

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

May 21, 2012

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

Re: Docket No. 120074-EI-Petition for approval of revisions to standard offer contract and rate schedules COG-1 and COG-2, by Tampa Electric Company

Dear Ms. Cole:

On April 2, 2012 we filed Tampa Electric Company's Petition for approval of revisions to its standard offer contract and rate schedules COG-1 and COG-2. On May 1, 2012 we submitted Tampa Electric's answers to Staff's First Data Request Nos. 1-10 relating to the company's proposed standard offer contract. The company subsequently detected an error in the escalation of fixed and variable O&M (the escalation was done twice). This error affected four tariff sheets that accompanied the original filing as well as two of the company's responses to Staff's Data Requests.

Enclosed for filing are the original and fifteen (15) copies each of revised tariff sheets 8.422, 8.426, 8.427 and 8.436 and five (5) copies each of revised responses to Staff's First Set of Data Requests Nos. 6 and 10. We are providing Staff with two copies of the tariff sheets marked in legislative format. We would appreciate your circulating these revised versions to the recipients of the original submissions so that they may be inserted in place of the corresponding pages of the earlier filings.

Sincerely,

James D. Beasley

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Enclosures

15 original

cc: Pauline E. Robinson, Esq. (w/encls.)

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Data Request

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**TAMPA ELECTRIC COMPANY
DOCKET NO. 120074-EI
STAFF'S FIRST DATA REQUEST
REQUEST NO. 6
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- 6.** Please explain the change in the total fixed operation and maintenance expense from \$21.53/kW to \$11.42/kW.
- A.** Tampa Electric filed revisions to the values for avoided unit fixed and variable O&M in its 2012 Standard Offer Contract (SOC) on May 21 2012. This revised response is based on the revised value for fixed operation and maintenance (FOM) expense of \$9.67/kW-year.

The \$21.53/kW-year (in 2013 \$) is the FOM expense of a 61 MW avoided CT with an in-service year of 2013 on which the 2011 SOC was based. The FOM expense of \$9.67/kW-year (in 2019 \$) shown in the revised 2012 SOC is for a 177 MW avoided CT with an in-service year of 2019.

When the FOM expense of both SOC avoided CTs is compared on an apples-to-apples basis in 2012 dollars, the FOM for the avoided CT of the 2012 SOC is about 8% higher (\$103 K per year) than that of the 2011 SOC avoided CT. However, this higher dollar amount, when divided by the much higher capacity of the 2012 SOC avoided CT (i.e., 177,000 kW compared to 61,000 kW), yields a lower \$/kW FOM value than that of the 2011 SOC avoided CT.

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- 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 the avoided unit parameters in Tampa Electric’s 2012 Standard Offer Contract including corrected fixed and variable operation and maintenance expenses filed on May 21, 2012. The estimated payments assume a 20-year contract term for a 50 megawatt renewable generating facility with an in-service date of January 1, 2013.

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.

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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)
2013	394,200			45.86	18,078	18,078
2014	394,200	-	-	49.36	19,457	19,457
2015	394,200	-	-	53.28	21,004	21,004
2016	395,280	-	-	54.60	21,584	21,584
2017	394,200	-	-	49.10	19,356	19,356
2018	394,200	-	-	52.59	20,730	20,730
2019	394,200	7.98	4,787	53.53	21,103	25,890
2020	395,280	8.21	4,927	56.69	22,408	27,336
2021	394,200	8.45	5,072	61.29	24,162	29,234
2022	394,200	8.70	5,221	60.38	23,804	29,025
2023	394,200	8.96	5,375	64.14	25,283	30,658
2024	395,280	9.22	5,533	63.48	25,091	30,624
2025	394,200	9.49	5,696	68.04	26,822	32,518
2026	394,200	9.77	5,863	67.17	26,480	32,343
2027	394,200	10.06	6,036	70.91	27,954	33,989
2028	395,280	10.36	6,213	74.02	29,260	35,473
2029	394,200	10.66	6,396	74.97	29,552	35,948
2030	394,200	10.97	6,584	73.57	29,001	35,585
2031	394,200	11.30	6,778	76.17	30,027	36,805
2032	395,280	11.63	6,977	80.66	31,884	38,861

(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 2019 which is the in-service date of the avoided unit.

(3) The energy rate beginning in 2019 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.

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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)
2013	394,200			45.86	18,078	18,078
2014	394,200	-	-	49.36	19,457	19,457
2015	394,200	-	-	53.28	21,004	21,004
2016	395,280	-	-	54.60	21,584	21,584
2017	394,200	-	-	49.10	19,356	19,356
2018	394,200	-	-	52.59	20,730	20,730
2019	394,200	9.29	5,576	53.53	21,103	26,680
2020	395,280	9.31	5,588	56.69	22,408	27,996
2021	394,200	9.33	5,600	61.29	24,162	29,762
2022	394,200	9.35	5,612	60.38	23,804	29,416
2023	394,200	9.37	5,624	64.14	25,283	30,907
2024	395,280	9.40	5,637	63.48	25,091	30,729
2025	394,200	9.42	5,650	68.04	26,822	32,472
2026	394,200	9.44	5,664	67.17	26,480	32,143
2027	394,200	9.46	5,677	70.91	27,954	33,631
2028	395,280	9.49	5,691	74.02	29,260	34,951
2029	394,200	9.51	5,706	74.97	29,552	35,257
2030	394,200	9.53	5,720	73.57	29,001	34,721
2031	394,200	9.56	5,735	76.17	30,027	35,762
2032	395,280	9.58	5,751	80.66	31,884	37,635

(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 2019 which is the in-service date of the avoided unit.

(3) The energy rate beginning in 2019 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.

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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)
2013	394,200	3.87	2,320	45.86	18,078	20,398
2014	394,200	3.98	2,388	49.36	19,457	21,844
2015	394,200	4.10	2,458	53.28	21,004	23,462
2016	395,280	4.22	2,530	54.60	21,584	24,114
2017	394,200	4.34	2,605	49.10	19,356	21,960
2018	394,200	4.47	2,681	52.59	20,730	23,411
2019	394,200	4.60	2,760	53.53	21,103	23,863
2020	395,280	4.74	2,841	56.69	22,408	25,250
2021	394,200	4.87	2,925	61.29	24,162	27,086
2022	394,200	5.02	3,011	60.38	23,804	26,814
2023	394,200	5.17	3,099	64.14	25,283	28,382
2024	395,280	5.32	3,190	63.48	25,091	28,282
2025	394,200	5.47	3,284	68.04	26,822	30,106
2026	394,200	5.63	3,381	67.17	26,480	29,861
2027	394,200	5.80	3,480	70.91	27,954	31,434
2028	395,280	5.97	3,583	74.02	29,260	32,843
2029	394,200	6.15	3,688	74.97	29,552	33,240
2030	394,200	6.33	3,797	73.57	29,001	32,798
2031	394,200	6.51	3,909	76.17	30,027	33,935
2032	395,280	6.71	4,024	80.66	31,884	35,908

(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 energy rate beginning in 2019 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.

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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)
2013	394,200	4.73	2,837	45.86	18,078	20,915
2014	394,200	4.74	2,842	49.36	19,457	22,299
2015	394,200	4.75	2,848	53.28	21,004	23,852
2016	395,280	4.76	2,854	54.60	21,584	24,438
2017	394,200	4.77	2,860	49.10	19,356	22,216
2018	394,200	4.78	2,866	52.59	20,730	23,596
2019	394,200	4.79	2,873	53.53	21,103	23,976
2020	395,280	4.80	2,879	56.69	22,408	25,288
2021	394,200	4.81	2,886	61.29	24,162	27,048
2022	394,200	4.82	2,893	60.38	23,804	26,697
2023	394,200	4.83	2,900	64.14	25,283	28,183
2024	395,280	4.85	2,907	63.48	25,091	27,999
2025	394,200	4.86	2,914	68.04	26,822	29,737
2026	394,200	4.87	2,922	67.17	26,480	29,402
2027	394,200	4.88	2,930	70.91	27,954	30,884
2028	395,280	4.90	2,938	74.02	29,260	32,198
2029	394,200	4.91	2,946	74.97	29,552	32,498
2030	394,200	4.92	2,954	73.57	29,001	31,955
2031	394,200	4.94	2,963	76.17	30,027	32,989
2032	395,280	4.95	2,971	80.66	31,884	34,855

(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 energy rate beginning in 2019 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.



Continued from Sheet No. 8.418

PARAMETERS FOR AVOIDED CAPACITY COSTS

Beginning with the in-service date (5/12019) of the Company's Designated Avoided Unit, a 177 MW (Winter Rating) natural gas-fired Combustion Turbine, for a 1 year deferral:

	VALUE
VAC _m = Company's monthly value of avoided capacity, \$/kW/month, for each month of year n	8.12
K = present value of carrying charges for one dollar of investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present value to the middle of the first year	1.4763
I _n = total direct and indirect cost, in mid-year \$/kW including AFUDC but excluding CWIP, of the Designated Avoided Unit(s) with an in-service date of year n, including all identifiable and quantifiable costs relating to the construction of the Designated Avoided Unit that would have been paid had the Designated Avoided Unit(s) been constructed	878.11
O _n = total fixed operation and maintenance expense for the year n, in mid-year \$/kW/year, of the Designated Avoided Unit(s);	9.67
i _p = annual escalation rate associated with the plant cost of the Designated Avoided Unit(s)	3.0%
i _o = annual escalation rate associated with the operation and maintenance expense of the Designated Avoided Unit(s);	2.4%
r = discount rate, defined as the Company's incremental after tax cost of capital;	7.95%

Continued to Sheet No. 4.424



FIFTH REVISED SHEET NO. 8.426
 CANCELS FOURTH REVISED SHEET NO. 8.426

Continued from Sheet No. 8.424

2019 COMBUSTION TURBINE - AVOIDED UNIT
 MONTHLY CAPACITY PAYMENT RATE (\$/KW-MONTH)
 NON-LEVELIZED PAYMENT OPTIONS

		OPTION 1	OPTION 2						
		NORMAL PAYMENT	EARLY PAYMENT						
CONTRACT YEAR		Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	Starting 5/1/14	Starting 5/1/13	Starting 5/1/12
FROM	TO	\$/kw -mo							
5/1/12	4/30/13								3.19
5/1/13	4/30/14							3.58	3.28
5/1/14	4/30/15						4.04	3.69	3.38
5/1/15	4/30/16					4.57	4.16	3.79	3.48
5/1/16	4/30/17				5.20	4.71	4.28	3.91	3.58
5/1/17	4/30/18			5.96	5.36	4.85	4.40	4.02	3.68
5/1/18	4/30/19		6.87	6.13	5.52	4.99	4.53	4.14	3.79
5/1/19	4/30/20	7.98	7.07	6.31	5.68	5.14	4.67	4.26	3.90
5/1/20	4/30/21	8.21	7.28	6.50	5.84	5.29	4.80	4.39	4.02
5/1/21	4/30/22	8.45	7.49	6.69	6.02	5.44	4.95	4.52	4.14
5/1/22	4/30/23	8.70	7.71	6.89	6.19	5.60	5.09	4.65	4.26
5/1/23	4/30/24	8.96	7.94	7.09	6.38	5.77	5.24	4.78	4.38
5/1/24	4/30/25	9.22	8.17	7.30	6.56	5.94	5.40	4.93	4.51
5/1/25	4/30/26	9.49	8.41	7.51	6.76	6.11	5.55	5.07	4.65
5/1/26	4/30/27	9.77	8.66	7.73	6.95	6.29	5.72	5.22	4.78
5/1/27	4/30/28	10.06	8.91	7.96	7.16	6.48	5.89	5.37	4.92
5/1/28	4/30/29	10.36	9.17	8.20	7.37	6.67	6.06	5.53	5.07

Continued to Sheet No. 8.427

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE:



Continued from Sheet No. 8.426

2019 COMBUSTION TURBINE - AVOIDED UNIT
 MONTHLY CAPACITY PAYMENT RATE (\$/KW-MONTH)
 LEVELIZED PAYMENT OPTIONS

		OPTION 3	OPTION 4						
		LEVELIZED NORMAL PAYMENT	LEVELIZED EARLY PAYMENT						
CONTRACT YEAR		Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	Starting 5/1/14	Starting 5/1/13	Starting 5/1/12
FROM	TO	\$/kw -mo	\$/kw -mo	\$/kw -mo	\$/kw -mo	\$/kw -mo	\$/kw -mo	\$/kw -mo	\$/kw -mo
5/1/12	4/30/13								3.80
5/1/13	4/30/14							4.23	3.81
5/1/14	4/30/15						4.72	4.24	3.81
5/1/15	4/30/16					5.30	4.73	4.25	3.82
5/1/16	4/30/17				5.97	5.31	4.74	4.26	3.83
5/1/17	4/30/18			6.77	5.99	5.32	4.76	4.27	3.84
5/1/18	4/30/19		7.72	6.78	6.00	5.33	4.77	4.27	3.85
5/1/19	4/30/20	8.88	7.74	6.80	6.01	5.35	4.78	4.28	3.86
5/1/20	4/30/21	8.90	7.75	6.81	6.03	5.36	4.79	4.29	3.87
5/1/21	4/30/22	8.92	7.77	6.83	6.04	5.37	4.80	4.31	3.88
5/1/22	4/30/23	8.94	7.79	6.84	6.05	5.38	4.81	4.32	3.89
5/1/23	4/30/24	8.96	7.81	6.86	6.07	5.40	4.82	4.33	3.90
5/1/24	4/30/25	8.98	7.83	6.88	6.08	5.41	4.83	4.34	3.91
5/1/25	4/30/26	9.00	7.85	6.90	6.10	5.42	4.85	4.35	3.92
5/1/26	4/30/27	9.02	7.87	6.91	6.11	5.44	4.86	4.36	3.93
5/1/27	4/30/28	9.04	7.89	6.93	6.13	5.45	4.87	4.37	3.94
5/1/28	4/30/29	9.07	7.91	6.95	6.15	5.47	4.89	4.39	3.95

Continued to Sheet No. 8.428



Continued from Sheet No. 8.428

PARAMETERS FOR AVOIDED UNIT ENERGY AND VARIABLE OPERATION AND MAINTENANCE COSTS

Beginning on May 1, 2019, to the extent that the Designated Avoided Unit(s) would have been operated had it been installed by the Company:

	VALUE
O_v = total variable operating and maintenance expense, in \$/MWH, of the Designated Avoided Unit(s), in year n	4.87
H = The average annual heat rate, in British Thermal Units (Btus) per kilowatt-hour (Btu/kWh), of the Designated Avoided Unit(s)	11,983