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: June 26, 2014

TO: Office of Commission Clerk (Stauffer)

FROM: Division of Engineering (Matthews, Mtenga)
Office of the General Counsel (Corbari)

tlo TB
AT KFC MXM

RE: Docket No. 140069-EI – Petition for approval of revisions to standard offer contract and rate schedule COG-2, by Tampa Electric Company.

AGENDA: 07/10/14 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

Section 366.91(3), Florida Statutes (F.S.) requires that each investor-owned utility (IOU) continuously offers to purchase capacity and energy from renewable energy generators. Commission Rules 25-17.200 through 25-17.310, Florida Administrative Code (F.A.C.), implement the statute and require each IOU to file with the Commission by April 1 of each year a standard offer contract to purchase the capacity and energy from such renewable generators, with estimated payments based on the next avoidable fossil-fueled generating unit of each technology type identified in the utility's current Ten-Year Site Plan. On April 1, 2014, Tampa Electric Company (TECO or Utility) filed a petition for approval of revisions to its standard offer contract and associated rate schedule. The Commission has jurisdiction over this standard offer contract pursuant to Sections 366.04 through 366.06, and 366.91, F.S.

Discussion of Issues

Issue 1: Should the Commission approve the revised standard offer contract filed by Tampa Electric Company?

Recommendation: Yes. The provisions of the revised standard offer contract and related rate schedule COG-2 conform to all requirements of Rules 25-17.200 through 25-17.310, F.A.C. The revised standard offer contract provides flexibility in the arrangements for payments so that a developer of renewable generation may select the payment stream best suited to its financial needs. Staff recommends that the revised standard offer contract and related rate schedule COG-2 submitted by TECO be approved as filed. (Matthews, Mtenga)

Staff Analysis: Rule 25-17.250, F.A.C., requires that TECO, an IOU, continuously make available a standard offer contract for the purchase of firm capacity and energy from renewable generating facilities (RF) and small qualifying facilities (QF) with design capacities of 100 kilowatt (kW) or less. Pursuant to Rule 25-17.250(1), F.A.C., the standard offer contract must provide a term of at least ten years, and the payment terms must be based on the Utility's next avoidable fossil-fueled generating unit identified in its most recent Ten-Year Site Plan, or if no avoided unit is identified, its next avoidable planned purchase. TECO has identified a 220 MW natural gas-fired combustion turbine (CT) as its next avoidable fossil-fueled generating unit in its 2014 Ten-Year Site Plan. The projected in-servide date of this unit is May 1, 2020.

The RF/QF operator may elect to make no commitment as to the quantity or timing of its deliveries to TECO, and to have a committed capacity of zero (0) MW. Under such a scenario, the energy is delivered on an as-available basis and the operator receives only an energy payment. Alternatively, the RF/QF operator may elect to commit to certain minimum performance requirements based on the identified avoided unit, such as being operational and delivering the agreed upon amount of capacity by the in-service date of the avoided unit, and thereby becomes eligible for capacity payments in addition to payments received for energy. The standard offer contract can also serve as a starting point for negotiation of contract terms by providing payment information to an RF/QF operator, in a situation where one or both parties desire particular contract terms other than those set down in the standard offer.

In order to promote renewable generation, the Commission requires the IOU to offer multiple options for capacity payments, including the options to receive early or levelized payments. If the RF/QF operator elects to receive capacity payments under the normal or levelized contract options, it will receive as-available energy payments only until the in-service date of the avoided unit (in this case May 1, 2020), and thereafter begin receiving capacity payments in addition to the energy payments. If either the early or early levelized option is selected, then the operator will begin receiving capacity payments earlier than the in-service date of the avoided unit. However, payments made under the early capacity payments options tend to be lower in the later years of the contract term because the net present value (NPV) of the total payments must remain equal for all contract options.

Table 1 below estimates the annual payments for each payment option available under the revised standard offer contract to an operator with a 50 MW facility and an in-service date of

May 1, 2020, and operating at a 90 percent capacity factor, which is the minimum capacity factor required to qualify for full capacity payments.

Table 1- Estimated Annual Payments to a 50 MW Renewable Facility (90% Capacity Factor)

Year	Energy Payment	Capacity Payment (By Type)			
		Normal	Levelized	Early	Early Levelized
	($000)	($000)	($000)	($000)	($000)
2015	14,463	0	0	2,377	2,888
2016	15,328	0	0	2,446	2,896
2017	13,694	0	0	2,517	2,905
2018	14,620	0	0	2,589	2,914
2019	15,386	0	0	2,664	2,923
2020	19,825	2,852	4,961	2,741	2,933
2021	22,628	4,402	4,976	2,821	2,942
2022	23,459	4,530	4,992	2,902	2,952
2023	24,783	4,661	5,008	2,986	2,962
2024	26,548	4,795	5,024	3,073	2,972
2025	28,277	4,934	5,041	3,162	2,983
2026	28,445	5,077	5,058	3,253	2,994
2027	29,754	5,224	5,076	3,348	3,005
2028	31,430	5,375	5,094	3,445	3,016
2029	33,232	5,531	5,112	3,544	3,028
2030	33,629	5,691	5,131	3,647	3,040
2031	35,029	5,856	5,150	3,753	3,052
2032	37,318	6,026	5,170	3,862	3,064
2033	39,419	6,200	5,190	3,974	3,077
2034	39,875	6,380	5,210	4,089	3,090
Total	**527,141**	**77,534**	**76,193**	**63,192**	**59,634**
2014 NPV	254,865	32,764	32,764	32,764	32,764

The type-and-strike format versions of the revised standard offer contract and associated rate schedule are included as Attachment A to this recommendation. Revisions include updates to the avoided unit, dates, and payment information which reflect the current economic and financial assumptions for the avoided unit. In addition, some maintenance costs were shifted from variable operations & maintenance (O&M) to fixed O&M, based on TECO’s use of service contracts for periodic CT maintenance.

TECO's proposed standard offer also includes two revisions related to indemnification and insurance required for interconnection. The first revision references state and federal law relating to government entities, and acknowledges that in the event of a claim, legislative action may be required above certain amounts. The second revision allows for a self-insurance option for companies upon approval by TECO, with an annual requirement for the renewable generator to demonstrate its continued ability to self-insure. The option to self-insure increases the flexibility of the standard offer for renewable generators. All of the changes made to the revised rate schedule sheets, as well as the economic and financial assumptions used in the contract, are consistent with the updated unit.

Conclusion

The provisions of the revised standard offer contract and related rate schedule COG-2 conform to all requirements of Rules 25-17.200 through 25-17.310, F.A.C. The revised standard offer contract provides flexibility in the arrangements for payments so that a developer of renewable generation may select the payment stream best suited to its financial needs. Staff recommends that the revised standard offer contract and related rate schedule COG-2 be approved as filed.

Issue 2: Should this docket be closed?

Recommendation: Yes. This docket should be closed upon issuance of a consummating order, unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the Commission's proposed agency action order. Potential signatories should be aware that, if a timely protest is filed, TECO's standard offer contract may subsequently be revised. (Corbari)

Staff Analysis: This docket should be closed upon issuance of a consummating order, unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the Commission's proposed agency action order. Potential signatories should be aware that, if a timely protest is filed, TECO's standard offer contract may subsequently be revised.

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~~SECOND~~ THIRD REVISED SHEET NO. 8.416
CANCELS ~~FIRST~~ SECOND 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~~ 10 days ~~312~~ 240 hours) each year for annual maintenance and a maximum of ~~6~~ 4 weeks (~~1,008~~672 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 Company, scheduled outage time may be utilized during any other months to improve 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:

   MCP= [(BCC) x (.02 x (CF- 45))] x CC

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ISSUED BY: G. L. Gillette, President **DATE EFFECTIVE:** ~~June 25, 2013~~

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~~SIXTH~~ SEVENTH REVISED SHEET NO. 8.422
CANCELS ~~FIFTH~~ SIXTH REVISED SHEET NO. 8.422

Continued from Sheet No. 8.418

PARAMETERS FOR AVOIDED CAPACITY COSTS

Beginning with the in-service date (5/1/2020) of the Company's Designated Avoided Unit, a 220MW (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	~~7.76~~7.13
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	~~1.4759~~1.4625
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	~~813.08~~786.64
O_n	=	total fixed operation and maintenance expense for the year n, in mid-year \$/kW/year, of the Designated Avoided Unit(s);	~~13.46~~13.30
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%~~2.3%
r	=	discount rate, defined as the Company's incremental after tax cost of capital;	~~7.95%~~7.34%

Continued to Sheet No. 4.424

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE: ~~June 25, 2013~~

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L	=	expected life of the Designated Avoided Unit(s); and	25
n	=	year for which the Designated Avoided Unit is deferred starting with its original anticipated in-service date and ending with the termination of the contract for the purchase of firm capacity and energy.	2020
A_m	=	monthly early capacity payments to be made to the CEP for each month of the contract year n, in $/kW/month, if payments start in 2013;	~~3.10~~3.27
m	=	Earliest year in which early capacity payments to the CEP may begin;	~~2013~~2014*
F	=	the cumulative present value, in the year contractual payments will begin, of the avoided capital cost component of capacity payments over the term of the contract which would have been made had capacity payments commenced with the anticipated in-service date of the Designated Avoided Unit(s);	~~381.00~~395.16*
t	=	the term, in years, of the contract for the purchase of firm capacity if early capacity payments commence in year m;	~~17~~16*

** Actual values will be determined based on the capacity payment start date and contract term selected by the CEP.*

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ISSUED BY: G. L. Gillette, President **DATE EFFECTIVE:** ~~June 25, 2013~~

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~~SIXTH~~ SEVENTH REVISED SHEET NO. 8.426
CANCELS ~~FIFTH~~ SIXTH REVISED SHEET NO. 8.426

Continued from Sheet No. 8.424

		~~OPTION 1~~	~~OPTION 2~~						
		~~NORMAL PAYMENT~~	~~EARLY PAYMENT~~						
~~CONTRACT YEAR~~		~~Starting 5/1/20~~	~~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~~
~~FROM~~	~~TO~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~
~~5/1/13~~	~~4/30/14~~								~~3.10~~
~~5/1/14~~	~~4/30/15~~							~~3.49~~	~~3.19~~
~~5/1/15~~	~~4/30/16~~						~~3.93~~	~~3.59~~	~~3.29~~
~~5/1/16~~	~~4/30/17~~					~~4.45~~	~~4.04~~	~~3.69~~	~~3.38~~
~~5/1/17~~	~~4/30/18~~				~~5.06~~	~~4.58~~	~~4.16~~	~~3.80~~	~~3.48~~
~~5/1/18~~	~~4/30/19~~			~~5.80~~	~~5.21~~	~~4.71~~	~~4.28~~	~~3.91~~	~~3.58~~
~~5/1/19~~	~~4/30/20~~		~~6.68~~	~~5.97~~	~~5.36~~	~~4.85~~	~~4.41~~	~~4.02~~	~~3.69~~
~~5/1/20~~	~~4/30/21~~	~~7.76~~	~~6.87~~	~~6.14~~	~~5.52~~	~~4.99~~	~~4.54~~	~~4.14~~	~~3.79~~
~~5/1/21~~	~~4/30/22~~	~~7.99~~	~~7.07~~	~~6.32~~	~~5.68~~	~~5.14~~	~~4.67~~	~~4.26~~	~~3.90~~
~~5/1/22~~	~~4/30/23~~	~~8.22~~	~~7.28~~	~~6.50~~	~~5.85~~	~~5.29~~	~~4.81~~	~~4.39~~	~~4.02~~
~~5/1/23~~	~~4/30/24~~	~~8.46~~	~~7.49~~	~~6.69~~	~~6.02~~	~~5.44~~	~~4.95~~	~~4.51~~	~~4.14~~
~~5/1/24~~	~~4/30/25~~	~~8.71~~	~~7.71~~	~~6.89~~	~~6.19~~	~~5.60~~	~~5.09~~	~~4.65~~	~~4.26~~
~~5/1/25~~	~~4/30/26~~	~~8.96~~	~~7.94~~	~~7.09~~	~~6.37~~	~~5.76~~	~~5.24~~	~~4.78~~	~~4.38~~
~~5/1/26~~	~~4/30/27~~	~~9.22~~	~~8.17~~	~~7.29~~	~~6.56~~	~~5.93~~	~~5.39~~	~~4.92~~	~~4.51~~
~~5/1/27~~	~~4/30/28~~	~~9.49~~	~~8.41~~	~~7.51~~	~~6.75~~	~~6.10~~	~~5.55~~	~~5.06~~	~~4.64~~
~~5/1/28~~	~~4/30/29~~	~~9.77~~	~~8.65~~	~~7.73~~	~~6.95~~	~~6.28~~	~~5.71~~	~~5.21~~	~~4.77~~
~~5/1/29~~	~~4/30/30~~	~~10.05~~	~~8.90~~	~~7.95~~	~~7.15~~	~~6.47~~	~~5.88~~	~~5.36~~	~~4.91~~

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE: ~~June 25, 2013~~

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~~SIXTH~~ SEVENTH REVISED SHEET NO. 8.426
CANCELS ~~FIFTH~~ SIXTH REVISED SHEET NO. 8.426

		OPTION 1	OPTION 2					
		NORMAL PAYMENT	EARLY PAYMENT					
CONTRACT YEAR		Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	Starting 5/1/14
FROM	TO	$/kw-mo	$/kw-mo	$/kw-mo	$/kw-mo	$/kw-mo	$/kw-mo	$/kw-mo
5/1/14	4/30/15							3.27
5/1/15	4/30/16						3.67	3.36
5/1/16	4/30/17					4.15	3.78	3.46
5/1/17	4/30/18				4.70	4.27	3.89	3.56
5/1/18	4/30/19			5.36	4.84	4.39	4.00	3.66
5/1/19	4/30/20		6.16	5.52	4.98	4.52	4.12	3.77
5/1/20	4/30/21	7.13	6.34	5.68	5.12	4.65	4.24	3.88
5/1/21	4/30/22	7.34	6.52	5.84	5.27	4.78	4.36	3.99
5/1/22	4/30/23	7.55	6.71	6.01	5.42	4.92	4.49	4.11
5/1/23	4/30/24	7.77	6.90	6.18	5.58	5.06	4.62	4.23
5/1/24	4/30/25	7.99	7.10	6.36	5.74	5.21	4.75	4.35
5/1/25	4/30/26	8.22	7.31	6.55	5.91	5.36	4.89	4.47
5/1/26	4/30/27	8.46	7.52	6.74	6.08	5.51	5.03	4.60
5/1/27	4/30/28	8.71	7.74	6.93	6.25	5.67	5.17	4.74
5/1/28	4/30/29	8.96	7.96	7.13	6.43	5.84	5.32	4.88
5/1/29	4/30/30	9.22	8.19	7.34	6.62	6.01	5.48	5.02

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ISSUED BY: G. L. Gillette, President **DATE EFFECTIVE:** ~~June 25, 2013~~

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~~FIRST~~ SECOND REVISED SHEET NO. 8.427
CANCELS ~~ORIGINAL~~ FIRST REVISED SHEET NO. 8.427

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		~~OPTION 3~~	~~OPTION 4~~						
		~~LEVELIZED NORMAL PAYMENT~~	~~LEVELIZED EARLY PAYMENT~~						
~~CONTRACT YEAR~~		~~Starting 5/1/20~~	~~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~~
~~FROM~~	~~TO~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~	~~$/kw-mo~~
~~5/1/13~~	~~4/30/14~~								~~3.67~~
~~5/1/14~~	~~4/30/15~~							~~4.09~~	~~3.68~~
~~5/1/15~~	~~4/30/16~~						~~4.57~~	~~4.10~~	~~3.69~~
~~5/1/16~~	~~4/30/17~~					~~5.12~~	~~4.58~~	~~4.11~~	~~3.70~~
~~5/1/17~~	~~4/30/18~~				~~5.78~~	~~5.14~~	~~4.59~~	~~4.12~~	~~3.71~~
~~5/1/18~~	~~4/30/19~~			~~6.55~~	~~5.79~~	~~5.15~~	~~4.61~~	~~4.14~~	~~3.73~~
~~5/1/19~~	~~4/30/20~~		~~7.47~~	~~6.57~~	~~5.81~~	~~5.17~~	~~4.62~~	~~4.15~~	~~3.74~~
~~5/1/20~~	~~4/30/21~~	~~8.59~~	~~7.49~~	~~6.59~~	~~5.83~~	~~5.19~~	~~4.64~~	~~4.16~~	~~3.75~~
~~5/1/21~~	~~4/30/22~~	~~8.62~~	~~7.52~~	~~6.61~~	~~5.85~~	~~5.20~~	~~4.65~~	~~4.18~~	~~3.76~~
~~5/1/22~~	~~4/30/23~~	~~8.65~~	~~7.54~~	~~6.63~~	~~5.87~~	~~5.22~~	~~4.67~~	~~4.19~~	~~3.78~~
~~5/1/23~~	~~4/30/24~~	~~8.68~~	~~7.57~~	~~6.65~~	~~5.89~~	~~5.24~~	~~4.69~~	~~4.21~~	~~3.79~~
~~5/1/24~~	~~4/30/25~~	~~8.70~~	~~7.59~~	~~6.68~~	~~5.91~~	~~5.26~~	~~4.70~~	~~4.22~~	~~3.80~~
~~5/1/25~~	~~4/30/26~~	~~8.73~~	~~7.62~~	~~6.70~~	~~5.93~~	~~5.28~~	~~4.72~~	~~4.24~~	~~3.82~~
~~5/1/26~~	~~4/30/27~~	~~8.76~~	~~7.65~~	~~6.72~~	~~5.95~~	~~5.30~~	~~4.74~~	~~4.25~~	~~3.83~~
~~5/1/27~~	~~4/30/28~~	~~8.79~~	~~7.67~~	~~6.75~~	~~5.97~~	~~5.32~~	~~4.75~~	~~4.27~~	~~3.85~~
~~5/1/28~~	~~4/30/29~~	~~8.83~~	~~7.70~~	~~6.77~~	~~6.00~~	~~5.34~~	~~4.77~~	~~4.29~~	~~3.86~~
~~5/1/29~~	~~4/30/30~~	~~8.86~~	~~7.73~~	~~6.80~~	~~6.02~~	~~5.36~~	~~4.79~~	~~4.30~~	~~3.88~~

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE: ~~June 25, 2013~~

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~~FIRST~~ SECOND **REVISED SHEET NO. 8.427**
CANCELS ~~ORIGINAL~~ FIRST REVISED **SHEET NO. 8.427**

		OPTION 3	OPTION 4					
		LEVELIZED NORMAL PAYMENT	LEVELIZED EARLY PAYMENT					
CONTRACT YEAR		Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	Starting 5/1/14
FROM	TO	$/kw-mo	$/kw-mo	$/kw-mo	$/kw-mo	$/kw-mo	$/kw-mo	$/kw-mo
5/1/14	4/30/15							3.84
5/1/15	4/30/16						4.27	3.85
5/1/16	4/30/17					4.77	4.28	3.86
5/1/17	4/30/18				5.36	4.79	4.30	3.87
5/1/18	4/30/19			6.06	5.38	4.81	4.31	3.89
5/1/19	4/30/20		6.89	6.08	5.40	4.82	4.33	3.90
5/1/20	4/30/21	7.89	6.91	6.10	5.42	4.84	4.34	3.91
5/1/21	4/30/22	7.92	6.93	6.12	5.43	4.85	4.36	3.93
5/1/22	4/30/23	7.95	6.96	6.14	5.45	4.87	4.37	3.94
5/1/23	4/30/24	7.97	6.98	6.16	5.47	4.89	4.39	3.95
5/1/24	4/30/25	8.00	7.00	6.18	5.49	4.90	4.40	3.97
5/1/25	4/30/26	8.03	7.03	6.20	5.51	4.92	4.42	3.98
5/1/26	4/30/27	8.06	7.05	6.23	5.53	4.94	4.44	4.00
5/1/27	4/30/28	8.09	7.08	6.25	5.55	4.96	4.45	4.01
5/1/28	4/30/29	8.12	7.11	6.27	5.57	4.98	4.47	4.03
5/1/29	4/30/30	8.15	7.13	6.30	5.59	5.00	4.49	4.05

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ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE: ~~June 25, 2013~~

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BASIS FOR MONTHLY ENERGY PAYMENT CALCULATION:

1. **Energy Payment Rate**: Prior to the in-service date of the avoided unit, the CEP's Energy Payment Rate shall be the Company's As-Available Energy Payment Rate (AEPR), as described in Appendix B. Starting the in-service date of the avoided unit, the basis for determining the Energy Payment Rate will be whether:

   a. The Company has dispatched the CEP's unit on AGC; or

   b. The Company has dispatched the CEP's unit off AGC and the CEP is operating its unit at or below the dispatched level; or

   c. The Company has dispatched the CEP's unit off AGC but the CEP is operating its unit above the dispatched level; or

   d. The Company has not dispatched the CEP's unit but the CEP is providing capacity and energy.

   Note: For any given hour the CEP unit must be operating on AGC a minimum of 30 minutes to qualify under case (a).

   The CEP's total monthly energy payment shall equal; (1) the sum of the hourly energy at the Unit Energy Payment Rate (UEPR), when the CEP's unit was dispatched by the Company, plus (2) the sum of the hourly energy at the corresponding hourly AEPR when the CEP's unit was operating at times other than when the Company dispatched the unit.

2. **Unit Energy Payment Rate:** Starting the in-service date of the avoided unit, the CEP will be paid at the UEPR for energy provided in Paragraph 1.a, Paragraph 1.b and that portion of the energy provided up to the dispatched level in Paragraph 1.c as defined above. The UEPR, which is based on the Company's Designated Avoided Unit and Heat Rate value of ~~10,146~~10,046 Btu/kWh, will be calculated monthly by the following formula:

$$UEPR = FC + O_v$$

   where;

   O_v = Unit Variable Operation & Maintenance Expense in $/MWH.

Continued to Sheet No. 8.434

ISSUED BY: G. L. Gillette, President

DATE EFFECTIVE: ~~June 25, 2013~~

TECO
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Continued from Sheet No. 8.428

FC = Fuel Component of the Energy Payment in \$/MWH as defined by:

$$FC = \frac{\cancel{10{,}146}\ 10{,}046\ \text{Btu/kWh} \times FP}{1{,}000}$$

where;

FP = Fuel Price in \$/MMBTU determined by:

FP = GC/(1-FRP) + TC

where;

GC = Fuel Price in \$/MMBTU determined by taking the first publication of each month of Inside FERC's Gas Market Report low price quotation under the column titled "Index" for "Florida Gas Transmission Co., "Zone 2", listings.

TC = then currently approved Florida Gas Transmission (FGT) Company tariff rate in \$/MMBTU for forward haul Interruptible Market Area Transportation (ITS-1), including usage and surcharges.

FRP= then currently approved FGT Company tariff Fuel Reimbursement Charge Percentage in percent applicable to forward hauls for recovery of costs associated with the natural gas used to operate FGT's pipeline system.

3. **As-Available Energy Payment Rate (AEPR):** For energy provided and not covered under Paragraph 2 above, the AEPR will be applicable and will be based on the system avoided energy cost as defined in Appendix B.

Continued to Sheet No. 8.436

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TECO
TAMPA ELECTRIC

~~SIXTH~~ SEVENTH REVISED SHEET NO. 8.436
CANCELS ~~FIFTH~~ SIXTH REVISED SHEET NO. 8.436

Continued from Sheet No. 8.428

PARAMETERS FOR AVOIDED UNIT ENERGY AND VARIABLE OPERATION AND MAINTENANCE COSTS

Beginning on May 1, 2020, 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	~~2.13~~ 2.11
H	=	The average annual heat rate, in British Thermal Units (Btus) per kilowatt-hour (Btu/kWh), of the Designated Avoided Unit(s)	~~10,146~~ 10,046

ISSUED BY: G. L. Gillette, President **DATE EFFECTIVE:** ~~June 25, 2013~~