	69.86	27,538	33,179
2024	395,280	9.44	5,663	71.12	28,114	33,776
2025	394,200	9.47	5,685	72.15	28,443	34,128
2026	394,200	9.51	5,708	73.12	28,824	34,532
2027	394,200	9.55	5,731	76.17	30,026	35,757
2028	395,280	9.59	5,755	76.30	30,161	35,916
2029	394,200	9.63	5,779	79.79	31,451	37,230
2030	394,200	9.67	5,804	80.70	31,812	37,615
2031	394,200	9.71	5,829	83.03	32,732	38,561

(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 (i.e., aero-derivative) in each year of the contract.

(2) The energy rate is a weighted blend based on the projected capacity factor of the avoided unit, the estimated avoided unit energy rate, and the estimated as-available energy rate.

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 2
PAGE 1 OF 1
FILED: APRIL 29, 2011**

- 2.** Please refer to Third Revised Sheet No. 8.236. Please explain the reason for the increase in the annual rate at which the Repayment Account balance accrues interest.
 - A.** The annual rate at which the Repayment Account balance accrues interest is tied to Tampa Electric's discount rate. The current discount rate is 8.02%, an increase of 0.03% from the 2010 rate of 7.99%. The increase is due to changes in Tampa Electric's current financial assumptions such as the interest rate on debt which increased from 6.8% for 2010 to 6.9% for 2011.

TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 3
PAGE 1 OF 2
FILED: APRIL 29, 2011

3. Please refer to Fourth Revised Sheet Nos. 8.422, 8.424, 8.428, and 8.436 of the Petition. Please explain the reason behind the change in values.
- A. The following response is based on corrected replacements to Fourth Revised Sheet Nos. 8.422, 8.424, 8.428 and 8.436 filed on April 29, 2011.

Fourth Revised Sheet Nos. 8.422:

VAC_m the \$/kW-mo. value of avoided capacity was impacted by the changes in parameters K , I_n , O_n , i_p , and i_o , which are explained below.

K The K-factor was updated to reflect Tampa Electric's current financial assumptions.

I_n The total direct and indirect cost including AFUDC of the 2013 avoided unit has changed as a result of 1) more accurate modeling of the construction spending curve to shift a portion the construction dollars into the in-service year of the avoided unit since the unit will still be under construction in 2013 until May; 2) the addition of one million dollars in transmission interconnection costs; 3) updated capital escalation rate; and 4) an updated k-factor.

i_p The escalation rate for capital was updated based on current assumption.

i_o The escalation rate for O&M was updated based on current assumption.

O_n The \$/kW-mo. fixed O&M expense reflects updated escalation rate for O&M.

r The discount rate reflects current financial assumptions.

TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 3
PAGE 2 OF 2
FILED: APRIL 29, 2011

Fourth Revised Sheet No. 8.424:

The values for parameters A_m and F are calculations for which the parameters listed on Revised Sheet No. 8.422 are inputs. Changes to these inputs have affected the calculated values. In addition, the value for A_m is affected by a change in the earliest year in which early capacity payments may begin from 2010 to 2011.

The changed values for parameters m and t reflects the reduced time period between the start of early payments (now in 2011) and the 2013 in-service date of the avoided unit.

Fourth Revised Sheet No. 8.428:

The payment streams were calculated based on updated parameters from the Fourth Revised Sheet Nos. 8.422 and 8.424.

Fourth Revised Sheet No. 8.436:

The change in values for O_v is a result of a lower assumed escalation rate than what was assumed in 2010.

The revised average heat rate of the avoided unit (H) reflects the current projected dispatch of the unit under Tampa Electric's unit dispatch model.

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 4
PAGE 1 OF 1
FILED: APRIL 29, 2011**

- 4.** Please refer to Fourth Revised Sheet Nos. 8.422 and 8.424. Current values of VAC_m , O_n , and A_m do not match the values that were submitted in TECO's Petition for 2010 Standard Offer Contract Revisions in Docket 100167-EI and approved under Order PSC-10-0465-TRF-EI. Please explain this discrepancy.

- A.** Please see the response to Request No. 3.

**TAMPA ELECTRIC COMPANY
DOCKET NO. 110093-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 5
PAGE 1 OF 1
FILED: APRIL 29, 2011**

- 5.** When does TECO anticipate construction would begin for the 2013 combustion turbine avoided unit? Should the Standard Offer Contract be closed at that time?
 - A.** It is anticipated that the field construction phase of the 2013 CT would begin approximately nine months prior to the in-service date of the avoided unit (i.e., August 1, 2012).