State of Florida

Public Service Commission

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-M-E-M-O-R-A-N-D-U-M-

DATE: June 7, 2012

TO: Office of Commission Clerk (Cole)

FROM: Division of Regulatory Analysis (Matthews) TW TB RLT
Office of the General Counsel (Murphy) AT CM

RE: Docket No. 120067-EI – Petition for approval of amended standard offer contract, by Progress Energy Florida, Inc.

AGENDA: 06/19/12 – Regular Agenda – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Edgar

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\RAD\WP\120067.RCM.DOC

Case Background

Section 366.91(3), Florida Statutes (F.S.), requires that each investor owned electric 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 based on the next avoidable generating unit or planned purchase. Progress Energy Florida, Inc. (PEF) filed its petition for approval of amended standard offer contract on March 30, 2012.

The Commission has jurisdiction over this standard offer contract pursuant to Sections 366.04 through 366.06 and 366.91, Florida Statutes (F.S.).

DOCUMENT NUMBER-DATE
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FPSC-COMMISSION CLERK

Discussion of Issues

Issue 1: Should the Commission approve the revised standard offer contract filed by Progress Energy Florida, Inc.?

Recommendation: Yes. The standard offer contract and related tariffs comply with Rules 25-17.200 through 25-17.310, F.A.C. (Matthews)

Staff Analysis: Because PEF is an IOU, Rule 25-17.250, F.A.C., requires that it 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 kilowatts (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 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. PEF has identified a 767 megawatt (MW) natural gas-fired combined cycle unit as its next fossil-fueled generating unit in its 2012 Ten-Year Site Plan. The projected in-service date of this unit is June 1, 2019.

The RF/QF operator may elect to make no commitment as to the quantity or timing of its deliveries to PEF, and to have a committed capacity of zero (0) MW. In this case the energy is delivered on an as-available basis and only an energy payment is made. Alternatively, the RF/QF operator may elect to commit to certain minimum performance requirements based on the avoided unit, such as being operational and delivering the agreed upon amount of capacity by the in-service date, and thereby become eligible for capacity payments in addition to those made for energy. If the RF/QF operator wishes to have contract terms that are different from those offered under the standard offer contract, the parties may enter into a negotiated contract instead.

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 June 1, 2019), 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. In addition, any capacity payments made which are greater than those called for under the normal option require additional performance security from the RF/QF operator.

Table 1 estimates the annual payments for all payment options that would be made under the current standard offer contract to an RF/QF operator with a 50 MW facility and an in-service date of June 2012, operating at a capacity factor of 86 percent, which is the minimum capacity factor required to qualify for a full capacity payment. This figure is less than the 94 percent value used in the 2011 standard offer contract. The minimum capacity factor required to qualify for any capacity payment was also reduced from 74 percent to 66 percent. According to PEF's response to staff's data request, the minimum performance standards in the 2012 standard offer contract were reduced from those in the previous years' contracts due to the change in the anticipated availability factor for the avoided unit, which is 86.5 percent. Table 1 also includes the net present values, in 2012 dollars, for each of the contract payment options. According to PEF, these figures do not match exactly due to rounding error in the mathematical calculation of NPV. The maximum difference is approximately 0.067 percent.

Table 1 – Estimated Annual Payments to a 50 MW Renewable Facility (86% Capacity Factor)

Year	Energy Payment	Capacity Payment (By Type)			
		Normal	Levelized	Early	Early Levelized
	$(000)	$(000)	$(000)	$(000)	$(000)
2012	-	-	-	-	-
2013	15,611	-	-	4,560	5,820
2014	16,461	-	-	4,668	5,832
2015	16,202	-	-	4,779	5,835
2016	17,549	-	-	4,891	5,841
2017	17,809	-	-	5,005	5,847
2018	18,629	-	-	5,122	5,853
2019	18,612	4,497	5,531	5,241	5,859
2020	19,217	7,882	9,491	5,363	5,866
2021	18,103	8,059	9,500	5,488	5,873
2022	17,533	8,240	9,510	5,615	5,879
2023	16,740	8,426	9,520	5,746	5,886
2024	18,173	8,615	9,530	5,879	5,894
2025	18,826	8,809	9,540	6,015	5,901
2026	19,705	9,007	9,551	6,155	5,908
2027	20,688	9,210	9,562	6,297	5,916
2028	20,926	9,417	9,573	6,443	5,924
2029	21,948	9,629	9,584	6,592	5,932
2030	21,540	9,846	9,596	6,744	5,940
2031	22,221	10,067	9,608	6,900	5,948
2032	23,150	10,294	9,620	7,059	5,957
Total	379,643	121,998	129,716	114,562	117,711
NPV (2012$)	202,499	52,137	52,123	52,104	52,102

PEF submitted a total of eleven revised tariff sheets, including six revised sheets of the standard offer contract and five revised sheets corresponding to Rate Schedule COG-2. The revisions to the tariff sheets are as follows:

- The modified table of example monthly capacity payments on Sheet No. 9.455.

- The modified dates and figures for the estimated incremental avoided energy costs for the next four semi-annual periods on Sheet No. 9.457.
- The revised estimated unit fuel cost and adjustment factors for delivery voltage on Sheet No. 9.458.
- The revised fixed value of deferral parameters for the normal contract option payments on Sheet No. 9.467.
- The revised fixed value of deferral parameters for the early contract option payments on Sheet No. 9.468.

The type-and-strike format version of these revised tariff sheets are included as Attachment A to this recommendation.

All of the changes made to the tariff sheets, as well as the economic assumptions used in the preparation of the contract, are consistent with the updated avoided unit. In addition to the changes made to the minimum performance standards discussed previously, PEF also changed the maximum allowed number of scheduled maintenance days per calendar year from 15 to 28 days. This change was made to correspond to the anticipated planned outage factor for the avoided unit, which is 7.7 percent or 28 days per year. All other revisions pertain to the date of the avoided unit, economic parameters, or document formatting. Beyond these modifications, all other items such as provisions for performance security and payment are retained from the 2011 standard offer contract and related tariffs.

The provisions of the 2012 standard offer contract and related tariffs submitted by PEF conform to all requirements of Rules 25-17.200 through 25-17.310, F.A.C. The 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. As such, staff believes the standard offer contract and related tariffs submitted by PEF should be approved as filed.

Issue 2: Should this docket be closed?

Recommendation: Yes. If the Commission approves staff's recommendation to approve the proposed standard offer contract and tariffs filed by PEF, and no person whose substantial interests are affected requests a hearing to address this matter, then Docket No. 120067-EI should be closed upon issuance of a Consummating Order, and the standard offer contracts and tariffs filed by PEF should be effective as of the date of the Commission's vote. If a protest is filed within 21 days of the issuance of the Commission's Order, the tariffs should remain in effect pending resolution of the protest. Potential signatories to the standard offer contract should be aware that approval of PEF's tariffs and standard offer contracts may be subject to a request for hearing, and if a hearing is held, PEF's tariffs and standard offer contracts may subsequently be revised. (Murphy)

Staff Analysis: If the Commission approves staff's recommendation to approve the proposed standard offer contract and tariffs filed by PEF, and no person whose substantial interests are affected requests a hearing to address this matter, then Docket No. 120067-EI should be closed upon issuance of a Consummating Order, and the standard offer contracts and tariffs filed PEF should be effective as of the date of the Commission's vote. If a protest is filed within 21 days of the issuance of the Commission's Order, the tariffs should remain in effect pending resolution of the protest. Potential signatories to the standard offer contract should be aware that approval of PEF's tariffs and standard offer contracts may be subject to a request for hearing, and if a hearing is held, PEF's tariffs and standard offer contracts may subsequently be revised.

ATTACHMENT "A"

Revised Tariff Sheets

Sheet Nos. 9.455, 9.457, 9.458, 9.467, 9.468

Progress Energy

SECTION No. IX
~~FOURTH~~ FIFTH REVISED SHEET NO. 9.455
CANCELS ~~THIRD~~ FOURTH SHEET NO. 9.455

TABLE 3
EXAMPLE MONTHLY CAPACITY PAYMENT IN $/kW/MONTH
PEF'S June 1, ~~2020~~ 2019 Undesignated ~~CT~~CC
Renewable or Qualifying Facility Standard Offer Contract Avoided Capacity Payments

($/kW/MONTH)

Contract Year	Option A Normal Capacity Payment Starting on the Avoided Unit In-Service Date	Option B Early Capacity Payment Starting on the Exemplary Capacity Payment Date	Option C Levelized Capacity Payment Starting on the Avoided Unit In-Service Date	Option D Early Levelized Capacity Payment Starting on the Exemplary Capacity Payment Date
~~2012~~2013		~~2.21~~6.16		~~2.51~~7.05
~~2013~~2014		~~2.25~~6.30		~~2.52~~7.06
~~2014~~2015		~~2.29~~6.44		~~2.52~~7.07
~~2015~~2016		~~2.34~~6.58		~~2.52~~7.08
~~2016~~2017		~~2.39~~6.73		~~2.52~~7.08
~~2017~~2018		~~2.43~~6.88		~~2.53~~7.09
~~2018~~2019	12.85	~~2.48~~7.04	14.00	~~2.53~~7.10
~~2019~~2020	13.14	~~2.53~~7.20	14.02	~~2.53~~7.11
~~2020~~2021	~~5.69~~13.43	~~2.58~~7.36	~~6.13~~14.03	~~2.54~~7.12
~~2021~~2022	~~5.80~~13.73	~~2.64~~7.52	~~6.14~~14.05	~~2.54~~7.13
~~2022~~2023	~~5.92~~14.04	~~2.69~~7.69	~~6.15~~14.07	~~2.55~~7.14
~~2023~~2024	~~6.04~~14.36	~~2.74~~7.87	~~6.15~~14.08	~~2.55~~7.14
~~2024~~2025	~~6.16~~14.68	~~2.80~~8.04	~~6.16~~14.10	~~2.55~~7.15
~~2025~~2026	~~6.28~~15.01	~~2.85~~8.22	~~6.17~~14.12	~~2.56~~7.16
~~2026~~2027	~~6.40~~15.35	~~2.91~~8.41	~~6.18~~14.14	~~2.56~~7.17
~~2027~~2028	~~6.53~~15.70	~~2.97~~8.60	~~6.19~~14.15	~~2.56~~7.18
~~2028~~	~~6.66~~	~~3.03~~	~~6.20~~	~~2.57~~
~~2029~~	~~6.80~~	~~3.09~~	~~6.20~~	~~2.57~~

1. The Capacity Payment schedules contained in this Contract assume a term of ten years from the Avoided Unit In-Service Date. In the event the RF/QF requests a term greater than ten years but less than the Avoided Unit Life then PEF shall prepare a schedule of Capacity Payments for the requested term. Such Capacity Payment rates shall be calculated utilizing the value-of-deferral methodology described in FPSC Rule 25-17.0832(6).

ISSUED BY: Lori J. Cross, Manager, Regulatory Planning Florida
EFFECTIVE:

For any period during which energy is delivered by the RF/QF to PEF, the Firm Energy Rate in cents per kilowatt hour (¢/kWh) shall be the following on an hour-by-hour basis: the lesser of (a) the As-Available Energy Rate and (b) the Avoided Unit Energy Cost. The Avoided Unit Energy Cost, in cents per kilowatt - hour (¢/kWh) shall be defined as the product of (a) the Avoided Unit Fuel Cost and (b) the Avoided Unit Heat Rate; plus (c) the Avoided Unit Variable O&M.

For the purposes of this agreement, the Avoided Unit Fuel Cost shall be determined from gas prices published in Platts Inside FERC, Gas Market Report, first of the month posting for Florida Gas Transmission ("FGT") Zone 3, plus other charges, surcharges and percentages that are in effect from time to time.~~FGT may apply. An estimated and indicative rate range of such other charges (as provided by FGT and expressed as a 100% LF Rate (includes a Reservation Charge and a basic Usage Charge)) is $1.35/MMBtu up to $1.50/MMBtu. This estimated and indicative recourse rate range is subject to change. The stated estimated and indicative recourse rate range does not include FGT's Fuel Reimbursement Charge ("Fuel") which is estimated to be approximately 3.25% based upon the historical calendar 2009 average. The estimated and indicative recourse rate does not include any surcharges (i.e. ACA - $.0019/MMBtu or UFS or any other unspecified future surcharges). FGT's Surcharges and Fuel percentages are collected in accordance with the terms and conditions of FGT's FERC approved tariff, in effect from time to time for service under FGT's proposed Rate Schedule FTS-3 which, at this time, has not been filed with or approved by the FERC.~~

The Parties may mutually agree to fix a minority portion of the base energy payments associated with the Avoided Unit and amortize that fixed portion, on a present value basis, over the term of the Contract. Such fixed energy payments may, at the option of the RF/QF, start as early as the Avoided Unit In-Service Date. For purposes of this paragraph, "base energy payments associated with the Avoided Unit" means the energy costs of the Avoided Unit to the extent that the Avoided Unit would have been operated. If this option is mutually agreed upon, it will be attached to this Contract in Appendix E.

ESTIMATED AS-AVAILABLE ENERGY COST

For informational purposes only, the estimated incremental avoided energy costs for the next four semi-annual periods are as follows. The following estimates include variable operation and maintenance expenses.

Applicable Period	Average ¢/KWH
April 1, ~~2011~~ 2012 - September 30, ~~2011~~2012	~~5.1~~4.6
October 1, ~~2011~~ 2012 – March 31, ~~2012~~2013	~~4.5~~3.8
April 1, ~~2012~~ 2013 – September 30, ~~2012~~2013	~~5.7~~4.3

ISSUED BY: Lori J. Cross, Manager, Regulatory Planning Florida
EFFECTIVE:

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October 1, ~~2012~~ 2013 – March 31, ~~2013~~2014	~~4.8~~4.0

ISSUED BY: Lori J. Cross, Manager, Regulatory Planning Florida
EFFECTIVE:

ESTIMATED UNIT FUEL COST

The estimated unit fuel costs listed below are associated with the Avoided Unit and are based on current estimates of the price of natural gas.

$/MMBTU

~~2012~~2013	~~2013~~2014	~~2014~~2015	~~2015~~2016	~~2016~~2017	~~2017~~2018	~~2018~~2019	~~2019~~2020	~~2020~~2021
~~5.28~~4.77	~~5.56~~5.07	~~6.05~~5.39	~~6.48~~5.61	~~6.70~~5.83	~~6.89~~5.93	~~7.12~~6.14	~~7.46~~6.32	~~7.74~~6.63

DELIVERY VOLTAGE ADJUSTMENT

PEF's average system line losses are analyzed annually for the prior calendar year, and delivery efficiencies are developed for the transmission, distribution primary, and distribution secondary voltage levels. This analysis is provided in the PEF's semi-annual fuel cost recovery filing with the FPSC in Exhibit Schedule E1. An adjustment factor, calculated as the reciprocal of the appropriate delivery efficiency factor, is applicable to the above determined energy costs if the RF/QF is within PEF's service territory to reflect the delivery voltage level at which RF/QF energy is received by the PEF.

The current delivery voltage adjustment factors are:

Delivery Voltage	Adjustment Factor
Transmission Voltage Delivery	~~1.0191~~1.0174
Primary Voltage Delivery	~~1.0291~~1.0274
Secondary Voltage Delivery	~~1.0618~~1.0593

PERFORMANCE CRITERIA

Payments for firm Capacity are conditioned on the RF/QF's ability to maintain the following performance criteria:

A. Capacity Delivery Date

The Capacity Delivery Date shall be no later than the Avoided Unit In-Service Date.

B. Availability and Capacity Factor

The Facility's availability and capacity factor are used in the determination of firm Capacity Payments through a performance based calculation as detailed in Appendix A to the Contract.

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SECTION No. IX
~~FOURTH~~ FIFTH REVISED SHEET NO. 9.467
CANCELS ~~THIRD~~ FOURTH SHEET NO. 9.467

SCHEDULE 2
TO RATE SCHEDULE COG-2CAPACITY OPTION PARAMETERS

FIXED VALUE OF DEFERRAL PAYMENTS - NORMAL CAPACITY OPTION PARAMETERS

Where, for one year deferral:

			Value
VAC_m	=	PEF's value of avoided capacity and O&M, in dollars per kilowatt per month, during month m;	~~5.69~~12.85
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 valued to the middle of the first year;	~~1.381~~1.422
I_n	=	total direct and indirect cost, in mid-year dollars per kilowatt including AFUDC but excluding CWIP, of the Avoided Unit with an in-service date of year n;	~~703.60~~1648.02
O_n	=	total fixed operation and maintenance expense, for the year n, in mid-year dollars per kilowatt per year, of the Avoided Unit:	~~4.65~~8.24
i_p	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.~~00~~25%
i_o	=	annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;	2.~~00~~25%
r	=	annual discount rate, defined as PEF's incremental after-tax cost of capital;	6.~~75~~47%
L	=	expected life of the Avoided Unit;	25
n	=	year for which the Avoided Unit is deferred starting with the Avoided Unit In-Service Date and ending with the Termination Date.	~~2020~~2019

ISSUED BY: Lori J. Cross, Manager, Regulatory Planning Florida
EFFECTIVE:

Progress Energy

SECTION No. IX
~~FOURTH~~ FIFTH REVISED SHEET NO. 9.468
CANCELS ~~THIRD~~ FOURTH SHEET NO. 9.468

FIXED VALUE OF DEFERRAL PAYMENTS - EARLY CAPACITY OPTION PARAMETERS

A_m	=	monthly avoided capital cost component of Capacity Payments to be made to the RF/QF starting as early as eight years prior to the Avoided Unit In-Service Date, in dollars per kilowatt per month;	~~2.06~~5.83
i_p	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.~~00~~25%
n	=	year for which early Capacity Payments to a RF/QF are to begin;	~~2012~~2013
F	=	the cumulative present value of the avoided capital cost component of Capacity Payments which would have been made had Capacity Payments commenced with the anticipated in-service date of the Avoided Unit and continued for a period of 10 years;	~~290.42~~789.94
r	=	annual discount rate, defined as PEF's incremental after-tax cost of capital;	6.~~75~~47%
t	=	the Term, in years, of the Contract for the purchase of firm capacity commencing prior to the in-service date of the Avoided Unit;	~~18~~16
G	=	the cumulative present value of the avoided fixed operation and maintenance expense component of Capacity Payments which would have been made had Capacity Payments commenced with the anticipated in-service date of the Avoided Unit and continued until the Termination Date.	~~21.23~~44.61

ISSUED BY: Lori J. Cross, Manager, Regulatory Planning Florida
EFFECTIVE: