

March 28, 2013

# RECEIVED-FPSC 13 MAR 28 PH 4: 146 COMMISSION CLERK

# VIA HAND DELIVERY

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

130068-E1

*Re:* Petition for Approval of Amended Standard Offer Contract (Schedule COG-2); Docket No. \_\_\_\_\_

Dear Ms. Cole:

Pursuant to Rule 25-17.0832(4), F.A.C., enclosed for filing on behalf of Progress Energy Florida, Inc. is the original and seven (7) copies of its petition for approval of amended standard offer contract (Schedule COG-2) based on a combined cycle avoided unit.

Thank you for your assistance in this matter. Should have any questions, please feel free to contact me at (727) 820-4692.

Sincerely, Diann M. Liplett CMR

**Dianne Triplett** 

DT/emc Enclosures

COM **AFD** APA **ECO** ENG TRAC. CLK

DOCUMENT NUMBER-DATE 0 1 5 2 5 MAR 28 2 FPSC-COMMISSION CLERK

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition of Progress Energy Florida for approval of amended standard offer contract (Schedule COG-2).

Docket No. 130068-E1.

Submitted for filing: March 28, 2013

#### **PETITION**

Progress Energy Florida, Inc. ("PEF" or "the Company"), pursuant to Sections 366.051 and 366.91(3), F.S., and Rule 25-17.0832(4), F.A.C., hereby petitions the Florida Public Service Commission ("the Commission") for approval of PEF's amended Standard Offer Contract. The amended Standard Offer Contract is attached hereto in standard format as Exhibit A and in legislative format as Exhibit B. In support of this petition, PEF submits the following:

1. PEF is a public utility subject to the regulatory jurisdiction of the Commission pursuant to Chapter 366, F.S. The Company's principal place of business is located at 299 First Avenue North, St. Petersburg, Florida 33701.

2. All notices, pleadings and correspondence required to be served on the petitioner should be directed to:

Dianne M. Triplett Post Office Box 14042 St. Petersburg, FL 33733-4042 Facsimile: (727) 820-5249

For express deliveries by private carrier, please use the address in paragraph 1 above.

3. The Amended Standard Offer Contract attached hereto is consistent with Commission Rule 25-17.0832 (4)-(6), F.A.C., governing standard offer contracts and tariffs. The avoided unit, on which the proposed standard offer contract is based, is an undesignated 1,189 MW combined cycle fueled by natural gas with a scheduled in-service date of June 1, 2018. The changes NUMBER-CATE

PROGRESS ENERGY FLORIDA

O 1 5 2 5 MAR 28 º FPSC-COMMISSION CLERK from the most recent standard offer are shown in underline and strike-through format in Exhibit B and affects the following sheets: 9.404, 9.415, 9.421, 9.423, 9.424, 9.442, 9.445, 9.455, 9.457, 9.458, 9.467 and 9.468. The attached Exhibit C contains the economic and financial assumptions for the cost parameters and the K Factor of the combined cycle unit on which the amended standard offer contract is based.

4. The proposed Amended Standard Offer Contract is required to be filed pursuant to Section 366.91(3), F.S., which states that "[o]n or before January 1, 2006, each public utility must continuously offer a purchase contract to producers of renewable energy." Pursuant to Chapter 366.91(3), F.S., PEF hereby submits its Amended Standard Offer Contract attached as Exhibit A for approval. The Amended Standard Offer Contract will be continuously offered, will have a term of 10 to 25 years, and will not have a subscription limit. The Amended Standard Offer Contract meets the requirements set forth in Section 366.91(3), F.S.

WHEREFORE, for the above-stated reasons, PEF respectfully requests that the Commission grant this petition and approve the Amended Standard Offer Contract in Exhibit A filed with this petition.

Respectfully Submitted,

iplett imr

JOHN T. BURNETT Deputy General Counsel DIANNE M. TRIPLETT Associate General Counsel Progress Energy Service Company, LLC Post Office Box 14042 St. Petersburg, FL 33733-4042 Telephone: (727) 820-5184

Attorneys for PROGRESS ENERGY FLORIDA, INC.

# EXHIBIT A

# AMENDED STANDARD OFFER CONTRACT (Clean copy)

Tariff Sheets:

9.404, 9.415, 9.421, 9.423, 9.424, 9.442, 9.445, 9.455, 9.457, 9.458, 9.467 and 9.468



SECTION NO. IX SECOND REVISED SHEET NO. 9.404 CANCELS FIRST SHEET NO. 9.404

# STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY AND ENERGY FROM A RENEWABLE ENERGY PRODUCER OR QUALIFYING FACILITY LESS THAN 100 KW

THIS STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY AND ENERGY (hereinafter referred to as the "Contract") is made and entered this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ (hereinafter referred to as the "Execution Date"), by and (hereinafter the Renewable between Energy Provider/Qualifying Facility ("RF/QF"), and Florida Power Corporation d/b/a Progress Energy Florida (hereinafter "PEF"), a private utility corporation organized and existing under the laws of the State of Florida. The RF/QF and PEF shall be individually identified herein as the "Party" and collectively as the "Parties". This Contract contains five Appendices which are incorporated into and made part of this Contract: Appendix A: Monthly Capacity Payment Calculation; Appendix B: Termination Fee; Appendix C: Detailed Project Information; Appendix D: Rate Schedule COG-2; Appendix E: Agreed Upon Payment Schedules and Other Mutual Agreements; and Appendix F: Florida Public Service Commission ("FPSC") Rules 25-17.080 through 25-17.310, F.A.C.

#### WITNESSETH:

WHEREAS, the RF/QF desires to sell, and PEF desires to purchase electricity to be generated by the RF/QF consistent with Florida Statutes 366.91 (2006) and FPSC Rules 25-17.080 through 25-17.310 F.A.C.; and

WHEREAS, the RF/QF has acquired an interconnection/transmission service agreement with the utility in whose service territory the Facility is to be located, pursuant to which the RF/QF assumes contractual responsibility to make any and all transmission-related arrangements (including ancillary services) between the RF/QF and the Transmission Provider for delivery of the Facility's firm capacity and energy to PEF. The Parties recognize that the Transmission Provider may be PEF and that the transmission service will be provided under a separate agreement; and

**WHEREAS**, the FPSC has approved this Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer; and

**WHEREAS**, the RF/QF guarantees that the Facility is capable of delivering firm capacity and energy to PEF for the term of this Contract in a manner consistent with the provision of this Contract;

NOW, THEREFORE, for mutual consideration the Parties agree as follows:



#### 3. Term of Contract

Except as otherwise provided herein, this Contract shall become effective immediately upon its execution by the Parties and shall end at 12:01 a.m. on the Termination Date, (the "Term") unless terminated earlier in accordance with the provisions hereof. Notwithstanding the foregoing, if the Capacity Delivery Date of the Facility is not accomplished by the RF/QF before the either the Avoided Unit In-Service Date or an earlier date in Appendix E (or such later date as may be permitted by PEF pursuant to Section 7), this Contract shall be rendered null and void and PEF's shall have no obligations under this Contract.

#### 4. Minimum Specifications and Milestones

As required by FPSC Rule 25-17.0832(4)(e), the minimum specifications pertaining to this Contract and milestone dates are as follows:

Avoided Unit	Undesignated CC
Avoided Unit Capacity	1189 MW
Avoided Unit In-Service Date	June 1, 2018
Avoided Unit Heat Rate	6,703 BTU/kWh
Avoided Unit Variable O&M	0.419¢ per kWh in mid-2013 dollars escalating
	annually at 2.25%
Avoided Unit Life	25 years
Capacity Payments begin	Avoided Unit In-Service Date unless Option B,
	or D is selected or amended in Appendix E
Termination Date	May 31, 2027 (10 years) unless amended in
	Appendix E
Minimum Performance Standards - On	87%
Peak Availability Factor*	
Minimum Performance Standards - Off	87%
Peak Availability Factor	
Minimum Availability Factor Required to	67%
qualify for a Capacity payment	
Expiration Date	April 1, 2014
Completed Permits Date	June 1, 2016
Exemplary Early Capacity Payment Date	January 1, 2014

\* RF/QF performance shall be as measured and/or described in Appendix A.



SECTION No. IX THIRD REVISED SHEET NO. 9.421 CANCELS SECOND REVISED SHEET NO. 9.421

#### 9.3 Payments for Energy and Capacity

- **9.3.1** Payments due the RF/QF will be made monthly, and normally by the twentieth Business Day following the end of the billing period. The kilowatt-hours sold by the RF/QF and the applicable avoided energy rate at which payments are being made shall accompany the payment to the RF/QF.
- **9.3.2** Payments to be made under this Contract shall, for a period of not longer than two (2) years, remain subject to adjustment based on billing adjustments due to error or omission by either Party, provided that such adjustments have been agreed to between the Parties.

#### 10. Electricity Production and Plant Maintenance Schedule

- 10.1 No later than sixty (60) calendar days prior to the Capacity Delivery Date, and prior to October 1 of each calendar year thereafter during the term of this Contract, the RF/QF shall submit to PEF in writing a good-faith estimate of the amount of electricity to be generated by the Facility and delivered to PEF for each month of the following calendar year, including the time, duration and magnitude of any scheduled maintenance period(s) or reductions in Capacity. A RF/QF agrees to provide updates to its planned maintenance periods as they become known. The Parties agree to discuss coordinating scheduled maintenance schedules.
- **10.2** By October 31 of each calendar year, PEF shall notify the RF/QF in writing whether the requested scheduled maintenance periods in the detailed plan are acceptable. If PEF does not accept any of the requested scheduled maintenance periods, PEF shall advise the RF/QF of the time period closest to the requested period(s) when the outage(s) can be scheduled. The RF/QF shall only schedule outages during periods approved by PEF, and such approval shall not be unreasonably withheld. Once the schedule for the detailed plan has been established and approved, either Party requesting a subsequent change in such schedule, except when such change is due to Force Majeure, must obtain approval for such change from the other Party. Such approval shall not be unreasonably withheld or delayed. Scheduled maintenance outage days shall be limited to twenty four days per calendar year. In no event shall maintenance periods be scheduled during the following periods: June 1 through September 15 and December 1 through and including the last day of February.
- **10.3** The RF/QF shall comply with reasonable requests by PEF regarding day-to-day and hour-by-hour communication between the Parties relative to electricity production and maintenance scheduling.



SECTION No. IX SIXTH REVISED SHEET NO. 9.423 CANCELS FIFTH SHEET NO. 9.423

- **10.5.3** If the Facility is separated from the PEF system for any reason, under no circumstances shall the RF/QF reconnect the Facility to PEF's system without first obtaining PEF'S specific approval.
- **10.5.4** During the term of this Contract, the RF/QF shall employ qualified personnel for managing, operating and maintaining the Facility and for coordinating such with PEF. The RF/QF shall ensure that operating personnel are on duty at all times, twenty-four (24) hours a calendar day and seven (7) calendar days a week. Additionally, during the term of this Contract, the RF/QF shall operate and maintain the Facility in such a manner as to ensure compliance with its obligations hereunder and in accordance with applicable law and Prudent Utility Practices.
- **10.5.5** PEF shall not be obligated to purchase, and may require curtailed or reduced deliveries of energy to the extent allowed under FPSC Rule 25-17.086 and under any curtailment plan which PEF may have on file with the FPSC from time to time.
- **10.5.6** During the term of this Contract, the RF/QF shall maintain sufficient fuel on the site of the Facility to deliver the capacity and energy associated with the Committed Capacity for an uninterrupted seventy-two-(72) hour period. At PEF's request, the RF/QF shall demonstrate this capability to PEF's reasonable satisfaction. During the term of this Contract, the RF/QF's output shall remain within a band of plus or minus ten percent (10%) of the daily output level or levels specified by the plant operator, in ninety percent (90%) of all operating hours under normal operating conditions. This calculation will be adjusted to exclude forced outage periods and periods during which the RF/QF's output is affected by a Force Majeure event.

#### 11. Completion/Performance Security

11.1 Simultaneous with the execution of this agreement RF/QF shall deliver to PEF Eligible Collateral in an amount according to Table 2. RF/QF's Performance Security shall be maintained throughout the Term although the amount of Eligible Collateral shall be adjusted from time to time in accordance with Table 2 and Section 11.4. The listed amounts are considered the initial amounts and use 2013 as the Base Year, with all amounts expressed in US Dollars.

Note: The amounts in the following Table are for 2013 and are subject to change based on utility cost estimates for any year subsequent to the Base Year.



SECTION No. IX SIXTH REVISED SHEET NO. 9.424 CANCELS FIFTH SHEET NO. 9.424

#### TABLE 2

Credit Class	Amount per MW	Amount per MW
	Years 1 - 5	Years 6 –
		Termination Date
A- and Above	\$25,000	\$10,000
BBB+ to BBB	\$75,000	\$60,000
BBB-	\$115,000	\$100,000
Below BBB-	\$170,000	\$150,000

- 11.2 In the event that a Material Adverse Change occurs in respect of RF/QF, then within two (2) Business Day(s) RF/QF shall deliver to PEF Supplemental Eligible Collateral equal to 50 percent of the current Eligible Collateral amount, provided however, that in the PEF's sole discretion, based on a review of the overall circumstances of RF/QF's Material Adverse Change, the total of the Eligible Collateral and the Supplemental Eligible Collateral may be reduced but in no event shall the amount be less than the Base Performance Security Amount.
- Performance Security Annual Adjustments The RF/QF Performance Security shall be adjusted on an annual basis beginning January 1, 2014 and each year of during the term of the Agreement. The values in Table 2 will be adjusted using the change in the Gross Domestic Price Implicit Price Deflator (GDPIPD) between the Base Year and each year during the term as reported in the <u>Survey of Current Business</u> published in January each year and revised thereafter, by the Bureau of Economic Analysis, United States Department of commerce, Washington, D.C. using the following formula: Current Performance Security amount (CPSA) multiplied by one plus the change in the GDPIPD, (CPSA X (1 + ΔGDPIPD)
- 11.5 Replacement Collateral, Release of Collateral - Upon any reduction of the amount of RF/QF Performance Security pursuant to Section 11.2 or 11.3 PEF thereof shall upon two (2) Business Days written request by the RF/QF release any Eligible or Supplemental Eligible Collateral that is no longer required. The choice of the type of Eligible Collateral by the RF/QF may be selected from time to time by the RF/QF and upon receipt of substitute Eligible Collateral, PEF shall promptly release such Eligible Collateral. Following any termination of this agreement, the Parties shall mutually agree to a final settlement of all obligations under this Agreement which such period shall not exceed 90 days from such termination date unless extended by mutual agreement between the Parties. After such settlement, any remaining Eligible Collateral posted by the RF/QF that has not been drawn upon by PEF pursuant to its rights under this Contract shall be returned to the RF/QF. Any dispute between the Parties regarding such final settlement shall be resolved according to applicable procedures set forth in Section 20.9.



SECTION No. IX FIFTH REVISED SHEET NO. 9.442 CANCELS FOURTH SHEET NO. 9.442

### APPENDIX A

#### ТО

### PROGRESS ENERGY FLORIDA RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW STANDARD OFFER CONTRACT

#### MONTHLY CAPACITY PAYMENT CALCULATION

Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Standard Offer Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer or a Qualifying Facility less than 100 kW.

A. In the event that the ACBF is less than or equal to 67%, then no Monthly Capacity Payment shall be due. That is:

MCP = 0

B. In the event that the ACBF is greater than 67% but less than 87%, then the Monthly Capacity Payment shall be calculated by using the following formula:

 $MCP = BCP \times [1 - [5 \times (.87 - ACBF)] \times CC$ 

C. In the event that the ACBF is equal to or greater than 87%, then the Monthly Capacity Payment shall be calculated by using the following formula:

 $MCP = BCP \times CC$ 

Where:

MCP =	Monthly Capacity Payment in dollars.
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BCP = Base Capacity Payment in \$/kW/Month as specified in Appendix D or E.

CC = Committed Capacity in kW.



a.

b.

SECTION No. IX FOURTH REVISED SHEET NO. 9.445 CANCELS THIRD REVISED SHEET NO. 9.445

In the event that for any Monthly Billing Period, the computation of the value of the Termination Fee for such Monthly Billing Period (as set forth above) yields a value less than zero, the amount of the Termination Fee shall be decreased by the amount of such value expressed as a positive number (the "Initial Reduction Value"); provided, however, that such Initial Reduction Value shall be subject to the following adjustments (the Initial Reduction Value, as adjusted, the "Reduction Value"):

In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A is less than or equal to 67%, then the Initial Reduction Value shall be adjusted to equal zero (Reduction Value = 0), and the Termination Fee shall not be reduced for the applicable Monthly Billing Period.

In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A, is greater than 67% but less than 87%, than the Reduction Value shall be determined as follows:

Reduction Value = Initial Reduction Value x [5 x (ACBF - .87)]

For the applicable Monthly Billing period, the Termination Fee shall be reduced by the amount of such Reduction Value.

c.

In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A, is equal to or greater than 87%, then the Initial Reduction Value shall not be adjusted (Reduction Value = Initial Reduction Value), and the Termination Fee shall be reduced for the applicable Monthly Billing period by the amount of the Initial Reduction Value.

In no event shall PEF be liable to the RF/QF at any time for any amount by which the Termination Fee, adjusted in accordance with the foregoing, is less than zero (0).



SECTION No. IX SIXTH REVISED SHEET NO. 9.455 CANCELS FIFTH SHEET NO. 9.455

# TABLE 3

# EXAMPLE MONTHLY CAPACITY PAYMENT IN \$/kW/MONTH PEF'S June 1, 2018 Undesignated CC Renewable or Qualifying Facility Standard Offer Contract Avoided Capacity Payments

#### (\$/kW/MONTH)

	Option A	Option B	Option C	Option D
	Normal	Early	Levelized	Early Levelized
	Capacity	Capacity	Capacity	Capacity
Contract	Payment Starting	Payment Starting	Payment Starting	Payment Starting
Year	on the Avoided	on the	on the Avoided	on the
	Unit In-Service	Exemplary	Unit In-Service	Exemplary
	Date	Capacity	Date	Capacity
		Payment Date		Payment Date
2014		6.47		7.30
2015		6.61		7.31
2016		6.76		7.31
2017		6.92		7.32
2018	10.80	7.07	11.78	7.33
2019	11.05	7.23	11.79	7.33
2020	11.29	7.39	11.81	7.34
2021	11.55	7.56	11.82	7.35
2022	11.81	7.73	11.83	7.35
2023	12.07	7.90	11.84	7.36
2024	12.34	8.08	11.85	7.37
2025	12.62	8.26	11.86	7.38
2026	12.91	8.45	11.87	7.39
2027	13.20	8.64	11.89	7.39
2028				
2029				

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).



SECTION No. IX SIXTH REVISED SHEET NO. 9.457 CANCELS FIFTH SHEET NO. 9.457

For any period during which energy is delivered by the RF/QF to PEF, the Firm Energy Rate in cents per kilowatt hour ( $\phi$ /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 ( $\phi$ /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 price 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.

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.

	Average
Applicable Period	¢/KWH
April 1, 2013 - September 30, 2013	3.9
October 1, 2013 – March 31, 2014	3.5
April 1, 2014– September 30, 2014	4.0
October 1, 2014 – March 31, 2015	3.9



#### 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.

#### <u>\$/MMBTU</u>

2014	2015	2016	2017	2018	2019	2020	2021	2022
4.33	4.49	5.03	5.35	5.68	6.03	6.38	6.74	7.12

#### **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	1.0156		
Primary Voltage Delivery	1.0256		
Secondary Voltage Delivery	1.0598		

#### PERFORMANCE CRITERIA

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

A. <u>Capacity Delivery Date</u>

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.



SECTION No. IX SIXTH REVISED SHEET NO. 9.467 CANCELS FIFTH 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 <sub>m</sub>	=	PEF's value of avoided capacity and O&M, in dollars per kilowatt per month, during month m;	10.80
К	=	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;	1.420
In	=	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;	1403.25
On	=	total fixed operation and maintenance expense, for the year n, in mid-year dollars per kilowatt per year, of the Avoided Unit:	5.52
i <sub>p</sub>	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.25%
io	=	annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;	2.25%
r	-	annual discount rate, defined as PEF's incremental after-tax cost of capital;	6.47%
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.	2018



SECTION No. IX SIXTH REVISED SHEET NO. 9.468 CANCELS FIFTH SHEET NO. 9.468

### FIXED VALUE OF DEFERRAL PAYMENTS -EARLY CAPACITY OPTION PARAMETERS

A <sub>m</sub>	=	monthly avoided capital cost component of Capacity Payments to be made to the RF/QF starting as early as four years prior to the Avoided Unit In-Service Date, in dollars per kilowatt per month;	6.19
i <sub>p</sub>	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.25%
n	=	year for which early Capacity Payments to a RF/QF are to begin;	2014
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;	761.51
r	=	annual discount rate, defined as PEF's incremental after-tax cost of capital;	6.47%
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;	14
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.	33.87

# EXHIBIT B

# AMENDED STANDARD OFFER CONTRACT (Legislative format)

Tariff Sheets:

9.404, 9.415, 9.421, 9.423, 9.424, 9.442, 9.445, 9.455, 9.457, 9.458, 9.467 and 9.468



SECTION NO. IX FIRST SECOND REVISED SHEET NO. 9.404 CANCELS ORIGINAL FIRST SHEET NO. 9.404

### STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY AND ENERGY FROM A RENEWABLE ENERGY PRODUCER OR QUALIFYING FACILITY LESS THAN 100 KW

THIS STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY AND ENERGY (hereinafter referred to as the "Contract") is made and entered this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ (hereinafter referred to as the "Execution Date"), by and (hereinafter the Renewable between Energy Provider/Qualifying Facility ("RF/QF"), and Florida Power Corporation d/b/a Progress Energy Florida (hereinafter "PEF"), a private utility corporation organized and existing under the laws of the State of Florida. The RF/QF and PEF shall be individually be identified herein as the "Party" and collectively as the "Parties". This Contract contains five Appendices which are incorporated into and made part of this Contract: Appendix A: Monthly Capacity Payment Calculation; Appendix B: Termination Fee; Appendix C: Detailed Project Information; Appendix D: Rate Schedule COG-2; Appendix E: Agreed Upon Payment Schedules and Other Mutual Agreements; and Appendix F: Florida Public Service Commission ("FPSC") Rules 25-17.080 through 25-17.310, F.A.C.

#### WITNESSETH:

WHEREAS, the RF/QF desires to sell, and PEF desires to purchase electricity to be generated by the RF/QF consistent with Florida Statutes 366.91 (2006) and FPSC Rules 25-17.080 through 25-17.310 F.A.C.; and

WHEREAS, the RF/QF has acquired an interconnection/transmission service agreement with the utility in whose service territory the Facility is to be located, pursuant to which the RF/QF assumes contractual responsibility to make any and all transmission-related arrangements (including ancillary services) between the RF/QF and the Transmission Provider for delivery of the Facility's firm capacity and energy to PEF. The Parties recognize that the Transmission Provider may be PEF and that the transmission service will be provided under a separate agreement; and

**WHEREAS**, the FPSC has approved this Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer; and

**WHEREAS**, the RF/QF guarantees that the Facility is capable of delivering firm capacity and energy to PEF for the term of this Contract in a manner consistent with the provision of this Contract;

NOW, THEREFORE, for mutual consideration the Parties agree as follows:



#### 3. Term of Contract

Except as otherwise provided herein, this Contract shall become effective immediately upon its execution by the Parties and shall end at 12:01 a.m. on the Termination Date, (the "Term") unless terminated earlier in accordance with the provisions hereof. Notwithstanding the foregoing, if the Capacity Delivery Date of the Facility is not accomplished by the RF/QF before the either the Avoided Unit In-Service Date or an earlier date in Appendix E (or such later date as may be permitted by PEF pursuant to Section 7), this Contract shall be rendered null and void and PEF's shall have no obligations under this Contract.

#### 4. Minimum Specifications and Milestones

As required by FPSC Rule 25-17.0832(4)(e), the minimum specifications pertaining to this Contract and milestone dates are as follows:

Avoided Unit	Undesignated CC
Avoided Unit Capacity	<del>767<u>1189</u> MW</del>
Avoided Unit In-Service Date	June 1, 20192018
Avoided Unit Heat Rate	<del>6,913<u>6,703</u> BTU/kWh</del>
Avoided Unit Variable O&M	0.34419¢ per kWh in mid-2019 2013 dollars
	escalating annually at 2.25%
Avoided Unit Life	25 years
Capacity Payments begin	Avoided Unit In-Service Date unless Option B,
	or D is selected or amended in Appendix E
Termination Date	May 31, 2028-2027 (10 years) unless amended
	in Appendix E
Minimum Performance Standards - On	<del>86<u>87</u>%</del>
Peak Availability Factor*	
Minimum Performance Standards – Off	<del>86<u>87</u>%</del>
Peak Availability Factor	
Minimum Availability Factor Required to	<u>6667</u> %
qualify for a Capacity payment	
Expiration Date	April 1, <del>2013</del> 2014
Completed Permits Date	June 1, <u>20172016</u>
Exemplary Early Capacity Payment Date	January 1, 20132014

\* RF/QF performance shall be as measured and/or described in Appendix A.

ISSUED BY: Lori J. Cross, Manager, Regulatory Planning FloridaJavier Portuondo, Director, Rates & Regulatory Strategy -<u>FL</u> EFFECTIVE: June 19, 2012



#### 9.3 Payments for Energy and Capacity

- **9.3.1** Payments due the RF/QF will be made monthly, and normally by the twentieth Business Day following the end of the billing period. The kilowatt-hours sold by the RF/QF and the applicable avoided energy rate at which payments are being made shall accompany the payment to the RF/QF.
- **9.3.2** Payments to be made under this Contract shall, for a period of not longer than two (2) years, remain subject to adjustment based on billing adjustments due to error or omission by either Party, provided that such adjustments have been agreed to between the Parties.

#### 10. Electricity Production and Plant Maintenance Schedule

- 10.1 No later than sixty (60) calendar days prior to the Capacity Delivery Date, and prior to October 1 of each calendar year thereafter during the term of this Contract, the RF/QF shall submit to PEF in writing a good-faith estimate of the amount of electricity to be generated by the Facility and delivered to PEF for each month of the following calendar year, including the time, duration and magnitude of any scheduled maintenance period(s) or reductions in Capacity. A RF/QF agrees to provide updates to its planned maintenance periods as they become known. The Parties agree to discuss coordinating scheduled maintenance schedules.
- **10.2** By October 31 of each calendar year, PEF shall notify the RF/QF in writing whether the requested scheduled maintenance periods in the detailed plan are acceptable. If PEF does not accept any of the requested scheduled maintenance periods, PEF shall advise the RF/QF of the time period closest to the requested period(s) when the outage(s) can be scheduled. The RF/QF shall only schedule outages during periods approved by PEF, and such approval shall not be unreasonably withheld. Once the schedule for the detailed plan has been established and approved, either Party requesting a subsequent change in such schedule, except when such change is due to Force Majeure, must obtain approval for such change from the other Party. Such approval shall not be unreasonably withheld or delayed. Scheduled maintenance outage days shall be limited to twenty eight-four days per calendar year. In no event shall maintenance periods be scheduled during the following periods: June 1 through September 15 and December 1 through and including the last day of February.
- **10.3** The RF/QF shall comply with reasonable requests by PEF regarding day-to-day and hour-by-hour communication between the Parties relative to electricity production and maintenance scheduling.



- **10.5.3** If the Facility is separated from the PEF system for any reason, under no circumstances shall the RF/QF reconnect the Facility to PEF's system without first obtaining PEF'S specific approval.
- **10.5.4** During the term of this Contract, the RF/QF shall employ qualified personnel for managing, operating and maintaining the Facility and for coordinating such with PEF. The RF/QF shall ensure that operating personnel are on duty at all times, twenty-four (24) hours a calendar day and seven (7) calendar days a week. Additionally, during the term of this Contract, the RF/QF shall operate and maintain the Facility in such a manner as to ensure compliance with its obligations hereunder and in accordance with applicable law and Prudent Utility Practices.
- **10.5.5** PEF shall not be obligated to purchase, and may require curtailed or reduced deliveries of energy to the extent allowed under FPSC Rule 25-17.086 and under any curtailment plan which PEF may have on file with the FPSC from time to time.
- **10.5.6** During the term of this Contract, the RF/QF shall maintain sufficient fuel on the site of the Facility to deliver the capacity and energy associated with the Committed Capacity for an uninterrupted seventy-two-(72) hour period. At PEF's request, the RF/QF shall demonstrate this capability to PEF's reasonable satisfaction. During the term of this Contract, the RF/QF's output shall remain within a band of plus or minus ten percent (10%) of the daily output level or levels specified by the plant operator, in ninety percent (90%) of all operating hours under normal operating conditions. This calculation will be adjusted to exclude forced outage periods and periods during which the RF/QF's output is affected by a Force Majeure event.

#### 11. Completion/Performance Security

11.1 Simultaneous with the execution of this agreement RF/QF shall deliver to PEF Eligible Collateral in an amount according to Table 2. RF/QF's Performance Security shall be maintained throughout the Term although the amount of Eligible Collateral shall be adjusted from time to time in accordance with Table 2 and Section 11.4. The listed amounts are considered the initial amounts and use 20122013 as the Base Year, with all amounts expressed in US Dollars.

Note: The amounts in the following Table are for  $\frac{2012}{2013}$  and are subject to change based on utility cost estimates for any year subsequent to the Base Year.



SECTION No. IX FIFTH SIXTH REVISED SHEET NO. 9.424 CANCELS FOURTH FIFTH SHEET NO. 9.424

#### TABLE 2

Credit Class	Amount per MW	Amount per MW
	Years 1 - 5	Years 6 –
		Termination Date
A- and Above	\$25,000	\$10,000
BBB+ to BBB	\$75,000	\$60,000
BBB-	\$115,000	\$100,000
Below BBB-	\$170,000	\$150,000

- 11.2 In the event that a Material Adverse Change occurs in respect of RF/QF, then within two (2) Business Day(s) RF/QF shall deliver to PEF Supplemental Eligible Collateral equal to 50 percent of the current Eligible Collateral amount, provided however, that in the PEF's sole discretion, based on a review of the overall circumstances of RF/QF's Material Adverse Change, the total of the Eligible Collateral and the Supplemental Eligible Collateral may be reduced but in no event shall the amount be less than the Base Performance Security Amount.
- 11.4 Performance Security Annual Adjustments The RF/QF Performance Security shall be adjusted on an annual basis beginning January 1, 2013-2014 and each year of during the term of the Agreement. The values in Table 2 will be adjusted using the change in the Gross Domestic Price Implicit Price Deflator (GDPIPD) between the Base Year and each year during the term as reported in the <u>Survey of</u> <u>Current Business</u> published in January each year and revised thereafter, by the Bureau of Economic Analysis, United States Department of commerce, Washington, D.C. using the following formula: Current Performance Security amount (CPSA) multiplied by one plus the change in the GDPIPD, (CPSA X (1 +  $\Delta$ GDPIPD)
- Replacement Collateral, Release of Collateral Upon any reduction of the amount 11.5 of RF/QF Performance Security pursuant to Section 11.2 or 11.3 PEF thereof shall upon two (2) Business Days written request by the RF/QF release any Eligible or Supplemental Eligible Collateral that is no longer required. The choice of the type of Eligible Collateral by the RF/QF may be selected from time to time by the RF/QF and upon receipt of substitute Eligible Collateral, PEF shall promptly release such Eligible Collateral. Following any termination of this agreement, the Parties shall mutually agree to a final settlement of all obligations under this Agreement which such period shall not exceed 90 days from such termination date unless extended by mutual agreement between the Parties. After such settlement, any remaining Eligible Collateral posted by the RF/QF that has not been drawn upon by PEF pursuant to its rights under this Contract shall be returned to the RF/QF. Any dispute between the Parties regarding such final settlement shall be resolved according to applicable procedures set forth in Section 20.9.



SECTION No. IX FOURTH FIFTH REVISED SHEET NO. 9.442 CANCELS THIRD FOURTH SHEET NO. 9.442

#### APPENDIX A

#### ТО

### PROGRESS ENERGY FLORIDA RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW STANDARD OFFER CONTRACT

#### MONTHLY CAPACITY PAYMENT CALCULATION

Capitalized terms not otherwise defined herein have the meaning ascribed to them in the Standard Offer Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer or a Qualifying Facility less than 100 kW.

A. In the event that the ACBF is less than or equal to <u>6667</u>%, then no Monthly Capacity Payment shall be due. That is:

MCP = 0

B. In the event that the ACBF is greater than <u>6667</u>% but less than <u>8687</u>%, then the Monthly Capacity Payment shall be calculated by using the following formula:

 $MCP = BCP \times [1 - [5 \times (.86 - 87 - ACBF)] \times CC$ 

C. In the event that the ACBF is equal to or greater than <u>8687</u>%, then the Monthly Capacity Payment shall be calculated by using the following formula:

 $MCP = BCP \times CC$ 

Where:

- MCP = Monthly Capacity Payment in dollars.
- BCP = Base Capacity Payment in \$/kW/Month as specified in Appendix D or E.

CC = Committed Capacity in kW.



SECTION No. IX THIRD-FOURTH REVISED SHEET NO. 9.445 CANCELS SECOND-THIRD REVISED SHEET NO. 9.445

In the event that for any Monthly Billing Period, the computation of the value of the Termination Fee for such Monthly Billing Period (as set forth above) yields a value less than zero, the amount of the Termination Fee shall be decreased by the amount of such value expressed as a positive number (the "Initial Reduction Value"); provided, however, that such Initial Reduction Value shall be subject to the following adjustments (the Initial Reduction Value, as adjusted, the "Reduction Value"):

In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A is less than or equal to 6667%, then the Initial Reduction Value shall be adjusted to equal zero (Reduction Value = 0), and the Termination Fee shall not be reduced for the applicable Monthly Billing Period.

In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A, is greater than <u>6667</u>% but less than <u>8687</u>%, than the Reduction Value shall be determined as follows:

Reduction Value = Initial Reduction Value x  $[5 \times (ACBF - ...8687)]$ 

For the applicable Monthly Billing period, the Termination Fee shall be reduced by the amount of such Reduction Value.

In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A, is equal to or greater than <u>8687</u>%, then the Initial Reduction Value shall not be adjusted (Reduction Value = Initial Reduction Value), and the Termination Fee shall be reduced for the applicable Monthly Billing period by the amount of the Initial Reduction Value.

In no event shall PEF be liable to the RF/QF at any time for any amount by which the Termination Fee, adjusted in accordance with the foregoing, is less than zero (0).

b.

C.

a.



# TABLE 3

# EXAMPLE MONTHLY CAPACITY PAYMENT IN \$/kW/MONTH PEF'S June 1, 2019-2018 Undesignated CC Renewable or Qualifying Facility Standard Offer Contract Avoided Capacity Payments

#### (\$/kW/MONTH)

	Option A	Option B	Option C	Option D
	Normal	Early	Levelized	Early Levelized
	Capacity	Capacity	Capacity	Capacity
Contract	Payment Starting	Payment Starting	Payment Starting	Payment Starting
Year	on the Avoided	on the	on the Avoided	on the
	Unit In-Service	Exemplary	Unit In-Service	Exemplary
	Date	Capacity	Date	Capacity
		Payment Date		Payment Date
<del>2013</del> 2014		6.166.47		7.057.30
20142015		6.306.61		7.067.31
20152016		<del>6.44</del> 6.76		7.077.31
<del>2016</del> 2017		6.58 <u>6.92</u>		7.087.32
20172018	10.80	<u>6.73</u> 7.07	11.78	7.087.33
<del>2018</del> 2019	11.05	<u>6.887.23</u>	11.79	7.097.33
<del>2019</del> 2020	<del>12.85</del> 11.29	7.047.39	<u>14.0011.81</u>	7.107.34
<del>2020</del> 2021	<del>13.14<u>11.55</u></del>	7.207.56	<u>14.0211.82</u>	7.117.35
<del>2021</del> 2022	<del>13.43<u>11.81</u></del>	7.367.73	<u>14.0311.83</u>	7.127.35
<del>2022</del> 2023	<del>13.73</del> 12.07	7.527.90	<u>14.0511.84</u>	7.137.36
<del>2023</del> 2024	<del>14.04<u>12.34</u></del>	<del>7.69</del> 8.08	<u>14.0711.85</u>	7.147.37
<del>2024</del> 2025	<del>14.36<u>12.62</u></del>	7.878.26	<u>14.0811.86</u>	7.147.38
<del>2025</del> 2026	<u>14.6812.91</u>	<del>8.04<u>8.45</u></del>	<u>14.1011.87</u>	7.157.39
<del>2026</del> 2027	<del>15.01</del> <u>13.20</u>	<u>8.228.64</u>	<u>14.1211.89</u>	<del>7.16</del> 7.39
<del>2027</del> 2028	15.35	<del>8.41</del>	14.14	7.17
<del>2028</del> 2029	<del>15.70</del>	8.60	14.15	7.18

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).



SECTION N₀. IX FIFTH-<u>SIXTH</u> REVISED SHEET NO. 9.457 CANCELS FOURTH FIFTH SHEET NO. 9.457

For any period during which energy is delivered by the RF/QF to PEF, the Firm Energy Rate in cents per kilowatt hour ( $\phi/kWh$ ) 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 ( $\phi/kWh$ ) 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 price 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.

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 <u>¢/KWH</u>
April 1, <del>2012-2013</del> - September 30, 2012 <u>2013</u>	4 <u>.63.9</u>
October 1, <del>2012-2013</del> – March 31, 2013 <u>2014</u>	<del>3.8<u>3.5</u></del>
April 1, <del>2013-2014</del> – September 30, <del>2013</del> 2014	4 <u>.34.0</u>
October 1, <u>2013-2014</u> – March 31, <u>20142015</u>	4.0 <u>3.9</u>



### 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.

<u>\$/MMBTU</u>

<del>2013</del> 201	<del>2014</del> 201	<u>2015</u> 201	<del>2016</del> 201	<del>2017</del> 201	<del>2018</del> 201	<del>2019</del> 202	<del>2020</del> 202	<del>2021</del> 202
<u>4</u>	5	<u>6</u>	7	<u>8</u>	<u>9</u>	<u>0</u>	<u>1</u>	2
4.774.33	<u>5.074.49</u>	<u>5.395.03</u>	<u>5.615.35</u>	<u>5.835.68</u>	<u>5.936.03</u>	<u>6.146.38</u>	<del>6.32</del> 6.74	<u>6.637.12</u>

#### **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. <del>0174<u>0156</u></del>
Primary Voltage Delivery	1. <del>0274<u>0256</u></del>
Secondary Voltage Delivery	1. <del>0593</del> 0598

#### PERFORMANCE CRITERIA

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

A. <u>Capacity Delivery Date</u>

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

B. <u>Availability and Capacity Factor</u>

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.



SECTION No. IX FIFTH\_SIXTH REVISED SHEET NO. 9.467 CANCELS FOURTH FIFTH\_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 <sub>m</sub>	=	PEF's value of avoided capacity and O&M, in dollars per kilowatt per month, during month m;	<del>12.85</del> <u>10.80</u>	
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;	<del>1.422<u>1.420</u></del>	
In	=	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;	<del>1648.02<u>1403</u> .25</del>	
On	=	total fixed operation and maintenance expense, for the year n, in mid-year dollars per kilowatt per year, of the Avoided Unit:	<u>8.245.52</u>	
i <sub>p</sub>	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.25%	
i <sub>o</sub>	=	annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;	2.25%	
r	=	annual discount rate, defined as PEF's incremental after-tax cost of capital;	6.47%	
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.	<u>20192018</u>	



 $A_m$ 

ip

n

F

r

1

G

#### FIXED VALUE OF DEFERRAL PAYMENTS -EARLY CAPACITY OPTION PARAMETERS

5.836.19 monthly avoided capital cost component of Capacity Payments to be made to the RF/QF starting as early as eight-four years prior to the Avoided Unit In-Service Date, in dollars per kilowatt per month: 2.25% annual escalation rate associated with the plant cost of the = Avoided Unit: 20132014 = year for which early Capacity Payments to a RF/QF are to begin; 789.94761. the cumulative present value of the avoided capital cost = 51 component of Capacity Payments which would have been made had Capacity Payments commenced with the anticipated inservice date of the Avoided Unit and continued for a period of 10 years; 6.47% = annual discount rate, defined as PEF's incremental after-tax cost of capital; <del>16</del>14 the Term, in years, of the Contract for the purchase of firm \_ capacity commencing prior to the in-service date of the Avoided Unit: 44.6133.87 = 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.

# EXHIBIT C

# ECONOMIC / FINANCIAL ASSUMPTIONS and K FACTOR

# Progress Energy Florida Renewable Standard Offer Contract Economic Assumptions

# CAPITALIZATION RATIOS

#### DISCOUNT RATE

6.47%

Debt	47.0%
Preferred	0.0%
Equity	53.0%

# BOOK DEPRECIATION LIFE

 Debt
 3.05%

 Preferred
 0.00%

 Equity
 10.50%

# INCOME TAX RATE

RATE OF RETURN

State	5.5%
Federal	35.0%
Effective	37.12%

# OTHER TAXES AND INS.

#### 0.96%

# TAX DEPRECIATION LIFE

20 Years

25 Years

# Progress Energy Florida Renewable Standard Offer Contract Unit Information

PLANT TYPE:	Combined Cycle Facility
-------------	-------------------------

NET CAPACITY: 1,189 MW

BOOK LIFE: 25 Years

# **INTALLED COST (IN-SERVICE YEAR 2018)**

TOTAL INSTALLED COST (\$/KW)	1403.25
DIRECT CONSTRUCTION COST (\$/KW) (2013)	1181.33
AFUDC AMOUNT (\$/KW)	127.95
ESCALATION	93.97
FIXED O & M (\$/KW-YR) (2013)	4.89
VARIABLE O & M (\$/KWH) (2013)	4.19
K FACTOR	1.420