FILED 6/26/2019 DOCUMENT NO. 05165-2019 FPSC - COMMISSION CLERK





Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FLORIDA 32399-0850

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

DATE: June 26, 2019

- TO: Office of Commission Clerk (Teitzman)
- **FROM:** Division of Engineering (Thompson, Doehling, Ellis) Office of the General Counsel (Murphy)
- **RE:** Docket No. 20190079-EQ Petition for approval of amended standard offer contract (Schedule COG-2) and amended interconnection agreement, by Duke Energy Florida, LLC.
- AGENDA: 07/09/19 Regular Agenda Proposed Agency Action Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

Section 366.91(3), Florida Statutes (F.S.), requires that each investor-owned utility (IOU) continuously offer to purchase capacity and energy from renewable energy generators (RF) and small qualifying facilities (QF). Florida Public Service Commission (Commission) Rules 25-17.200 through 25-17.310, Florida Administrative Code (F.A.C.), implement the statute and require each IOU to file with the Commission by April 1 of each year, a standard offer contract based on the next avoidable fossil fueled generating unit of each technology type identified in the utility's current Ten-Year Site Plan.

On April 1, 2019, Duke Energy Florida, LLC (DEF) filed a petition for approval of its amended standard offer contract and associated rate schedule COG-2, based on its 2019 Ten-Year Site

Plan, and amended interconnection agreement. On June 7, 2019, DEF refiled its standard offer contract to include supplemental revisions to Sheet 9.416 in response to staff's first data request.¹

The Commission has jurisdiction over this standard offer contract pursuant to Sections 366.04 through 366.055 and 366.91, F.S.

¹Document No. 04774-2019, filed June 7, 2017, in Docket No. 20190079-EQ.

Discussion of Issues

Issue 1: Should the Commission approve the amended standard offer contract (Schedule COG-2) and amended interconnection agreement filed by Duke Energy Florida, LLC?

Recommendation: Yes. The provisions of DEF's amended standard offer contract and associated rate schedule COG-2, as revised on June 7, 2019, and amended interconnection agreement, as filed on April 1, 2019, 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. (Doehling, Thompson)

Staff Analysis: 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 RF/QFs 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 218 megawatt (MW) natural gas-fueled combustion turbine (CT) as the next planned generating unit in its 2019 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, in a situation where one or both parties desire particular contract terms other than those established in the standard offer.

In order to promote renewable generation, the Commission requires 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, then the operator will begin receiving capacity payments earlier than the in-service date of the avoided unit. However, payments made under the early capacity payments options tend to be lower in the later years of the contract term because the net present value (NPV) of the total payments must remain equal for all contract payment options.

Table 1 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).

	Enorgy		Capacity Payment (By Type)		
Year	Energy Payment	Normal	Levelized	Early	Early Levelized
	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)
2020	9,469	-	-	-	-
2021	8,638	-	-	-	-
2022	7,796	-	-	-	-
2023	7,172	-	-	-	-
2024	8,266	-	-	-	-
2025	9,878	-	-	2,173	2,333
2026	10,850	-	-	2,201	2,335
2027	12,413	1,674	1,788	2,230	2,337
2028	13,409	2,908	3,067	2,260	2,339
2029	13,833	2,946	3,070	2,289	2,341
2030	15,079	2,985	3,072	2,319	2,343
2031	15,656	3,024	3,075	2,350	2,346
2032	16,942	3,064	3,078	2,381	2,348
2033	17,411	3,104	3,081	2,412	2,350
2034	17,725	3,145	3,084	2,444	2,352
2035	16,807	3,187	3,087	2,476	2,355
2036	17,429	3,229	3,090	2,509	2,357
2037	18,218	3,271	3,093	2,542	2,360
2038	19,774	3,314	3,097	2,576	2,362
2039	20,956	3,358	3,100	2,610	2,365
Total	277,721	39,208	38,782	35,772	35,224
NPV (2019\$)	133,766	15,549	15,549	15,549	15,549

Table 1 – Estimated Annual Payments to a 50 MW Renewable Facility(95% Capacity Factor)

Source: DEF's response to staff's first data request.²

The changes made to DEF's tariff sheets are consistent with the updated avoided unit. Other revisions DEF made to its tariff sheets include: (1) financial and technical viability conditions; (2) completion/performance security requirements; (3) delivery voltage calculation methods; and (4) testing requirements.

²Document No. 03911-2019, filed April 24, 2019, in Docket No. 20190079-EQ.

The additional conditions to verify the RF/QF is both financially and technically viable, found on Sheet Nos. 9.416, 9.419, and 9.420, and the completion/performance security requirements, found on Sheet No. 9.425, were added to provide additional protection to both DEF and its customers. The technical viability and security requirements are consistent with conditions approved in FPL's standard offer contract.³ The financial viability requirements on Sheet No. 9.416 were modified on June 7, 2019, to provide limited exemptions from these conditions. Staff believes the revised financial requirements are adequate to safeguard ratepayers and should not be overly burdensome to the RF/QF.

The revisions in the Delivery Voltage section, found on Sheet No. 9.458, were made so that the delivery voltage adjustment factor will be calculated based on the current delivery efficiencies in DEF's tariff as approved by FERC. This will allow for the delivery voltage adjustment factors to stay up to date should there be any changes in DEF's Open Access Tariff subsequent to the standard offer contract filing, and will be provided within 30 days of a written request by any interested person. Changes in testing requirements, found on Sheet No. 9.710, were made to reflect the current testing requirements of modern electrical relays. This is consistent with the manufacturer's current recommendations.

In addition to the above revisions, there are a number of unsubstantial changes including updates to calendar dates, position titles, and typographical corrections. The type-and-strike format versions of the amended standard offer contract and associated rate schedule COG-2, as revised on June 7, 2019, are included as Attachment A to this recommendation. The amended interconnection agreement, as filed on April 1, 2019, is included as Attachment B to this recommendation.

Conclusion

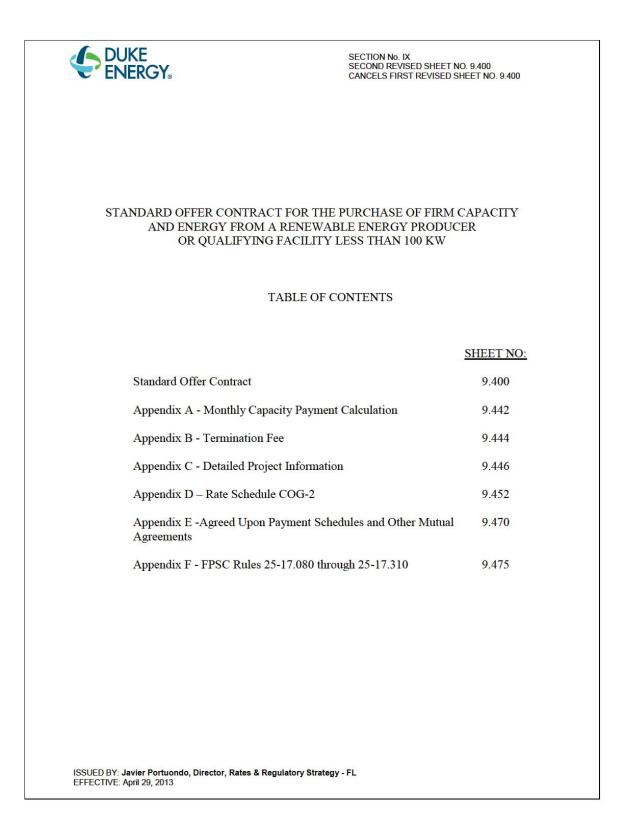
The provisions of DEF's amended standard offer contract and associated rate schedule COG-2, as revised on June 7, 2019, and amended interconnection agreement, as filed on April 1, 2019, conform to all requirements of Rules 25-17.200 through 25-17.310, F.A.C. The amended standard offer contract provides flexibility in the arrangements for payments so that a developer of renewable generation may select the payment stream best suited to its financial needs.

³Order No. PSC-2018-0316-PAA-EQ, issued June 20, 2018, in Docket No. 20180083-EQ, In re: Petition for approval of renewable energy tariff and standard offer contract, by Florida Power & Light Company.

Issue 2: Should this docket be closed?

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

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



	SECTION NO. IX SECOND REVISED SHEET NO. 9.401 CANCELS FIRST SHEET NO. 9.401
AND ENERGY FRO	RACT FOR THE PURCHASE OF FIRM CAPACITY M A RENEWABLE ENERGY PRODUCER ING FACILITY LESS THAN 100 KW
	between
	and
DUK	E ENERGY FLORIDA, LLC
ISSUED BY: Javier Portuondo, Managing Direc EFFECTIVE: June 5, 2018	tor, Rates & Regulatory Strategy - FL

ia I		SECTION NO. IX SECOND THIRD REVISED SHEET NO.9.402
I		CANCELS FIRST- <u>SECOND</u> REVISED SHEET NO. 9.402
	TABLE OF CONTI i	ENTS
		SHEET NO:
	Introduction & Parties' Recitals	9.404
	1. Definitions	9.405
	2. Facility; Renewable Facility or Qualifying Facility	Status 9.414
	3. Term of Contract	9.415
	4. Minimum Specifications and Milestones	9.415
	5. Conditions Precedent	9.416
	6. Sale of Electricity by the RF/QF	9.417
	7. Committed Capacity/Capacity Delivery Date	9.418
l,	8. Testing Procedures	9.4 <u>20</u> 19
Ĩ.	9. Payment for Electricity Produced by the Facility	9.42 <u>1</u> 0
Ĩ.	10. Electricity Production and Plant Maintenance Sche	dule 9.42 <u>2</u> +
[11. Completion/Performance Security	9.42 <u>4</u> 3
[12. Termination Fee	9.42 <u>6</u> 5
Į.	13. Performance Factor	9.42 <u>7</u> 6
	14. Default	9.427
	15. Rights in the Event of Default	9.428
ſ	16. Indemnification	9.42 <u>9</u> 8

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

		SECTION NO. IX FOURTH-FIFTH REVISED SHEET NO.9.403 CANCELS THIRD-FOURTH 9.403
	TABLE OF CONT	ENTS
	ii	
ſ	17 Insurance	9.4 <u>30</u> 29
	18. Force Majeure	9.431
	19. Representations, Warranties, and Covenants of RF	/QF 9.433
	20. General Provisions	9.435
	Execution	9.441

ISSUED BY: Javier Portuondo, <u>Managing</u> Director, Rates & Regulatory Strategy - FL EFFECTIVE: July 10, 2014



SECTION NO. IX FIFTH REVISED SHEET NO. 9.404 CANCELS FOURTH REVISED SHEET NO. 9.404

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

THIS STANDARD OFFER CONTRACT FOR THE PURCHASE OF FIRM CAPACITY AND ENERGY (hereinafter referred to as the "Contract") is made and entered (hereinafter referred to as the "Execution Date"), by and this day of between (hereinafter the Renewable Energy Provider/Qualifying Facility ("RF/QF"), and Duke Energy Florida,LLC d/b/a Duke Energy (hereinafter "DEF"), a private utility corporation 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 contains six Appendices which are incorporated into and made part of this Contract: Appendix A: Monthly Capacity Payment Calculation; Appendix B: Termination Fee; Appendix C: Detailed Project Information; Appendix D: Rate Schedule COG-2; Appendix E: Agreed Upon Payment Schedules and Other Mutual Agreements; and Appendix F: Florida Public Service Commission ("FPSC") Rules 25-17.080 through 25-17.310, F.A.C.

WITNESSETH:

WHEREAS, the RF/QF desires to sell, and 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

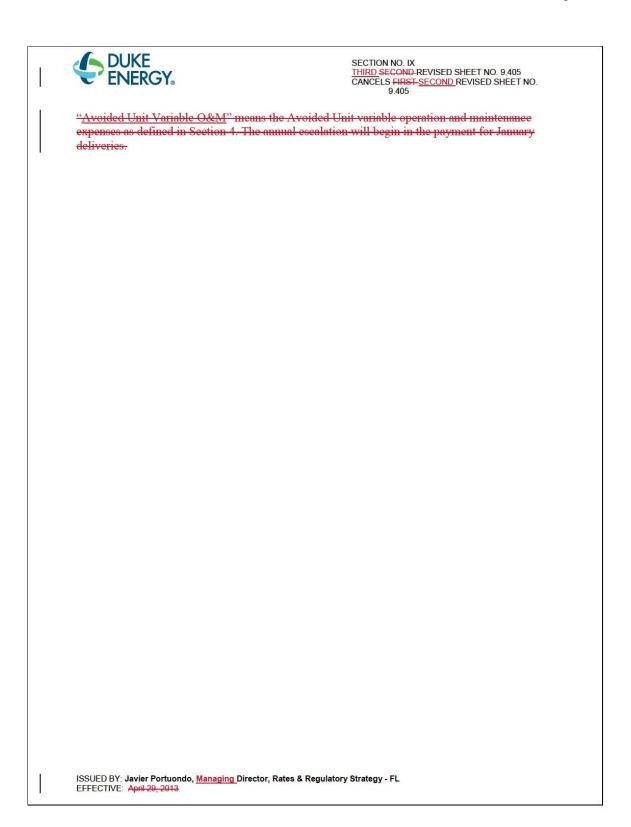
WHEREAS, the FPSC has approved this Contract for the Purchase of Firm Capacity and Energy from a Renewable Energy Producer; and

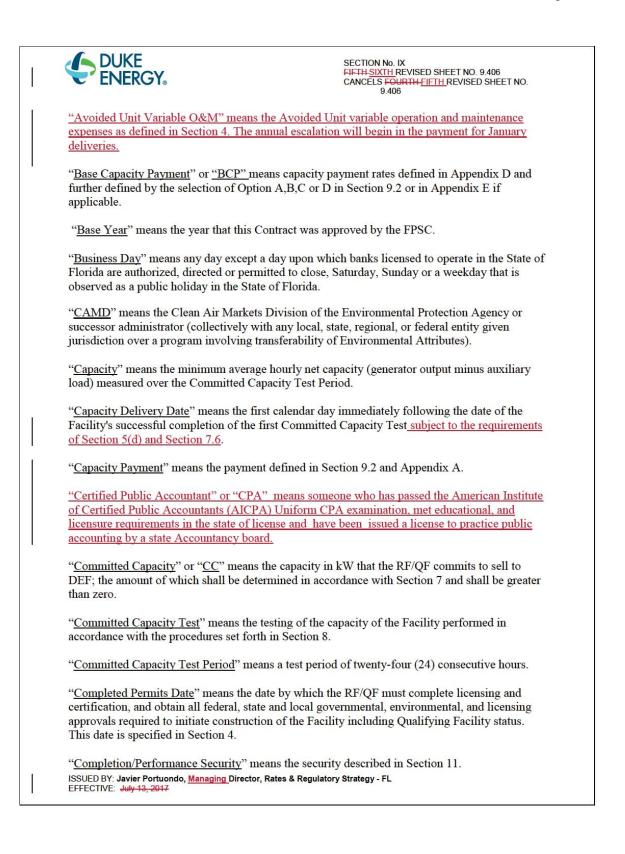
WHEREAS, the RF/QF guarantees that the Facility is capable of delivering firm capacity and energy to DEF for the term of this Contract in a manner consistent with the provision of this Contract;

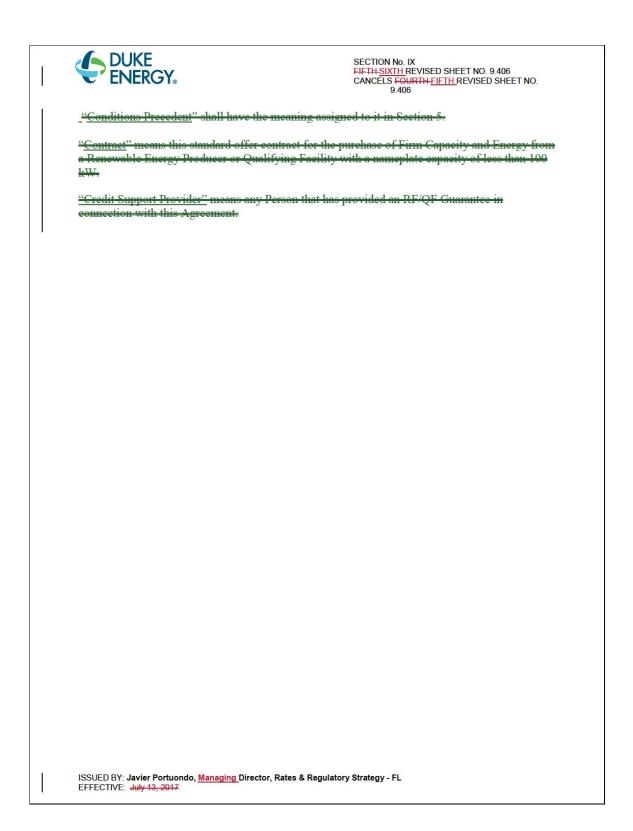
NOW, THEREFORE, for mutual consideration the Parties agree as follows:

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL EFFECTIVE: June 5, 2018

		SECTION NO. IX	
		SECTION NO. IX <u>THIRD</u> SECOND REVISED SHEET NO. 9.405 CANCELS FIRST-SECOND 9.405	
	1. Definitions		
	" <u>AFR</u> " means the Facility's annual fuel requirement.		
	"AFTR" means the Facility's annual fuel transportation requirement		
	" <u>Annual Capacity Billing Factor</u> " or <u>"ACBF"</u> means 12 month rolling average of the Monthly Availability Factor as further defined and explained in Appendix A.		
	" <u>Appendices</u> " 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:		
	" <u>Appendix A</u> " sets forth the Monthly Capacity " <u>Appendix B</u> " sets forth the Termination Fee. " <u>Appendix C</u> " sets forth the Detailed Project In		
	" <u>Appendix D</u> " sets forth Rate Schedule COG-2 " <u>Appendix E</u> " sets forth the Agreed Upor Agreements	2.	
	" <u>Appendix F</u> " sets forth Florida Public Servic through 25-17.310, F.A.C.	ce Commission ("FPSC") Rules 25-17.080	
f	" <u>As-Available Energy Rate</u> " means the rate calculated 25-17.0825, F.A.C., and DEF's Rate Schedule COG-1 to time		
	"Auditor's Standard Report" means a written opinion financial statements. The report is written in a standar accepted auditing standards (GAAS).		
	" <u>Authorization to Construct</u> " means authorization issu Agency to construct or reconstruct the Facility granted the State of Florida and any relevant federal law.		
	" <u>Avoided Unit</u> " means the electrical generating unit d Contract is based.	escribed in Section 4 upon which this	
	"Avoided Unit Energy Cost" has the meaning assigned	d to it in Appendix D.	
"Avoided Unit Fuel Cost" has the meaning assigned to it in Appendix D.		o it in Appendix D.	
	" <u>Avoided Unit Heat Rate</u> " means the average annual heat rate of the Avoided Unit as defined in Section 4.		
	" <u>Avoided Unit In-Service Date</u> " means the date upon started commercial operation as specified in Section 4		
	" <u>Avoided Unit Life</u> " means the economic life of the A ISSUED BY: Javier Portuondo, <u>Managing</u> Director, Rates & Regulator EFFECTIVE: April 20, 2013		

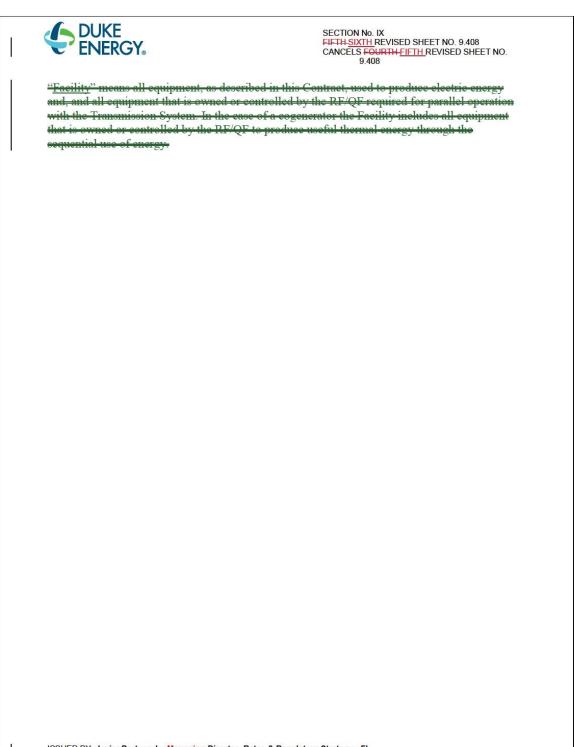




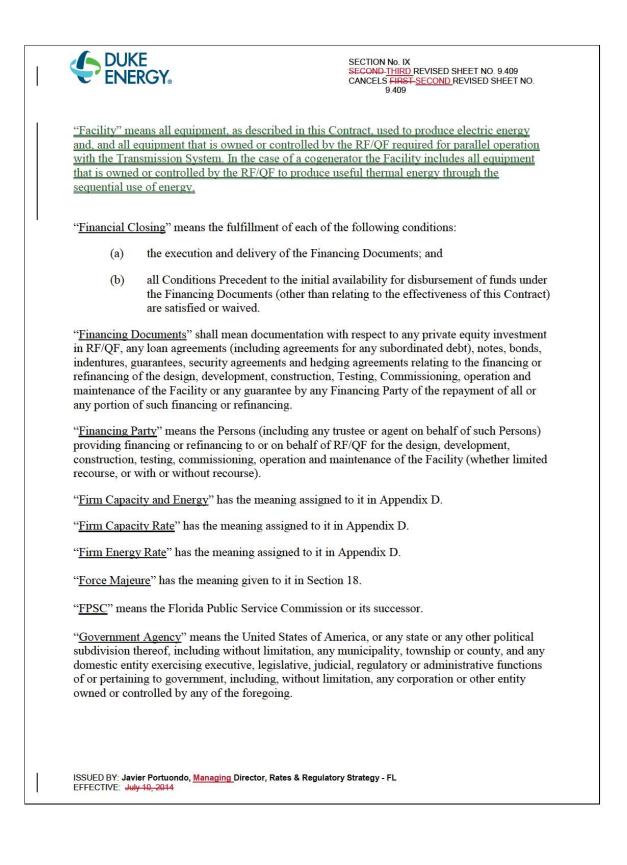


		SECTION No. IX FOURTH FIFTH REVISED SHEET NO. 9.407 CANCELS THIRD FOURTH REVISED SHEET NO. 9.407	
	"Conditions Precedent" shall have the meaning assigned	ed to it in Section 5.	
	<u>"Contract" means this standard offer contract for the purchase of Firm Capacity and Energy from</u> <u>a Renewable Energy Producer or Qualifying Facility with a nameplate capacity of less than 100</u> <u>kW.</u>		
	<u>"Credit Support Provider" means any Person that has p</u> connection with this Agreement.	provided an RF/QF Guarantee in	
I	" <u>Creditworthy</u> " 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.		
	" <u>DEF</u> " has the meaning assigned to it in the opening p	aragraph of this Contract.	
	"DEF Entities" has the meaning assigned to it in Section	on 16.	
	" <u>Demonstration Period</u> " means a sixty-hour period in y be completed.	which the Committed Capacity Test must	
	" <u>Distribution System</u> " means the distribution system c transformers and switchgear used for conveying electr including any part of the Transmission System.		
	"Dispute" shall have the meaning assigned to it in Sect	tion 20.9.	
	" <u>Drop Dead Date</u> " means the date which is twelve (12 except for the condition defined in Section 5(a)(i). The service agreements can take up to 24 months to obtain Date means the date which is twenty four (24) months	e Parties recognize that firm transmission so for Section 5(a)(i) only the Drop Dead	
	" <u>Eastern Prevailing Time</u> " or "EPT" means the time in Unites States of America, whether Eastern Standard T		
	" <u>Effective Date</u> " has the meaning assigned to it in Sec	tion 5.	
	" <u>Electrical Interconnection Point</u> " means the physical j with the Transmission System or, if RF/QF interconne DEF's, DEF's interconnection with the Transmission I other physical point on which RF/QF and DEF may ag	cts with a Transmission System other than Provider's Transmission System, or such	
[ISSUED BY: Javier Portuondo, <u>Managing</u> Director, Rates & Regulator EFFECTIVE: June 9, 2016	y Strategy - FL	

DUKE SECTION No. IX SECTION NO. 1A FIFTH SIXTH REVISED SHEET NO. 9.408 CANCELS FOURTH FIFTH REVISED SHEET NO. ENERGY. 9 408 "Eligible Collateral" means (i) a Letter of Credit from a Qualified Institution or (ii) cash deposit provided to DEF by RF/OF 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. "Expected Nameplate Capacity Rating" means the total generating capacity of the Facility that is the sum of (a) the Committed Capacity, and (b) the capacity required for any station service use of generating unit equipment or auxiliaries, including, without limitation, cooling towers, heat exchanges, duct burners and other equipment that could be used for energy production or as required by law, and shall be in service during the Committed Capacity Test Period and (c) any other capacity reserved for on-site use or energy production. "Expiration Date" means the final date upon which this Contract can be executed. This date is specified in Section 4. ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL EFFECTIVE: July 13, 2017



ISSUED BY: Javier Portuondo, <u>Managing</u> Director, Rates & Regulatory Strategy - FL EFFECTIVE: July 13, 2017



	DUKE ENERGY.	SECTION No. IX FOURTH_FIFTH REVISED SHEET NO. 9.410 CANCELS THIRD FOURTH REVISED SHEET NO 9.410
	"IEEE" means the Institute of Electrical and Electroni	cs Engineers, Inc.
	"Indemnified Party" has the meaning assigned to it in S	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 electr	icity, as the context requires.
	<u>"kW</u> " means one or more kilowatts of electricity, as the	e context requires.
	" <u>kWh</u> " means one or more kilowatt-hours of electricity	y, as the context requires.
ľ	" <u>Letter of Credit</u> " means a stand-by letter of credit from to DEF whose approval may not be unreasonably with that DEF has the right to draw on the Letter of Credit in Business Days remain until its expiration and RF/QF h provide replacement Eligible Collateral as required und	held. The Letter of Credit must provide n the event that less than twenty (20) as failed to renew the Letter of Credit or
1	"Licensed Professional Engineer" means a person who engineering under Chapter 471 of the Florida Statues.	is licensed to engage in the practice of
	"LOI" means a letter of intent for fuel supply.	
	" <u>MCPC</u> " means the Monthly Capacity Payment for O	ption A.
	" <u>Monthly Billing Period</u> " means the period beginning month, except that the initial Monthly Billing Period sl a.m., on the Capacity Delivery Date and ending with the	nall consist of the period beginning 12:01
	" <u>Monthly Availability Factor" or "MAF</u> " means the to Billing Period for which the calculation is made, divide and the total hours during the Monthly Billing Period.	
	" <u>Monthly Capacity Payment" or "MCP</u> " means the pay accordance with Appendix A.	yment for Capacity calculated in
	"MW" means one or more megawatts of electricity, as	the context requires.
	" <u>MWh</u> " means one or more megawatt-hours of electric	city, as the context requires.
	ISSUED BY: Javier Portuondo, <u>Managing</u> Director, Rates & Regulator EFFECTIVE: June 9, 2016	y Strategy - FL

	KE ERGY.	SECTION No. IX SECOND REVISED SHEET NO. 9.411 CANCELS FIRST REVISED SHEET NO. 9.411
"Option A"	means normal Capacity Payments as desc	ribed in Appendix D.
"Option B"	means early Capacity Payments as describ	oed in Appendix D.
"Option C"	means levelized Capacity Payments as de	scribed in Appendix D.
"Option D"	means early levelized Capacity Payments	as described in Appendix D.
" <u>Party</u> " or "	Parties" has the meaning assigned to it in	the opening paragraph of this Contract.
joint venture		ion, association, joint stock company trust, mental Agency (or any department, agency,
	nsents" mean the following Consents, each of RF/QF's obligations hereunder:	h of which is necessary to RF/QF for the
(a)	the Authorization to Construct;	
(b)	substation located at the Facility site, in	spect of the Facility, and any electricity including but not limited to, a prevention of e, proximity and visual impact permit, and
(c)	any integrated pollution control license	
and maintain engineering	, procurement and construction contract, the	er contract required to construct, operate include, but are not limited to, the turnkey he electrical interconnection and operating lease, and the operation and maintenance
but not limit portion of o the Facility in light of th made, could as efficiency facility desi Utility Pract exclusion of	he facts known or that should reasonably he have been expected to accomplish the de y, reliability, economy and profitability) in	aged in or approved by a significant chnology, complexity and size similar to me, in the exercise of reasonable judgment ave been known at the time a decision was sired result and goals (including such goals a manner consistent with applicable d applicable laws and regulations. Prudent imum practice, method or act to the acceptable practices, methods or acts in
ISSUED BY: Ja EFFECTIVE: Ju	vier Portuondo, Director, Rates & Regulatory Strategy	7 - FL



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.

"<u>Qualified Institution</u>" 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.

"<u>REC</u>" 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.

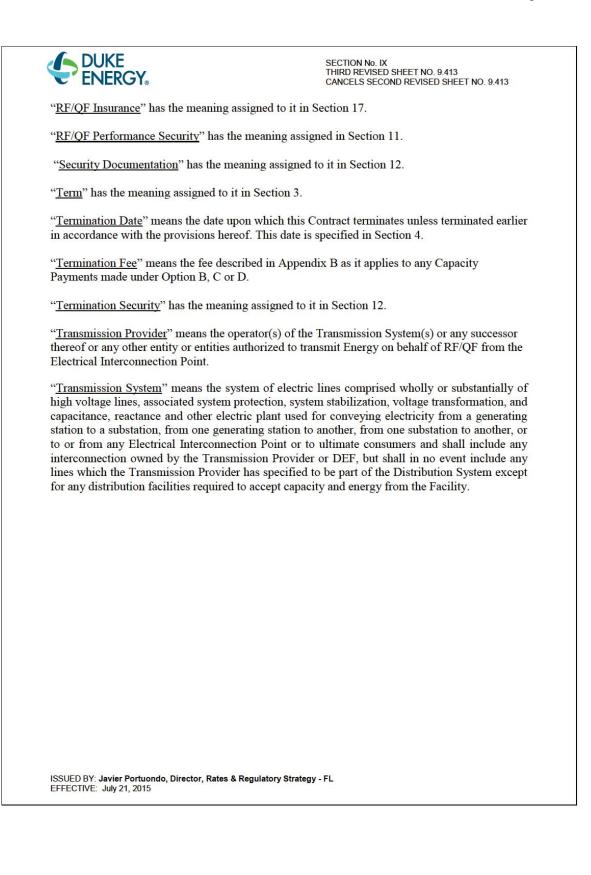
"Remedial Action Plan" has the meaning assigned to it in Section 20.3.

"<u>Renewable Facility</u>" or "<u>RF/QF</u>" 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.

"<u>Required Capacity Deliver Date</u>" 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.

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



ENIEDCY	SECTION № 1X SECOND REVISED SHEET NO. 9.414 CANCELS FIRST REVISED SHEET NO. 9.414
. Facility; Renewable Facility or Qualifying Fac	cility Status
'he Facility's location and generation capabilities are as	described in Table 1 below.
TABLE 1	
TECHNOLOGY AND GENERAT	OR CAPABILITIES
Location: Specific legal description (e.g., metes and bo other legal description with street address required)	unds or 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 $\mathsf{EFFECTIVE}$: April 29, 2013

	SECTION No. IX <u>THIRTEENTH TWELFTH REVISED</u> SHEET NO. 9 CANCELS <u>TWELFTH ELEVENTH</u> REVISED SHEE NO. 9.415
3. Term of Contract	
execution by the Parties and shall end at unless terminated earlier in accordance foregoing, if the Capacity Delivery Date of the Required Capacity Delivery Date (or su	Contract shall become effective immediately upor 12:01 a.m. on the Termination Date, (the "Ter with the provisions hereof. Notwithstanding the Facility is not accomplished by the RF/QF be ich later date as may be permitted by DEF pursuar I null and void and DEF's shall have no obligation
4. Minimum Specifications and Mile	stones
As required by FPSC Rule 25-17.0832(4 Contract and milestone dates are as follows	(e), the minimum specifications pertaining to
Avoided Unit	Undesignated Combustion Turbine
Avoided Unit Capacity	226-<u>218</u>MW
Avoided Unit In-Service Date	June 1, 2027
Avoided Unit Heat Rate	10,905 <u>12,005</u> BTU/kWh
Avoided Unit Variable O&M	0. <u>931716</u> ¢ per kWh in mid-201 <u>9</u> 8 dollars
	escalating annually at 2.50%
Avoided Unit Life	35 years
	Avoided Unit In-Service Date unless Option B,
Capacity Payments begin	or D is selected or amended in Appendix E
	or D is selected or amended in Appendix E
Capacity Payments begin	or D is selected or amended in Appendix E May 31, 2037 (10 years) unless amended in
Capacity Payments begin Termination Date Minimum Performance Standards – On Peak Availability Factor* Minimum Performance Standards – Off	or D is selected or amended in Appendix E May 31, 2037 (10 years) unless amended in Appendix E
Capacity Payments begin Termination Date Minimum Performance Standards – On Peak Availability Factor* Minimum Performance Standards – Off Peak Availability Factor Minimum Availability Factor Required to	or D is selected or amended in Appendix E May 31, 2037 (10 years) unless amended in Appendix E 95%
Capacity Payments begin Termination Date Minimum Performance Standards – On Peak Availability Factor* Minimum Performance Standards – Off Peak Availability Factor Minimum Availability Factor Required to qualify for a Capacity payment	or D is selected or amended in Appendix E May 31, 2037 (10 years) unless amended in Appendix E 95% 95% 75%
Capacity Payments begin Termination Date Minimum Performance Standards – On Peak Availability Factor* Minimum Performance Standards – Off Peak Availability Factor Minimum Availability Factor Required to qualify for a Capacity payment Expiration Date	or D is selected or amended in Appendix E May 31, 2037 (10 years) unless amended in Appendix E 95% 95% 75% April 1, 20 <u>2019</u>
Capacity Payments begin Termination Date Minimum Performance Standards – On Peak Availability Factor* Minimum Performance Standards – Off Peak Availability Factor Minimum Availability Factor Required to qualify for a Capacity payment	or D is selected or amended in Appendix E May 31, 2037 (10 years) unless amended in Appendix E 95% 95% 75%

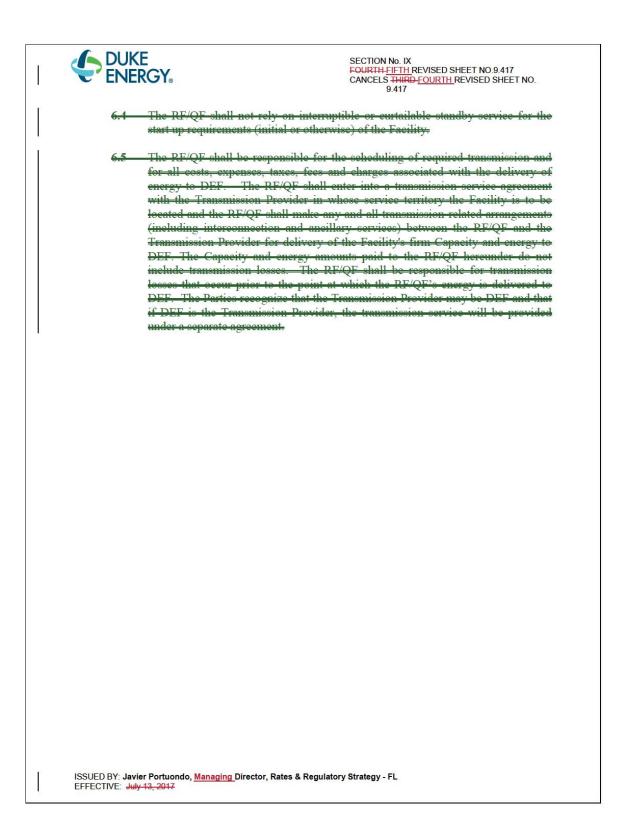
ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL EFFECTIVE: June 5, 2018

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ENE	SECTION No. IX SEVENTH <u>EIGHTH</u> REVISED SHEET NO. 9.416 CANCELS SIXTH SEVENTH 9.416	
5. Con	Conditions Precedent	
	ss otherwise waived in writing by DEF, on or before the Drop Dead Date, RF/QF satisfy the following Conditions Precedent:	
(i)	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/QF in its sole discretion;	
(iii)	RF/QF shall have entered into Financing Documents relative to the construction of the <u>entire</u> Facility and have achieved Financial Closing in a form and substance satisfactory to RF/QF in its sole discretion; <u>RF/QF shall have obtained an</u> <u>Auditor's Standard Report for the most recent financial year from a Certified</u> <u>Public Accountant (reasonably acceptable to DEF in all respects). If the RF/QF</u> <u>has a nameplate capacity of 5 MW or less, or the RF/QF is owned by a</u> <u>Government Agency or the RF/QF is a publicly traded company that is</u> <u>Creditworthy then an Auditor's Standard Report is not required. The RF/QF shall</u> <u>provide the Duke Energy Florida Director of Qualified Facility Contracts a copy</u> <u>of the Auditor's Standard Report and a copy of the signing partner's Certified</u> <u>Public Accountant license;</u>	
(iv)	RF/QF shall have entered into the Project Contracts in a form and substance satisfactory to RF/QF in its sole discretion;	
(v)	RF/QF shall have obtained insurance policies or coverage in compliance with Section 17;	
(vi)	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);	
(vii)	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.	
<u>(viii</u>)	Engineer (reasonably acceptable to DEF in all respects) stating the project is technically viable. The RF/QF shall provide the Duke Energy Florida Director of	
	<u>Qualified Facility Contracts this certificate and a copy of the Professional</u> Engineer's license.	

	DUKE	SECTION No. IX
	DUKE ENERGY.	SECTION NO. IX SEVENTH_EIGHTH REVISED SHEET NO. 9.416
C.	ENERGY	CANCELS SIXTH SEVENTH REVISED SHEET NO.
		9.416
(b)	 Promptly upon satisfaction of the 	ne Conditions Precedent to be satisfied, the Party having
	satisfied the same shall deliver	to the other Party a certificate evidencing such
		e satisfaction of a Condition Precedent at its sole
	discretion. Such waiver must be	
	Default which has occurred and	a made in writing. Subject to there being no Event of
		or is continuing us of the date upon which the dist of
	Such continentes is defivered, in	e date of such last cortificate shall constitute the effective
	date of this Contract (the "Effec	tive Date").
)	Unless all Conditions Precedent	t are satisfied on or before the Drop Dead Date or such
-		
	Conditions Precedent are warve	d 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 Capaci	ity Delivery Date on or before the Required Capacity
1	Delivery Date.	
SUE	D BY: Javier Portuondo, <u>Managing</u> Director	, Rates & Regulatory Strategy - FL
issuei Effec	D BY: Javier Portuondo, <u>Managing Director</u> TIVE: July 13, 2017	, Rates & Regulatory Strategy - FL

	¢	DUK ENEI	e RGY.	SECTION No. IX FOURTH FIFTH REVISED SHEET NO.9.417 CANCELS THIRD FOURTH REVISED SHEET NO. 9.417
	<u>(b)</u>	<u>satisfi</u> <u>satisfa</u> <u>discre</u> <u>Defau</u> <u>such c</u>	otly upon satisfaction of the Conditions Pr ed the same shall deliver to the other Party action. DEF may waive the satisfaction of tion. Such waiver must be made in writing lt which has occurred and/or is continuing certificates is delivered, the date of such late f this Contract (the "Effective Date").	<u>v a certificate evidencing such</u> <u>a Condition Precedent at its sole</u> <u>s. Subject to there being no Event of</u> <u>as of the date upon which the last of</u>
	<u>(c)</u>	Condi	s all Conditions Precedent are satisfied on tions Precedent are waived in writing , thi either Party shall have any further liability	s Contract shall terminate on such date
	<u>(d)</u>		F shall achieve the Capacity Delivery Date ery Date.	e on or before the Required Capacity
1	(e)	RF/QI	F shall ensure that before the initial Comm	itted Capacity Test:
		(a)	the Facility shall have been constructed s be duly and properly undertaken in accor	so that the Committed Capacity Test may rdance with Section 7; and
		(b)	an operable physical connection from the shall have been effected in accordance w operating agreement required by the Tra- that such physical connection shall be m	ith the electrical interconnection and nsmission Provider, provided, however,
	6.	Sale o	of Electricity by the RF/QF	
		6.1	purchase from the RF/QF electric power and sale of electricity pursuant to the arrangement or () simultaneous pur however, that no such arrangement sha	RF/QF shall sell to DEF and DEF shall r generated by the Facility. The purchase is Contract shall be a () net billing rchase and sale arrangement; provided, Il cause the RF/QF to sell more than the odology may be changed at the option of Appendix D.
		6.2	Ownership and Offering For Sale Of Ren	newable Energy Attributes
				etain any and all rights to own and to sell sociated with the electric generation of the
		6.3	In the event that the RF/QF decides to se electric generation of the RF/QF during provide notice to the Company of its inte Company a reasonable opportunity to of	the term of this Contract, the RF/QF shall ent to sell such EAs and provide the
) BY: Javi e TIVE: July	er Portuondo, <u>Managing</u> Director, Rates & Regulatory -13, 2017	Strategy - FL



	E RGY.	SECTION No. IX SIXTH SEVENTH REVISED SHEET NO. 9.418 CANCELS FIFTH SIXTH REVISED SHEET NO. 9.418
<u>6.4</u>	The RF/QF shall not rely on interrupti start up requirements (initial or otherwise	ible or curtailable standby service for the see) of the Facility.
6.5	for all costs, expenses, taxes, fees and energy to DEF. The RF/QF shall en- with the Transmission Provider in whi located and the RF/QF shall make any (including interconnection and ancillar Transmission Provider for delivery of the DEF. The Capacity and energy amoun include transmission losses. The RF/ losses that occur prior to the point at the DEF. The Parties recognize that the Transmission Provider for the	e scheduling of required transmission and d charges associated with the delivery of ter into a transmission service agreement ose service territory the Facility is to be and all transmission-related arrangements ry services) between the RF/QF and the the Facility's firm Capacity and energy to nts paid to the RF/QF hereunder do not QF shall be responsible for transmission which the RF/QF's energy is delivered to ansmission Provider may be DEF and that the transmission service will be provided
 7. Com	mitted Capacity/Capacity Delivery Date	2
7.1	determined in accordance with this S	y to DEF, the amount of which shall be Section 7. Subject to Section 7.3, the kW, with an expected Capacity Delivery y Delivery Date.
7.2	be performed in accordance with the Demonstration Period for the first Con earlier than ninety (90) days before the testing must be completed before the A date in Appendix E. The first Committe completed unless the Facility demonst percent (100%) of the Committed Cap Section 8.1, the RF/QF may schedule	uch test a Committed Capacity Test) shall procedures set forth in Section 8. The mitted Capacity Test shall commence no he Required Capacity Delivery Date and woided Unit In-Service Date or an earlier ted Capacity Test shall not be successfully trates a Capacity of at least one hundred acity set forth in Section 7.1. Subject to and perform up to three (3) Committed nts of the Contract with respect to the first
7.3	require the RF/QF, after notice of not such proposed event, to validate the Committed Capacity Test at any time, u which shall be provided to DEF within of such test. On and after the date of and until the completion of a sub- Committed Capacity shall be set at the	pacity Test, DEF shall have the right to less than ten (10) Business Days prior to e Committed Capacity by means of a up to two (2) times per year, the results of seven (7) calendar days of the conclusion such requested Committed Capacity Test, sequent Committed Capacity Test, the the lower of the Capacity tested or the section 7.1. Provided however, any such 2) month period must be for cause.
ISSUED BY: Javi EFFECTIVE: July	er Portuondo, Managing Director, Rates & Regulatory	

	KE SECTION No. IX ERGY. SEVENTH EIGHTH REVISED SHEET NO. 9.419 CANCELS SIXTH SEVENTH REVISED SHEET NO. 9.419 9.419 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) and the following Delivery Date Conditions (defined below) have been satisfied. 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.
	7.6.1 A certificate addressed to DEF from a Licensed Professional Engineer (reasonably acceptable to DEF in all respects) stating: (a) the nameplate capacity rating or capability of the Facility at the anticipated time of commercial operation and through the term of this Contract assuming the use of Prudent Utility Practices, must be between 95% and 105% of the "Expected Nameplate Capacity Rating:" (b) that the Facility is able to generate electric energy reliably in amounts expected by this Contract and in accordance with all other terms and conditions hereof; (c) that Start-Up Testing of the Facility has been completed; and (d) that, pursuant to Section 10.5, all system protection and control and Automatic Generation Control devices are installed and operational.
	 7.6.2 A certificate addressed to DEF from a Licensed Professional Engineer (reasonably acceptable to DEF in all respects) stating, in conformance with the requirements of the interconnection agreement, that: (a) all required interconnection facilities have been constructed; (b) all required interconnection tests have been completed; and (c) the Facility is physically interconnected with the Transmission System in conformance with the interconnection agreement and able to deliver energy consistent with the terms of this Contract. 7.6.3 A certificate addressed from a Licensed Professional Engineer (reasonably
	acceptable to DEF in all respects) stating that the RF/QF has obtained or entered into all permits and agreements including, but not limited to Project Contracts with respect to the Facility necessary for land control, construction, ownership, operation, and maintenance of the Facility (the "Project Contracts"). RF/QF must provide copies of any or all Project Contracts requested by DEF.
ISSUED BY: J EFFECTIVE:	avier Portuondo, <u>Managing</u> Director, Rates & Regulatory Strategy - FL July 13, 2017

ľ		E RGY.	SECTION No. IX SEVENTH <u>EIGHTH</u> REVISED SHEET NO. 9.419 CANCELS SIXTH SEVENTH REVISED SHEET NO. 9.419	
	8. Testin	g Procedures		
	<u></u>	Demonstration Period, we Committed Capacity Tes means of a written notice to the start of such period apply to any Committee provisions of this Contra	y Test must be completed successfully within the nich period, including the approximate start time of the t, shall be selected and scheduled by the RF/QF by to DEF delivered at least thirty (30) calendar days prior d. The provisions of the foregoing sentence shall not I Capacity Test ordered by DEF under any of the ct. DEF shall have the right to be present onsite to mmitted Capacity Test required or permitted under this	•
	8.2 —	four (24) consecutive h highest sustained net kV exceeding the design of parameters defined by the at the Facility. The Comm designated by the RF/QF DEF pursuant to Section	Test results shall be based on a test period of twenty- ours (the "Committed Capacity Test Period") at the V rating at which the Facility can operate without perating conditions, temperature, pressures, and other applicable manufacturer(s) for steady state operations nitted Capacity Test Period shall commence at the time pursuant to Section 8.1 or at such time requested by 7.3; provided, however, that the Committed Capacity nce earlier than such time in the event that DEF is o, such earlier time.	
			use of unit auxiliaries, including, without limitation, angers, and other equipment required by law, shall be in tted Capacity Test Period.	
			ility shall be the minimum hourly net output in kW mxiliary) measured over the Committed Capacity Test	
	ISSUED BY: Javie EFFECTIVE: July	er Portuondo, <u>Managing</u> Director, R 13, 2017	ates & Regulatory Strategy - FL	

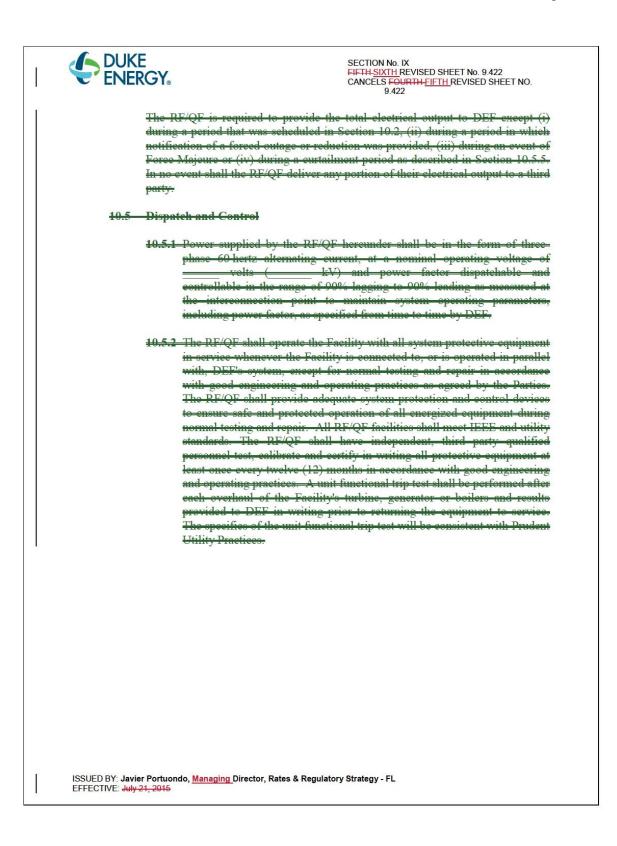
	SECTION No. IX FIFTH- <u>SIXTH</u> REVISED SHEET NO. 9.420 CANCELS FOURTH-FIFTH REVISED SHEET NO. 9.420
	7.6.4 An opinion from a law firm or attorney, registered or licensed in the State of Florida (reasonably acceptable to DEF in all respects), stating, after all appropriate and reasonable inquiry, that: (a) the RF/QF has obtained or entered into all Project Contracts; (b) neither RF/QF nor the Facility is in violation of, or subject to any liability under any applicable law; and (c) RF/QF has duly filed and had recorded all of the agreements, documents, instruments, mortgages, deeds of trust, and other writings.
	For each Licensed Professional Engineer utilized in 7.6.1 through 7.6.4, RF/QF should provide DEF with a copy of the Professional Engineer's license.
	DEF shall have ten, (10) Business Days after receipt either to confirm to the RF/QF that all of the Delivery Date Conditions have been satisfied or have occurred, or to state with specificity what DEF reasonably believes has not been satisfied.
<u>8. Testin</u>	g 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 <u>Contract.</u>
<u>8.2</u>	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
8.4	service during the Committed Capacity Test Period. 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.
ISSUED BY: Javie EFFECTIVE: July -	r Portuondo, <u>Managing</u> Director, Rates & Regulatory Strategy - FL

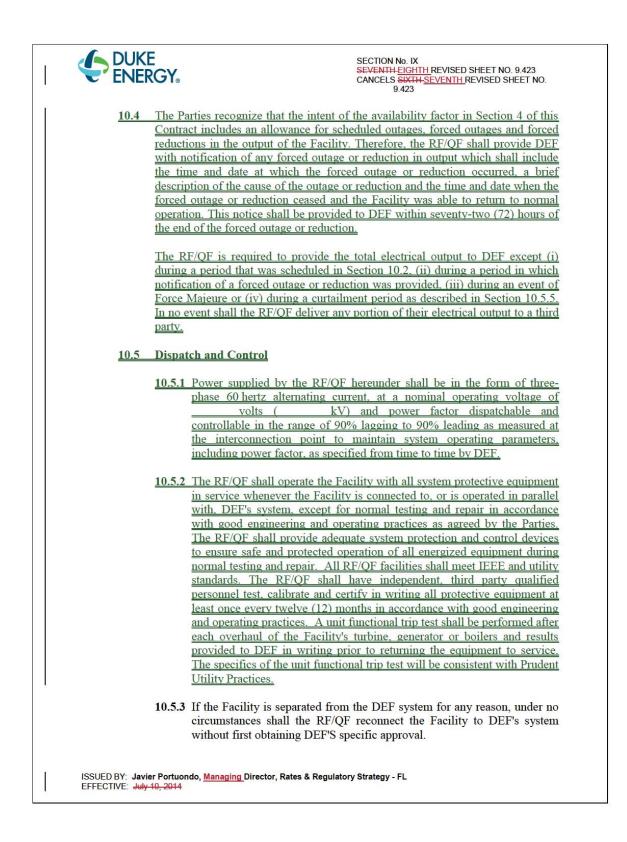
9. P. 9. 9.1.1 D	
9. P 9. 9.1.1 D	eperation and performance during testing, shall be submitted to DEF to RF/QF within seven (7) colondar days of the conclusion of the Comm Capacity Test. The RF/QF shall certify that all such data is accurate and com Payment for Electricity Produced by the Facility Payment for Electricity Produced by the Facility and delivered to in accordance with the rates and procedures contained in Appendix D, as i be amended from time to time. The Parties agree that this Contract sh subject to all of the provisions contained in Rate Schedule COG 1 or Appen whichever applies as approved and on file with the FPSC. DEF may, at its option, limit deliveries under this Contract to 110% of the Comm Capacity as set forth in Section 7. In the event that DEF chooses to deliveries, any energy in excess of 110% of the Committed Capacity will be for at the rates defined in Rate Schedule COG 1 and shall not be included calculations in Appendix A hereto. Capacity
<u>,1,1</u>	 DEF agrees to pay the RE/QE for energy produced by the Facility and delivered to in accordance with the rates and procedures contained in Appendix D, as i be amended from time to time. The Parties agree that this Contract sh subject to all of the provisions contained in Rate Schedule COG 1 or Appen whichever applies as approved and on file with the EPSC. DEF may, at its option, limit deliveries under this Contract to 110% of the Comm Capacity as set forth in Section 7. In the event that DEF chooses to deliveries, any energy in excess of 110% of the Committed Capacity will be for at the rates defined in Rate Schedule COG 1 and shall not be included calculations in Appendix A hereto.
9.1.1 D 9 .1.2 D	 DEF agrees to pay the RE/QF for energy produced by the Facility and delivered to in accordance with the rates and procedures contained in Appendix D, as i be amended from time to time. The Parties agree that this Contract sh subject to all of the provisions contained in Rate Schedule COG 1 or Appen whichever applies as approved and on file with the FPSC. DEF may, at its option, limit deliveries under this Contract to 110% of the Comm Capacity as set forth in Section 7. In the event that DEF chooses to deliveries, any energy in excess of 110% of the Committed Capacity will be for at the rates defined in Rate Schedule COG 1 and shall not be included calculations in Appendix A hereto.
9.1.2 D	in accordance with the rates and procedures contained in Appendix D, as is be amended from time to time. The Parties agree that this Contract should be all of the provisions contained in Rate Schedule COG-1 or Appen whichever applies as approved and on file with the FPSC. DEF may, at its option, limit deliveries under this Contract to 110% of the Comm Capacity as set forth in Section 7. In the event that DEF chooses to deliveries, any energy in excess of 110% of the Committed Capacity will be for at the rates defined in Rate Schedule COG-1 and shall not be included calculations in Appendix A hereto.
	Capacity as set forth in Section 7. In the event that DEF chooses to deliveries, any energy in excess of 110% of the Committed Capacity will be for at the rates defined in Rate Schedule COG 1 and shall not be included calculations in Appendix A hereto.
9 <u>.2</u>	
	DEF agrees to pay the RF/QF for the Capacity described in Section accordance with the rates and procedures contained in Appendix D, as it m amended and approved from time to time by the FPSC, and pursuant election of Option of Appendix D or an alternative rate sched Appendix E. The RF/QF understands and agrees that Capacity Payment only be made if the Capacity Delivery Date occurs before the Required Cap Delivery Date and the Facility is delivering firm Capacity and Energy to Once so selected, this Option, the Firm Capacity Rate and/or the Firm E Rate cannot be changed for the term of this Contract.
ISSUED BY:	

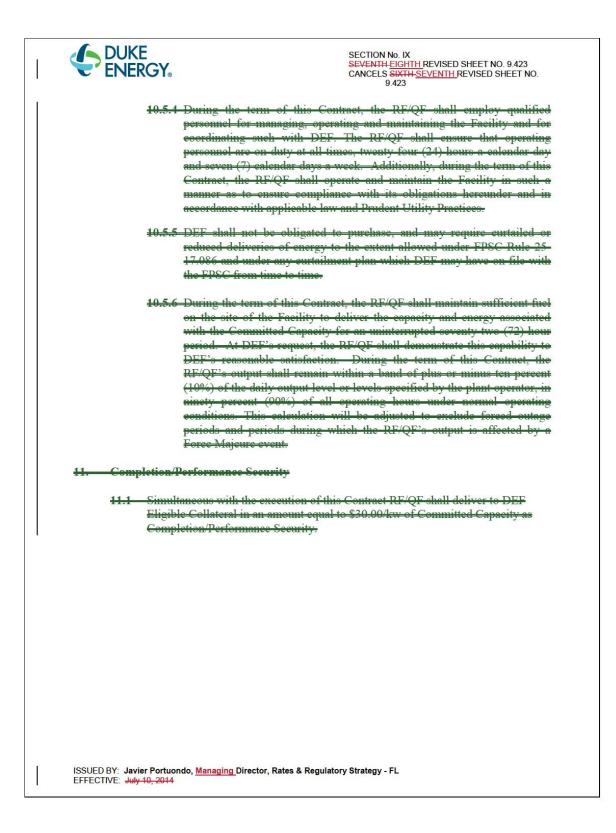
	SECTION No. IX FOURTH-FIFTH REVISED SHEET NO. 9.421 CANCELS THIRD-FOURTH 9.421
8.5	The Committed Capacity Test shall be performed according to standard industry testing procedures for the appropriate technology of the RF/QF.
8.6	The results of any Committed Capacity Test, including all data related to 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.
9.3	Payments for Energy and Capacity
	9.3.1 Payments due the RF/QF will be made monthly, and normally by the twentieth Business Day following the end of the billing period. The kilowatt-hours sold by the RF/QF and the applicable avoided energy rate at which payments are being made shall accompany the payment to the RF/QF.
ſ	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
ISSUED BY: Javie EFFECTIVE: July	r Portuondo, Managing Director, Rates & Regulatory Strategy - FL

ľ		SECTION No. IX FOURTH FIFTH REVISED SHEET NO. 9.421 CANCELS THIRD FOURTH REVISED SHEET NO. 9.421
		r or omission by either Party, provided that such agreed to between the Parties.
	10. Electricity Production and Plant Ma	intenance Schedule
	Date, and prior to October 1 - c this Contract, the RF/QF shall the amount of electricity to be each month of the following magnitude of any scheduled m RF/QF agrees to provide upo	aintenance period(s) or reductions in Capacity. The
	whether the requested schedu acceptable. If DEF does not a periods, DEF shall advise the period(s) when the outage(s) of outages during periods appro unreasonably withheld. Once established and approved, eith schedule, encept when such oh for such change from the other withheld or delayed. Schedu twenty four days per calendar	oved by DEF, and such approval shall not be a the schedule for the detailed plan has been her Party requesting a subsequent change in such ange is due to Force Majeure, must obtain approval r Party. Such appreval shall not be unreasonably led maintenance outage days shall be limited to year. In no event shall maintenance periods be ing periods: June 1 through September 15 and
		reasonable requests by DEF regarding day to day ation between the Parties relative to electricity heduling.
ĺ,	ISSUED BY: Javier Portuondo, <u>Managing</u> Director, Rates & EFFECTIVE: July 10, 2014	Regulatory Strategy - FL

	SECTION No. IX FIFTH_SIXTH_REVISED SHEET No. 9.422 CANCELS FOURTH_FIFTH REVISED SHEET NO. 9.422
	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. Electri	icity 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/OF agrees to provide updates to its planned maintenance periods as they become known. The Parties agree to discuss coordinating scheduled maintenance schedules.
	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.
10.1	The Parties recognize that the intent of the availability factor in Section 1 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 and the time and date when the forced outage or reduction course of the outage of the forced outage of the forced outage of the operation. This notice shall be provided to DEF within seventy two (72) hours of the end of the forced outage or reduction.
ISSUED BY: Javier EFFECTIVE: July 2	r Portuondo, <u>Managing</u> Director, Rates & Regulatory Strategy - FL 1, 2015







	GY. SECTION No. IX EIGHTH NINTH REVISED SHEET NO. 9.424 CANCELS SEVENTH EIGHTH REVISED SHEET NO. 9.424
	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.
<u>11. Comple</u>	etion/Performance Security
	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.
	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.
	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 Portuondo, <u>Managing</u> Director, Rates & Regulatory Strategy - FL 3, 2017



	e RGY.	SECTION No. IX SIXTH-SEVENTH REVISED SHEET NO. 9.425 CANCELS FIFTH-SIXTH REVISED SHEET NO. 9.425
<u>11.3</u>	<u>RF/QF following the occurre</u> provisions of this Contract in entitled to under this Contrac circumstance when this Con	E may draw upon Eligible Collateral provided by the ence of an Event of Default or pursuant to the other a order to recover any damages to which DEF is et. In the event of such a draw then, except in the ract otherwise terminates, the RF/QF shall within hish the Eligible Collateral to the full amounts
11.4	Capacity Delivery Date and first twelve (12) months foll return the Completion/Perfor of the first anniversary of the Capacity Delivery Date does Date <u>consistent with Section</u> to draw downretain the Com Capacity Delivery Date occu- that the ACBF is less than 9 the Capacity Delivery Date of Completion/Performance Sec for 12 consecutive months <u>months</u> months with the ACBF is gr Completion/Performance Sec requires the RF/QF to perfor time on or before the first an Section 7.3 and, in connection RF/QF fails to demonstrate a the Committed Capacity set immediately to receive, draw be, one-hundred percent (10 sole remedy from the RF/QF any nature whatsoever of the by the RF/QF. <u>Upon the con</u> ACBF greater than or equal Completion/Performance Sec on the Completion/Performance Sec	city Delivery Date occurs before the Required (b) the ACBF is equal to or greater than 95% for the owing the Capacity Delivery Date then DEF will mance Security to the RF/QF within ninety (90) days capacity Delivery Date. In the event that the not occur before the Required Capacity Delivery <u>7.6 herein</u> , then-DEF shall immediately be entitled pletion/Performance Security in full. In the event the rs before the Required Capacity Delivery Date, and, 5% for any of the first twelve (12) months following hen DEF shall be entitled to draw uponretain the curity until the ACBF is equal to or greater than 95% Upon the completion of twelve (12) consecutive eater than or equal to 95%, then DEF will return the curity within ninety (90) days. In the event that DEF m one or more Committed Capacity Test(s) at any niversary of the Capacity Delivery Date pursuant to in with any such Committed Capacity Test(s). the Capacity of at least one-hundred percent (100%) of forth in Section 7.1, DEF shall be entitled 2 upon, or retain, in its sole discretion as the case may 20% of the Completion/Performance Security as its 2's failure to perform, free from any claim or right of RF/QF, including any equity or right of redemption mpletion of twelve (12) consecutive months with the to 95% then DEF will return the curity within ninety (90) days. Following any draws nee Security, the RF/QF shall make payment to DEF Performance Security to the amounts required in five (5) business days.
11.5	RF/QF's failure to be in com Requirements of this Section	mptly notify DEF of any circumstance that results in pliance with the RF/QF Performance Security 11. From time to time, at DEF's written request, ith such evidence as DEF may reasonably request,
ISSUED BY: Javi EFFECTIVE: July	er Portuondo, <u>Managing</u> Director, Rate - 13, 2017	s & Regulatory Strategy - FL

		GY.	SECTION No. IX SIXTH.SEVENTH REVISED SHEET NO. 9.425 CANCELS FIFTH SIXTH REVISED SHEET NO. 9.425
		that RF/QF Letter of Credit or Contract.	Security Account is in full compliance with this
ſ	12. Termir	nation Fee and Security	
	12.1	In the event that the RF/QF of Option C, or Option D of A Appendix E that differe from FPSC Rule 25 17.0832(6)(a), RF/QF shall owe and be liab	eceives Capacity Payments pursuant to Option B, ppendix D or any Copacity Payment schedule in then upon the termination of this Contract, the to DEF for the Termination Fee. The RF/QF's ation Fee shall survive the termination of this he RF/QF, on a monthly basis, a calculation of the ble, standby letter(s) of credit issued by a Qualified adstance acceptable to DEF (including provisions of full draws and (b) permitting DEF to draw upon in full, if such Letter of Credit is not renewed or y (20) Business Days prior to its expiration date); DEF in its sole discretion; or (iii) a cash deposit i), or (iii), the "Termination Sceurity").
1 1 1	ISSUED BY: Javier EFFECTIVE: July 1	Portuondo, <u>Managing</u> Director, Rates & 3, 2017	Regulatory Strategy - FL

	RGY.	SECTION No. IX <u>THIRD-FOURTH</u> REVISED SHEET NO. 9.426 CANCELS <u>SECOND-THIRD</u> REVISED SHEET NO. 9.426
12. Termi	nation Fee and Security	
12.1	Option C, or Option D of App Appendix E that differs from a FPSC Rule 25-17.0832(6)(a), t RF/QF shall owe and be liable obligation to pay the Termina	eeives Capacity Payments pursuant to Option B, bendix D or any Capacity Payment schedule in Normal Capacity Payment Rate as calculated in hen upon the termination of this Contract, the to DEF for the Termination Fee. The RF/QF's tion Fee shall survive the termination of this e RF/QF, on a monthly basis, a calculation of the
	<u>unconditional, irrevocabl</u> Institution in form and su (a) permitting partial and such Letter of Credit, in replaced at least twenty (ii) a bond issued to DE substance acceptable to D	shall be secured by the RF/QF by: (i) an e. standby letter(s) of credit issued by a Qualified ubstance acceptable to DEF (including provisions full draws and (b) permitting DEF to draw upon full, if such Letter of Credit is not renewed or (20) Business Days prior to its expiration date); F by a financially sound company in form and DEF in its sole discretion; or (iii) a cash deposit or (iii), the "Termination Security").
	financial condition of (i) and (ii) the insurer(s), in a rating of any issuer(s) or fail to meet the requirem the RF/QF to replace the the event that DEF notifit the replacement letter(s) of a Qualified Institution, ar thirty (30) calendar day RF/QF to comply with the grounds for DEF to draw	and the RF/QF shall be required to monitor the the issuer(s) in the case of any Letter of Credit the case of any bond. In the event the senior debt insurer(s) has deteriorated to the extent that they tents of a Qualified Institution, DEF may require eletter(s) of credit or the bond, as applicable. In es the RF/QF that it requires such a replacement, of credit or bond, as applicable, must be issued by ad meet the requirements of Section 12.1.1 within rs following such notification. Failure by the the requirements of this Section 12.1.2 shall be w in full on any existing Letter of Credit or bond remedies it may have hereunder.
	Delivery Date, upon DEI deseribed in Section 12 ealendar (10) days, writ	each calendar quarter (March 31, June 30, mber 31) occurring subsequent to the Capacity 5's issuance of the Termination Fee calculation as 2.1, the RF/QF must provide DEF, within ten ten assurance and documentation (the "Security m and substance acceptable to DEF, that the on Security is sufficient to cover the balance of
	have the right to request within five (5) calen Documentation. Failure	ugh the end of the following quarter. In addition time during the term of this Contract, DEF shall st and the RF/QF shall be obligated to deliver dar days of such request, such Security by the RF/QF to comply with the requirements of 1 be grounds for DEF to draw in full on any
ISSUED BY: Javie EFFECTIVE: July	t his Section 12.1.3 shal r Portuondo, <u>Managing</u> Director, Rates & R	be grounds for DEF to draw in full on any

		SECTION No. IX THIRD FOURTH REVISED SHEET NO. 9.426 CANCELS SECOND-THIRD 9.426
		existing Letter of Credit or bond or to retain any each 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 (and off peak Avoided Unit	e provide an incentive to the RF/QF to operate the Facility during on peak periods in a manner that approximates the prejected performance of the —A formula to achieve this objective is attached as Appendix A.
Ĩ,	ISSUED BY: Javier Portuon EFFECTIVE: July 21, 2015	do, <u>Managing</u> Director, Rates & Regulatory Strategy - FL

	GY. SECTION No. IX SIXTH SEVENTH REVISED SHEET NO. 9.427 CANCELS FIFTH SIXTH REVISED SHEET NO. 9.427
	 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 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
	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.
DEF de and off	mance Factor esires to provide an incentive to the RF/QF to operate the Facility during on-peak f-peak periods in a manner that approximates the projected performance of the d Unit. A formula to achieve this objective is attached as Appendix A. t
	hstanding the occurrence of any Force Majeure as described in Section 18, each of owing 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;
	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;
ISSUED BY: Javier EFFECTIVE: Juno	Portuondo, <u>Managing</u> Director, Rates & Regulatory Strategy - FL 9, 2016

SHEET NO. 9.427 VISED SHEET NO. 9.427	DUKE ENERGY.	
Party or the entity ppointed for either 1 owns or controls nehed, levied upon, process, and such (30) calendar days efit of creditors, or	(e) <u>either Party</u> , or the of active business insolvency laws sh which owns or con Party or any of its either Party; or if a encumbered, pledg proceedings shall r thereof; or if either admit in writing its	(
	(f) the RF/QF fails to under this Contrac grounds for insecur	(
quired to initiate	(g) the RF/QF fails to governmental, env construction of the	-
ertification of the	(h) the RF/QF fails to ((i) any of the representation of the formation of	
	false or misleading	I
	ISSUED BY: Javier Portuondo, <u>Managing</u> Di	ISSUED BY
	ISSUED BY: Javier Portuondo, <u>Managing</u> Di EFFECTIVE: Juno 9, 2016	ISSUED BY EFFECTIVE

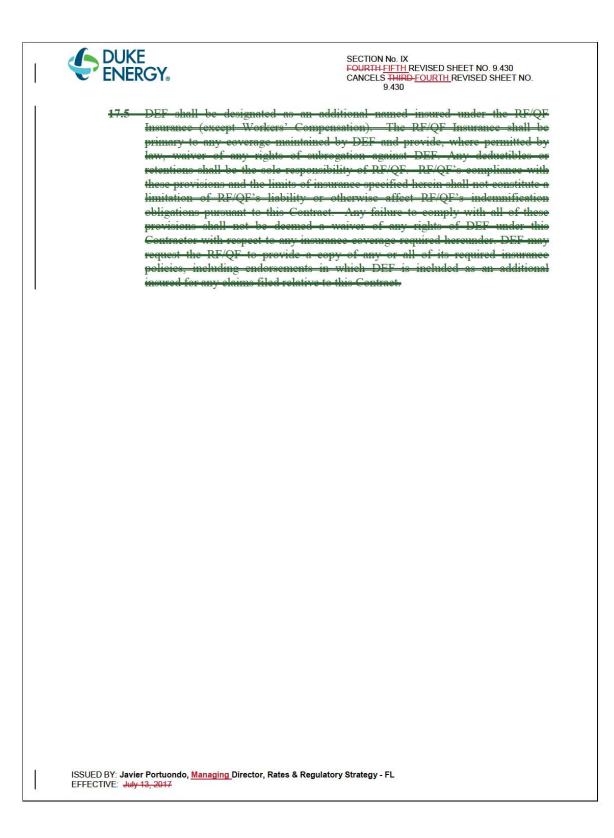
	E SECTION No. IX FIFTH SIXTH REVISED SHEET NO. 9.428 CANCELS FOURTH-FIFTH REVISED SHEET NO. 9.428
<u>(e)</u>	either Party, or the entity which owns or controls either Party, ceases the conduct of active business; or if proceedings under the federal bankruptcy law or insolvency laws shall be instituted 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;
<u>(f)</u>	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:
<u>(g)</u>	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;
<u>(i)</u>	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:
(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
(k)	either Party breaches any material provision of this Contract not specifically mentioned in this Section 14;
(1)	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. Right	ts 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:
ISSUED BY: Javi EFFECTIVE: जम्म	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; er Portuondo, Managing Director, Rates & Regulatory Strategy - FL

	SECTION No. IX FIFTH SIXTH REVISED SHEET NO. 9.428 CANCELS FOURTH FIFTH REVISED SHEET NO. 9.428
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
<u>15.1.3</u>	exercise any other remedy(ics) which may be available to DEF at law or in equity.
1 5.2 Termine prior to Contrac	such termination or for damages, if any, resulting from any breach of this
<u> 16. Indomnificatio</u>	2
RF/QF custome protecti agrees, held har employe and "RI expense	d the RF/QF shall each be responsible for its own facilities. DEF and the shall each be responsible for ensuring adequate safeguards for other DEF rs, DEF's and the RF/QF's personnel and equipment, and for the on of its own generating system. Each Party (the "Indomnifying Party") to the outent permitted by applicable law, to indomnify, pay, defend, and mhost the other Party (the "Indomnified Party") and its officers, directors, see, agents and contractors (horoinafter called respectively, "DEF Entities" "/QF Entities") from and against any and ell claims, demands, costs or a for lows, damage, or injury to persons or property of the Indomnified rto third partice) directly caused by, arising out of, or resulting from:
ISSUED BY: Javier Portuondo EFFECTIVE: July 13, 2017	o, <u>Managing</u> Director, Rates & Regulatory Strategy - FL

	E SECTION No. IX THIRD FOURTH REVISED SHEET NO. 9.429 CANCELS SECOND THIRD REVISED SHEET NO. 9.429
	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.
<u>15.2</u>	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 <u>Contract.</u>
16. Inden	nification
<u>16.1</u>	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, emplovees, 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:
	 (a) 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 ISSUED BY: Javie EFFECTIVE: June	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 indomnification horeunder without first allowing the Indemnifying Party the right to defend such a claim. The Indemnifying Party shall have no obligations under er Portuondo, Managing Director, Rates & Regulatory Strategy - FL o 5, 2018

		E RGY.	SECTION No. IX THIRD-FOURTH REVISED SHEET NO. 9.429 CANCELS SECOND-THIRD REVISED SHEET NO. 9.429
		Section 16 in the event of a breach of t Party. Section 16 shall survive terminat	he foregoing sentence by the Indemnified ion of this Contract.
	17. Insura	mee	
	17.1	The RF/QF shall precure or cause to be the entire Term of this Contract, a policy by an insurer acceptable in the state of F Office" commercial general liability and Workers' Componation in accordance of Florida (such policy or policies, celle certificate of insurance shall be delivere days prior to the start of any intercome Insurance shall contain (a) an endersom products liability/completed operations (b) premises and operations liability, (e) endersoment covering liabilities (i) white performance or nonperformance of, this the Facility or any of the RF/QF's equip RF/QF Insurance must be reasonably ac assessment or deductible shall be for the	Horida on a standard "Insurance Services Hor excess liability form or equivalent and with the statutory requirements of the state etively, the "RF/QF Insurance"). A d to DEF at least fifteen (15) calendar stion work. At a minimum, the RF/QF ent providing coverage, including coverage for the term of this Contract, and a broad form contractual liability sh might arise under, or in the Contract or (ii) caused by operation of
I	ISSUED BY: Javie EFFECTIVE: Juno	r Portuondo, Managing Director, Rates & Regulatory -5, 2018	/ Strategy - FL

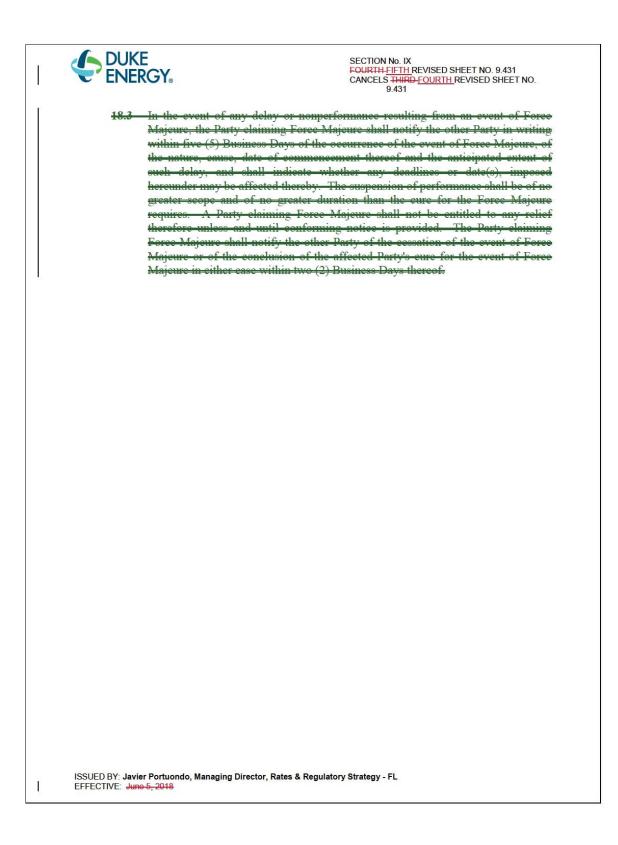
	E SECTION No. IX FOURTH FIFTH REVISED SHEET NO. 9.430 CANCELS THIRD-FOURTH REVISED SHEET NO. 9.430					
<u>16.2</u>	Payment by an Indemnified Party to a third party shall not be a condition precedent to the obligations of the Indemnifying Party under Section 16. No Indemnified Party under Section 16 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.					
<u>17. Insur</u>	<u>17. Insurance</u>					
17.1	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/QF 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/QF 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.					
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.					
ISSUED BY: Javie EFFECTIVE: July	er Portuondo <mark>, <u>Managing</u> Director, Rates & Regulatory Strategy - FL 13, 2017</mark>					

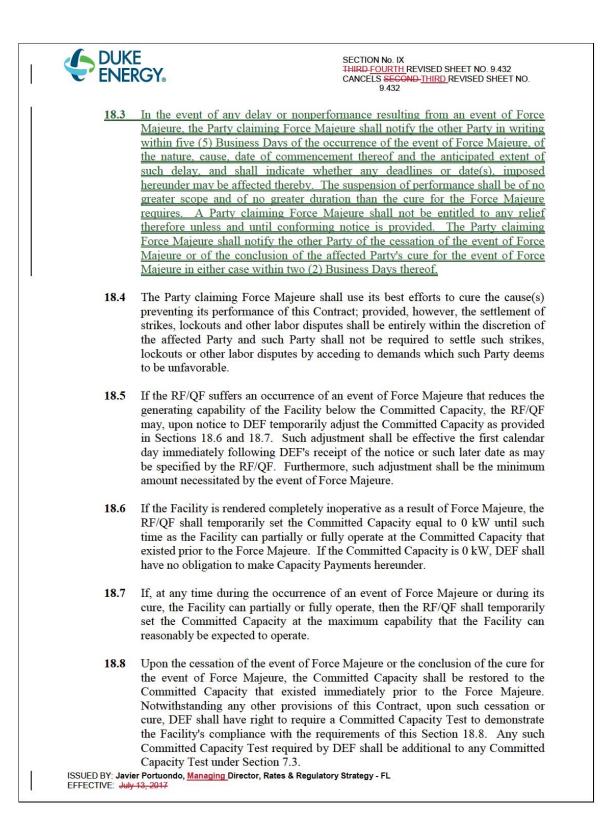


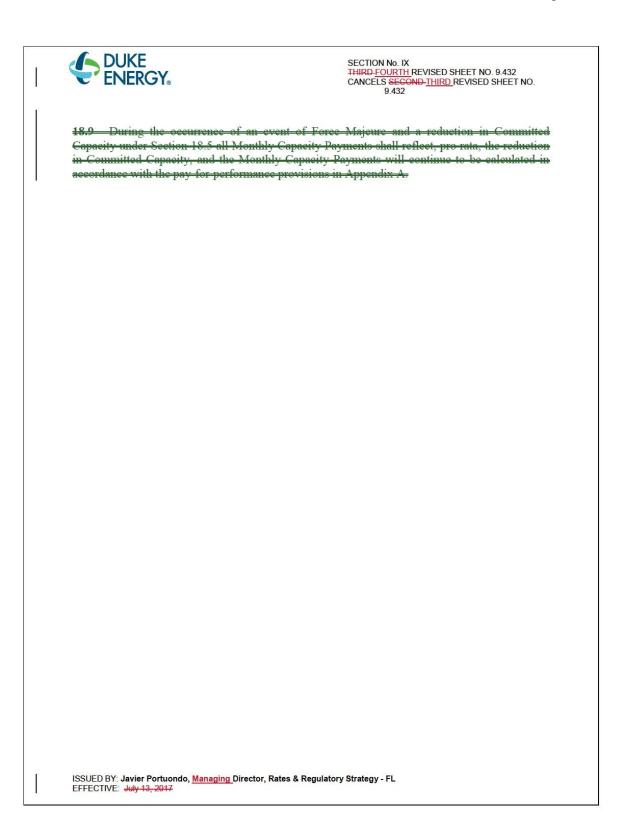
DUKE SECTION No. IX FOURTH FIFTH REVISED SHEET NO. 9.431 ENERGY. CANCELS THIRD FOURTH REVISED SHEET NO. 0 431 17.5 DEF shall be designated as an additional named insured under the RF/OF Insurance (except Workers' Compensation). The RF/OF Insurance shall be primary to any coverage maintained by DEF and provide, where permitted by law, waiver of any rights of subrogation against DEF. Any deductibles or retentions shall be the sole responsibility of RF/OF. RF/OF'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. 18. **Force Majeure** 18.1 "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.

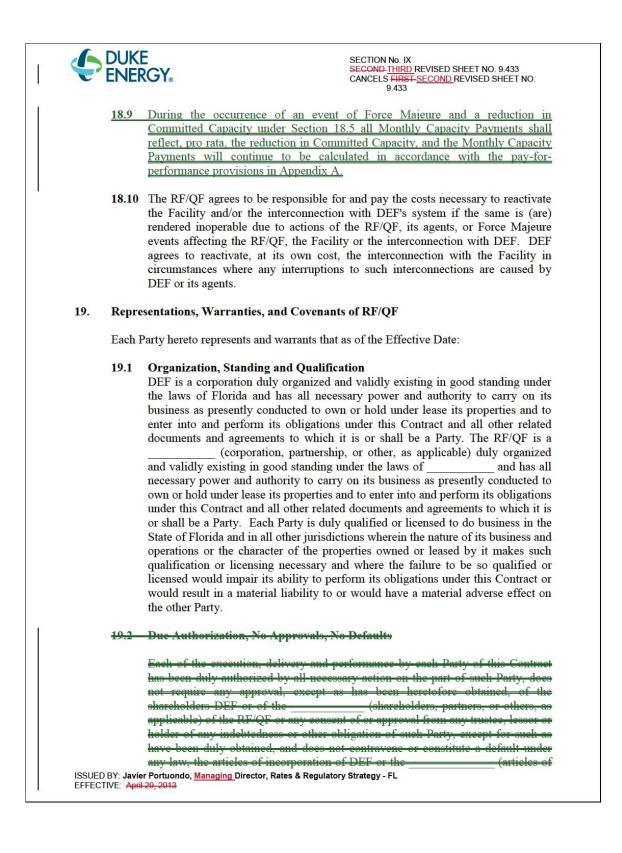
ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL EFFECTIVE: Juno 5, 2018

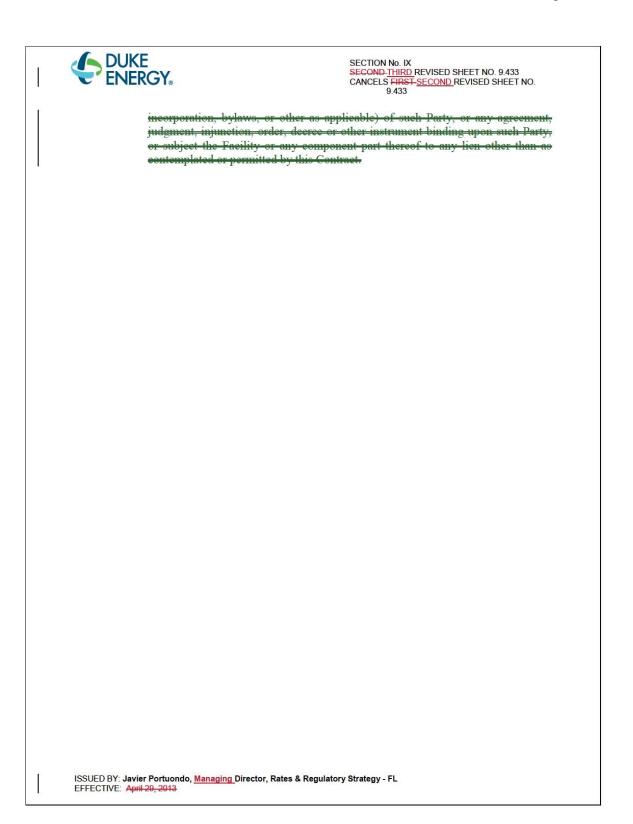
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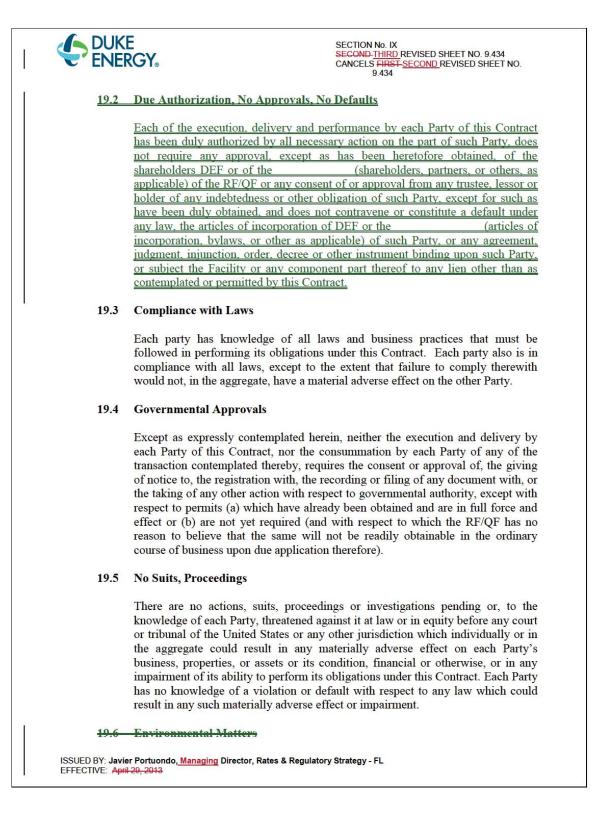


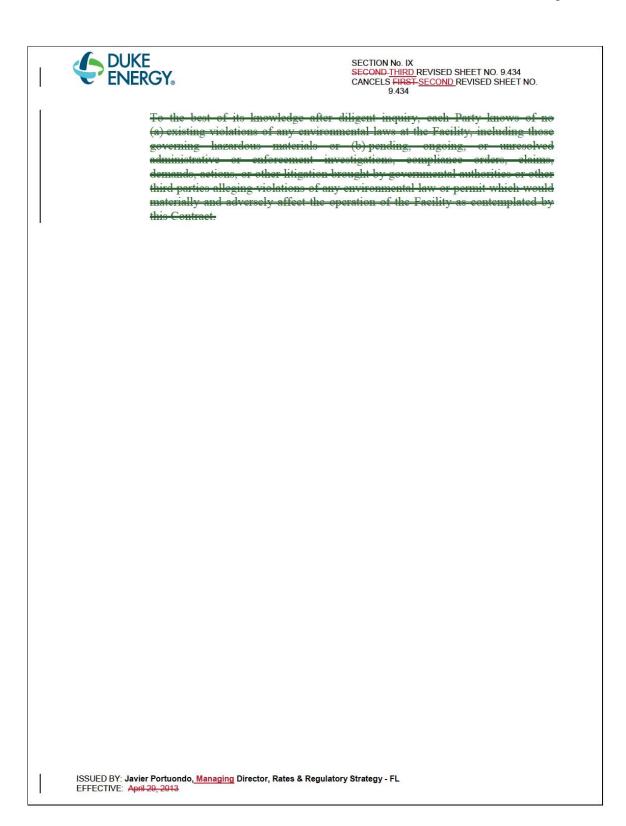












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19.6 Environmental Matters

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

9 435

FOURTH FIFTH REVISED SHEET NO. 9.435 CANCELS THIRD FOURTH REVISED SHEET NO.

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.

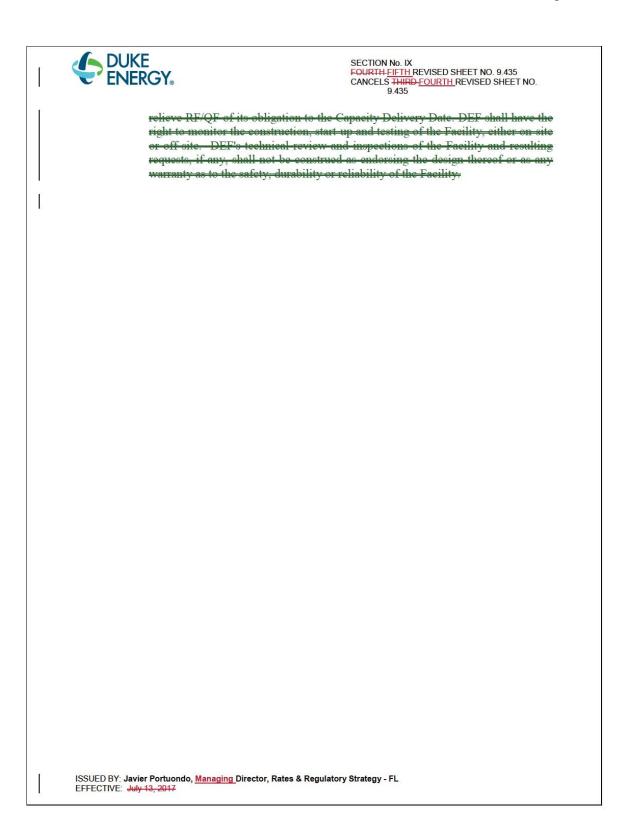
20.2 Permits

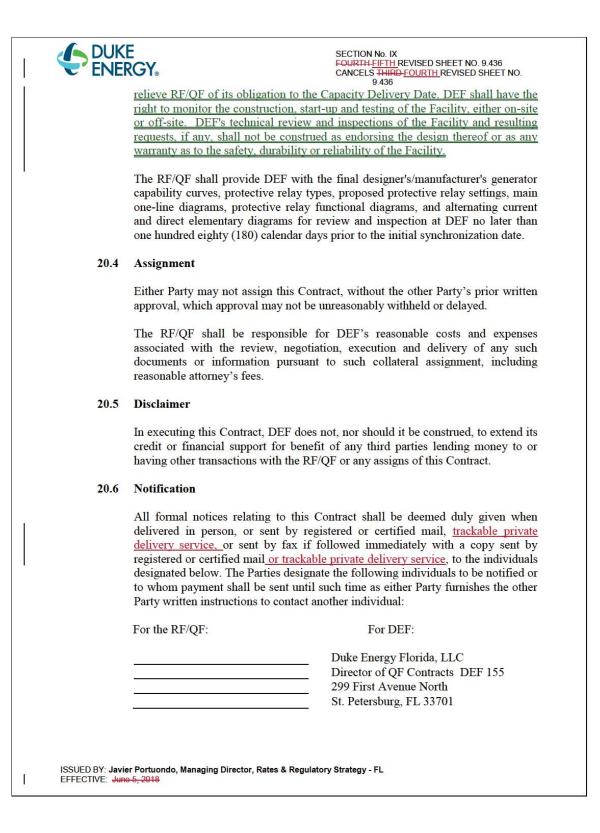
The RF/QF hereby agrees to obtain and maintain any and all permits, certifications, licenses, consents or approvals of any governmental authority which the RF/QF is required to obtain as a prerequisite to engaging in the activities specified in this Contract.

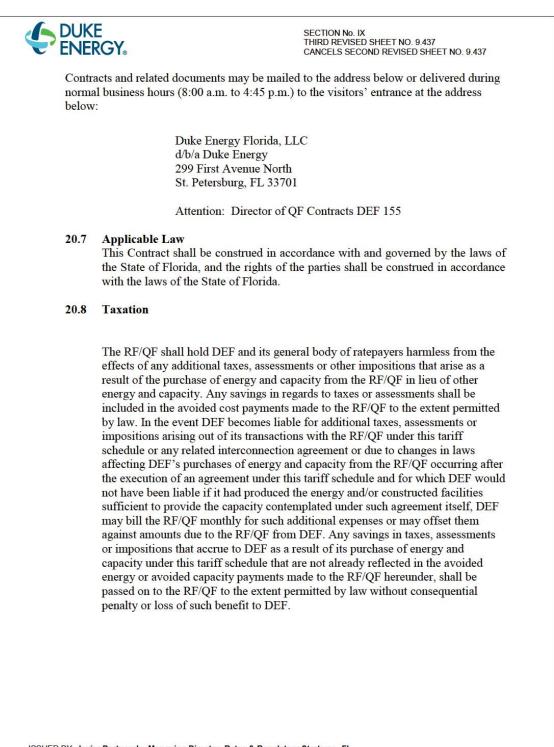
20.3 Project Management

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

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ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL EFFECTIVE: June 5, 2018

DUKE SECTION No. IX THIRD REVISED SHEET NO. 9.438 ENERGY. CANCELS SECOND REVISED SHEET NO. 9.438 **Resolution of Disputes** 20.9 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.

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

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

20.11 Severability

DUKE

ENERGY.

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.

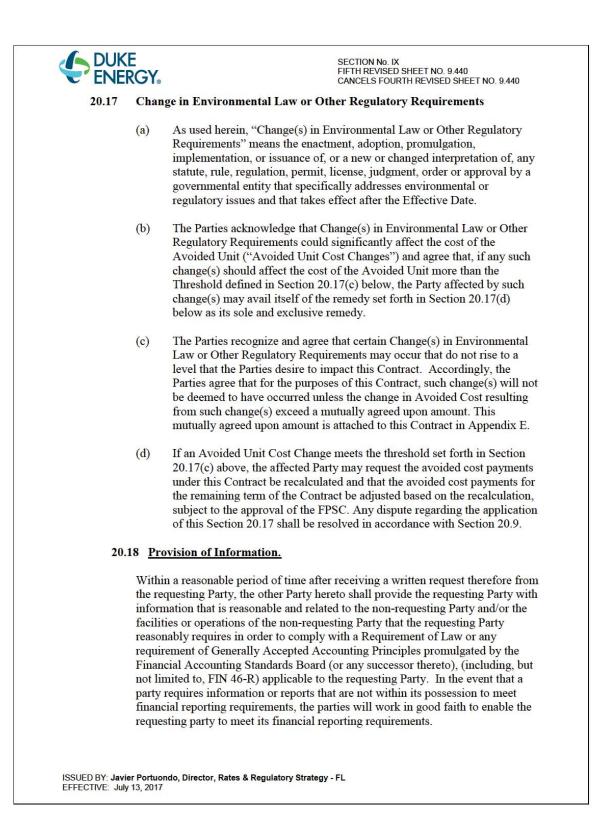
20.15 No Waiver

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.

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

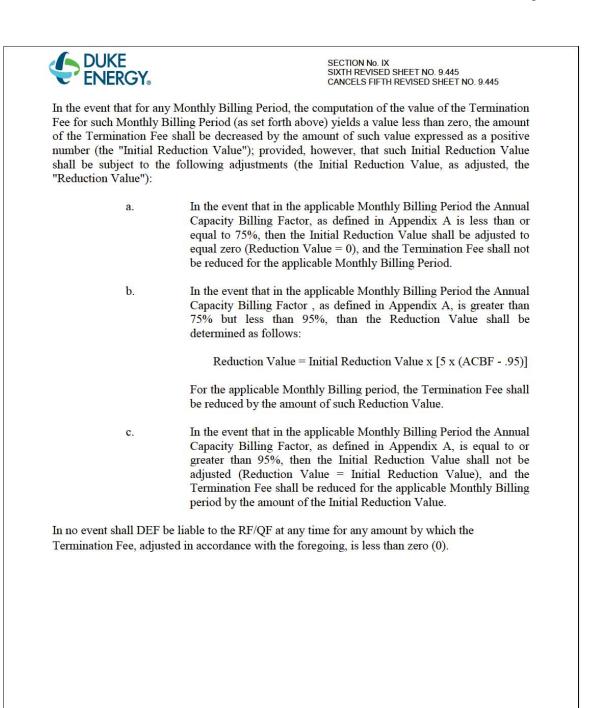


	SECTION No. IX THIRD REVISED SHEET NO. 9.441 CANCELS SECOND REVISED SHEET NO. 9.441
IN WITNESS WHEREOF, the RF/Q	F has executed this Contract on the date set forth below.
RF/QF	
Signature	
Print Name	
Title	
Date	
	acknowledged receipt of this executed Contract.
DUKE ENERGY FLORIDA, LLC.	
DUKE ENERGY FLORIDA, LLC.	
DUKE ENERGY FLORIDA, LLC. Signature Print Name	

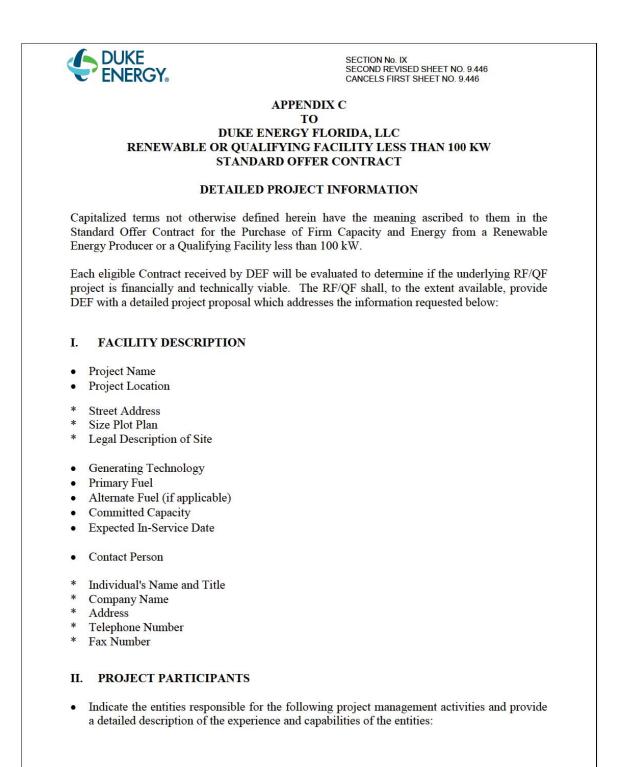
APP	CANCELS SEVENTH REVISED SHEET NO. 9.442					
	APPENDIX A					
TO DUKE ENERGY FLORIDA, LLC RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW STANDARD OFFER CONTRACT						
MONTHLY CAPACITY PAYMENT CALCULATION						
Capitalized terms not otherwise defined herein have the meaning ascribed to them in 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.						
A. In the event that the ACBF is le Capacity Payment shall be due	ess than or equal to 75%, then no Monthly . That is:					
MCP = 0						
	In the event that the ACBF is greater than 75% but less than 95%, then the Monthly Capacity Payment shall be calculated by using the following formula:					
MCP = BCP x [1 - [5 x	(.95 - ACBF)] x CC					
	In the event that the ACBF is equal to or greater than 95%, then the Monthly Capacity Payment shall be calculated by using the following formula:					
$MCP = BCP \ge CC$						
Where:						
MCP = Monthly Cap	acity Payment in dollars.					
BCP = Base Capac Appendix D	ity Payment in \$/kW/Month as specified in or E.					
CC = Committed C	Capacity in kW.					
SUED BY: Javier Portuondo, Managing Director, Rates & FECTIVE: June 5, 2018	& Regulatory Strategy - FL					

			SECTION No. IX	
T ENER	RGY.		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 pro- rated 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 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 pro- rated 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.	
ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: April 29, 2013				

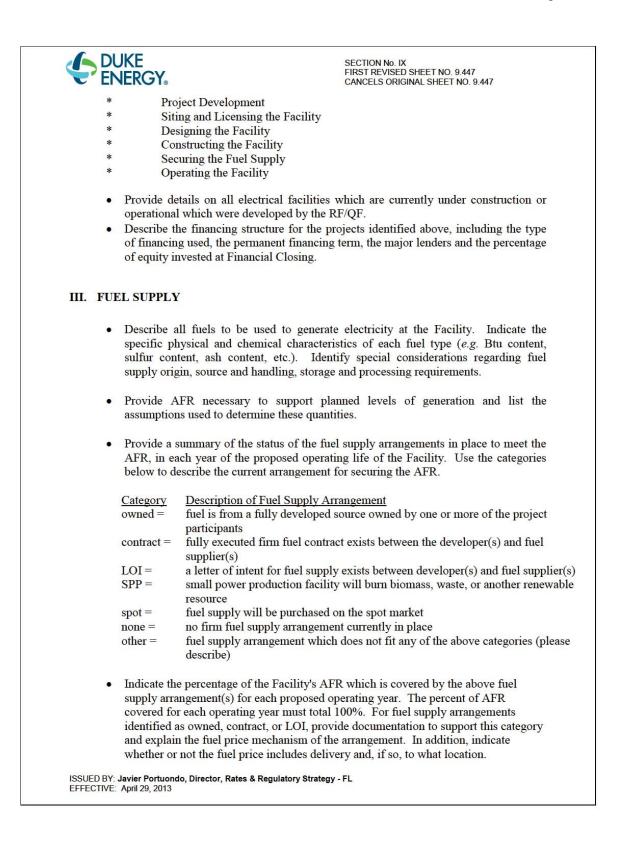
	SECTION No. IX FOURTH REVISED SHEET 9.444 CANCELS THIRD REVISED SHEET NO. 9.444					
RENEWABL	APPENDIX B TO DUKE ENERGY FLORIDA, LLC RENEWABLE OR QUALIFYING FACILITY LESS THAN 100 KW STANDARD OFFER CONTRACT					
	TERMINATION FEE					
Standard Offer Contract for	erwise defined herein have the meaning ascribed to them in the or the Purchase of Firm Capacity and Energy from a Renewable lifying Facility less than 100 kW.					
in which the Capacity D	hall be the sum of the values for each month beginning with the month elivery Date occurs through the month of the Termination Date (or he case may be) computed according to the following formula:					
$ \begin{array}{l} \mathbf{n} \\ \sum \\ \mathbf{i} = 1 \end{array} $ (MCP _i)	$- MCPC_i$) · $(1 + r)^{(n-i)}$					
with:	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)					
r	 DEF's incremental after-tax avoided cost of capital (defined as r in Appendix D). 					
MCPi	Monthly Capacity Payment paid to RF/QFQF corresponding to the Monthly Billing Period i, calculated in accordance with Appendix A.					
MCPCi	 Monthly Capacity Payment for Option A corresponding to the Monthly Billing Period i, calculated in accordance with this Contract. 					
ISSUED BY: Javier Portuondo, M EFFECTIVE: June 5, 2018	anaging Director, Rates & Regulatory Strategy - FL					



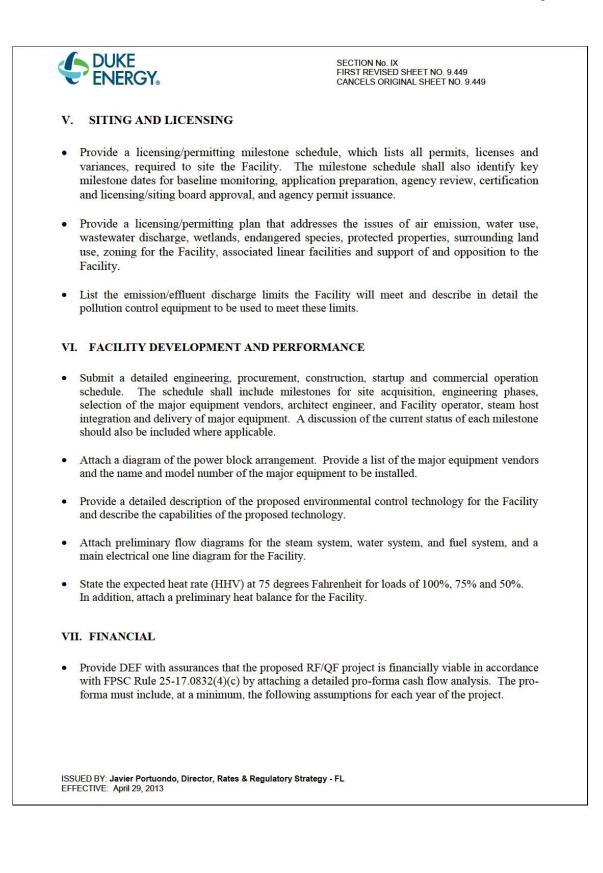
ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: June 9, 2016 Docket No. 20190079-EQ Date: June 26, 2019



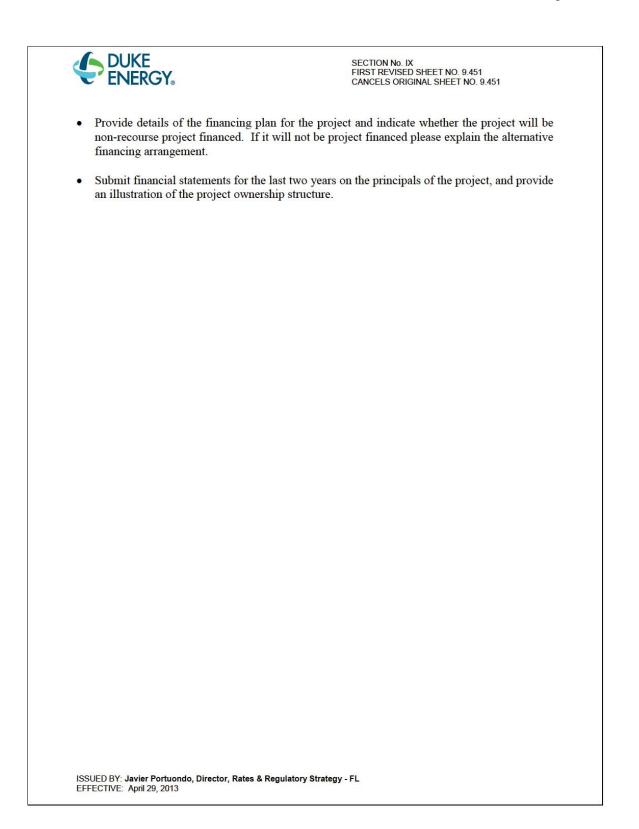
 $\mathsf{ISSUED}\ \mathsf{BY:}\ \mathsf{Javier}\ \mathsf{Portuondo}, \mathsf{Managing}\ \mathsf{Director}, \mathsf{Rates}\ \&\ \mathsf{Regulatory}\ \mathsf{Strategy}\ \mathsf{-FL}\ \mathsf{EFFECTIVE:}\ \mathsf{June}\ 5,\ 2018$



	ike Iergy.	SECTION No. IX FIRST REVISED SHEET NO. 9.448 CANCELS ORIGINAL SHEET NO, 9.448
•	secondary fue segment of th	I transportation networks available for delivering all primary and el to the Facility site. Indicate the mode, route and distance of each ne journey, from fuel source to the Facility site. Discuss the current ertinent factors impacting future availability of the transportation
•		R necessary to support planned levels of generation and list the used to determine these quantities.
•	meet the AFT	nmary of the status of the fuel transportation arrangements in place to TR in each year of the proposed operating life of the Facility. Use the ow 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)
•	for primary a	naximum, minimum and average fuel inventory levels to be maintained and secondary fuels at the Facility site. List the assumptions used in the inventory levels.
٠		mation regarding RF/QF's plans to maintain sufficient on site fuel to ty and energy for an uninterrupted seventy-two (72) hour period.
IV. PLA	NT DISPATC	CHABILITY/CONTROLLABILITY
	e the followin nance capabilit	g operating characteristics and a detailed explanation supporting the ties indicated:
	* Ramp	Rate (MW/minute)
		Capability (% above Committed Capacity)
	* Minim	num power level (% of Committed Capacity)
		y Turnaround Time, Hot to Hot (hours)
		up Time from Cold Shutdown (hours) Cycling (# cycles/yr.)
		nd MVAR Control (ACC, Manual, Other (please explain))
	lavier Portuondo T	Director, Rates & Regulatory Strategy - FL
ISSUED BY:		



DUKE SECTION No. IX FIRST REVISED SHEET NO. 9.450 ENERGY. 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 SECOND REVISED SHEET NO. 9.452 CANCELS FIRST SHEET NO. 9.452

APPENDIX D

TO

DUKE ENERGY FLORIDA, LLC 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.

ISSUED BY: Javier Portuondo, Managing Director, Rates & Regulatory Strategy - FL $\mathsf{EFFECTIVE}$ June 5, 2018



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

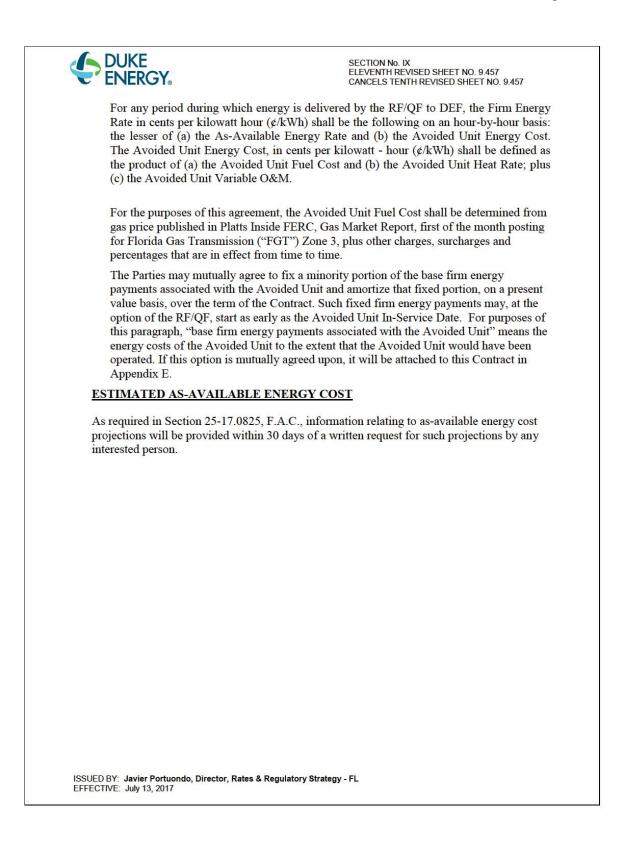
Payment schedules under this option are based on the value of a year-by-year deferral of DEF's Avoided Unit with an in-service date as of the Avoided Unit In-Service Date in Section 4 of the Contract, calculated in accordance with FPSC Rule 25-17.0832, F.A.C., as described in Schedule 1. Once this option 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.

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



		GY.	SECTION No. IX <u>THIRTEENTH TWELFTH</u> REVISED SHEET NO. 9.455 CANCELS <u>TWELFTH</u> ELEVENTH REVISED SHEET NO. 9.455		
		EXAMPLE MONTH DEF' le or Qualifying Faci	S June 1, 2027 Unde	esignated CT	
			(\$/kW/MONT	H)	
	Contract Year	Option A Normal Capacity Payment Starting on the Avoided Unit In-Service Date	<u>Option B</u> Early Capacity Payment Starting on the Exemplary Capacity Payment Date	Option C Levelized Capacity Payment Starting on the Avoided Unit In-Service Date	<u>Option D</u> Early Levelized Capacity Payment Starting on the Exemplary Capacity Payment Date
	2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037	$\begin{array}{r} 4.\underline{7884}\\ 4.\underline{8596}\\ \underline{4.915.09}\\ \underline{4.975.22}\\ 5.\underline{0435}\\ 5.\underline{1148}\\ 5.\underline{1762}\\ 5.\underline{2476}\\ 5.\underline{3190}\\ \underline{5.386.05}\\ 5.\underline{456.20} \end{array}$	$\begin{array}{r} 3.7\underline{12}\\ 3.7\underline{581}\\ 3.8091\\ \underline{3.854.00}\\ \underline{3.904.10}\\ \underline{3.904.10}\\ \underline{3.964.21}\\ 4.0\underline{131}\\ 4.0\underline{642}\\ 4.\underline{1153}\\ 4.\underline{1764}\\ 4.\underline{2276}\\ 4.\underline{2888}\\ \underline{4.345.00}\end{array}$	5.0537 5.0538 5.0639 5.0640 5.0741 5.0741 5.0742 5.0843 5.0844 5.0945 5.0946	3.944.19 3.954.20 3.954.21 3.954.21 3.964.22 3.964.23 3.974.23 3.974.23 3.974.24 3.974.25 3.984.26 3.984.26 3.984.26 3.994.27 3.994.28
	1.		ded Unit In-Service n years but less than of Capacity Payment be calculated utilizin	Date. In the event the Avoided Unit L s for the requested t	erm. Such Capacity
Į.	ISSUED BY: Javie EFFECTIVE: Juno	er Portuondo, Managing Di 5, 2018	rector, Rates & Regulator	y Strategy - FL	

DUKE SECTION No. IX SECOND REVISED SHEET NO. 9.456 ENERGY. 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. Β. Energy Rates Payments Prior to the Avoided Unit In-Service Date 1. 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 2. 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. ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: July 13, 2017



E E	¢	DUKE ENERGY.	SECTION No. IX <u>FOURTEENTH</u> THIRTEENTH REVISED SHEET NO. 9.458 CANCELS TWELFTH <u>THIRTEENTH</u> REVISED SHEET NO. 9.458					
	ESTI	IMATED 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.							
	DEL	IVERY VOLTAGE ADJUSTMENT						
Ĺ	efficie voltag Loss cost n appro RF/Q	's average system line losses are analyzed annual encies are developed for the transmission, distri- ge levels. This analysis is provided in the DEF's Factor (currently Attachment Q) -in its Open A recovery filing with the FPSC. An adjustment opriate delivery efficiency factor, is applicable to F is within DEF's service territory to reflect to by is received by the DEF.	bution primary, and distribution secondary Procedures For Changing The Real Power access Transmission Tariff and DEF's fuel factor, calculated as the reciprocal of the the above determined energy costs if the					
	The e	wurrent delivery voltage adjustment factors are:						
		Delivery Voltage	Adjustment Factor					
		Transmission Voltage Delivery						
		Primary Voltage Delivery	1.0253					
		Secondary Voltage Delivery	1.0627					
	<u>conju</u> Deliv	Delivery Voltage Adjustment will be calculated l mction with DEF's Open Access Transmission T- rery Voltage Adjustment will be provided wit ested person.	ariff as approved by the FERC. The current					
	PER	FORMANCE CRITERIA						
		eents for firm Capacity are conditioned on the rmance criteria:	RF/QF's ability to maintain the following					
	A.	Capacity Delivery Date						
		The Capacity Delivery Date shall be no later th	nan the Required Capacity Delivery Date.					
	B.	Availability and Capacity Factor						
		The Facility's availability and capacity fact Capacity Payments through a performance bas the Contract.						
L		D BY: Javier Portuondo, Managing Director, Rates & Regulato TIVE: March 5, 2010	ory Strategy - FL					



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.

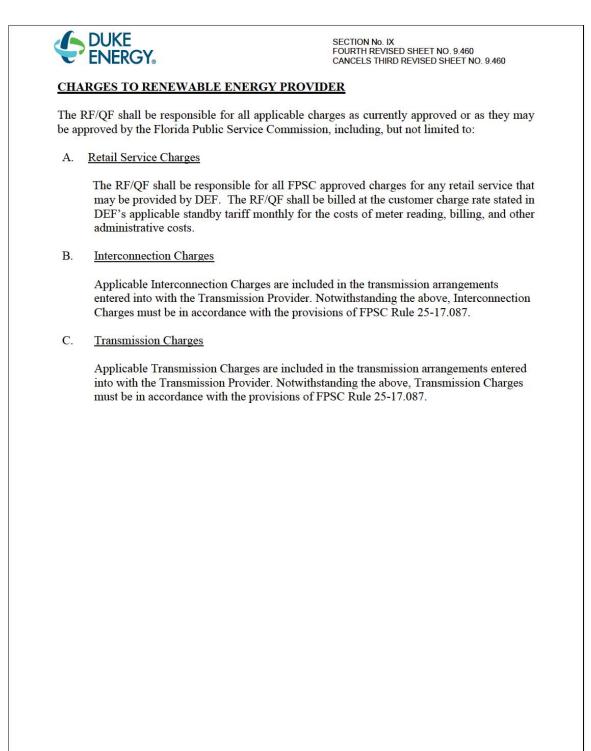
BILLING OPTIONS

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.

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



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

4	DUKE	SECTION No. IX FIRST REVISED SHEET NO. 9.461 CANCELS ORIGINAL SHEET NO, 9.461
TER	MS OF SEI	RVICE
A.		the RF/QF's responsibility to inform DEF of any change in its electric a capability.
B.		ric service delivered by DEF to a RF/QF located in DEF's service area abject to the following terms and conditions:
		RF/QF shall be metered separately and billed under the applicable retail e schedule(s), whose terms and conditions shall pertain.
		security deposit will be required in accordance with FPSC Rules 25082(5) and 25-6.097, F.A.C., and the following:
	(i)	In the first year of operation, the security deposit should be based 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.
	(ii	For each year thereafter, a review of the actual sales and purchases 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.
	(3) DI	EF shall specify the point of interconnection and voltage level.
	fe: co No Co	the RF/QF must enter into an interconnection to DEF's system. Specific atures of the RF/QF and its interconnection to DEF's facilities will be insidered by DEF in preparing the interconnection agreement. Solutions that above, interconnection with, and delivery into, the impany's system must be accomplished in accordance with the posisions of FPSC Rule 25-17.087.
C.	Service u FPSC.	nder this rate schedule is subject to the rules and regulations of the
	D BY: Javier Po CTIVE: April 29,	rtuondo, Director, Rates & Regulatory Strategy - FL

DUKE ENERGY.	SECTION No. IX FIRST REVISED SHEET NO. 9.462 CANCELS ORIGINAL SHEET NO. 9.462
	SCHEDULE 1 TO RATE SCHEDULE COG-2
CALCULA	ATION OF VALUE OF DEFERRAL PAYMENTS
APPLICABILITY	
calculate the monthly v Contract. When used a associated with the Avo applicable value of de	des a detailed description of the methodology used by DEF to values of deferring or avoiding the Avoided Unit identified in the in conjunction with the current FPSC-approved cost parameters oided Unit contained in Schedule 2, a RF/QF may determine the eferral capacity payment rate associated with the timing and ar facility should the RF/QF enter into a Contract with DEF.
requirements or equival	Schedule 1 is the discussion of the types and forms of surety bond lent assurance for payment of the Termination Fee acceptable to tractual default by a RF/QF.
CALCULATION OF	VALUE OF DEFERRAL OPTION A
	(5) specifies that avoided capacity costs, in dollars per kilowatt with capacity sold to a utility by a RF/QF pursuant to Contract
year value of deferral a deferring the Avoided U	year-by-year value of deferral of the Avoided Unit. The year-by- shall be the difference in revenue requirements associated with Jnit one year, and shall be calculated as follows:
year value of deferral deferring the Avoided UVAC _m =	year-by-year value of deferral of the Avoided Unit. The year-by- shall be the difference in revenue requirements associated with Jnit one year, and shall be calculated as follows: $1/12 [KI_n (1 - R) / (1 - R^L) + O_n]$
year value of deferral a deferring the Avoided U	year-by-year value of deferral of the Avoided Unit. The year-by- shall be the difference in revenue requirements associated with Jnit one year, and shall be calculated as follows: $1/12 [KI_n (1 - R) / (1 - R^L) + O_n]$
year value of deferral deferring the Avoided UVAC _m =	year-by-year value of deferral of the Avoided Unit. The year-by- shall be the difference in revenue requirements associated with Jnit one year, and shall be calculated as follows: $1/12 [KI_n (1 - R) / (1 - R^L) + O_n]$
year value of deferral deferring the Avoided UVAC _m = Where, for a one	year-by-year value of deferral of the Avoided Unit. The year-by- shall be the difference in revenue requirements associated with Jnit one year, and shall be calculated as follows: $1/12 [KI_n (1 - R) / (1 - R^L) + O_n]$ e year deferral: = utility's monthly value of avoided capacity, in dollars per
year value of deferral a deferring the Avoided U VAC _m = Where, for a one VAC _m	 year-by-year value of deferral of the Avoided Unit. The year-by-shall be the difference in revenue requirements associated with Unit one year, and shall be calculated as follows: 1/12 [KIn (1 - R) / (1 - R^L) + On] e year deferral: utility's monthly value of avoided capacity, in dollars per kilowatt per month, for each month of year n; 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
year value of deferral a deferring the Avoided U VAC _m = Where, for a one VAC _m K	 year-by-year value of deferral of the Avoided Unit. The year-by-shall be the difference in revenue requirements associated with Unit one year, and shall be calculated as follows: 1/12 [KIn (1 - R) / (1 - R^L) + On] e year deferral: utility's monthly value of avoided capacity, in dollars per kilowatt per month, for each month of year n; 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;

		SECTION No. IX FIRST REVISED SHEET NO. 9.463 CANCELS ORIGINAL SHEET NO, 9.463
On	=	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;
io	=	annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;
r	<u>-</u>	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:

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

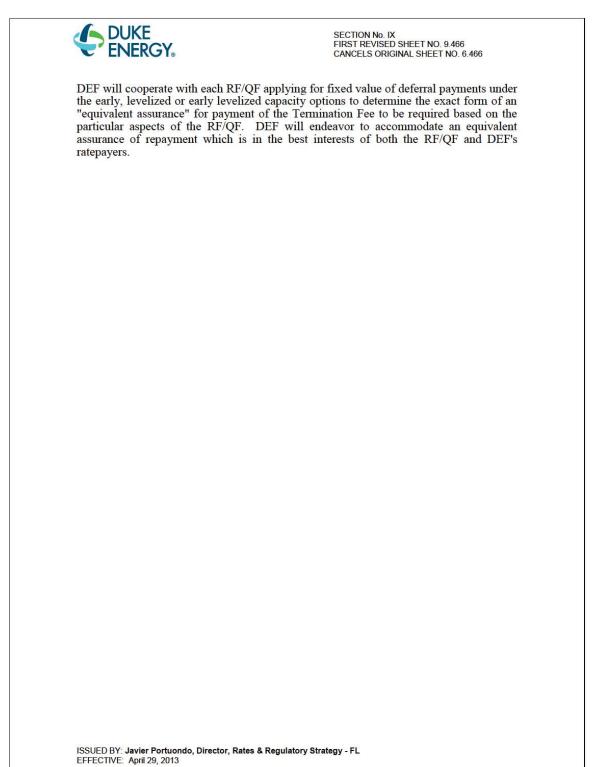
Where:

A _M	Ħ	monthly payments to be made to the RF/QF for each month of the contract year n, in dollars per kilowatt per month in which RF/QF delivers capacity pursuant to the early capacity option;
ip		annual escalation rate associated with the plant cost of the Avoided Unit;
io	=	annual escalation rate associated with the operation and maintenance expense of the Avoided Unit;

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

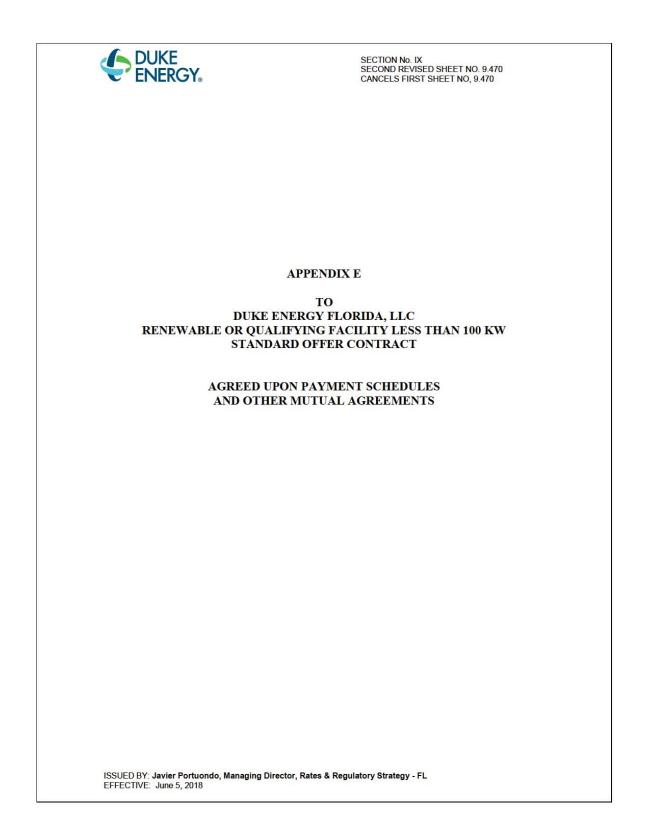
		SECTION No. IX FIRST REVISED SHEET NO. 9.464 CANCELS ORIGINAL SHEET NO, 9.464
m	=	year for which the fixed value of deferral payments under the early capacity option are made to a RF/QF, starting in year one and ending in the year t;
t	=	the Term, in years, of the Contract:
A_{c}	=	$F[(1-R)/(1-R^{t})]$
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	=	$(1 + i_p)/(1 + r)$
г	=	annual discount rate, defined as DEF's incremental after- tax cost of capital; and
Ao	=	$G[(1-R)/(1-R^{t})]$
Where:		
G		The cumulative present value, in the year that the contractual payments will begin, of the avoided fixed operation and maintenance expense component of Capacity Payments which would have been made had Capacity Payments commenced with the Avoided Unit In-Service Date.
R	=	$(1 + i_o)/(1 + r)$
The currently approved	para	meters applicable to the formulas above are found in Schedule 2.
LEVELIZED AND EAR RESPECTIVELY Monthly fixed value of d	RLY	VALUE OF DEFERRAL PAYMENTS - LEVELIZED CAPACITY - OPTION C & OPTION D, l payments for levelized and early levelized capacity shall
be calculated as follows:		l payments for levelized and early levelized capacity shall Rates & Regulatory Strategy - FL

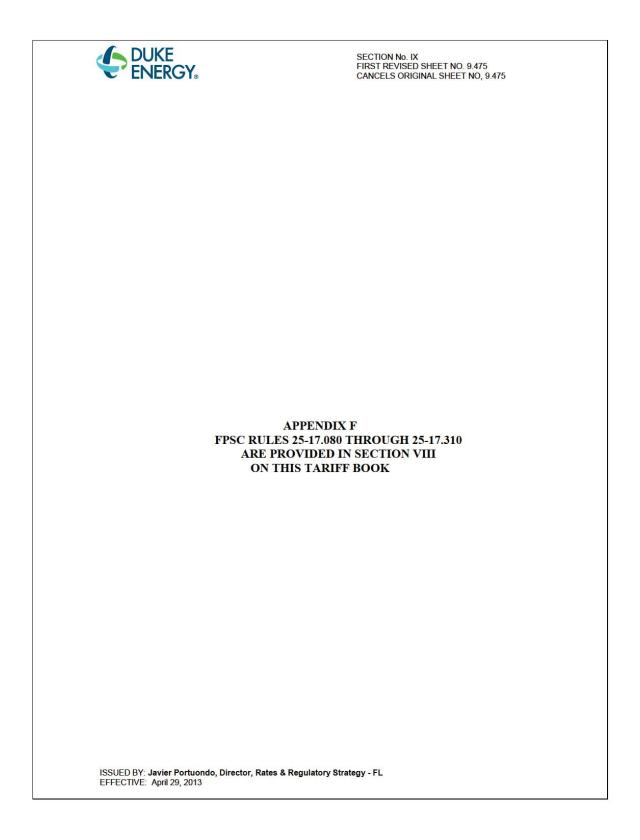
	SECTION No. IX FIRST REVISED SHEET NO. 9 CANCELS ORIGINAL SHEET I	
PL	$[F / 12) \cdot [r / 1 - (1 + r)^{-t}] + O$	
Where:		
P _L	the monthly levelized capacity payment, prior to the in-service date of DEF's Avoid	
F	the cumulative present value, in the y contractual payments will begin, of the a cost component of the Capacity Payments have been made had the Capacity Paym levelized;	voided capital which would
r	 the annual discount rate, defined as DEF after-tax cost of capital; 	's incrementa
t	= the Term, in years of the Contract	
0	the monthly fixed operation and maintenan of the Capacity Payments, calculated in ac calculation of the fixed value of deferral the levelized capacity or the early level options.	cordance with payments for
RISK-RELATEI	GUARANTEES	
17.091, FPSC Rupayments - early of RF/QF must provide the provident of the	n of governmental solid waste facilities covered by FI le 25-17.0832 (4)(e)10 requires that, when fixed value apacity, levelized capacity, or early levelized capacity a de a surety bond or equivalent assurance of securing the the event the RF/QF is unable to meet the terms and co- ling on the nature of the RF/QF's operation, financi- ability to meet the terms and conditions of the Contra- stitute an equivalent assurance of payment:	ne of deferral re elected, the payment of a unditions of its al health and
(3) Un (4) Un pay con allo gov cus lev	h deposit(s) with DEF; conditional, irrevocable, direct pay Letter of Credit; ecured promise by a municipal, county or state govern ments for early or levelized capacity in the event junction with a legally binding commitment from suc wing the utility to levy a surcharge on either the electr ernment's electricity consuming facilities or the const omers of such government to assure that payments dized capacity are repaid;	of default, in h government ic bills of the ituent electric for early or
ear	ecured promise by a privately-owned RF/QF to repay y or levelized capacity in the event of default, in conju lly binding commitment from the owner(s) of the F pany, and/or subsidiary companies located in Florida ments for early, levelized or early levelized capacity are r	The second secon
con	er guarantees acceptable to DEF.	



1 1			JKE NERGY.	SECTION No. IX <u>THIRTEENTH</u> TWELFTH REVISED SH 9.467 CANCELS <u>TWELFTH ELEVENTH</u> REV NO. 9.467				
I	SCHEDULE 2 TO RATE SCHEDULE COG-2_CAPACITY OPTION PARAMETERS							
			FIXED VALUE OF DEF NORMAL CAPACITY O					
		Where, fo	r one year deferral:					
	VA	aC _m =	DEF's value of avoided capac kilowatt per month, during mont		<u>Value</u> 4. <u>78</u> 84			
ļ	K	=	present value of carrying charge over L years with carrying ch annual rate base and assumed to year and present valued to the mi	arges computed using average be paid at the middle of each	1.28 <u>6</u> 4			
	In	=	total direct and indirect cost, in including AFUDC but excludin with an in-service date of year n;	g CWIP, of the Avoided Unit	767.95<u>675.4</u> <u>6</u>			
	On	:==	total fixed operation and mainter mid-year dollars per kilowatt per		3.85 2.06			
	ip	=	annual escalation rate associate Avoided Unit;	ed with the plant cost of the	<u>2.501.27</u> %			
	io	=	annual escalation rate associa maintenance expense of the Avor		2.50%			
	r	=	annual discount rate, defined as I of capital;	DEF's incremental after-tax cost	7.15%			
	L	=	expected life of the Avoided Uni	t;	35			
	n	=	year for which the Avoided Ur Avoided Unit In-Service Date as Date.	e	2027			
Ĩ			Javier Portuondo, Managing Director, Rates & Juno 5, 2018	Regulatory Strategy - FL				

1		UKE NER	GY. SECTION No. IX TWELFTH THIRTEENTH 9.468 CANCELS TWELFTH ELEVENTH REVISED NO. 9.468	
ļ	Am	ł	FIXED VALUE OF DEFERRAL PAYMENTS - EARLY CAPACITY OPTION PARAMETERS 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;	3.47 <u>57</u>
I	ip	=	annual escalation rate associated with the plant cost of the Avoided Unit;	2.50<u>1.27</u>%
	n	=	year for which early Capacity Payments to a RF/QF are to begin;	2025
	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;	259.42 <u>268.</u> <u>44</u>
	r	=	annual discount rate, defined as DEF's incremental after-tax cost of capital;	7.15%
	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.	18.40<u>10.55</u>
Ĩ	ISSUED BY EFFECTIVE		r Portuondo, Managing Director, Rates & Regulatory Strategy - FL 5, 2018	

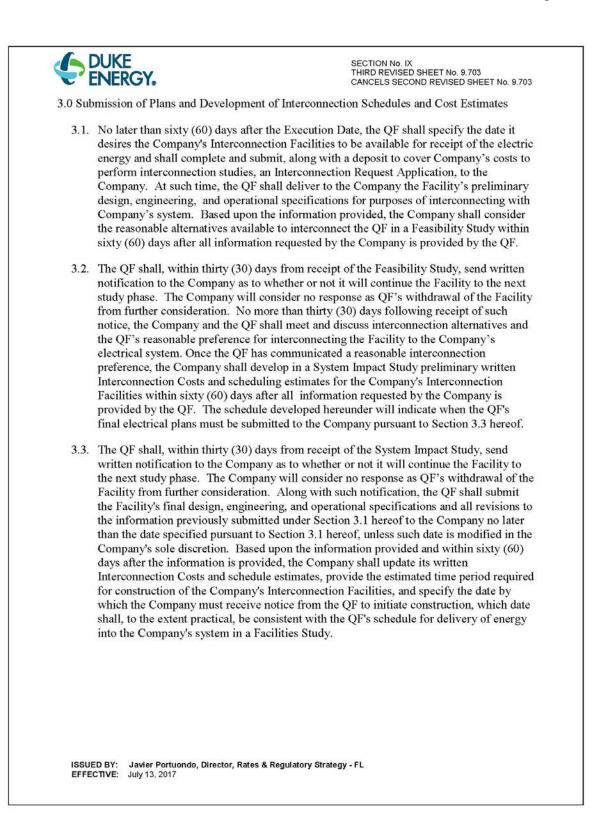


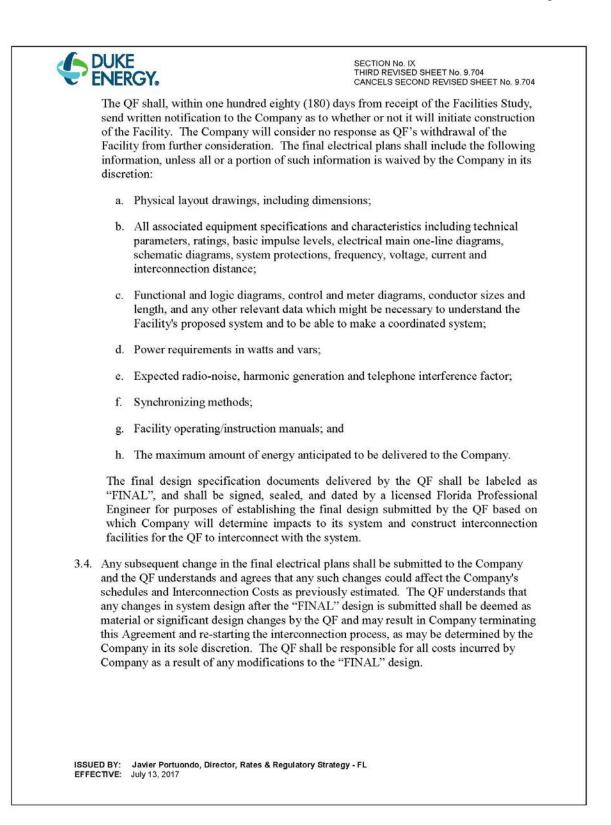


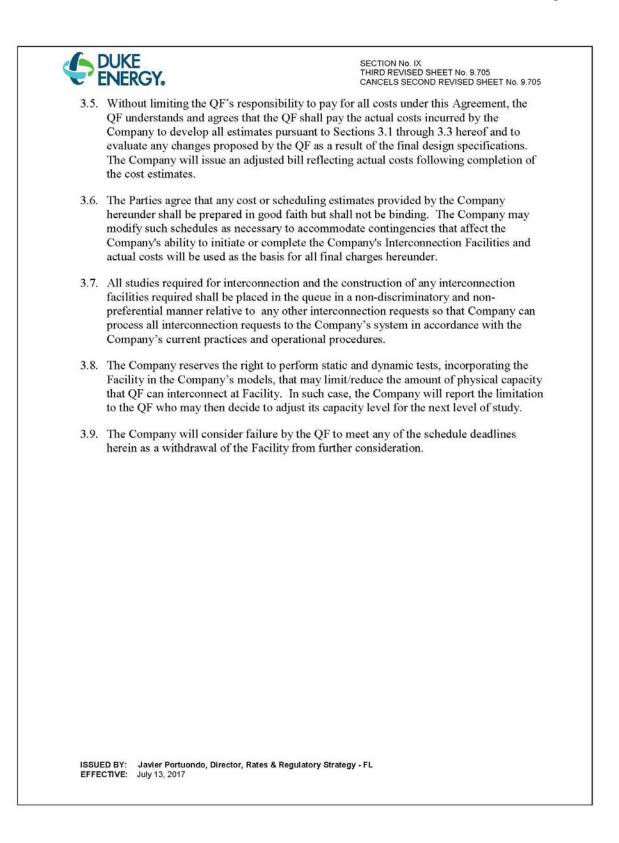
		(SED SHEET No. 9.700 IT REVISED SHEET No. 9.700
	INTERCONNECTION AGREEMENT	
INT	TERCONNECTION ARRANGEMENTS AND COST RESPONS	IBILITY
1.0 Pur	rpose	
1.1.	This Interconnection Agreement ("Agreement") sets forth the terpursuant to which ("QF") has agree Duke Energy Florida, LLC ("Company") to interconnect with C system. This Agreement provides the procedures for the schedu the Company's Interconnection Facilities as well as the cost resp Facility for the payment of Interconnection Costs. This Agreement operating, testing, and inspection procedures for the safe paralle Facility with the Company's electrical system. This Agreement interconnected with the Company's system and providing all net to the Company. All requirements contained herein shall apply lieu of the provisions of the Power Purchase Agreement.	d to comply with and pay Company's electrical uling of construction for ponsibility of a QF ment also provides for el operation of the applies to QF's directly t electrical output for sale
2.0 Def	finitions	
2.1.	"Agreement" means this Interconnection Agreement.	
2.2.	"Company" means Duke Energy Florida, LLC.	
2.3.	" <u>Company's Interconnection Facilities</u> " means all equipment lo side of the Point of Delivery, including without limitation, equip switching, transmission, distribution, protective relaying and sat the Company's sole discretion are required to be installed for th Company's system, measurement of electric energy injected int and upgrades to the Company's electrical system required for th use, and deliver the energy to Company's load, including all me equipment installed for the measurement of such energy deliver regardless of the Facility's location in relation to the Point of De-	pment for connection, fety provisions which in e delivery into the o the Company's system, he Company to receive, tering and telemetering ed by the Facility,
2.4.	" <u>Default</u> " means the failure of a breaching Party to cure its brea	ch under this Agreement.
	JED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL ECTIVE: July 13, 2017	

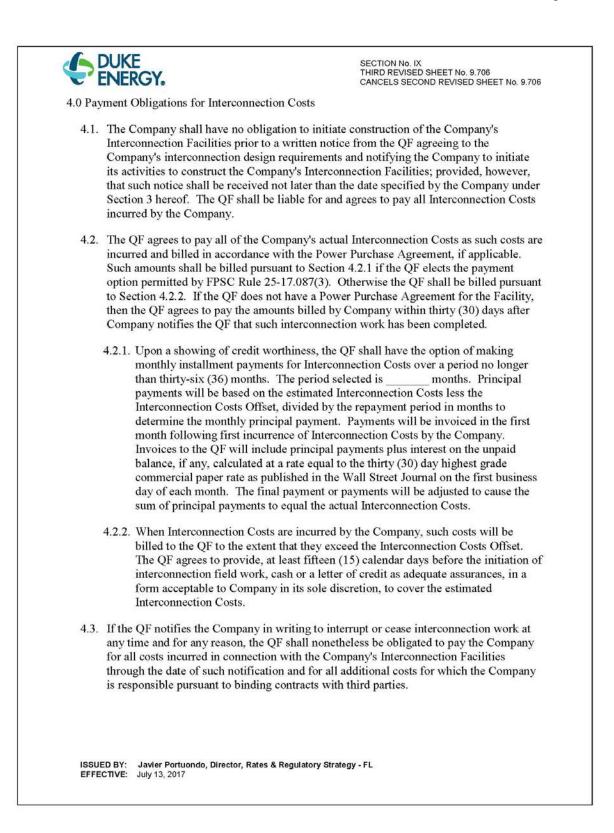
DUKE SECTION No. IX SECOND REVISED SHEET No. 9.701 ENERGY. CANCELS FIRST REVISED SHEET No. 9.701 2.5. "Emergency Condition" means (a) any urgent, abnormal, operationally unstable, dangerous, and/or public safety condition that is existing on the Company's system; (b) any urgent, abnormal, operationally unstable, dangerous, and/or public safety condition that is likely to result in any of the following: (i) loss or damage to the Facility and/or the Company's system, (ii) disruption of generation by the Facility, (iii) disruption of service or stability on the Company's system, and/or (iv) endangerment to human life or public safety; and/or, (c) any circumstance that requires action by the Company's System Operator to comply with standing NERC regulations or standards, including without limitation actions to respond to, prevent, limit, or manage loss or damage to the Facility, loss or damage to the Company's system, disruption of generation by the Facility, disruption of service on the Company's system, an abnormal condition on the Company's system, and/or endangerment to human life or safety. An Emergency Condition will be an excuse to QF's performance only if such condition is not due to OF's negligence, willful misconduct, and/or failure to perform as required under this Agreement. 2.6. "Execution Date" means the date on which the Parties execute this Agreement. 2.7. "Facility" means all equipment used to produce electrical output and, for a cogeneration facility, used to produce useful thermal energy through the sequential use of energy. 2.8. "Facilities Study" means a written cost estimate of all the required materials and labor to complete the interconnection of the Facility with the Company's electrical system, and an estimate of the date by which construction of the interconnection will be completed. 2.9. "Feasibility Study" means a review of the alternatives and operational requirements reasonably available to interconnect the Facility to the Company's electric system and identification of a feasible interconnection alternative. 2.10. "Indemnified Party" has the meaning assigned to it in Section 12.1. 2.11. "Indemnifying Party" has the meaning assigned to it in Section 12.2. 2.12. "Interconnection Costs" means the actual costs incurred by the Company under this Agreement and for the Company's Interconnection Facilities, including, without limitation, the cost of equipment, engineering, communication, labor, and operations, maintenance, and administrative activities. ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strategy - FL EFFECTIVE: July 13, 2017

<	DUKE ENERGY.	SECTION No. IX SECOND REVISED SHEET No. 9.702 CANCELS FIRST REVISED SHEET No. 9.702
	2.13. " <u>Interconnection Costs Offset</u> " means the estim Interconnection Costs that the Company would electric energy from the Facility but instead woo Facility as if it were a non-generating customers	have incurred if it were not purchasing uld have provided electrical service to the
	2.14. "Interconnection Request Application" means a the information required to study an interconnect	
	2.15. "Part(y)(ies)" means the Company or/and the Q	F.
	2.16. " <u>Point of Delivery</u> " means the point(s) on the C where electric energy generated exclusively by Company system pursuant to this Agreement.	
	2.17. " <u>Point of Metering</u> " means the point(s) where e delivery to the Company, subject to adjustment are the sole responsibility of the QF, is measure	for losses to the Point of Delivery that
	2.18. " <u>Power Purchase Agreement</u> " means either the Available Energy, (ii) the Standard Offer Contra Energy from a Renewable Energy Producer or a (iii) a negotiated contract based upon (i) or (ii).	act for the Purchase of Firm Capacity and
	2.19. " <u>Qualifying Facility</u> " or " <u>OF</u> " means a facility t FPSC Rule 25-17.080. For the purposes of this as defined in the Institute of Electrical and Elect 1547 for Interconnecting Distributed Resources may be amended from time to time, will be deen Stipulation approved by the Florida Public Serv 0707-PAA-EI, issued August 18, 2006 in Docker	Agreement only, a Distributed Resource tronics Engineers ("IEEE") Standard with Electric Power Systems, as they ned to be a QF, consistent with the ice Commission in Order No. PSC-06-
	2.20. " <u>OF Insurance</u> " has the meaning assigned to it i	n Section 13.1.
	2.21. "System Impact Study" means a preliminary wr Interconnection Facilities, including without lim complete the interconnection and a preliminary construction of the interconnection will be comp	nitation, required materials and labor to estimate of the date by which
	ISSUED BY: Javier Portuondo, Director, Rates & Regulatory Strat EFFECTIVE: July 13, 2017	egy - FL

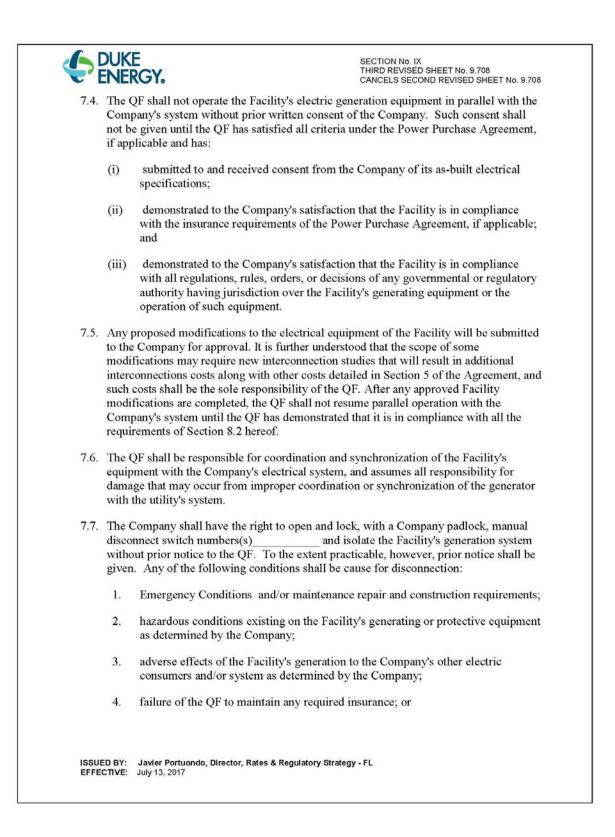








	DUKE ENERGY.	SECTION No. IX THIRD REVISED SHEET No. 9,707 CANCELS SECOND REVISED SHEET No. 9,707	
	ment Obligation for Operation, Mainter erconnection Facilities	nance and Repair of the Company's	
5.1.	and repair of the interconnection. The interconnection and (b) maintenance of	costs associated with the operation, maintenance, se include (a) the Company's inspections of the f any equipment beyond that which would be vice to the Qualifying Facility if no sales to the	
5.2.	The QF shall pay a monthly charge eq Interconnection Costs Offset.	ual to 0.50% of the Interconnection Costs less the	
6.0 Sch	ematic Diagram		
6.1.	major circuit components connecting t and showing the Point of Delivery and if different. All switch number design	a part hereof, is a schematic diagram showing the he Facility with the Company's electrical system the Point of Metering and/or Point of Ownership, ations initially left blank on Exhibit B-1 will be the date on which the Facility first operates in	
7.0 Op	erating Standards		
7.1.		ndently provide for the safe operation of their during which the other Party's facilities are d.	
7.2.	action for so long as it is reasonably no Company may be necessary to operate address, if applicable, an Emergency C	pt electrical generation or take other appropriate eccessary, which in the judgment of the QF or the and maintain a part of either Party's system, to Condition on either Party's system. The QF shall cal generation during the situations defined in	
7.3.		es to the Company from the QF shall not exceed the Company's pursuant to the studies performed	
	ED BY: Javier Portuondo, Director, Rates & Reg CTIVE: July 13, 2017	ulatory Strategy - FL	

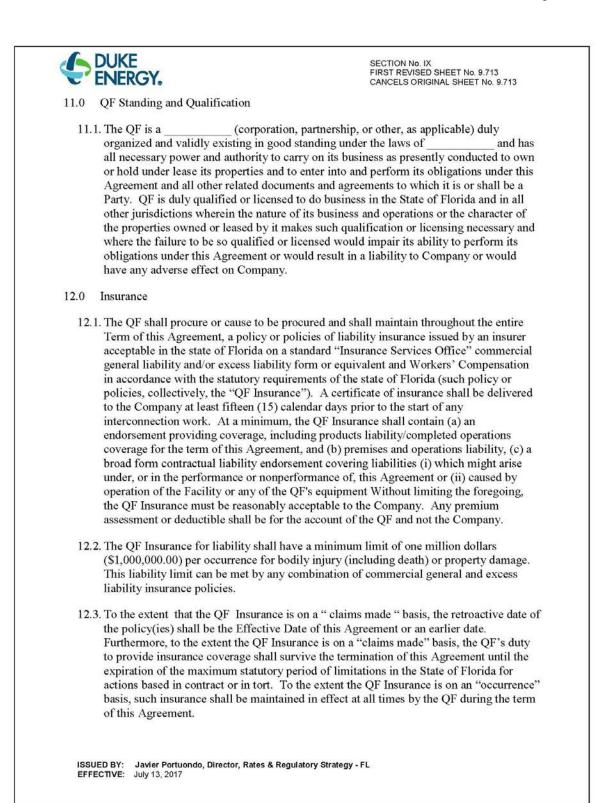


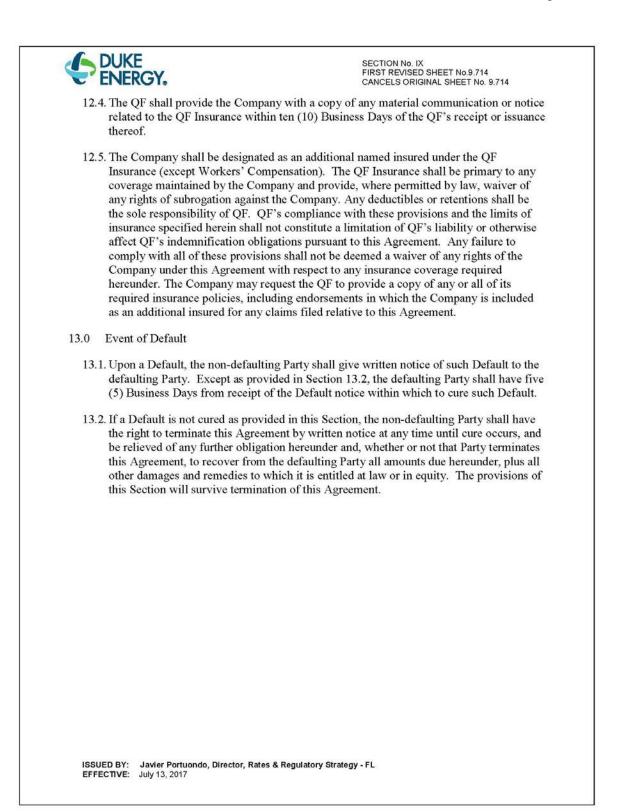
E ENI	KE ERGY.	SECTION No. IX THIRD REVISED SHEET No. 9.709 CANCELS SECOND REVISED SHEET No. 9.709
5.		isting or future regulations, rules, orders aulatory authority having jurisdiction over tent or the operation of such equipment.
Con	Facility's electric generation equipment sh npany's system when auxiliary power is be ility's electric generation equipment.	
Con	ther Party shall operate switching devices on npany may open the manual disconnect sw suant to Section 7.7 hereof.	
	uld one Party desire to change the operatin other Party, the following procedures shall	
(i)	representative of the other Party regardi	nge shall orally agree with an authorized ng which switch or switches are to be switching device, and when each switch
(ii)	The Party performing the requested sw when the requested switching change has	itching shall notify the requesting Party as been completed.
(iii		nel safety. Each Party will perform work if its facilities are energized or test for
(iv]		rning its facilities to approved operating ds, prior to the Company authorizing the
(v)	The Company shall install one or more Company personnel on the Company's s and/or close any switch bearing a Comp	switching and tagging list shall remove
ma sha the	uld any essential protective equipment fail ntenance or construction requirements, the I be disconnected from the Company's syst QF shall either (i) open the generator break nual disconnect switch number(s)	Facility's electric generation equipment tem. To accomplish this disconnection,

l	SECTION No. IX THIRD-FOURTH REVISED SHEET No. 9.710 CANCELS SECOND_THIRD REVISED SHEET
	No. 9.710 7.11.1. If the QF elects option (i), the breaker assembly shall be opened and drawn out by QF personnel. As promptly as practicable, Company personnel shall install a Company padlock and a red tag on the breaker enclosure door.
	7.11.2. If the QF elects option (ii), the switch shall be opened by QF personnel or by Company personnel and, as promptly as practicable, Company personnel will install a Company padlock and a red tag.
	8.0 Inspection and Testing
I	8.1. The inspection and testing of all electrical relays governing the operation of the generator's circuit breaker shall be performed in accordance with manufacturer's recommendations, but in no case less than once every 12 months. This inspection and testing shall include, but not be limited to, the following:
	(i) electrical checks on all relays and verification of settings electrically;
	(ii) cleaning of all contacts;
	 (iii) complete testing of tripping mechanisms for correct operating sequence and proper time intervals; and
	(iv) visual inspection of the general condition of the relays.
	8.2. In the event that any essential relay or protective equipment is found to be inoperative or in need of repair, the QF shall notify the Company of the problem and cease parallel operation of the generator until repairs or replacements have been made. The QF shall be responsible for maintaining records of all inspections and repairs and shall make said records available to the Company upon request.
	8.3. The Company shall have the right to operate and test any of the Facility's protective equipment to assure accuracy and proper operation. This testing shall not relieve the QF of the responsibility to assure proper operation of its equipment and to perform routine maintenance and testing.
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DUKE	SECTION No. IX SECOND REVISED SHEET No. 9.711
C EINERGI.	CANCELS FIRST REVISED SHEET No. 9.711
9.0 Notification	
	s made for emergency or operational reasons may be made to the as and shall thereafter be confirmed promptly in writing:
	To The Company: _System Dispatcher on Duty_
	Title: System Dispatcher
	Telephone: (727) 384-7211 Facsimile: (727) 384-7865
	Facsimile: (727) 384-7865
	To The QF:
	Title:
	Telephone:
	Facsimile:
planned outages 9.3. Communication	provide as much notification as practicable to the other Party regarding of equipment that may affect the other Party's operation. for contract administrative purposes may be made to the following
persons:	
	To The Company:
	Title: Wholesale/Renewable Manager
	Address: 299 First Avenue North
	Mail Code FL-155 St Petersburg, FL 33701
	Telephone: (727) 820-4597
	Facsimile: (727) 820-4598
	To The QF:
	Title:
	Address:
	Telephone: Facsimile:
ISSUED BY: Javier Portug EFFECTIVE: July 13, 2017	ondo, Director, Rates & Regulatory Strategy - FL

	E RGY.	SECTION No. IX SECOND REVISED SHEET No. 9.712 CANCELS FIRST REVISED SHEET No. 9.712
10.0 Stand	ards	
accor FPSC EL, fo Comp Stand	dance with the provisions of FP C Order No. PSC-06-0707-PAA- or a QF that is a Distributed Resc pany's system must be accompli	to, the Company's system must be accomplished in SC Rule 25-17.087. Additionally, as provided in EI, issued August 18, 2006, in Docket No. 060410- burce, the QF's interconnection with the shed in accordance with the provisions of the IEEE stributed Resources with Electric Power Systems stion.
10.2. The f	ollowing minimum guidelines sl	hall also be met:
a.	generator output frequency wit	ime mover shall be capable of maintaining the hin limits for loads from no-load up to rated y shall be 60 hertz (cycles per second), plus or on of less than 1%.
b.		capable of maintaining the generator output voltage to rated output. The limits for voltage shall be the s or minus 5%.
c.		n shall be deemed acceptable when it does not have uared) of harmonics than the Company's normal nnection point.
d.	provide reactive power require factor at the point of interconn- shall have static capacitors that	nt shall be designed, operated, and controlled to ments from 0.95 lagging to 0.95 leading power ection with the Company. Induction generators t provide at least 95% of the magnetizing current generator field. Capacitors shall not be so large as QF's generator field.
e.	· · · ·	may be operated in parallel with the Company's invertor. The inverter must meet all the criteria in
ISSUED BY:	Javier Portuondo, Director, Rates & Re	nulatory Strategy - FL





	DUKE ENERGY。	SECTION No. IX FIRST REVISED SHEET NO. 9.715 CANCELS ORIGINAL SHEET No. 9.715
14.0	Termination	
14.1	. This Agreement shall terminate upon any of the fo	llowing events:
	(a) at the time when the nature of the QF's service manner in which the QF delivers power to the Q	
	(b) pursuant to the procedure set forth in Section 13	3.2; or
	(c) as set forth in Section 3.3; or	
	(d) termination of the Power Purchase Agreement;	or
	(e) upon 30 days' notice by the QF to the Company	у.
15.0	Assignment	
15.1	 Any assignment by QF of this Agreement and the be made only with the written consent of the Comp unreasonably withheld and shall be subject to cred assurances. 	pany, which consent shall not be
16.0	Governing Law and Jurisdiction	
16.1	This Agreement and the rights and duties hereunde enforced and performed in accordance with the La regard to principles of conflicts of law.	
17.0	Mutual Representations	
17.1	L QF and Company each hereby represents and warr each has the capacity, authority, and power to exect Agreement; (ii) this Agreement constitutes legal, v enforceable against it; (iii) each person who execut party has full and complete authority to execute an an authorized representative of such party; (iv) eac made its own independent decision to bind itself un completely read, fully understands, and voluntarily Agreement.	cute, deliver, and perform under this valid, and binding obligations tes this Agreement on behalf of each id bind such party to this Agreement as ch is acting on its own behalf and has nder this Agreement; and, (v) each has
18.0	Entire Agreement	
18.1	This Agreement constitutes the entire agreement au Company relating to the subject matter herein. The effective unless duly executed by an authorized off Company, and upon receipt of such duly executed and delivered by Company to QF.	his Agreement shall not be binding and ficer of QF and delivered by QF to
	ED BY: Javier Portuondo, Director, Rates & Regulatory Strategy CTIVE: July 13, 2017	(-FL

DUKE ENERGY.	SECTION No. IX FIRST REVISED SHEET No. 9.716 CANCELS ORIGINAL SHEET No. 9.716
	EXHIBIT B-1
	Exhibit B-1 will be unique for each Facility and must be complete prior to parallel
	operation with the Company
ISSUED BY: Javier Portu EFFECTIVE: July 13, 2017	ondo, Director, Rates & Regulatory Strategy - FL

DUKE ENERGY.	SECTION No. IX FIRST REVISED SHEET No. 9.717 CANCELS ORIGINAL SHEET No. 9.717
IN WITNESS WHEREOF, the QF has ex	xecuted this Agreement on the date set forth below
QF	
Signature	
Print Name	
Title	
Date	
IN WITNESS WHEREOF, the Comp. Agreement. DUKE ENERGY FLORIDA, LLC.	
Agreement. DUKE ENERGY FLORIDA, LLC.	any has acknowledged receipt of this execute
Agreement.	
Agreement. DUKE ENERGY FLORIDA, LLC.	
Agreement. DUKE ENERGY FLORIDA, LLC. Signature	
Agreement. DUKE ENERGY FLORIDA, LLC. Signature	
Agreement. DUKE ENERGY FLORIDA, LLC. Signature Print Name	
Agreement. DUKE ENERGY FLORIDA, LLC. Signature Print Name	
Agreement. DUKE ENERGY FLORIDA, LLC. Signature Print Name Title	
Agreement. DUKE ENERGY FLORIDA, LLC. Signature Print Name Title	
Agreement. DUKE ENERGY FLORIDA, LLC. Signature Print Name Title	