#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of amended standard offer contract (Schedule COG-2) based on a combustion turbine avoided unit, by Duke Energy Florida, LLC. DOCKET NO. 20180073-EQ ORDER NO. PSC-2018-0314-PAA-EQ ISSUED: June 19, 2018

The following Commissioners participated in the disposition of this matter:

ART GRAHAM, Chairman JULIE I. BROWN DONALD J. POLMANN GARY F. CLARK ANDREW GILES FAY

# NOTICE OF PROPOSED AGENCY ACTION ORDER APPROVING DUKE ENERGY FLORIDA, LLC'S STANDARD OFFER CONTRACT AND RELATED TARIFFS

#### BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission (Commission) that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code (F.A.C.).

#### **Case Background**

Section 366.91(3), Florida Statutes (F.S.), requires that each investor-owned utility (IOU) continuously offer to purchase capacity and energy from renewable energy generators and small qualifying facilities. Pursuant to Rules 25-17.200 through 25-17.310, Florida Administrative Code (F.A.C.), by April 1 of each year, each IOU must file a standard offer contract based on the next avoidable fossil fueled generating unit of each technology type identified in the Utility's current Ten-Year Site Plan. On March 29, 2018, Duke Energy Florida, LLC (DEF) filed a petition for approval of its amended standard offer contract and rate schedule COG-2 based on its 2018 Ten-Year Site Plan.

DEF uses a value that is filed with the Federal Energy Regulatory Commission (FERC) every year on May 1 as a component of the delivery voltage adjustment factors found on Sheet 9.458 of its standard offer contract. While this value has historically been available for DEF's standard offer contract filing, this year the value was calculated after the April 1 filing deadline.

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On May 25, 2018, DEF provided revisions to Sheet 9.458 containing updated delivery voltage adjustment factors reflecting the newly calculated value filed with FERC. On May 16, 2018, DEF also filed revisions to Sheet 9.415 correcting the cost of the avoided unit's variable operation and maintenance from 0.0931 cents per kilowatt-hour ( $\phi$ /kWh) to 0.931  $\phi$ /kWh.

In addition to the aforementioned revisions, DEF's standard offer contract and rate schedule COG-2 include updates to avoided unit specifications, calendar dates, and a monthly capacity payment example and its accompanying capacity payment parameters. Also included are typographical corrections, updates to position titles, and a change to DEF's name from Duke Energy Florida, Inc., to Duke Energy Florida, LLC.

We have jurisdiction over this standard offer contract pursuant to Sections 366.04 through 366.06 and 366.91, F.S.

### **Analysis and Decision**

Rule 25-17.250, F.A.C., requires that DEF, 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 kilowatts (kW) or less. Pursuant to Rule 25-17.250(1) and (3), F.A.C., the standard offer contract must provide a term of at least 10 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. DEF has identified a 226 megawatt (MW) natural gas-fueled combustion turbine (CT) as its next planned generating unit in its 2018 Ten-Year Site Plan. The projected in-service date of the unit is June 1, 2027.

Under DEF's standard offer contract, the RF/QF operator commits to certain minimum performance requirements based on the identified avoided unit (such as being operational and delivering an 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 may also serve as a starting point for negotiation of contract terms by providing payment information to an RF/QF operator, when one or both parties desire particular contract terms other than those established in the standard offer.

In order to promote renewable generation, we require each 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, 2027) and thereafter, begin receiving capacity payments in addition to the energy payments. If either the early or early levelized option is selected, 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 payment options.

The table below contains estimates of the annual payments for each payment option available under the amended standard offer contract to an operator with a 50 MW renewable facility operating at a capacity factor of 95 percent, which is the minimum capacity factor required under the contract to qualify for full capacity payments. Normal and levelized capacity payments begin in 2027, reflecting the projected in-service date of the avoided unit (June 1, 2027).

### Estimated Annual Payments to a 50 MW Renewable Facility (95% Capacity Factor)

	Enangy	Capacity Payment (By Type)			
Year	Energy Payment	Normal	Levelized	Early	Early Levelized
	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2019	8,553	-	-	-	-
2020	6,683	-	-	-	-
2021	5,323	-	-	-	-
2022	5,589	-	-	-	-
2023	6,343	-	-	-	-
2024	7,655	-	-	-	-
2025	9,068	-	-	2,157	2,455
2026	10,200	-	-	2,211	2,459
2027	11,473	1,695	1,906	2,266	2,462
2028	12,305	2,978	3,272	2,323	2,466
2029	13,014	3,053	3,277	2,381	2,470
2030	13,993	3,129	3,282	2,441	2,474
2031	14,108	3,207	3,287	2,502	2,478
2032	14,427	3,288	3,293	2,564	2,482
2033	15,380	3,370	3,298	2,628	2,486
2034	16,430	3,454	3,304	2,694	2,491
2035	16,682	3,540	3,310	2,761	2,495
2036	18,141	3,629	3,316	2,830	2,500
2037	18,727	3,720	3,322	2,901	2,504
2038	20,057	3,813	3,328	2,974	2,509
Total	244,151	38,875	38,195	35,632	34,731
NPV (2018\$)	114,628	14,718	14,718	14,718	14,718

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The type-and-strike format versions of the amended standard offer contract and associated rate schedule COG-2, including the most recent revisions to Sheet 9.458 filed on May 25, 2018, and Sheet 9.415 filed on May 16, 2018, are included in this order as Attachment A. All of the changes made to DEF's tariff sheets are consistent with the updated avoided unit. Revisions include updates to avoided unit specifications, calendar dates, and a monthly capacity payment example and its accompanying capacity payment parameters. Also revised are delivery voltage adjustment factors reflecting DEF's 2017 line loss analysis. In addition, there are a number of minor changes including typographical corrections, updates to position titles, and a change to DEF's name from Duke Energy Florida, Inc., to Duke Energy Florida, LLC.

The provisions of DEF's amended standard offer contract and associated rate schedule COG-2, as filed on March 29, 2018, and as modified by the revisions to Sheet 9.458 filed on May 25, 2018, and Sheet 9.415 filed on May 16, 2018, conform to all requirements of Rules 25-17.200 through 25-17.310, F.A.C. The amended 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. Upon review, we approve the amended standard offer contract and associated rate schedule COG-2 filed by Duke Energy Florida.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that the amended standard offer contract and associated rate schedule COG-2 filed by Duke Energy Florida, LLC are hereby approved. It is further,

ORDERED that this docket shall be closed upon the issuance of a consummating order, unless a person whose substantial interests are affected by this Commission's decision files a protest within 21 days of the issuance of this Proposed Agency Action Order. Potential signatories should be aware that, if a timely protest is filed, Duke Energy Florida, LLC's standard offer contract may subsequently be revised. It is further,

ORDERED that in the event this Order becomes final, this docket shall be closed.

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By ORDER of the Florida Public Service Commission this 19th day of June, 2018.

Carlotta S. Stauffer CARLOTTA S. STAUFFER

Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard

Tallahassee, Florida 32399

(850) 413-6770

www.floridapsc.com

Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

**CWM** 

#### NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing that is available under Section 120.57, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on July 10, 2018.

In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.



SECTION No. IX SECOND REVISED SHEET NO. 9.400 CANCELS FIRST REVISED SHEET NO. 9.400

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

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SECTION NO. IX
FIRST-SECOND REVISED SHEET NO. 9.401
CANCELS ORIGINAL-FIRST SHEET NO. 9.401

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

GE3999-4	
and	

between

DUKE ENERGY FLORIDA, LLC

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL EFFECTIVE: April-29,-2013



SECTION NO. IX SECOND REVISED SHEET NO.9.402 CANCELS FIRST REVISED SHEET NO. 9.402

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ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: April 29, 2013



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ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: July 10, 2014



SECTION NO. IX
FOURTH-FIFTH REVISED SHEET NO. 9.404
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## 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 CONTR	ACT FOR THE PURCHASE OF FIRM	
CAPACITY AND ENERGY (hereinafter refer	rred to as the "Contract") is made and entered	
this day of , (hereinafter	referred to as the "Execution Date"), by and	
between	(hereinafter the Renewable Energy	
Provider/Qualifying Facility ("RF/QF"), and Dul	ke Energy Florida, <del>LLCne.</del> d/b/a Duke Energy	
(hereinafter "DEF"), a private utility corporation	n organized and existing under the laws of the	
State of Florida. The RF/QF and DEF shall be individually identified herein as the "Party" and		
collectively as the "Parties". This Contract conta		
and made part of this Contract: Appendix	A: Monthly Capacity Payment Calculation;	
Appendix B: Termination Fee; Appendix C: D	etailed Project Information; Appendix D: Rate	
Schedule COG-2; Appendix E: Agreed Upon Pay	ment Schedules and Other Mutual Agreements;	
and Appendix F: Florida Public Service Comm	nission ("FPSC") Rules 25-17.080 through 25-	
17.310, F.A.C.		

#### WITNESSETH:

WHEREAS, the RF/QF desires to sell, and DEF 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 will acquire 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 DEF. The Parties recognize that the Transmission Provider may be DEF 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 DEF 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:



SECTION NO. IX SECOND REVISED SHEET NO. 9.405 CANCELS FIRST REVISED SHEET NO. 9.405

#### 1. Definitions

- "AFR" means the Facility's annual fuel requirement.
- "AFTR" means the Facility's annual fuel transportation requirement
- "Annual Capacity Billing Factor" or "ACBF" means 12 month rolling average of the Monthly Availability Factor as further defined and explained in Appendix A.
- "Appendices" shall mean the schedules, exhibits, and attachments which are appended hereto and are hereby incorporated by reference and made a part of this Contract. Such Appendices include:
  - "Appendix A" sets forth the Monthly Capacity Payment Calculation.
  - "Appendix B" sets forth the Termination Fee.
  - "Appendix C" sets forth the Detailed Project Information.
  - "Appendix D" sets forth Rate Schedule COG-2.
  - "Appendix E" sets forth the Agreed Upon Payment Schedules and Other Mutual Agreements
  - "Appendix F" sets forth Florida Public Service Commission ("FPSC") Rules 25-17.080 through 25-17.310, F.A.C.
- "As-Available Energy Rate" means the rate calculated by DEF in accordance with FPSC Rule 25-17.0825, F.A.C., and DEF's Rate Schedule COG-1, as they may each be amended from time to time
- "Authorization to Construct" means authorization issued by any appropriate Government Agency to construct or reconstruct the Facility granted to RF/QF in accordance with the laws of the State of Florida and any relevant federal law.
- "Avoided Unit" means the electrical generating unit described in Section 4 upon which this Contract is based.
- "Avoided Unit Energy Cost" has the meaning assigned to it in Appendix D.
- "Avoided Unit Fuel Cost" has the meaning assigned to it in Appendix D.
- "Avoided Unit Heat Rate" means the average annual heat rate of the Avoided Unit as defined in Section 4.
- "Avoided Unit In-Service Date" means the date upon which the Avoided Unit would have started commercial operation as specified in Section 4.
- "Avoided Unit Life" means the economic life of the Avoided Unit.
- "Avoided Unit Variable O&M" means the Avoided Unit variable operation and maintenance expenses as defined in Section 4. The annual escalation will begin in the payment for January deliveries.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: April 29, 2013



SECTION No. IX FIFTH REVISED SHEET NO. 9.406 CANCELS FOURTH REVISED SHEET NO. 9.406

"Base Capacity Payment" or "BCP" means capacity payment rates defined in Appendix D and further defined by the selection of Option A,B,C or D in Section 9.2 or in Appendix E if applicable.

"Base Year" means the year that this Contract was approved by the FPSC.

"<u>Business Day</u>" means any day except a day upon which banks licensed to operate in the State of Florida are authorized, directed or permitted to close, Saturday, Sunday or a weekday that is observed as a public holiday in the State of Florida.

"CAMD" means the Clean Air Markets Division of the Environmental Protection Agency or successor administrator (collectively with any local, state, regional, or federal entity given jurisdiction over a program involving transferability of Environmental Attributes).

"Capacity" means the minimum average hourly net capacity (generator output minus auxiliary load) measured over the Committed Capacity Test Period.

"Capacity Delivery Date" means the first calendar day immediately following the date of the Facility's successful completion of the first Committed Capacity Test.

"Capacity Payment" means the payment defined in Section 9.2 and Appendix A.

"Committed Capacity" or "CC" means the capacity in kW that the RF/QF commits to sell to DEF; the amount of which shall be determined in accordance with Section 7 and shall be greater than zero.

"Committed Capacity Test" means the testing of the capacity of the Facility performed in accordance with the procedures set forth in Section 8.

"Committed Capacity Test Period" means a test period of twenty-four (24) consecutive hours.

"Completed Permits Date" means the date by which the RF/QF must complete licensing and certification, and obtain all federal, state and local governmental, environmental, and licensing approvals required to initiate construction of the Facility including Qualifying Facility status. This date is specified in Section 4.

"Completion/Performance Security" means the security described in Section 11.

"Conditions Precedent" shall have the meaning assigned to it in Section 5.

"Contract" means this standard offer contract for the purchase of Firm Capacity and Energy from a Renewable Energy Producer or Qualifying Facility with a nameplate capacity of less than 100 kW.

"Credit Support Provider" means any Person that has provided an RF/QF Guarantee in connection with this Agreement.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: July 13, 2017



SECTION No. IX FOURTH REVISED SHEET NO. 9.407 CANCELS THIRD REVISED SHEET NO. 9.407

"Creditworthy" with respect to a Party or its Credit Support Provider, as applicable, means a party is rated at least BBB by Standard & Poor's (S&P), or at least Baa3 by Moody's Investor Services (Moody's). Rating shall be the unsecured, senior long-term debt rating (not supported by third party credit enhancement) or the issuer rating will be used if not available. If a Party or its Credit Support Provider, as applicable, is rated by both S&P and Moody's, then the lower of the two ratings will apply.

"DEF" has the meaning assigned to it in the opening paragraph of this Contract.

"DEF Entities" has the meaning assigned to it in Section 16.

"Demonstration Period" means a sixty-hour period in which the Committed Capacity Test must be completed.

"<u>Distribution System</u>" means the distribution system consisting of electric lines, electric plant, transformers and switchgear used for conveying electricity to ultimate consumers, but not including any part of the Transmission System.

"Dispute" shall have the meaning assigned to it in Section 20.9.

"Drop Dead Date" means the date which is twelve (12) months following the Execution Date except for the condition defined in Section 5(a)(i). The Parties recognize that firm transmission service agreements can take up to 24 months to obtain so for Section 5(a)(i) only the Drop Dead Date means the date which is twenty four (24) months following the Execution Date.

"Eastern Prevailing Time" or "EPT" means the time in effect in the Eastern Time Zone of the Unites States of America, whether Eastern Standard Time or Eastern Daylight Savings Time.

"Effective Date" has the meaning assigned to it in Section 5.

"<u>Electrical Interconnection Point</u>" means the physical point at which the Facility is connected with the Transmission System or, if RF/QF interconnects with a Transmission System other than DEF's, DEF's interconnection with the Transmission Provider's Transmission System, or such other physical point on which RF/QF and DEF may agree.



SECTION No. IX FIFTH REVISED SHEET NO. 9.408 CANCELS FOURTH REVISED SHEET NO. 9.408

"Eligible Collateral" means (i) a Letter of Credit from a Qualified Institution or (ii) cash deposit provided to DEF by RF/QF or a combination of (i), and/or (ii) as outlined in Section 11.

"Energy" means megawatt-hours generated by the Facility of the character commonly known as three-phase, sixty hertz electric energy that is delivered at a nominal voltage at the Electrical Interconnection Point.

"Environmental Attributes" or "EA" means all attributes of an environmental or other nature that are created or otherwise arise from the Facility's generation of electricity from a renewable energy source in contrast with the generation of electricity using nuclear or fossil fuels or other traditional resources. Forms of such attributes include, without limitation, any and all environmental air quality credits, green credits, renewable energy credits ("RECs"), carbon credits, emissions reduction credits, certificates, tags, offsets, allowances, or similar products or rights, howsoever entitled, (i) resulting from the avoidance of the emission of any gas, chemical, or other substance, including but not limited to, mercury, nitrogen oxide, sulfur dioxide, carbon dioxide, carbon monoxide, particulate matter or similar pollutants or contaminants of air, water or soil gas, chemical, or other substance, and (ii) attributable to the generation, purchase, sale or use of Energy from or by the Facility, or otherwise attributable to the Facility during the Term. Environmental Attributes include, without limitation, those currently existing or arising during the Term under local, state, regional, federal, or international legislation or regulation relevant to the avoidance of any emission described in this Contract under any governmental, regulatory or voluntary program, including, but not limited to, the United Nations Framework Convention on Climate Change and related Kyoto Protocol or other programs, laws or regulations involving or administered by the Clean Air Markets Division of the Environmental Protection Agency ("CAMD") or successor administrator (collectively with any local, state, regional, or federal entity given jurisdiction over a program involving transferability of Environmental Attributes,).

"Event of Default" has the meaning assigned to it in Section 14.

"Execution Date" has the meaning assigned to it in the opening paragraph of this Contract.

"Exemplary Early Capacity Payment Date" means the exemplary date used to calculate Capacity Payments for Option B and D. This date is specified in Section 4. The actual Capacity Payments for Option B and D will be calculated based upon the Required Capacity Delivery Date.

"Expiration Date" means the final date upon which this Contract can be executed. This date is specified in Section 4.

"Facility" means all equipment, as described in this Contract, used to produce electric energy and, and all equipment that is owned or controlled by the RF/QF required for parallel operation with the Transmission System. In the case of a cogenerator the Facility includes all equipment that is owned or controlled by the RF/QF to produce useful thermal energy through the sequential use of energy.



SECTION No. IX SECOND REVISED SHEET NO. 9.409 CANCELS FIRST REVISED SHEET NO. 9.409

"Financial Closing" means the fulfillment of each of the following conditions:

- (a) the execution and delivery of the Financing Documents; and
- (b) all Conditions Precedent to the initial availability for disbursement of funds under the Financing Documents (other than relating to the effectiveness of this Contract) are satisfied or waived.

"Financing Documents" shall mean documentation with respect to any private equity investment in RF/QF, any loan agreements (including agreements for any subordinated debt), notes, bonds, indentures, guarantees, security agreements and hedging agreements relating to the financing or refinancing of the design, development, construction, Testing, Commissioning, operation and maintenance of the Facility or any guarantee by any Financing Party of the repayment of all or any portion of such financing or refinancing.

"Financing Party" means the Persons (including any trustee or agent on behalf of such Persons) providing financing or refinancing to or on behalf of RF/QF for the design, development, construction, testing, commissioning, operation and maintenance of the Facility (whether limited recourse, or with or without recourse).

"Firm Capacity and Energy" has the meaning assigned to it in Appendix D.

"Firm Capacity Rate" has the meaning assigned to it in Appendix D.

"Firm Energy Rate" has the meaning assigned to it in Appendix D.

"Force Majeure" has the meaning given to it in Section 18.

"FPSC" means the Florida Public Service Commission or its successor.

"Government Agency" means the United States of America, or any state or any other political subdivision thereof, including without limitation, any municipality, township or county, and any domestic entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including, without limitation, any corporation or other entity owned or controlled by any of the foregoing.



SECTION No. IX FOURTH REVISED SHEET NO. 9.410 CANCELS THIRD REVISED SHEET NO 9.410

"IEEE" means the Institute of Electrical and Electronics Engineers, Inc.

"Indemnified Party" has the meaning assigned to it in Section 16.

"Indemnifying Party" has the meaning assigned to it in Section 16.

"Initial Reduction Value" has the meaning assigned to it in Appendix B.

"Insurance Services Office" has the meaning assigned to it in Section 17.

"KVA" means one or more kilovolts-amperes of electricity, as the context requires.

"kW" means one or more kilowatts of electricity, as the context requires.

"kWh" means one or more kilowatt-hours of electricity, as the context requires.

"Letter of Credit" means a stand-by letter of credit from a Qualified Institution that is acceptable to DEF whose approval may not be unreasonably withheld. The Letter of Credit must provide that DEF has the right to draw on the Letter of Credit in the event that less than twenty (20) Business Days remain until its expiration and RF/QF has failed to renew the Letter of Credit or provide replacement Eligible Collateral as required under this Agreement.

"LOI" means a letter of intent for fuel supply.

"MCPC" means the Monthly Capacity Payment for Option A.

"Monthly Billing Period" means the period beginning on the first calendar day of each calendar month, except that the initial Monthly Billing Period shall consist of the period beginning 12:01 a.m., on the Capacity Delivery Date and ending with the last calendar day of such month.

"Monthly Availability Factor" or "MAF" means the total energy received during the Monthly Billing Period for which the calculation is made, divided by the product of Committed Capacity and the total hours during the Monthly Billing Period.

"Monthly Capacity Payment" or "MCP" means the payment for Capacity calculated in accordance with Appendix A.

"MW" means one or more megawatts of electricity, as the context requires.

"MWh" means one or more megawatt-hours of electricity, as the context requires.



SECTION No. IX SECOND REVISED SHEET NO. 9.411 CANCELS FIRST REVISED SHEET NO. 9.411

"Option A" means normal Capacity Payments as described in Appendix D.

"Option B" means early Capacity Payments as described in Appendix D.

"Option C" means levelized Capacity Payments as described in Appendix D.

"Option D" means early levelized Capacity Payments as described in Appendix D.

"Party" or "Parties" has the meaning assigned to it in the opening paragraph of this Contract.

"Person" means any individual, partnership, corporation, association, joint stock company trust, joint venture, unincorporated organization, or Governmental Agency (or any department, agency, or political subdivision thereof).

"Project Consents" mean the following Consents, each of which is necessary to RF/QF for the fulfillment of RF/QF's obligations hereunder:

- (a) the Authorization to Construct;
- (b) planning permission and consents in respect of the Facility, and any electricity substation located at the Facility site, including but not limited to, a prevention of significant deterioration permit, a noise, proximity and visual impact permit, and any required zoning permit; and
- (c) any integrated pollution control license.

"Project Contracts" means this Contract, and any other contract required to construct, operate and maintain the Facility. The Project Contracts may include, but are not limited to, the turnkey engineering, procurement and construction contract, the electrical interconnection and operating agreement, the fuel supply agreement, the facility site lease, and the operation and maintenance agreement.

"Prudent Utility Practices" means any of the practices, methods, standards and acts (including, but not limited to, the practices, methods and acts engaged in or approved by a significant portion of owners and operators of power plants of technology, complexity and size similar to the Facility in the United States) that, at a particular time, in the exercise of reasonable judgment in light of the facts known or that should reasonably have been known at the time a decision was made, could have been expected to accomplish the desired result and goals (including such goals as efficiency, reliability, economy and profitability) in a manner consistent with applicable facility design limits and equipment specifications and applicable laws and regulations. Prudent Utility Practice is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to be a spectrum of acceptable practices, methods or acts in each case taking into account the Facility as an independent power project.



SECTION No. IX FOURTH REVISED SHEET NO. 9.412 CANCELS THIRD REVISED SHEET NO. 9.412

"Qualifying Facility" or "QF" means a cogenerator, small power producer, or non-utility generator that has been certified or self-certified by the FERC as meeting certain ownership, operating and efficiency criteria established by the Federal Energy Regulatory Commission pursuant to the Public Utility Regulatory Policies Act of 1978 ("PURPA"), the criteria for which are currently set forth in 18 C.F.R. § 292, et seq. (2006), Section 210 of PURPA, 16 U.S.C. § 824a-3 (2005), 16 U.S.C. 796 et seq. (2006), and Section 1253 of EPAct 2005, Pub. L. No. 109-58, § 1253, 119 Stat. 594 (2005) or, alternatively, analogous provisions under the laws of the State of Florida.

"Qualified Institution" means the domestic office of a United States commercial bank or trust company or the United States branch of a foreign bank having total assets of at least ten billion dollars (\$10,000,000,000) (which is not an affiliate of either party) and a general long-term senior unsecured debt rating of A- or higher (as rated by Standard & Poor's Ratings Group), or A3 or higher (as rated by Moody's Investor Services).

"<u>Rate Schedule COG-1</u>" means DEF's Agreement for Purchase of As-Available Energy and/or Parallel Operation with a Qualifying Facility as approved by the FPSC and as may be amended from time to time.

"REC" means renewable energy credits, green tags, green tickets, renewable certificates, tradable renewable energy credits ("T-REC") or any tradable certificate that is produced by a renewable generator in addition to and in proportion to the production of electrical energy.

"Reduction Value" has the meaning assigned to it in Appendix B.

"Remedial Action Plan" has the meaning assigned to it in Section 20.3.

"Renewable Facility" or "RF/QF" means an electrical generating unit or group of units at a single site, interconnected for synchronous operation and delivery of electricity to an electric utility, where the primary energy in British Thermal Units used for the production of electricity is from one or more of the following sources: hydrogen produced from sources other than fossil fuels, biomass, solar energy, geothermal energy, wind energy, ocean energy, hydroelectric power or waste heat from a commercial or industrial manufacturing process.

"Required Capacity Deliver Date" means the date specified in Appendix E. In the event that no Required Capacity Delivery Date is specified in Appendix E then the RF/QF shall achieve the Capacity Delivery Date on or before the Avoided Unit In-Service Date

"RF/QF Entities" has the meaning assigned to it in Section 16.



SECTION No. IX THIRD REVISED SHEET NO. 9.413 CANCELS SECOND REVISED SHEET NO. 9.413

"RF/QF Insurance" has the meaning assigned to it in Section 17.

"RF/QF Performance Security" has the meaning assigned in Section 11.

"Security Documentation" has the meaning assigned to it in Section 12.

"Term" has the meaning assigned to it in Section 3.

"Termination Date" means the date upon which this Contract terminates unless terminated earlier in accordance with the provisions hereof. This date is specified in Section 4.

"Termination Fee" means the fee described in Appendix B as it applies to any Capacity Payments made under Option B, C or D.

"Termination Security" has the meaning assigned to it in Section 12.

"Transmission Provider" means the operator(s) of the Transmission System(s) or any successor thereof or any other entity or entities authorized to transmit Energy on behalf of RF/QF from the Electrical Interconnection Point.

"Transmission System" means the system of electric lines comprised wholly or substantially of high voltage lines, associated system protection, system stabilization, voltage transformation, and capacitance, reactance and other electric plant used for conveying electricity from a generating station to a substation, from one generating station to another, from one substation to another, or to or from any Electrical Interconnection Point or to ultimate consumers and shall include any interconnection owned by the Transmission Provider or DEF, but shall in no event include any lines which the Transmission Provider has specified to be part of the Distribution System except for any distribution facilities required to accept capacity and energy from the Facility.



SECTION No. IX SECOND REVISED SHEET NO. 9.414 CANCELS FIRST REVISED SHEET NO. 9.414

#### 2. Facility; Renewable Facility or Qualifying Facility Status

The Facility's location and generation capabilities are as described in Table 1 below.

#### TABLE 1

TECHNOLOGY AND GENERATOR CAPABILITIES		
Location: Specific legal description (e.g., metes and bounds or other legal description with street address required)	City: County:	
Generator Type (Induction or Synchronous)		
Technology		
Fuel Type and Source	=	
Generator Rating (KVA)		
Maximum Capability (kW)		
Net Output (kW)		
Power Factor (%)		
Operating Voltage (kV)		
Peak Internal Load kW		

The RF/QF's failure to complete Table 1 in its entirety shall render this Contract null and void and of no further effect.

The RF/QF shall use the same fuel or energy source and maintain the status as a Renewable Facility or a Qualifying Facility throughout the term of this Contract. RF/QF shall at all times keep DEF informed of any material changes in its business which affects its Renewable Facility or Qualifying Facility status. DEF and RF/QF shall have the right, upon reasonable notice of not less than seven (7) Business Days, to inspect the Facility and to examine any books, records, or other documents reasonably deemed necessary to verify compliance with this Contract. In the event of an emergency at or in proximity to the RF/QF site that impacts DEF's system, DEF shall make reasonable efforts to contact the Facility and make arrangements for an emergency inspection. On or before March 31 of each year during the term of this Contract, the RF/QF shall provide to DEF a certificate signed by an officer of the RF/QF certifying that the RF/QF continuously maintained its status as a Renewable Facility or a Qualifying Facility during the prior calendar year.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL

EFFECTIVE: April 29, 2013



SECTION No. IX <u>ELEVENTH-TWELFTH</u> REVISED SHEET NO. 9.415 CANCELS <u>TENTH-ELEVENTH</u> SHEET NO. 9.415

#### 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 Required Capacity Delivery Date (or such later date as may be permitted by DEF pursuant to Section 7), this Contract shall be rendered null and void and DEF'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 Combustion Turbine
Avoided Unit Capacity	22 <u>6</u> 8 MW
Avoided Unit In-Service Date	June 1, 202 <u>7</u> 4
Avoided Unit Heat Rate	10, <u>905</u> 672 BTU/kWh
Avoided Unit Variable O&M	0.09351¢ per kWh in mid-20187 dollars escalating annually at 2.50%
Avoided Unit Life	35 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, 203 <u>7</u> 4 (10 years) unless amended in Appendix E
Minimum Performance Standards – On Peak Availability Factor*	95%
Minimum Performance Standards – Off Peak Availability Factor	95%
Minimum Availability Factor Required to qualify for a Capacity payment	75%
Expiration Date	April 1, 201 <u>9</u> 8
Completed Permits Date	June 1, 202 <u>5</u> 2
Exemplary Early Capacity Payment Date	January 1, 202 <u>5</u> 2

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



SECTION No. IX SEVENTH REVISED SHEET NO. 9.416 CANCELS SIXTH REVISED SHEET NO. 9.416

#### **Conditions Precedent**

- Unless otherwise waived in writing by DEF, on or before the Drop Dead Date, RF/QF shall satisfy the following Conditions Precedent:
  - RF/QF shall have obtained firm transmission service necessary to deliver Capacity and energy from the Facility to the Electrical Interconnection Point, in a form and substance satisfactory to RF/QF in its sole discretion;
  - (ii) RF/QF shall have obtained the Project Consents and any other Consents for which it is responsible under the terms hereof in a form and substance satisfactory to RF/OF in its sole discretion;
  - (iii) RF/QF shall have entered into Financing Documents relative to the construction of the Facility and have achieved Financial Closing in a form and substance satisfactory to RF/QF in its sole discretion;
  - RF/QF shall have entered into the Project Contracts in a form and substance (iv) satisfactory to RF/QF in its sole discretion;
  - RF/QF shall have obtained insurance policies or coverage in compliance with (v) Section 17;
  - Each Party shall have delivered to the other Party (i) a copy of its constitutional documents (certified by its corporate secretary as true, complete and up-to-date) and (ii) a copy of a corporate resolution approving the terms of this Contract and the transactions contemplated hereby and authorizing one or more individuals to execute this Contract on its behalf (such copy to have been certified by its corporate representative as true, complete and up-to-date);
  - RF/QF shall have obtained Qualifying Facility status from either the FPSC or FERC. The RF/QF shall provide the Duke Energy Florida Director of Qualified Facility Contracts a copy of the certification of QF status filing and any re-filings required to reflect subsequent changes to the previously certified Facility.
- Promptly upon satisfaction of the Conditions Precedent to be satisfied, the Party having (b) satisfied the same shall deliver to the other Party a certificate evidencing such satisfaction. DEF may waive the satisfaction of a Condition Precedent at its sole discretion. Such waiver must be made in writing. Subject to there being no Event of Default which has occurred and/or is continuing as of the date upon which the last of such certificates is delivered, the date of such last certificate shall constitute the effective date of this Contract (the "Effective Date").
- Unless all Conditions Precedent are satisfied on or before the Drop Dead Date or such Conditions Precedent are waived in writing, this Contract shall terminate on such date and neither Party shall have any further liability to the other Party hereunder.
- (d) RF/QF shall achieve the Capacity Delivery Date on or before the Required Capacity Delivery Date.



SECTION No. IX FOURTH REVISED SHEET NO.9.417 CANCELS THIRD REVISED SHEET NO. 9.417

- (e) RF/QF shall ensure that before the initial Committed Capacity Test:
  - (a) the Facility shall have been constructed so that the Committed Capacity Test may be duly and properly undertaken in accordance with Section 7; and
  - (b) an operable physical connection from the Facility to the Transmission System shall have been effected in accordance with the electrical interconnection and operating agreement required by the Transmission Provider, provided, however, that such physical connection shall be made consistent with the terms hereof.

#### 6. Sale of Electricity by the RF/QF

- 6.1 Consistent with the terms hereof, the RF/QF shall sell to DEF and DEF shall purchase from the RF/QF electric power generated by the Facility. The purchase and sale of electricity pursuant to this Contract shall be a ( ) net billing arrangement or ( ) simultaneous purchase and sale arrangement; provided, however, that no such arrangement shall cause the RF/QF to sell more than the Facility's net output. The billing methodology may be changed at the option of the RF/QF, subject to the provisions of Appendix D.
- 6.2 Ownership and Offering For Sale Of Renewable Energy Attributes
  - Subject to Section 6.3, the RF/QF shall retain any and all rights to own and to sell any and all Environmental Attributes associated with the electric generation of the Facility.
- 6.3 In the event that the RF/QF decides to sell any or all EAs that result from the electric generation of the RF/QF during the term of this Contract, the RF/QF shall provide notice to the Company of its intent to sell such EAs and provide the Company a reasonable opportunity to offer to purchase such EAs.
- 6.4 The RF/QF shall not rely on interruptible or curtailable standby service for the start up requirements (initial or otherwise) of the Facility.
- 6.5 The RF/QF shall be responsible for the scheduling of required transmission and for all costs, expenses, taxes, fees and charges associated with the delivery of energy to DEF. The RF/QF shall enter into a transmission service agreement with the Transmission Provider in whose service territory the Facility is to be located and the RF/QF shall make any and all transmission-related arrangements (including interconnection and ancillary services) between the RF/QF and the Transmission Provider for delivery of the Facility's firm Capacity and energy to DEF. The Capacity and energy amounts paid to the RF/QF hereunder do not include transmission losses. The RF/QF shall be responsible for transmission losses that occur prior to the point at which the RF/QF's energy is delivered to DEF. The Parties recognize that the Transmission Provider may be DEF and that if DEF is the Transmission Provider, the transmission service will be provided under a separate agreement.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL

EFFECTIVE: July 13, 2017



SECTION No. IX SIXTH REVISED SHEET NO. 9.418 CANCELS FIFTH REVISED SHEET NO. 9.418

#### 7. Committed Capacity/Capacity Delivery Date

- 7.1 If the RF/QF commits to sell capacity to DEF, the amount of which shall be determined in accordance with this Section 7. Subject to Section 7.3, the Committed Capacity is set at \_\_\_\_\_ kW, with an expected Capacity Delivery Date on or before the Required Capacity Delivery Date.
- 7.2 Capacity testing of the Facility (each such test a Committed Capacity Test) shall be performed in accordance with the procedures set forth in Section 8. The Demonstration Period for the first Committed Capacity Test shall commence no earlier than ninety (90) days before the Required Capacity Delivery Date and testing must be completed before the Avoided Unit In-Service Date or an earlier date in Appendix E. The first Committed Capacity Test shall not be successfully completed unless the Facility demonstrates a Capacity of at least one hundred percent (100%) of the Committed Capacity set forth in Section 7.1. Subject to Section 8.1, the RF/QF may schedule and perform up to three (3) Committed Capacity Tests to satisfy the requirements of the Contract with respect to the first Committed Capacity Test.
- 7.3 In addition to the first Committed Capacity Test, DEF shall have the right to require the RF/QF, after notice of no less than ten (10) Business Days prior to such proposed event, to validate the Committed Capacity by means of a Committed Capacity Test at any time, up to two (2) times per year, the results of which shall be provided to DEF within seven (7) calendar days of the conclusion of such test. On and after the date of such requested Committed Capacity Test, and until the completion of a subsequent Committed Capacity Test, the Committed Capacity shall be set at the lower of the Capacity tested or the Committed Capacity as set forth in Section 7.1. Provided however, any such second test requested within a twelve (12) month period must be for cause.

EFFECTIVE: July 13, 2017



SECTION No. IX SEVENTH REVISED SHEET NO. 9.419 CANCELS SIXTH REVISED SHEET NO. 9.419

- 7.4 Notwithstanding anything contrary to the terms hereof, the Committed Capacity may not exceed the amount set forth in Section 7.1 without the consent of DEF, which consent shall be granted in DEF's sole discretion.
- 7.5 Unless Option B or D as contained in Appendix D or Appendix E is chosen by RF/QF, DEF shall make no Capacity Payments to the RF/QF prior to the Avoided Unit In-Service Date.
- 7.6 The RF/QF shall be entitled to receive Capacity Payments beginning on the Capacity Delivery Date, provided the Capacity Delivery Date occurs before the Required Capacity Delivery Date (or such later date permitted by DEF). If the Capacity Delivery Date does not occur before the Required Capacity Delivery Date, DEF shall immediately be entitled to draw down the Completion/Performance Security in full.

#### 8. Testing Procedures

- 8.1 The Committed Capacity Test must be completed successfully within the Demonstration Period, which period, including the approximate start time of the Committed Capacity Test, shall be selected and scheduled by the RF/QF by means of a written notice to DEF delivered at least thirty (30) calendar days prior to the start of such period. The provisions of the foregoing sentence shall not apply to any Committed Capacity Test ordered by DEF under any of the provisions of this Contract. DEF shall have the right to be present onsite to monitor firsthand any Committed Capacity Test required or permitted under this Contract.
- 8.2 The Committed Capacity Test results shall be based on a test period of twenty-four (24) consecutive hours (the "Committed Capacity Test Period") at the highest sustained net kW rating at which the Facility can operate without exceeding the design operating conditions, temperature, pressures, and other parameters defined by the applicable manufacturer(s) for steady state operations at the Facility. The Committed Capacity Test Period shall commence at the time designated by the RF/QF pursuant to Section 8.1 or at such time requested by DEF pursuant to Section 7.3; provided, however, that the Committed Capacity Test Period may commence earlier than such time in the event that DEF is notified of, and consents to, such earlier time.
- 8.3 Normal station service use of unit auxiliaries, including, without limitation, cooling towers, heat exchangers, and other equipment required by law, shall be in service during the Committed Capacity Test Period.
- 8.4 The Capacity of the Facility shall be the minimum hourly net output in kW (generator output minus auxiliary) measured over the Committed Capacity Test Period.



SECTION No. IX FIFTH REVISED SHEET NO. 9.420 CANCELS FOURTH REVISED SHEET NO. 9.420

- 8.5 The Committed Capacity Test shall be performed according to standard industry testing procedures for the appropriate technology of the RF/QF.
- 8.6 The results of any Committed Capacity Test, including all data related to Facility operation and performance during testing, shall be submitted to DEF by the RF/QF within seven (7) calendar days of the conclusion of the Committed Capacity Test. The RF/QF shall certify that all such data is accurate and complete.

#### 9. Payment for Electricity Produced by the Facility

#### 9.1 Energy

- 9.1.1 DEF agrees to pay the RF/QF for energy produced by the Facility and delivered to DEF in accordance with the rates and procedures contained in Appendix D, as it may be amended from time to time. The Parties agree that this Contract shall be subject to all of the provisions contained in Rate Schedule COG-1 or Appendix D whichever applies as approved and on file with the FPSC.
- 9.1.2 DEF may, at its option, limit deliveries under this Contract to 110% of the Committed Capacity as set forth in Section 7. In the event that DEF chooses to limit deliveries, any energy in excess of 110% of the Committed Capacity will be paid for at the rates defined in Rate Schedule COG-1 and shall not be included in the calculations in Appendix A hereto.

#### 9.2 Capacity

DEF agrees to pay the RF/QF for the Capacity described in Section 7 in accordance with the rates and procedures contained in Appendix D, as it may be amended and approved from time to time by the FPSC, and pursuant to the election of Option \_\_\_\_\_\_ of Appendix D or an alternative rate schedule in Appendix E. The RF/QF understands and agrees that Capacity Payments will only be made if the Capacity Delivery Date occurs before the Required Capacity Delivery Date and the Facility is delivering firm Capacity and Energy to DEF. Once so selected, this Option, the Firm Capacity Rate and/or the Firm Energy Rate cannot be changed for the term of this Contract.



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

#### 9.3 Payments for Energy and Capacity

- 9.3.1 Payments due the RF/OF 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**

- No later than sixty (60) calendar days prior to the Required 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 DEF in writing a good-faith estimate of the amount of electricity to be generated by the Facility and delivered to DEF for each month of the following calendar year, including the time, duration and magnitude of any scheduled maintenance period(s) or reductions in Capacity. The 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, DEF shall notify the RF/QF in writing whether the requested scheduled maintenance periods in the detailed plan are acceptable. If DEF does not accept any of the requested scheduled maintenance periods, DEF 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 DEF, 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.
- The RF/QF shall comply with reasonable requests by DEF regarding day-to-day and hour-by-hour communication between the Parties relative to electricity production and maintenance scheduling.



SECTION No. IX FIFTH REVISED SHEET No. 9.422 CANCELS FOURTH REVISED SHEET NO. 9.422

10.4 The Parties recognize that the intent of the availability factor in Section 4 of this Contract includes an allowance for scheduled outages, forced outages and forced reductions in the output of the Facility. Therefore, the RF/QF shall provide DEF with notification of any forced outage or reduction in output which shall include the time and date at which the forced outage or reduction occurred, a brief description of the cause of the outage or reduction and the time and date when the forced outage or reduction ceased and the Facility was able to return to normal operation. This notice shall be provided to DEF within seventy-two (72) hours of the end of the forced outage or reduction.

The RF/QF is required to provide the total electrical output to DEF except (i) during a period that was scheduled in Section 10.2, (ii) during a period in which notification of a forced outage or reduction was provided, (iii) during an event of Force Majeure or (iv) during a curtailment period as described in Section 10.5.5. In no event shall the RF/QF deliver any portion of their electrical output to a third party.

#### 10.5 Dispatch and Control

- 10.5.1 Power supplied by the RF/QF hereunder shall be in the form of three-phase 60 hertz alternating current, at a nominal operating voltage of \_\_\_\_\_ volts (\_\_\_\_ kV) and power factor dispatchable and controllable in the range of 90% lagging to 90% leading as measured at the interconnection point to maintain system operating parameters, including power factor, as specified from time to time by DEF.
- 10.5.2 The RF/QF shall operate the Facility with all system protective equipment in service whenever the Facility is connected to, or is operated in parallel with, DEF's system, except for normal testing and repair in accordance with good engineering and operating practices as agreed by the Parties. The RF/QF shall provide adequate system protection and control devices to ensure safe and protected operation of all energized equipment during normal testing and repair. All RF/QF facilities shall meet IEEE and utility standards. The RF/QF shall have independent, third party qualified personnel test, calibrate and certify in writing all protective equipment at least once every twelve (12) months in accordance with good engineering and operating practices. A unit functional trip test shall be performed after each overhaul of the Facility's turbine, generator or boilers and results provided to DEF in writing prior to returning the equipment to service. The specifics of the unit functional trip test will be consistent with Prudent Utility Practices.



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

- 10.5.3 If the Facility is separated from the DEF system for any reason, under no circumstances shall the RF/QF reconnect the Facility to DEF's system without first obtaining DEF'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 DEF. 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 DEF 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 DEF 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 DEF's request, the RF/QF shall demonstrate this capability to DEF'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 Contract RF/QF shall deliver to DEF Eligible Collateral in an amount equal to \$30.00/kw of Committed Capacity as Completion/Performance Security.



SECTION No. IX EIGHTH REVISED SHEET NO. 9.424 CANCELS SEVENTH REVISED SHEET NO. 9.424

- 11.2 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, DEF shall promptly release the Eligible Collateral that has been replaced by the substitute Eligible Collateral. Following any termination of this Contract, the Parties shall mutually agree to a final settlement of all obligations under this Contract 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 DEF 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.
- 11.3 Draws, Replenishment DEF may draw upon Eligible Collateral provided by the RF/QF following the occurrence of an Event of Default or pursuant to the other provisions of this Contract in order to recover any damages to which DEF is entitled to under this Contract. In the event of such a draw then, except in the circumstance when this Contract otherwise terminates, the RF/QF shall within five (5) Business Days replenish the Eligible Collateral to the full amounts required.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL

EFFECTIVE: July 13, 2017



SECTION No. IX SIXTH REVISED SHEET NO. 9.425 CANCELS FIFTH REVISED SHEET NO. 9.425

- 11.4 In the event that the (a) Capacity Delivery Date occurs before the Required Capacity Delivery Date and (b) the ACBF is equal to or greater than 95% for the first twelve (12) months following the Capacity Delivery Date then DEF will return the Completion/Performance Security to the RF/QF within ninety (90) days of the first anniversary of the Capacity Delivery Date. In the event that the Capacity Delivery Date does not occur before the Required Capacity Delivery Date then DEF shall immediately be entitled to draw down the Completion/Performance Security in full. In the event that the ACBF is less than 95% for any of the first twelve (12) months following the Capacity Delivery Date then DEF shall be entitled to draw upon the Completion/Security until the ACBF is equal to or greater than 95% for 12 consecutive months. Upon the completion of twelve (12) consecutive months with the ACBF greater than or equal to 95% then DEF will return the Completion/Performance Security within ninety (90) days.
- 11.5 Reporting RF/QF shall promptly notify DEF of any circumstance that results in RF/QF's failure to be in compliance with the RF/QF Performance Security Requirements of this Section 11. From time to time, at DEF's written request, RF/QF shall provide DEF with such evidence as DEF may reasonably request, that RF/QF Letter of Credit or Security Account is in full compliance with this Contract.

#### 12. Termination Fee and Security

- 12.1 In the event that the RF/QF receives Capacity Payments pursuant to Option B, Option C, or Option D of Appendix D or any Capacity Payment schedule in Appendix E that differs from a Normal Capacity Payment Rate as calculated in FPSC Rule 25-17.0832(6)(a), then upon the termination of this Contract, the RF/QF shall owe and be liable to DEF for the Termination Fee. The RF/QF's obligation to pay the Termination Fee shall survive the termination of this Contract. DEF shall provide the RF/QF, on a monthly basis, a calculation of the Termination Fee.
  - 12.1.1 The Termination Fee shall be secured by the RF/QF by: (i) an unconditional, irrevocable, standby letter(s) of credit issued by a Qualified Institution in form and substance acceptable to DEF (including provisions (a) permitting partial and full draws and (b) permitting DEF to draw upon such Letter of Credit, in full, if such Letter of Credit is not renewed or replaced at least twenty (20) Business Days prior to its expiration date); (ii) a bond issued to DEF by a financially sound company in form and substance acceptable to DEF in its sole discretion; or (iii) a cash deposit with DEF (any of (i), (ii), or (iii), the "Termination Security").



SECTION No. IX THIRD REVISED SHEET NO. 9.426 CANCELS SECOND REVISED SHEET NO. 9.426

- 12.1.2 DEF shall have the right and the RF/QF shall be required to monitor the financial condition of (i) the issuer(s) in the case of any Letter of Credit and (ii) the insurer(s), in the case of any bond. In the event the senior debt rating of any issuer(s) or insurer(s) has deteriorated to the extent that they fail to meet the requirements of a Qualified Institution, DEF may require the RF/QF to replace the letter(s) of credit or the bond, as applicable. In the event that DEF notifies the RF/QF that it requires such a replacement, the replacement letter(s) of credit or bond, as applicable, must be issued by a Qualified Institution, and meet the requirements of Section 12.1.1 within thirty (30) calendar days following such notification. Failure by the RF/QF to comply with the requirements of this Section 12.1.2 shall be grounds for DEF to draw in full on any existing Letter of Credit or bond and to exercise any other remedies it may have hereunder.
- 12.1.3 After the close of each calendar quarter (March 31, June 30, September 30, and December 31) occurring subsequent to the Capacity Delivery Date, upon DEF's issuance of the Termination Fee calculation as described in Section 12.1, the RF/QF must provide DEF, within ten calendar (10) days, written assurance and documentation (the "Security Documentation"), in form and substance acceptable to DEF, that the amount of the Termination Security is sufficient to cover the balance of the Termination Fee through the end of the following quarter. In addition to the foregoing, at any time during the term of this Contract, DEF shall have the right to request and the RF/QF shall be obligated to deliver within five (5) calendar days of such request, such Security Documentation. Failure by the RF/QF to comply with the requirements of this Section 12.1.3 shall be grounds for DEF to draw in full on any existing Letter of Credit or bond or to retain any cash deposit, and to exercise any other remedies it may have hereunder.
- 12.1.4 Upon any termination of this Contract following the Required Capacity Delivery Date, DEF shall be entitled to receive (and in the case of the Letter(s) of Credit or bond, draw upon such Letter(s) of Credit or bond) and retain one hundred percent (100%) of the Termination Security.

#### 13. Performance Factor

DEF desires to provide an incentive to the RF/QF to operate the Facility during on-peak and off-peak periods in a manner that approximates the projected performance of the Avoided Unit. A formula to achieve this objective is attached as Appendix A.



SECTION No. IX SIXTH REVISED SHEET NO. 9.427 CANCELS FIFTH REVISED SHEET NO. 9.427

#### 14. Default

Notwithstanding the occurrence of any Force Majeure as described in Section 18, each of the following shall constitute an Event of Default:

- the RF/QF changes or modifies the Facility from that provided in Section 2 with respect to its type, location, technology or fuel source, without the prior written approval of DEF;
- (b) after the Capacity Delivery Date, the Facility fails for twelve (12) consecutive months to maintain an Annual Capacity Billing Factor, as described in Appendix A, of at least seventy five percent (75%);
- (c) the RF/QF fails to satisfy its obligations to 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 under Section 10.5.6 hereof;
- (d) the failure to make when due, any payment required pursuant to this Contract if such failure is not remedied within three (3) Business Days after written notice;
- (e) either Party, or the entity which owns or controls either Party, ceases the conduct of active business; or if proceedings under the federal bankruptcy law or insolvency laws shall be instituted by or for or against either Party or the entity which owns or controls either Party; or if a receiver shall be appointed for either Party or any of its assets or properties, or for the entity which owns or controls either Party; or if any part of either Party's assets shall be attached, levied upon, encumbered, pledged, seized or taken under any judicial process, and such proceedings shall not be vacated or fully stayed within thirty (30) calendar days thereof; or if either Party shall make an assignment for the benefit of creditors, or admit in writing its inability to pay its debts as they become due;
- (f) the RF/QF fails to give proper assurance of adequate performance as specified under this Contract within thirty (30) calendar days after DEF, with reasonable grounds for insecurity, has requested in writing such assurance;
- (g) the RF/QF fails to achieve licensing, certification, and all federal, state and local governmental, environmental, and licensing approvals required to initiate construction of the Facility by no later than the Completed Permits Date;
- (h) the RF/QF fails to comply with the provisions of Section 11 hereof;
- (i) any of the representations or warranties, including the certification of the completion of the Conditions Precedent, made by either Party in this Contract is false or misleading in any material respect as of the time made;



SECTION No. IX FIFTH REVISED SHEET NO. 9.428 CANCELS FOURTH REVISED SHEET NO. 9.428

- (j) if, at any time after the Capacity Delivery Date, the RF/QF reduces the Committed Capacity due to an event of Force Majeure and fails to repair the Facility and reset the Committed Capacity to the level set forth in Section 7.1 (as such level may be reduced by Section 7.3) within twelve (12) months following the occurrence of such event of Force Majeure; or
- either Party breaches any material provision of this Contract not specifically mentioned in this Section 14;
- the RF/QF fails to maintain its status as a Qualifying Facility.
- (m) the RF/QF sells any energy or firm capacity to an entity other than DEF.

#### 15. Rights in the Event of Default

- 15.1 Upon the occurrence of any of the Events of Default in Section 14, the DEF may, at its option:
  - **15.1.1** immediately terminate this Contract, without penalty or further obligation, except as set forth in Section 15.2, by written notice to the RF/QF, and offset against any payment(s) due from DEF to the RF/QF, any monies otherwise due from the RF/QF to DEF;
  - 15.1.2 enforce the provisions of the Completion/Performance Security pursuant to Section 11 and/or the Termination Security requirement pursuant to Section 12 hereof, as applicable; and
  - 15.1.3 exercise any other remedy(ies) which may be available to DEF at law or in equity.
- 15.2 Termination shall not affect the liability of either Party for obligations arising prior to such termination or for damages, if any, resulting from any breach of this Contract.

#### 16. Indemnification

16.1 DEF and the RF/QF shall each be responsible for its own facilities. DEF and the RF/QF shall each be responsible for ensuring adequate safeguards for other DEF customers, DEF's and the RF/QF's personnel and equipment, and for the protection of its own generating system. Each Party (the "Indemnifying Party") agrees, to the extent permitted by applicable law, to indemnify, pay, defend, and hold harmless the other Party (the "Indemnified Party") and its officers, directors, employees, agents and contractors (hereinafter called respectively, "DEF Entities" and "RF/QF Entities") from and against any and all claims, demands, costs or expenses for loss, damage, or injury to persons or property of the Indemnified Party (or to third parties) directly caused by, arising out of, or resulting from:

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL

EFFECTIVE: July 13, 2017



SECTION No. IX
SECOND\_THIRD REVISED SHEET NO. 9.429
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9.429

- a breach by the Indemnifying Party of its covenants, representations, and warranties or obligations hereunder;
- (b) any act or omission by the Indemnifying Party or its contractors, agents, servants or employees in connection with the installation or operation of its generation system or the operation thereof in connection with the other Party's system;
- (c) any defect in, failure of, or fault related to, the Indemnifying Party's generation system;
- (d) the negligence or willful misconduct of the Indemnifying Party or its contractors, agents, servants or employees; or
- (e) any other event or act that is the result of, or proximately caused by, the Indemnifying Party or its contractors, agents, servants or employees related to the Contract or the Parties' performance thereunder.
- 16.2 Payment by an Indemnified Party to a third party shall not be a condition precedent to the obligations of the Indemnifying Party under Section 16. No Indemnified Party under Section 16 shall settle any claim for which it claims indemnification hereunder without first allowing the Indemnifying Party the right to defend such a claim. The Indemnifying Party shall have no obligations under Section 16 in the event of a breach of the foregoing sentence by the Indemnified Party. Section 16 shall survive termination of this Contract.

#### 17. Insurance

The RF/QF shall procure or cause to be procured and shall maintain throughout the entire Term of this Contract, a policy or policies of liability insurance issued by an insurer acceptable in the state of Florida on a standard "Insurance Services Office" commercial general liability and/or excess liability form or equivalent and Workers' Compensation in accordance with the statutory requirements of the state of Florida (such policy or policies, collectively, the "RF/OF Insurance"). A certificate of insurance shall be delivered to DEF at least fifteen (15) calendar days prior to the start of any interconnection work. At a minimum, the RF/OF Insurance shall contain (a) an endorsement providing coverage, including products liability/completed operations coverage for the term of this Contract, and (b) premises and operations liability, (c) a broad form contractual liability endorsement covering liabilities (i) which might arise under, or in the performance or nonperformance of, this Contract or (ii) caused by operation of the Facility or any of the RF/QF's equipment. Without limiting the foregoing, the RF/QF Insurance must be reasonably acceptable to DEF. Any premium assessment or deductible shall be for the account of the RF/QF and not DEF.



SECTION No. IX FOURTH REVISED SHEET NO. 9.430 CANCELS THIRD REVISED SHEET NO. 9.430

- 17.2 The RF/QF Insurance for liability shall have a minimum limit of five million dollars (\$5,000,000.00) per occurrence for bodily injury (including death) or property damage. This liability limit can be met by any combination of commercial general and excess liability insurance policies.
- 17.3 To the extent that the RF/QF Insurance is on a "claims made" basis, the retroactive date of the policy(ies) shall be the Effective Date of this Contract or an earlier date. Furthermore, to the extent the RF/QF Insurance is on a "claims made" basis, the RF/QF's duty to provide insurance coverage shall survive the termination of this Contract until the expiration of the maximum statutory period of limitations in the State of Florida for actions based in contract or in tort. To the extent the RF/QF Insurance is on an "occurrence" basis, such insurance shall be maintained in effect at all times by the RF/QF during the term of this Contract.
- 17.4 The RF/QF shall provide DEF with a copy of any material communication or notice related to the RF/QF Insurance within ten (10) Business Days of the RF/QF's receipt or issuance thereof.
- 17.5 DEF shall be designated as an additional named insured under the RF/QF Insurance (except Workers' Compensation). The RF/QF Insurance shall be primary to any coverage maintained by DEF and provide, where permitted by law, waiver of any rights of subrogation against DEF. Any deductibles or retentions shall be the sole responsibility of RF/QF. RF/QF's compliance with these provisions and the limits of insurance specified herein shall not constitute a limitation of RF/QF's liability or otherwise affect RF/QF's indemnification obligations pursuant to this Contract. Any failure to comply with all of these provisions shall not be deemed a waiver of any rights of DEF under this Contractor with respect to any insurance coverage required hereunder. DEF may request the RF/QF to provide a copy of any or all of its required insurance policies, including endorsements in which DEF is included as an additional insured for any claims filed relative to this Contract.



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CANCELS SECOND-THIRD REVISED SHEET NO. 9.431

#### 18. Force Majeure

- "Force Majeure" is defined as an event or circumstance that is not reasonably foreseeable, is beyond the reasonable control of and is not caused by the negligence or lack of due diligence of the Party claiming Force Majeure or its contractors or suppliers and adversely affects the performance by that Party of its obligations under or pursuant to this Contract. Such events or circumstances may include, but are not limited to, actions or inactions of civil or military authority (including courts and governmental or administrative agencies), acts of God, war, riot or insurrection, blockades, embargoes, sabotage, epidemics, explosions and fires not originating in the Facility or caused by its operation, hurricanes, floods, strikes, lockouts or other labor disputes or difficulties (not caused by the failure of the affected party to comply with the terms of a collective bargaining agreement). Force Majeure shall not be based on (i) the loss of DEF's markets; (ii) DEF's economic inability to use or resell the Capacity and Energy purchased hereunder; or (iii) RF/QF's ability to sell the Capacity or Energy at a price greater than the price herein. Equipment breakdown or inability to use equipment caused by its design, construction, operation, maintenance or inability to meet regulatory standards, or otherwise caused by an event originating in the control of a Party, or a Party's failure to obtain on a timely basis and maintain a necessary permit or other regulatory approval, shall not be considered an event of Force Majeure, unless such Party can reasonably demonstrate, to the reasonable satisfaction of the non-claiming Party, that the event was not reasonably foreseeable, was beyond the Party's reasonable control and was not caused by the negligence or lack of due diligence of the Party claiming Force Majeure or its agents, contractors or suppliers and adversely affects the performance by that Party of its obligations under or pursuant to this Contract.
- 18.2 Except as otherwise provided in this Contract, each Party shall be excused from performance when its nonperformance was caused, directly or indirectly by an event of Force Majeure.
- 18.3 In the event of any delay or nonperformance resulting from an event of Force Majeure, the Party claiming Force Majeure shall notify the other Party in writing within five (5) Business Days of the occurrence of the event of Force Majeure, of the nature, cause, date of commencement thereof and the anticipated extent of such delay, and shall indicate whether any deadlines or date(s), imposed hereunder may be affected thereby. The suspension of performance shall be of no greater scope and of no greater duration than the cure for the Force Majeure requires. A Party claiming Force Majeure shall not be entitled to any relief therefore unless and until conforming notice is provided. The Party claiming Force Majeure shall notify the other Party of the cessation of the event of Force Majeure or of the conclusion of the affected Party's cure for the event of Force Majeure in either case within two (2) Business Days thereof.



SECTION No. IX THIRD REVISED SHEET NO. 9.432 CANCELS SECOND REVISED SHEET NO. 9.432

- 18.4 The Party claiming Force Majeure shall use its best efforts to cure the cause(s) preventing its performance of this Contract; provided, however, the settlement of strikes, lockouts and other labor disputes shall be entirely within the discretion of the affected Party and such Party shall not be required to settle such strikes, lockouts or other labor disputes by acceding to demands which such Party deems to be unfavorable.
- 18.5 If the RF/QF suffers an occurrence of an event of Force Majeure that reduces the generating capability of the Facility below the Committed Capacity, the RF/QF may, upon notice to DEF temporarily adjust the Committed Capacity as provided in Sections 18.6 and 18.7. Such adjustment shall be effective the first calendar day immediately following DEF's receipt of the notice or such later date as may be specified by the RF/QF. Furthermore, such adjustment shall be the minimum amount necessitated by the event of Force Majeure.
- 18.6 If the Facility is rendered completely inoperative as a result of Force Majeure, the RF/QF shall temporarily set the Committed Capacity equal to 0 kW until such time as the Facility can partially or fully operate at the Committed Capacity that existed prior to the Force Majeure. If the Committed Capacity is 0 kW, DEF shall have no obligation to make Capacity Payments hereunder.
- 18.7 If, at any time during the occurrence of an event of Force Majeure or during its cure, the Facility can partially or fully operate, then the RF/QF shall temporarily set the Committed Capacity at the maximum capability that the Facility can reasonably be expected to operate.
- 18.8 Upon the cessation of the event of Force Majeure or the conclusion of the cure for the event of Force Majeure, the Committed Capacity shall be restored to the Committed Capacity that existed immediately prior to the Force Majeure. Notwithstanding any other provisions of this Contract, upon such cessation or cure, DEF shall have right to require a Committed Capacity Test to demonstrate the Facility's compliance with the requirements of this Section 18.8. Any such Committed Capacity Test required by DEF shall be additional to any Committed Capacity Test under Section 7.3.
- 18.9 During the occurrence of an event of Force Majeure and a reduction in Committed Capacity under Section 18.5 all Monthly Capacity Payments shall reflect, pro rata, the reduction in Committed Capacity, and the Monthly Capacity Payments will continue to be calculated in accordance with the pay-forperformance provisions in Appendix A.



SECTION No. IX SECOND REVISED SHEET NO. 9.433 CANCELS FIRST REVISED SHEET NO. 9.433

18.10 The RF/QF agrees to be responsible for and pay the costs necessary to reactivate the Facility and/or the interconnection with DEF's system if the same is (are) rendered inoperable due to actions of the RF/QF, its agents, or Force Majeure events affecting the RF/QF, the Facility or the interconnection with DEF. DEF agrees to reactivate, at its own cost, the interconnection with the Facility in circumstances where any interruptions to such interconnections are caused by DEF or its agents.

#### 19. Representations, Warranties, and Covenants of RF/OF

Each Party hereto represents and warrants that as of the Effective Date:

#### 19.1 Organization, Standing and Qualification

DEF is a corporation duly organized and validly existing in good standing under the laws of Florida and has all necessary power and authority to carry on its business as presently conducted to own or hold under lease its properties and to enter into and perform its obligations under this Contract and all other related documents and agreements to which it is or shall be a Party. The RF/QF is a (corporation, partnership, or other, as applicable) duly organized and validly existing in good standing under the laws of necessary power and authority to carry on its business as presently conducted to own or hold under lease its properties and to enter into and perform its obligations under this Contract and all other related documents and agreements to which it is or shall be a Party. Each Party is duly qualified or licensed to do business in the State of Florida and in all other jurisdictions wherein the nature of its business and operations or the character of the properties owned or leased by it makes such qualification or licensing necessary and where the failure to be so qualified or licensed would impair its ability to perform its obligations under this Contract or would result in a material liability to or would have a material adverse effect on the other Party.

# 19.2 Due Authorization, No Approvals, No Defaults

Each of the execution, delivery and performance by each Party of this Contract has been duly authorized by all necessary action on the part of such Party, does not require any approval, except as has been heretofore obtained, of the shareholders DEF or of the \_\_\_\_\_\_\_ (shareholders, partners, or others, as applicable) of the RF/QF or any consent of or approval from any trustee, lessor or holder of any indebtedness or other obligation of such Party, except for such as have been duly obtained, and does not contravene or constitute a default under any law, the articles of incorporation of DEF or the \_\_\_\_\_\_ (articles of incorporation, bylaws, or other as applicable) of such Party, or any agreement, judgment, injunction, order, decree or other instrument binding upon such Party, or subject the Facility or any component part thereof to any lien other than as contemplated or permitted by this Contract.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL

EFFECTIVE: April 29, 2013



SECTION No. IX SECOND REVISED SHEET NO. 9.434 CANCELS FIRST REVISED SHEET NO. 9.434

#### 19.3 Compliance with Laws

Each party has knowledge of all laws and business practices that must be followed in performing its obligations under this Contract. Each party also is in compliance with all laws, except to the extent that failure to comply therewith would not, in the aggregate, have a material adverse effect on the other Party.

## 19.4 Governmental Approvals

Except as expressly contemplated herein, neither the execution and delivery by each Party of this Contract, nor the consummation by each Party of any of the transaction contemplated thereby, requires the consent or approval of, the giving of notice to, the registration with, the recording or filing of any document with, or the taking of any other action with respect to governmental authority, except with respect to permits (a) which have already been obtained and are in full force and effect or (b) are not yet required (and with respect to which the RF/QF has no reason to believe that the same will not be readily obtainable in the ordinary course of business upon due application therefore).

## 19.5 No Suits, Proceedings

There are no actions, suits, proceedings or investigations pending or, to the knowledge of each Party, threatened against it at law or in equity before any court or tribunal of the United States or any other jurisdiction which individually or in the aggregate could result in any materially adverse effect on each Party's business, properties, or assets or its condition, financial or otherwise, or in any impairment of its ability to perform its obligations under this Contract. Each Party has no knowledge of a violation or default with respect to any law which could result in any such materially adverse effect or impairment.

#### 19.6 Environmental Matters

To the best of its knowledge after diligent inquiry, each Party knows of no (a) existing violations of any environmental laws at the Facility, including those governing hazardous materials or (b) pending, ongoing, or unresolved administrative or enforcement investigations, compliance orders, claims, demands, actions, or other litigation brought by governmental authorities or other third parties alleging violations of any environmental law or permit which would materially and adversely affect the operation of the Facility as contemplated by this Contract.



SECTION No. IX FOURTH REVISED SHEET NO. 9.435 CANCELS THIRD REVISED SHEET NO. 9.435

#### 20. General Provisions

#### 20.1 Project Viability

To assist DEF in assessing the RF/QF's financial and technical viability, the RF/QF shall provide the information and documents requested in Appendix C or substantially similar documents, to the extent the documents apply to the type of Facility covered by this Contract and to the extent the documents are available. All documents to be considered by DEF must be submitted at the time this Contract is presented to DEF. Failure to provide the following such documents may result in a determination of non-viability by DEF.

#### 20.2 Permits

The RF/QF hereby agrees to obtain and maintain any and all permits, certifications, licenses, consents or approvals of any governmental authority which the RF/QF is required to obtain as a prerequisite to engaging in the activities specified in this Contract.

#### 20.3 Project Management

If requested by DEF, the RF/QF shall submit to DEF its integrated project schedule for DEF's review within sixty (60) calendar days from the execution of this Contract, and a start-up and test schedule for the Facility at least sixty (60) calendar days prior to start-up and testing of the Facility. These schedules shall identify key licensing, permitting, construction and operating milestone dates and The RF/QF shall submit monthly progress reports in a form satisfactory to DEF within fifteen (15) calendar days after the close of each month from the first month following the Effective Date until the Capacity Delivery Date. The RF/QF shall notify DEF of any changes in such schedules within ten (10) calendar days after such changes are determined. If for any reason, DEF has reason to believe that RF/QF may fail to achieve the Capacity Delivery Date, then, upon DEF's request, RF/QF shall submit to DEF, within ten (10) business days of such request, a remedial action plan ("Remedial Action Plan") that sets forth a detailed description of RF/QF's proposed course of action to promptly achieve the Capacity Delivery Date. Delivery of a Remedial Action Plan does not relieve RF/QF of its obligation to the Capacity Delivery Date. DEF shall have the right to monitor the construction, start-up and testing of the Facility, either on-site or off-site. DEF's technical review and inspections of the Facility and resulting requests, if any, shall not be construed as endorsing the design thereof or as any warranty as to the safety, durability or reliability of the Facility.



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9.436

The RF/QF shall provide DEF with the final designer's/manufacturer's generator capability curves, protective relay types, proposed protective relay settings, main one-line diagrams, protective relay functional diagrams, and alternating current and direct elementary diagrams for review and inspection at DEF no later than one hundred eighty (180) calendar days prior to the initial synchronization date.

#### 20.4 Assignment

Either Party may not assign this Contract, without the other Party's prior written approval, which approval may not be unreasonably withheld or delayed.

The RF/QF shall be responsible for DEF's reasonable costs and expenses associated with the review, negotiation, execution and delivery of any such documents or information pursuant to such collateral assignment, including reasonable attorney's fees.

#### 20.5 Disclaimer

In executing this Contract, DEF does not, nor should it be construed, to extend its credit or financial support for benefit of any third parties lending money to or having other transactions with the RF/QF or any assigns of this Contract.

#### 20.6 Notification

All formal notices relating to this Contract shall be deemed duly given when delivered in person, or sent by registered or certified mail, or sent by fax if followed immediately with a copy sent by registered or certified mail, to the individuals designated below. The Parties designate the following individuals to be notified or to whom payment shall be sent until such time as either Party furnishes the other Party written instructions to contact another individual:

For the RF/QF:	For DEF:
	Duke Energy Florida, LLC
	Cogeneration Manager Director of QF
	Contracts DEF 155
	299 First Avenue North
	St. Petersburg, FL 33701

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL

EFFECTIVE: July 13, 2017



SECTION No. IX SECOND-THIRD REVISED SHEET NO. 9.437 CANCELS FIRST-SECOND REVISED SHEET NO. 9.437

Contracts and related documents may be mailed to the address below or delivered during normal business hours (8:00 a.m. to 4:45 p.m.) to the visitors' entrance at the address below:

Duke Energy Florida, LLC d/b/a Duke Energy 299 First Avenue North St. Petersburg, FL 33701

Attention: Director of QF Contracts Cogeneration Manager DEF

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# 20.7 Applicable Law

This Contract shall be construed in accordance with and governed by the laws of the State of Florida, and the rights of the parties shall be construed in accordance with the laws of the State of Florida.

#### 20.8 Taxation

The RF/QF shall hold DEF and its general body of ratepayers harmless from the effects of any additional taxes, assessments or other impositions that arise as a result of the purchase of energy and capacity from the RF/QF in lieu of other energy and capacity. Any savings in regards to taxes or assessments shall be included in the avoided cost payments made to the RF/QF to the extent permitted by law. In the event DEF becomes liable for additional taxes, assessments or impositions arising out of its transactions with the RF/QF under this tariff schedule or any related interconnection agreement or due to changes in laws affecting DEF's purchases of energy and capacity from the RF/QF occurring after the execution of an agreement under this tariff schedule and for which DEF would not have been liable if it had produced the energy and/or constructed facilities sufficient to provide the capacity contemplated under such agreement itself, DEF may bill the RF/QF monthly for such additional expenses or may offset them against amounts due to the RF/QF from DEF. Any savings in taxes, assessments or impositions that accrue to DEF as a result of its purchase of energy and capacity under this tariff schedule that are not already reflected in the avoided energy or avoided capacity payments made to the RF/QF hereunder, shall be passed on to the RF/QF to the extent permitted by law without consequential penalty or loss of such benefit to DEF.

EFFECTIVE: July 13, 2017



SECTION No. IX THIRD REVISED SHEET NO. 9.438 CANCELS SECOND REVISED SHEET NO. 9.438

#### 20.9 Resolution of Disputes

#### 20.9.1 Notice of Dispute

In the event that any dispute, controversy or claim arising out of or relating to this Contract or the breach, termination or validity thereof should arise between the Parties (a "Dispute"), the Party may declare a Dispute by delivering to the other Party a written notice identifying the disputed issue.

## 20.9.2 Resolution by Parties

Upon receipt of a written notice claiming a Dispute, executives of both Parties shall meet at a mutually agreeable time and place within ten (10) business days after delivery of such notice and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the Dispute. In such meetings and exchanges, a Party shall have the right to designate as confidential any information that such Party offers. No confidential information exchanged in such meetings for the purpose of resolving a Dispute may be used by a Party in litigation against the other Party. If the matter has not been resolved within thirty (30) calendar days of the disputing Party's notice having been issued, or if the Parties fail to meet within ten (10) business days as required above, either Party may initiate binding arbitration in St. Petersburg, Florida, conducted in accordance with the then current American Arbitration Association's ("AAA") Large, Complex Commercial Rules or other mutually agreed upon procedures.

## 20.10 Limitation of Liability

IN NO EVENT SHALL DEF, ITS PARENT CORPORATION, OFFICERS, DIRECTORS, EMPLOYEES, AND AGENTS BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE, OR MULTIPLE DAMAGES RESULTING FROM ANY CLAIM OR CAUSE OF ACTION, WHETHER BROUGHT IN CONTRACT, TORT (INCLUDING, BUT NOT LIMITED TO, NEGLIGENCE OR STRICT LIABILITY), OR ANY OTHER LEGAL THEORY.



SECTION No. IX THIRD REVISED SHEET NO. 9.439 CANCELS SECOND REVISED SHEET NO. 9.439

## 20.11 Severability

If any part of this Contract, for any reason, is declared invalid or unenforceable by a public authority of appropriate jurisdiction, then such decision shall not affect the validity of the remainder of the Contract, which remainder shall remain in force and effect as if this Contract had been executed without the invalid or unenforceable portion.

#### 20.12 Complete Agreement and Amendments

All previous communications or agreements between the Parties, whether verbal or written, with reference to the subject matter of this Contract are hereby abrogated. No amendment or modification to this Contract shall be binding unless it shall be set forth in writing and duly executed by both Parties. This Contract constitutes the entire agreement between the Parties.

#### 20.13 Survival of Contract

Subject to the requirements of Section 20.4, this Contract, as it may be amended from time to time, shall be binding upon, and inure to the benefit of, the Parties' respective successors-in-interest and legal representatives.

#### 20.14 Record Retention

Each Party shall maintain for a period of five (5) years from the date of termination hereof all records relating to the performance of its obligations hereunder.

#### 20.15 No Waiver

No waiver of any of the terms and conditions of this Contract shall be effective unless in writing and signed by the Party against whom such waiver is sought to be enforced. Any waiver of the terms hereof shall be effective only in the specific instance and for the specific purpose given. The failure of a Party to insist, in any instance, on the strict performance of any of the terms and conditions hereof shall not be construed as a waiver of such Party's right in the future to insist on such strict performance.

#### 20.16 Set-Off

DEF may at any time, but shall be under no obligation to, set off or recoup any and all sums due from the RF/QF against sums due to the RF/QF hereunder without undergoing any legal process.



SECTION No. IX FIFTH REVISED SHEET NO. 9.440 CANCELS FOURTH REVISED SHEET NO. 9.440

#### Change in Environmental Law or Other Regulatory Requirements

- As used herein, "Change(s) in Environmental Law or Other Regulatory (a) Requirements" means the enactment, adoption, promulgation, implementation, or issuance of, or a new or changed interpretation of, any statute, rule, regulation, permit, license, judgment, order or approval by a governmental entity that specifically addresses environmental or regulatory issues and that takes effect after the Effective Date.
- The Parties acknowledge that Change(s) in Environmental Law or Other (b) Regulatory Requirements could significantly affect the cost of the Avoided Unit ("Avoided Unit Cost Changes") and agree that, if any such change(s) should affect the cost of the Avoided Unit more than the Threshold defined in Section 20.17(c) below, the Party affected by such change(s) may avail itself of the remedy set forth in Section 20.17(d) below as its sole and exclusive remedy.
- The Parties recognize and agree that certain Change(s) in Environmental (c) Law or Other Regulatory Requirements may occur that do not rise to a level that the Parties desire to impact this Contract. Accordingly, the Parties agree that for the purposes of this Contract, such change(s) will not be deemed to have occurred unless the change in Avoided Cost resulting from such change(s) exceed a mutually agreed upon amount. This mutually agreed upon amount is attached to this Contract in Appendix E.
- If an Avoided Unit Cost Change meets the threshold set forth in Section (d) 20.17(c) above, the affected Party may request the avoided cost payments under this Contract be recalculated and that the avoided cost payments for the remaining term of the Contract be adjusted based on the recalculation, subject to the approval of the FPSC. Any dispute regarding the application of this Section 20.17 shall be resolved in accordance with Section 20.9.

#### 20.18 Provision of Information.

Within a reasonable period of time after receiving a written request therefore from the requesting Party, the other Party hereto shall provide the requesting Party with information that is reasonable and related to the non-requesting Party and/or the facilities or operations of the non-requesting Party that the requesting Party reasonably requires in order to comply with a Requirement of Law or any requirement of Generally Accepted Accounting Principles promulgated by the Financial Accounting Standards Board (or any successor thereto), (including, but not limited to, FIN 46-R) applicable to the requesting Party. In the event that a party requires information or reports that are not within its possession to meet financial reporting requirements, the parties will work in good faith to enable the requesting party to meet its financial reporting requirements.



SECTION No. IX THIRD REVISED SHEET NO. 9.441 CANCELS SECOND REVISED SHEET NO. 9.441

RF/QF	
	<u></u>
Signature	
Print Name	
Title	<del></del>
-	<del></del>
Date ITNESS WHEREC	<b>DF</b> , DEF has acknowledged receipt of this executed Contract.
ITNESS WHEREC	
ITNESS WHEREC	
ITNESS WHEREO	
E ENERGY FLOR Signature Print Name	

EFFECTIVE: July 13, 2017



SECTION No. IX SEVENTH EIGHTH REVISED SHEET NO. 9.442
CANCELS SIXTH SEVENTH REVISED SHEET NO.

## APPENDIX A

#### TO

# DUKE ENERGY FLORIDA, LLC 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.

In the event that the ACBF is less than or equal to 75%, then no Monthly A. Capacity Payment shall be due. That is:

MCP = 0

In the event that the ACBF is greater than 75% but less than 95%, then the B. Monthly Capacity Payment shall be calculated by using the following formula:

 $MCP = BCP \times [1 - [5 \times (.95 - ACBF)] \times CC$ 

In the event that the ACBF is equal to or greater than 95%, then the Monthly C. Capacity Payment shall be calculated by using the following formula:

 $MCP = BCP \times CC$ 

Where:

MCP Monthly Capacity Payment in dollars.

Base Capacity Payment in \$/kW/Month as specified in **BCP** 

Appendix D or E.

CC Committed Capacity in kW.



SECTION No. IX SECOND REVISED SHEET NO. 9.443 CANCELS FIRST REVISED SHEET NO. 9.443

**ACBF** 

Annual Capacity Billing Factor. The ACBF shall be the electric energy actually received by DEF for the 12 consecutive months preceding the date of calculation excluding any energy received during an event of Force Majeure in which the Committed Capacity is temporarily set equal to 0 kW, divided by the product of the Committed Capacity and the number of hours in the 12 consecutive months preceding the date of calculation excluding the hours during an event of Force Majeure in which the Committed Capacity is temporarily set equal to 0 kW. If an event of Force Majeure occurs during the 12 consecutive months preceding the date of calculation in which the Committed Capacity is temporarily set to a value greater than 0 kW then the 12 month rolling average will be prorated accordingly. During the first 12 consecutive Monthly Billing Periods commencing with the first Monthly Billing Period in which Capacity Payments are to be made, the calculation of 12-month rolling average ACBF shall be performed as follows (a) during the first Monthly Billing Period, the ACBF shall be equal to the Monthly Availability Factor; (b) thereafter, the calculation of the ACBF shall be computed by summing the electric energy actually received by DEF for the number of full consecutive months preceding the date of calculation excluding any energy received during an event of Force Majeure in which the Committed Capacity is temporarily set equal to 0 kW, divided by the product of the Committed Capacity and the number of hours in the number of full consecutive months preceding the date of calculation excluding the hours during an event of Force Majeure in which the Committed Capacity is temporarily set equal to 0 kW. If an event of Force Majeure occurs during the months preceding the date of calculation in which the Committed Capacity is temporarily set to a value greater than 0 kW then the 12 month rolling average will be prorated accordingly. This calculation shall be performed at the end of each Monthly Billing Period until enough Monthly Billing Periods have elapsed to calculate a true 12-month rolling average ACBF.

MAF

Monthly Availability Factor. The total energy received during the Monthly Billing Period for which the calculation is made, divided by the product of Committed Capacity times the total hours during the Monthly Billing Period.

Monthly Billing Period The period beginning on the first calendar day of each calendar month, except that the initial Monthly Billing Period shall consist of the period beginning 12:01 a.m., on the Capacity Delivery Date and ending with the last calendar day of such month.

EFFECTIVE: April 29, 2013



SECTION No. IX THIRD-FOURTH REVISED SHEET 9.444 CANCELS SECOND-THIRD REVISED SHEET NO. 9.444

## APPENDIX B TO

# DUKE ENERGY FLORIDA, LLC RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW STANDARD OFFER CONTRACT

## TERMINATION FEE

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.

The "Termination Fee" shall be the sum of the values for each month beginning with the month in which the Capacity Delivery Date occurs through the month of the Termination Date (or month of calculation, as the case may be) computed according to the following formula:

$$\begin{array}{l} n \\ \sum \quad (MCP_i - MCPC_i) \cdot (1+r)^{(n-i)} \\ i = 1 \end{array}$$

with:

r

MCPC = 0 for all periods prior to the in-service date of the

Avoided Unit:

where

i = number of Monthly Billing Periods commencing with the Capacity Delivery Date (i.e., the month in which Capacity Delivery Date occurs = 1; the month following this month in which Capacity Delivery Date occurs = 2 etc.)

n = the number of Monthly Billing Periods which have elapsed from the month in which the Capacity Delivery Date occurs through the month of termination (or month of calculation, as the case may be)

 DEF's incremental after-tax avoided cost of capital (defined as r in Appendix D).

MCP<sub>i</sub> = Monthly Capacity Payment paid to RF/QFQF corresponding to the Monthly Billing Period i, calculated in accordance with Appendix A.

MCPC<sub>i</sub> = Monthly Capacity Payment for Option A corresponding to the Monthly Billing Period i, calculated in accordance with this Contract.



SECTION No. IX SIXTH REVISED SHEET NO. 9.445 CANCELS FIFTH 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"):

- a. 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 75%, 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.
- b. In the event that in the applicable Monthly Billing Period the Annual Capacity Billing Factor, as defined in Appendix A, is greater than 75% but less than 95%, than the Reduction Value shall be determined as follows:

Reduction Value = Initial Reduction Value x [5 x (ACBF - .95)]

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 95%, 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 DEF 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).

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL

EFFECTIVE: June 9, 2016



SECTION No. IX
FIRST\_SECOND REVISED SHEET NO. 9.446
CANCELS ORIGINAL-FIRST\_SHEET NO. 9.446

# APPENDIX C TO

# DUKE ENERGY FLORIDA, LLC RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW STANDARD OFFER CONTRACT

#### DETAILED PROJECT INFORMATION

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.

Each eligible Contract received by DEF will be evaluated to determine if the underlying RF/QF project is financially and technically viable. The RF/QF shall, to the extent available, provide DEF with a detailed project proposal which addresses the information requested below:

## I. FACILITY DESCRIPTION

- Project Name
- Project Location
- \* Street Address
- \* Size Plot Plan
- \* Legal Description of Site
- Generating Technology
- · Primary Fuel
- Alternate Fuel (if applicable)
- Committed Capacity
- · Expected In-Service Date
- · Contact Person
- \* Individual's Name and Title
- Company Name
- \* Address
- \* Telephone Number
- \* Fax Number

# II. PROJECT PARTICIPANTS

 Indicate the entities responsible for the following project management activities and provide a detailed description of the experience and capabilities of the entities:

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL

EFFECTIVE: April 29, 2013



SECTION No. IX FIRST REVISED SHEET NO. 9.447 CANCELS ORIGINAL SHEET NO. 9.447

- Project Development
- \* Siting and Licensing the Facility
- Designing the Facility
- Constructing the Facility
- \* Securing the Fuel Supply
- Operating the Facility
- Provide details on all electrical facilities which are currently under construction or operational which were developed by the RF/QF.
- Describe the financing structure for the projects identified above, including the type
  of financing used, the permanent financing term, the major lenders and the percentage
  of equity invested at Financial Closing.

#### III. FUEL SUPPLY

- Describe all fuels to be used to generate electricity at the Facility. Indicate the
  specific physical and chemical characteristics of each fuel type (e.g. Btu content,
  sulfur content, ash content, etc.). Identify special considerations regarding fuel
  supply origin, source and handling, storage and processing requirements.
- Provide AFR necessary to support planned levels of generation and list the assumptions used to determine these quantities.
- Provide a summary of the status of the fuel supply arrangements in place to meet the AFR, in each year of the proposed operating life of the Facility. Use the categories below to describe the current arrangement for securing the AFR.

Category	Description of Fuel Supply Arrangement
owned =	fuel is from a fully developed source owned by one or more of the project participants
contract =	fully executed firm fuel contract exists between the developer(s) and fuel supplier(s)
TOI =	a letter of intent for fuel supply exists between developer(s) and fuel supplier(s)
SPP =	small power production facility will burn biomass, waste, or another renewable resource
spot =	fuel supply will be purchased on the spot market
none =	no firm fuel supply arrangement currently in place
other =	fuel supply arrangement which does not fit any of the above categories (please describe)

 Indicate the percentage of the Facility's AFR which is covered by the above fuel supply arrangement(s) for each proposed operating year. The percent of AFR covered for each operating year must total 100%. For fuel supply arrangements identified as owned, contract, or LOI, provide documentation to support this category and explain the fuel price mechanism of the arrangement. In addition, indicate whether or not the fuel price includes delivery and, if so, to what location.

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL

EFFECTIVE: April 29, 2013



SECTION No. IX FIRST REVISED SHEET NO. 9.448 CANCELS ORIGINAL SHEET NO, 9.448

- Describe fuel transportation networks available for delivering all primary and secondary fuel to the Facility site. Indicate the mode, route and distance of each segment of the journey, from fuel source to the Facility site. Discuss the current status and pertinent factors impacting future availability of the transportation network.
- Provide AFTR necessary to support planned levels of generation and list the assumptions used to determine these quantities.
- Provide a summary of the status of the fuel transportation arrangements in place to
  meet the AFTR in each year of the proposed operating life of the Facility. Use the
  categories below to describe the current arrangement for securing the AFTR.

owned =	fuel transport via a fully developed system owned by one or more of the project participants
contract =	fully executed firm transportation contract exists between the developer(s) and fuel transporter(s)
TOI =	a letter of intent for fuel transport exists between developer(s) and fuel transporter(s)
spot =	fuel transportation will be purchased on the spot market
none =	no firm fuel transportation arrangement currently in place
other =	fuel transportation arrangement which does not fit any of the above categories (please describe)

- Provide the maximum, minimum and average fuel inventory levels to be maintained for primary and secondary fuels at the Facility site. List the assumptions used in determining the inventory levels.
- Provide information regarding RF/QF's plans to maintain sufficient on site fuel to deliver capacity and energy for an uninterrupted seventy-two (72) hour period.

# IV. PLANT DISPATCHABILITY/CONTROLLABILITY

- Provide the following operating characteristics and a detailed explanation supporting the performance capabilities indicated:
  - \* Ramp Rate (MW/minute)
  - \* Peak Capability (% above Committed Capacity)
  - \* Minimum power level (% of Committed Capacity)
  - Facility Turnaround Time, Hot to Hot (hours)
  - \* Start-up Time from Cold Shutdown (hours)
  - Unit Cycling (# cycles/yr.)
  - \* MW and MVAR Control (ACC, Manual, Other (please explain))



SECTION No. IX FIRST REVISED SHEET NO. 9.449 CANCELS ORIGINAL SHEET NO. 9.449

#### V. SITING AND LICENSING

- Provide a licensing/permitting milestone schedule, which lists all permits, licenses and variances, required to site the Facility. The milestone schedule shall also identify key milestone dates for baseline monitoring, application preparation, agency review, certification and licensing/siting board approval, and agency permit issuance.
- Provide a licensing/permitting plan that addresses the issues of air emission, water use, wastewater discharge, wetlands, endangered species, protected properties, surrounding land use, zoning for the Facility, associated linear facilities and support of and opposition to the Facility.
- List the emission/effluent discharge limits the Facility will meet and describe in detail the
  pollution control equipment to be used to meet these limits.

#### VI. FACILITY DEVELOPMENT AND PERFORMANCE

- Submit a detailed engineering, procurement, construction, startup and commercial operation schedule. The schedule shall include milestones for site acquisition, engineering phases, selection of the major equipment vendors, architect engineer, and Facility operator, steam host integration and delivery of major equipment. A discussion of the current status of each milestone should also be included where applicable.
- Attach a diagram of the power block arrangement. Provide a list of the major equipment vendors
  and the name and model number of the major equipment to be installed.
- Provide a detailed description of the proposed environmental control technology for the Facility and describe the capabilities of the proposed technology.
- Attach preliminary flow diagrams for the steam system, water system, and fuel system, and a main electrical one line diagram for the Facility.
- State the expected heat rate (HHV) at 75 degrees Fahrenheit for loads of 100%, 75% and 50%.
   In addition, attach a preliminary heat balance for the Facility.

# VII. FINANCIAL

Provide DEF with assurances that the proposed RF/QF project is financially viable in accordance
with FPSC Rule 25-17.0832(4)(c) by attaching a detailed pro-forma cash flow analysis. The proforma must include, at a minimum, the following assumptions for each year of the project.



FIRST REVISED SHEET NO. 9.450 CANCELS ORIGINAL SHEET NO. 9.450

- Annual Project Revenues
  - Capacity Payments (\$ and \$/kW/Mo.)
  - Variable O&M (\$ and \$/MWh)
  - \* Energy (\$ and \$/MWh)
  - \* Tipping Fees (\$ and \$/ton)
  - \* Interest Income
  - Other Revenues
  - Variable O&M Escalation (%/yr.)
  - \* Energy Escalation (%/yr.)
  - Tipping Fee Escalation (%/yr.)
- Annual Project Expense
  - Fixed O&M (\$ and \$/kW/Mo.)
  - Variable O&M (\$ and \$/MWh)
  - Energy (\$ and \$/MWh)
  - Property Taxes (\$)
  - Insurance (\$)
  - Emission Compliance (\$ and \$/MWh)
  - Depreciation (\$ and %/yr.)
  - Other Expenses (\$)
  - Fixed O&M Escalation (%/yr.)
  - Variable O&M Escalation (%/yr.)
  - Energy Escalation (%/yr.)
- Other Project Information
  - Installed Cost of the Facility (\$ and \$/kW)
  - Committed Capacity (kW)
  - Average Heat Rate HHV (MBTU/kWh)
  - Federal Income Tax Rate (%)
  - Facility Capacity Factor (%)
  - Energy Sold to DEF (MWh)
- Permanent Financing
  - Permanent Financing Term (yr.)
  - Project Capital Structure (percentage of long-term debt, subordinated debt, tax exempt debt and equity)
  - Financing Costs (cost of long-term debt, subordinated debt, tax exempt debt and equity)
  - Annual Interest Expense
  - Annual Debt Service (\$)
  - Amortization Schedule (beginning balance, interest expense, principal reduction, ending balance)

ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: April 29, 2013



SECTION No. IX FIRST REVISED SHEET NO. 9.451 CANCELS ORIGINAL SHEET NO. 9.451

- Provide details of the financing plan for the project and indicate whether the project will be non-recourse project financed. If it will not be project financed please explain the alternative financing arrangement.
- Submit financial statements for the last two years on the principals of the project, and provide an illustration of the project ownership structure.



SECTION No. IX FIRST SECOND REVISED SHEET NO. 9.452 CANCELS ORIGINAL FIRST SHEET NO. 9.452

#### APPENDIX D

#### TO

# DUKE ENERGY FLORIDA<u>, LLC</u> RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW STANDARD OFFER CONTRACT

#### RATE SCHEDULE COG-2

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.

#### **SCHEDULE**

COG-2, Firm Capacity and Energy from a Renewable Facility ("RF/QF") or a Qualifying Facility less than 100 kW ("QF")

## AVAILABLE

DEF will, under the provisions of this schedule and the Contract to which this Appendix is attached and incorporated into by reference, purchase firm capacity and energy offered by a RF/QF as defined in the contract. DEF's obligation to contract to purchase firm capacity from such RF/QF by means of this schedule and the Contract will continue no later than the Expiration Date.

# **APPLICABLE**

To RF/QFs as defined in the Contract producing capacity and energy for sale to DEF on a firm basis pursuant to the terms and conditions of this schedule and the Contract. "Firm Capacity and Energy" are described by FPSC Rule 25-17.0832, F.A.C., and are capacity and energy produced and sold by a RF/QF pursuant to the Contract provisions addressing (among other things) quantity, time and reliability of delivery.

#### CHARACTER OF SERVICE

Purchases within the territory served by DEF shall be, at the option of DEF, single or three phase, 60-hertz alternating current at any available standard DEF voltage. Purchases from outside the territory served by DEF shall be three phase, 60-hertz alternating current at the voltage level available at the interchange point between DEF and the entry delivering the Firm Capacity and Energy from the RF/QF.



SECTION No. IX FIRST REVISED SHEET NO. 9.453 CANCELS ORIGINAL SHEET NO. 9.453

#### LIMITATION

Purchases under this schedule are subject to FPSC Rules 25-17.080 through 25-17.310, F.A.C., and are limited to those RF/QFs which:

- A. Are defined in the Contract;
- B. Execute a Contract;

#### RATES FOR PURCHASES BY DEF

Firm Capacity and Energy are purchased at unit cost, in dollars per kilowatt per month and cents per kilowatt-hour, respectively, based on the value of deferring additional capacity required by DEF. For the purpose of this schedule, an Avoided Unit has been designated by DEF. DEF's next Avoided Unit has been identified in Section 4 of the Contract. Schedule 1 to this Appendix describes the methodology used to calculate payment schedules, general terms, and conditions applicable to the Contract filed and approved pursuant to FPSC Rules 25-17.080 through 25-17.310, F.A.C.

#### A. Firm Capacity Rates

Four options, A through D, as set forth below, are available for payments of firm capacity that is produced by a RF/QF and delivered to DEF. Once selected, an option shall remain in effect for the term of the Contract. Exemplary payment schedules, shown below, contain the monthly rate per kilowatt of firm Capacity which the RF/QF has contractually committed to deliver to DEF and are based on a contract term which extends through the Termination Date in Section 4 of the Contract. Payment schedules for other contract terms will be made available to any RF/QF upon request and may be calculated based on the methodologies described in Schedule 1. The currently approved parameters used to calculate the following schedule of payments are found in Schedule 2 to this Appendix.

# Option A - Fixed Value of Deferral Payments - Normal Capacity

Payment schedules under this option are based on the value of a year-by-year deferral of DEF's Avoided Unit with an in-service date as of the Avoided Unit In-Service Date in Section 4 of the Contract, calculated in accordance with FPSC Rule 25-17.0832, F.A.C., as described in Schedule 1. Once this option is selected, the current schedule of payments shall remain fixed and in effect throughout the term of the Contract. The payment schedule for this option follows in Table 3.



SECTION No. IX FIRST REVISED SHEET NO. 9.454 CANCELS ORIGINAL SHEET NO. 9.454

#### Option B - Fixed Value of Deferral Payments - Early Capacity

Payment schedules under this option are based upon the early capital cost component of the value of a year-by-year deferral of the Avoided Unit. The term "early" with respect to Option B means that these payments can start prior to the anticipated in-service date of the Avoided Unit; provided, however, that under no circumstances may payments begin before this RF/QF is delivering Firm Capacity and Energy to DEF pursuant to the terms of the Contract. When this option is selected, the Capacity Payments shall be made monthly commencing no earlier than the Capacity Delivery Date of the RF/QF and calculated as shown on Schedule 1. Capacity Payments under Option B do not result in a prepayment or create a future benefit.

The RF/QF shall select the month and year in which the deliveries of firm capacity and energy to DEF are to commence and Capacity Payments are to start. DEF will provide the RF/QF with a schedule of capacity payment rates based on the month and year in which the deliveries of firm capacity and energy are to commence and the term of the Contract. The exemplary payment schedule in Table 3 is based on a contract term that begins on the Exemplary Early Capacity Payment Date in Section 4 of the Contract.

#### Option C - Fixed Value of Deferral Payment - Levelized Capacity

Payment schedules under this option are based upon the levelized capital cost component of the value of a year-by-year deferral of the Avoided Unit. The capital portion of Capacity Payments under this option shall consist of equal monthly payments over the term of the Contract, calculated as shown on Schedule 1. The fixed operation and maintenance portion of Capacity Payments shall be equal to the value of the year-by-year deferral of fixed operation and maintenance expense associated with the Avoided Unit. These calculations are shown in Schedule 1. The payment schedule for this option is contained in Table 3. Capacity Payments under Option C do not result in a prepayment or create a future benefit.

# Option D - Fixed Value of Deferral Payment - Early Levelized Capacity

Payment schedules under this option are based upon the early levelized capital cost component of the value of a year-by-year deferral of the Avoided Unit. The capital portion of Capacity Payments under this option shall consist of equal monthly payments over the term of the Contract, calculated as shown on Schedule 1. The fixed operation and maintenance expense shall be calculated as shown in Schedule 1.

The RF/QF shall select the month and year in which the deliveries of firm capacity and energy to DEF are to commence and Capacity Payments are to start. DEF will provide the RF/QF with a schedule of capacity payment rates based on the month and year in which the deliveries of firm capacity and energy are to commence and the term of the Contract. The exemplary payment schedule in Table 3 is based on a contract term that begins on the Exemplary Early Capacity Payment Date in Section 4 of the Contract.



ELEVENTH-TWELFTH REVISED SHEET NO. 9.455
CANCELS TENTH-ELEVENTH REVISED SHEET NO.

# TABLE 3 EXAMPLE MONTHLY CAPACITY PAYMENT IN \$/kW/MONTH

DEF'S June 1, 2024-2027 Undesignated CT 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
20241				
20252		3.723.36		4.193.80
202 <u>6</u> 3		3.813.45		4.203.80
20274	4.844.37	3.913.53	5.374.84	4.213.81
20285	4.964.48	4.003.62	5.384.85	4.213.82
20296	5.094.59	4.103.71	5.384.86	4.223.82
203027	5.224.70	4.213.81	5.394.87	4.233.83
203128	5.354.82	4.313.90	5.404.87	4.233.83
20 <u>32</u> <del>29</del>	5.484.94	4.424.00	5.414.88	4.243.84
203330	5.625.07	4.534.10	5.424.89	4.253.85
20341	5.765.19	4.644.20	5.434.90	4.263.86
20352	5.905.32	4.764.31	5.444.91	4.263.86
203 <u>6</u> 3	6.055.46	4.884.41	5.454.92	4.273.87
20374	6.205.59	5.004.52	5.464.93	4.283.88

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 DEF 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: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL EFFECTIVE: July-13, 2017



SECTION No. IX SECOND REVISED SHEET NO. 9.456 CANCELS FIRST REVISED SHEET NO. 9.456

2. The RF/QF may also request an alternative Capacity Payment rate stream from DEF as authorized by Rule 25-17.250(4). Regardless of the Capacity Payment rate stream requested by the RF/QF, the cumulative present value of the capital cost payments made to the RF/QF over the term of the Contract shall not exceed the cumulative present value of the capital cost payments had such payments been made pursuant to FPSC Rule 25-17.0832(4)(g)(i). Fixed operation and maintenance expense shall be calculated to conform with FPSC Rule 25-17.0832(6)(b). Such an alternative Capacity Payment rate shall be subject to the Termination Fee in Appendix B.

In the event that alternative Capacity Payment rates are agreed upon, such Capacity Payment rate schedule shall be attached to the Contract in Appendix E.

#### B. Energy Rates

#### Payments Prior to the Avoided Unit In-Service Date

 The energy rate, in cents per kilowatt-hour (¢/kWh), shall be based on DEF's actual hourly avoided energy costs which are calculated by DEF in accordance with FPSC Rule 25-17.0825, F.A.C.

The calculation of payments to the RF/QF shall be based on the sum over all hours of the billing period, of the product of each hour's avoided energy cost times the amount of energy (kWh) delivered to DEF from the Facility for that hour. All purchases shall be adjusted for losses from the point of metering to the point of interconnection.

 Upon request of the RF/QF, DEF shall provide the RF/QF the option of receiving energy payments based on DEF's year-by-year projection of system incremental costs prior to hourly economy energy sales to other utilities, based on normal weather and fuel conditions plus a mutually agreed upon market volatility risk premium.

## Payments Starting on Avoided Unit In-Service Date

The calculation of payments to the RF/QF for energy delivered to DEF, on and after the Avoided Unit In-Service Date shall be the sum, over all hours of the Monthly Billing Period, of the product of (a) each hour's Firm Energy Rate (¢/kWh); and (b) the amount of energy (kWh) delivered to DEF from the Facility during that hour.



SECTION No. IX ELEVENTH REVISED SHEET NO. 9.457 CANCELS TENTH REVISED SHEET NO. 9.457

For any period during which energy is delivered by the RF/QF to DEF, 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 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 firm 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 firm 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 firm 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

As required in Section 25-17.0825, F.A.C., information relating to as-available energy cost projections will be provided within 30 days of a written request for such projections by any interested person.



SECTION No. IX

ELEVENTH-TWELFTH REVISED SHEET NO. 9.458

CANCELS ELEVENTH TENTH-SHEET NO. 9.458

#### ESTIMATED UNIT FUEL COST

As required in Section 25-17.0832, F.A.C., the estimated fuel costs associated with DEF's Avoided Unit are based on current estimates of the price of natural gas and will be provided within 30 days of a written request for such projections by any interested person.

# **DELIVERY VOLTAGE ADJUSTMENT**

DEF'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 DEF's Procedures For Changing The Real Power Loss Factor (currently Attachment Q) in its Open Access Transmission Tariff and DEF's fuel cost recovery filing with the FPSC. 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 DEF's service territory to reflect the delivery voltage level at which RF/QF energy is received by the DEF.

The current delivery voltage adjustment factors are:

Delivery Voltage	Adjustment Factor
Transmission Voltage Delivery	1.01 <u>50</u> 36
Primary Voltage Delivery	1.02 <u>54</u> 36
Secondary Voltage Delivery	1.0 <u>627</u> <del>629</del>

# 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 Required Capacity Delivery 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 THIRD REVISED SHEET NO. 9.459 CANCELS SECOND REVISED SHEET NO. 9.459

## METERING REQUIREMENTS

The RF/QFs within the territory served by DEF shall be required to purchase from DEF hourly recording meters to measure their energy deliveries to DEF. Energy purchases from the RF/QFs outside the territory of DEF shall be measured as the quantities scheduled for interchange to DEF by the entity delivering Firm Capacity and Energy to DEF.

# BILLING OPTIONS

A RF/QF, upon entering into this Contract for the sale of firm capacity and energy or prior to delivery of as-available energy, may elect to make either simultaneous purchases from and sales to DEF, or net sales to DEF; provided, however, that no such arrangement shall cause the RF/QF to sell more than the Facility's net output. A decision on billing methods may only be changed:

1) when a RF/QF selling as-available energy enters into this Contract for the sale of firm capacity and energy; 2) when a Contact expires or is lawfully terminated by either the RF/QF or DEF; 3) when the RF/QF is selling as-available energy and has not changed billing methods within the last twelve months; 4) when the election to change billing methods will not contravene the provisions of FPSC Rule 25-17.0832 or a contract between the RF/QF and DEF.

If a RF/QF elects to change billing methods, such changes shall be subject to the following: 1) upon at least thirty days advance written note to DEF; 2) the installation by DEF of any additional metering equipment reasonably required to effect the change in billing and upon payment by the RF/QF for such metering equipment and its installation; and 3) upon completion and approval by DEF of any alteration(s) to the interconnection reasonably required to effect the change in billing and upon payment by the RF/QF for such alteration(s).

Payments due a 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 rates at which payment are being made shall accompany the payment to the RF/QF.



SECTION No. IX FOURTH REVISED SHEET NO. 9.460 CANCELS THIRD REVISED SHEET NO. 9.460

## CHARGES TO RENEWABLE ENERGY PROVIDER

The RF/QF shall be responsible for all applicable charges as currently approved or as they may be approved by the Florida Public Service Commission, including, but not limited to:

# A. Retail Service Charges

The RF/QF shall be responsible for all FPSC approved charges for any retail service that may be provided by DEF. The RF/QF shall be billed at the customer charge rate stated in DEF's applicable standby tariff monthly for the costs of meter reading, billing, and other administrative costs.

#### B. <u>Interconnection Charges</u>

Applicable Interconnection Charges are included in the transmission arrangements entered into with the Transmission Provider. Notwithstanding the above, Interconnection Charges must be in accordance with the provisions of FPSC Rule 25-17.087.

# C. Transmission Charges

Applicable Transmission Charges are included in the transmission arrangements entered into with the Transmission Provider. Notwithstanding the above, Transmission Charges must be in accordance with the provisions of FPSC Rule 25-17.087.



SECTION No. IX FIRST REVISED SHEET NO. 9.461 CANCELS ORIGINAL SHEET NO, 9.461

## TERMS OF SERVICE

- It shall be the RF/QF's responsibility to inform DEF of any change in its electric A. generation capability.
- Any electric service delivered by DEF to a RF/QF located in DEF's service area В. shall be subject to the following terms and conditions:
  - A RF/QF shall be metered separately and billed under the applicable retail (1) rate schedule(s), whose terms and conditions shall pertain.
  - A security deposit will be required in accordance with FPSC Rules 25-(2) 17.082(5) and 25-6.097, F.A.C., and the following:
    - In the first year of operation, the security deposit should be based (i) upon the singular month in which the RF/QF's projected purchases from DEF exceed, by the greatest amount, DEF's estimated purchases from the RF/QF. The security deposit should be equal to twice the amount of the difference estimated for that month. The deposit is required upon interconnection.
    - For each year thereafter, a review of the actual sales and purchases (ii) between the RF/QF and DEF will be conducted to determine the actual month of maximum difference. The security deposit should be adjusted to equal twice the greatest amount by which the actual monthly purchases by the RF/QF exceed the actual sales in DEF in that month.
  - DEF shall specify the point of interconnection and voltage level. (3)
  - (4) The RF/QF must enter into an interconnection to DEF's system. Specific features of the RF/QF and its interconnection to DEF's facilities will be considered by DEF in preparing the interconnection agreement. Notwithstanding the above, interconnection with, and delivery into, the Company's system must be accomplished in accordance with the provisions of FPSC Rule 25-17.087.
- C. Service under this rate schedule is subject to the rules and regulations of the FPSC.



SECTION No. IX FIRST REVISED SHEET NO. 9.462 CANCELS ORIGINAL SHEET NO. 9.462

# SCHEDULE 1 TO RATE SCHEDULE COG-2

#### CALCULATION OF VALUE OF DEFERRAL PAYMENTS

# APPLICABILITY

This Schedule 1 provides a detailed description of the methodology used by DEF to calculate the monthly values of deferring or avoiding the Avoided Unit identified in the Contract. When used in conjunction with the current FPSC-approved cost parameters associated with the Avoided Unit contained in Schedule 2, a RF/QF may determine the applicable value of deferral capacity payment rate associated with the timing and operation of its particular facility should the RF/QF enter into a Contract with DEF.

Also contained in this Schedule 1 is the discussion of the types and forms of surety bond requirements or equivalent assurance for payment of the Termination Fee acceptable to DEF in the event of contractual default by a RF/QF.

## CALCULATION OF VALUE OF DEFERRAL OPTION A

FPSC Rule 25-17.0832(5) specifies that avoided capacity costs, in dollars per kilowatt per month, associated with capacity sold to a utility by a RF/QF pursuant to Contract shall be defined as the year-by-year value of deferral of the Avoided Unit. The year-by-year value of deferral shall be the difference in revenue requirements associated with deferring the Avoided Unit one year, and shall be calculated as follows:

$$VAC_m = 1/12 [KI_n (1 - R) / (1 - R^L) + O_n]$$

Where, for a one year deferral:

VAC<sub>m</sub> = utility's monthly value of avoided capacity, in dollars per kilowatt per month, for each month of year n;

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;

 $R = (1 + i_p)/(1 + r);$ 

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, including all identifiable and quantifiable costs relating to the construction for the Avoided Unit which would have been paid had the Avoided Unit been constructed;

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4	DUKE ENERGY.		SECTION No. IX FIRST REVISED SHEET NO. 9.463 CANCELS ORIGINAL SHEET NO, 9.463
	$O_n$	=	total fixed operation and maintenance expense for the year n, in mid-year dollars per kilowatt per year, of the Avoided Unit;
	$i_p$	=	annual escalation rate associated with the plant cost of the Avoided Unit;
	$i_{o}$	=	annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;
	r	=	annual discount rate, defined as the utility's incremental after-tax cost of capital;
	L	=	expected life of the Avoided Unit; and
	n	=	year for which the Avoided Unit is deferred starting with the Avoided Unit In-Service Date and ending with the Termination Date.

# CALCULATION OF FIXED VALUE OF DEFERRAL PAYMENTS - EARLY CAPACITY-OPTION B

Under the fixed value of deferral Option A, payments for firm capacity shall not commence until the in-service date of the Avoided unit(s). At the option of the RF/QF, however, DEF may begin making payments for capacity consisting of the capital cost component of the value of a year-by-year deferral of the Avoided Unit prior to the anticipated in-service date of the Avoided Unit. When such payments for capacity are elected, the avoided capital cost component of Capacity Payments shall be paid monthly commencing no earlier than the Capacity Delivery Date of the RF/QF, and shall be calculated as follows:

$$A_{M} = \left[A_{c} \left(1+i_{p}\right)^{(m-1)} + A_{o} \left(1+i_{o}\right)^{(m-1)}\right] / 12 \hspace{1cm} \text{for } m=1 \text{ to } t$$

Where:

monthly payments to be made to the RF/QF for each  $A_M$ month of the contract year n, in dollars per kilowatt per month in which RF/QF delivers capacity pursuant to the early capacity option;

annual escalation rate associated with the plant cost of the Avoided Unit;

annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;

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m	=	year for which the fixed value of deferral payments under the early capacity option are made to a RF/QF, starting in year one and ending in the year t;
t	=	the Term, in years, of the Contract:
$A_c$	=	$F[(1-R)/(1-R^{t})]$
Where:		
F	=	the cumulative present value, in the year that the contractual payments will begin, of the avoided capital cost component of Capacity Payments which would have been made had Capacity Payments commenced with the Avoided Unit In-Service Date;
R	=	$(1+i_p)/(1+r)$
r	=	annual discount rate, defined as DEF's incremental after-tax cost of capital; and
$A_{o}$	=	$G[(1-R)/(1-R^t)]$
Where:		

Capacity 1 d

G

operation and maintenance expense component of Capacity Payments which would have been made had Capacity Payments commenced with the Avoided Unit In-Service Date.

The cumulative present value, in the year that the contractual payments will begin, of the avoided fixed

 $R = (1 + i_0)/(1 + r)$ 

The currently approved parameters applicable to the formulas above are found in Schedule 2.

# <u>CALCULATION OF FIXED VALUE OF DEFERRAL PAYMENTS -</u> <u>LEVELIZED AND EARLY LEVELIZED CAPACITY - OPTION C & OPTION D,</u> <u>RESPECTIVELY</u>

Monthly fixed value of deferral payments for levelized and early levelized capacity shall be calculated as follows:



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$$P_L = (F / 12) \cdot [r / 1 - (1 + r)^{-t}] + O$$

#### Where:

$P_{\rm L}$	=	the monthly levelized capacity payment, starting on or	
		prior to the in-service date of DEF's Avoided Unit(s):	

F	=	the cumulative present value, in the year that the contractual payments will begin, of the avoided capital
		cost component of the Capacity Payments which would
		have been made had the Capacity Payments not been
		levelized:

O = the monthly fixed operation and maintenance component of the Capacity Payments, calculated in accordance with calculation of the fixed value of deferral payments for the levelized capacity or the early levelized capacity options.

# RISK-RELATED GUARANTEES

With the exception of governmental solid waste facilities covered by FPSC Rule 25-17.091, FPSC Rule 25-17.0832 (4)(e)10 requires that, when fixed value of deferral payments - early capacity, levelized capacity, or early levelized capacity are elected, the RF/QF must provide a surety bond or equivalent assurance of securing the payment of a Termination Fee in the event the RF/QF is unable to meet the terms and conditions of its Contract. Depending on the nature of the RF/QF's operation, financial health and solvency, and its ability to meet the terms and conditions of the Contract, one of the following may constitute an equivalent assurance of payment:

- Bond;
- (2) Cash deposit(s) with DEF;
- (3) Unconditional, irrevocable, direct pay Letter of Credit;
- (4) Unsecured promise by a municipal, county or state government to repay payments for early or levelized capacity in the event of default, in conjunction with a legally binding commitment from such government allowing the utility to levy a surcharge on either the electric bills of the government's electricity consuming facilities or the constituent electric customers of such government to assure that payments for early or levelized capacity are repaid;
- (5) Unsecured promise by a privately-owned RF/QF to repay payments for early or levelized capacity in the event of default, in conjunction with a legally binding commitment from the owner(s) of the RF/QF, parent company, and/or subsidiary companies located in Florida to assure that payments for early, levelized or early levelized capacity are repaid; or
- (6) Other guarantees acceptable to DEF.



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DEF will cooperate with each RF/QF applying for fixed value of deferral payments under the early, levelized or early levelized capacity options to determine the exact form of an "equivalent assurance" for payment of the Termination Fee to be required based on the particular aspects of the RF/QF. DEF will endeavor to accommodate an equivalent assurance of repayment which is in the best interests of both the RF/QF and DEF's ratepayers.



SECTION No. IX

<u>ELEVENTH-TWELFTH</u> REVISED SHEET NO. 9.467

CANCELS <u>TENTH-ELEVENTH</u> REVISED 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
$VAC_m$	=	DEF's value of avoided capacity and O&M, in dollars per kilowatt per month, during month m;	4. <u>84</u> 37
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. <u>284</u> 3 <del>17</del>
$I_n$	=	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;	767.95697.2 7
On	=	total fixed operation and maintenance expense, for the year n, in mid-year dollars per kilowatt per year, of the Avoided Unit:	3. <u>85</u> <del>67</del>
$i_p$	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.50%
$i_o$	=	annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;	2.50%
r	=	annual discount rate, defined as DEF's incremental after-tax cost of capital;	<u>7.15</u> 6.85%
L	=	expected life of the Avoided Unit;	35
n	1=1	year for which the Avoided Unit is deferred starting with the Avoided Unit In-Service Date and ending with the Termination Date.	202 <u>7</u> 4



SECTION No. IX

<u>ELEVENTH-TWELFTH</u> REVISED SHEET NO. 9.468
CANCELS <u>TENTH-ELEVENTH</u> REVISED SHEET
NO. 9.468

# FIXED VALUE OF DEFERRAL PAYMENTS -EARLY CAPACITY OPTION PARAMETERS

		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 two years prior to the Avoided Unit In-Service Date, in dollars per kilowatt per month;	3.4713
$i_p$	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.50%
n	=	year for which early Capacity Payments to a RF/QF are to begin;	202 <u>5</u> 2
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;	2 <u>59.42</u> 76.3 8
r	=	annual discount rate, defined as DEF's incremental after-tax cost of capital;	<u>7.15</u> 6.85%
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;	13
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.	20.8018.40



SECTION No. IX FIRST-SECOND REVISED SHEET NO. 9.470 CANCELS ORIGINAL FIRST SHEET NO. 9.470

# APPENDIX E

TO
DUKE ENERGY FLORIDA, LLC
RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW
STANDARD OFFER CONTRACT

AGREED UPON PAYMENT SCHEDULES AND OTHER MUTUAL AGREEMENTS



SECTION No. IX FIRST REVISED SHEET NO. 9.475 CANCELS ORIGINAL SHEET NO. 9.475

# APPENDIX F FPSC RULES 25-17.080 THROUGH 25-17.310 ARE PROVIDED IN SECTION VIII ON THIS TARIFF BOOK

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