DOCKET NO. 150105-EI

### AUSLEY MCMULLEN

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FILED APR 01, 2015 DOCUMENT NO. 01786-15 FPSC - COMMISSION CLERK

April 1, 2015

#### **VIA: ELECTRONIC FILING**

Ms. Carlotta S. Stauffer Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Re: Petition of Tampa Electric Company for Approval of Revisions to Rate Schedule

COG-2 for the Standard Offer

Dear Ms. Stauffer:

Attached for filing in the above-styled matter is Tampa Electric Company's Petition for Approval of Revisions to Rate Schedule COG-2 for the Standard Offer.

Thank you for your assistance in connection with this matter.

Sincerely,

James D. Beasley

JDB/pp Attachment

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Tampa Electric Company	)	
for Approval of Revisions to Rate Schedule	) I	DOCKET NO
COG-2 for the Standard Offer.	)	
	)	FILED: April 1, 2015

#### TAMPA ELECTRIC COMPANY'S PETITION FOR APPROVAL OF REVISIONS TO RATE SCHEDULE COG-2 FOR THE STANDARD OFFER

Tampa Electric Company ("Tampa Electric" or "the company"), pursuant to Sections 366.051 and 366.91, Florida Statutes, and Rules 25-17.200 through 25-17.310, Florida Administrative Code, petitions the Florida Public Service Commission ("the Commission") to approve revisions to its Rate Schedule COG-2 for the Standard Offer. As grounds therefor, the company says:

1. The name, address, telephone number and facsimile number of the petitioner are:

Tampa Electric Company Post Office Box 111 Tampa, FL 33601 (813) 228-4111 (813) 228-1770 (fax)

- 2. Tampa Electric is an investor-owned public utility subject to the jurisdiction of the Commission under Chapter 366, Florida Statutes.
- 3. All notices, pleadings and correspondence required to be served on the Petitioner should be directed to:

James D. Beasley
J. Jeffry Wahlen
Ashley M. Daniels
Ausley & McMullen
Post Office Box 391
Tallahassee, FL 32302
(850) 224-9115
(850) 222-7960 (fax)

Paula Brown, Manager Regulatory Coordination Tampa Electric Company Post Office Box 111 Tampa, FL 33602 (813) 228-1444 (813) 228-1770 (fax) 4. Tampa Electric proposes revisions to Rate Schedule COG-2 based on the

generating unit technology and in-service dates reflected in the company's generation expansion

plan contained in its proposed Ten Year Site Plan ("TYSP"), filed concurrently with this

Petition. Tampa Electric's 2015 avoided unit remains a GE7FA.05 combustion turbine;

however, the unit's in-service date has been deferred by one year to May 1, 2021. The company

has updated the cost parameters and unit characteristics based on the most current information

available.

5. Attached hereto as Exhibit "A" is a listing of revised tariff sheets and a

description of the proposed changes for each tariff sheet. The revised tariff sheets containing the

proposed revisions to Schedule COG-2 are attached hereto in both standard and legislative

formats as Exhibits "B" and "C", respectively.

6. Tampa Electric is not aware of any disputed issues of material fact relative to the

subject matter of this petition.

WHEREFORE, Tampa Electric respectfully requests that the Commission grant this

Petition for Approval of its revised COG-2 tariff as reflected in the revised tariff sheets contained

in Exhibit "B".

DATED this 1st day of April 2015.

Respectfully submitted,

JAMES D. BEASLEY

J. JEFFRY WAHLEN

ASHLEY M. DANIELS

Ausley & McMullen

Post Office Box 391

Tallahassee, FL 32302

(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY



### PROPOSED REVISIONS TO TAMPA ELECTRIC COMPANY'S RATE SCHEDULE COG-2 FOR STANDARD OFFER

TARIFF SHEET NO.	REVISIONS/COMMENTS
8.010	Updated with the new in-service date of the avoided CT.
8.326	Updated with the new in-service date of the avoided CT.
8.406	Updated with the new in-service date of the avoided CT.
8.416	(COG-2) Added missing parenthesis.
8.422	(COG-2) Updated parameters for avoided capacity costs.
8.424	(COG-2) Updated parameters for avoided capacity costs.
8.426	(COG-2) Updated table of early capacity payments based on 2021 CT.
8.427	(COG-2) Updated table of levelized capacity payments based on 2021 CT.
8.434	(COG-2) Corrected format of FC calculation.
8.436	(COG-2) Updated in-service date and variable O&M costs.



# TWELFTH REVISED SHEET NO. 8.010 CANCELS ELEVENTH REVISED SHEET NO. 8.010

### **COGENERATION and SMALL POWER PRODUCTION**

Title	Sheet No.
<u>Schedule COG-1, As-Available Energy:</u> Standard Rate for Purchase of As-Available Energy from Qualifying Cogeneration and Small Power Production Facilities (Qualifying Facilities)	8.020
<b>Appendix A</b> - Methodology to be Used in the Calculation of Avoided Energy Cost - Schedule COG-1	8.101
<u>Standard Offer Contract:</u> Standard Offer Contract for the Purchase of Contracted Capacity and Associated Energy from a Renewable Generating Facility or a Small Qualifying Facility	8.202
Evaluation Procedure for Standard Offer Contracts	8.266
Schedule COG-2: Standard Offer Contract Rate for the Purchase of Contracted Capacity and Associated Energy	8.284
Appendix A: Value of Deferral Methodology	8.328
<b>Appendix B:</b> Methodology to be Used in Calculation of Avoided Energy Cost	8.344
Appendix C: 2021 Combustion Turbine	8.406
Appendix D: Reserved for Future Use	-
Appendix E: Reserved for Future Use	-
Appendix F: Reserved for Future Use	-
Interconnection Agreement: Interconnection Agreement	8.600
General Standards for Safety: General Standards for Safety and Interconnection of Cogeneration and Small Power Production Facilities to the Electric Utility System	8.700
Service Agreement For The Purchase of Emergency On-Demand Energy At Negotiated Rates	8.800

**ISSUED BY:** G. L. Gillette, President

**DATE EFFECTIVE:** 



### RATE SCHEDULE COG-2 TABLE OF APPENDICES

APPENDIX	TITLE	SHEET NO.
А	VALUE OF DEFERRAL METHODOLGY	8.328
В	METHODOLOGY TO BE USED IN THE CALCULATION OF AVOIDED ENERGY COST	8.344
С	<ul> <li>2021 COMBUSTION TURBINE</li> <li>Minimum Performance Standard</li> <li>Parameters for Avoided Unit Capacity Costs</li> <li>Exemplary Capacity Payment Schedules</li> <li>Parameters for Avoided Unit Energy Costs</li> </ul>	8.406
D	RESERVED FOR FUTURE USE	-
E	RESERVED FOR FUTURE USE	-
F	RESERVED FOR FUTURE USE	-

ISSUED BY: G. L. Gillette, President

### SIXTH REVISED SHEET NO. 8.406 CANCELS FIFTH REVISED SHEET NO. 8.406

#### RATE SCHEDULE COG-2 APPENDIX C

#### **2021 COMBUSTION TURBINE**

This Designated Avoided Unit is a 220 MW (winter rating) natural gas-fired combustion turbine with a May 1, 2021, in-service date.

#### MINIMUM PERFORMANCE STANDARDS

In order to receive a Monthly Capacity Payment, all Contracted Capacity and Associated Energy provided by CEPs shall meet or exceed the following MPS on a monthly basis. The MPS are based on the anticipated peak and off-peak dispatchability, unit availability, and operating factor of the Designated Avoided Unit over the term of this Standard Offer Contract. The CEP's proposed generating facility ("the Facility") as defined in the Standard Offer Contract will be evaluated against the anticipated performance of a combustion turbine, starting with the first Monthly Period following the date selected in Paragraph 6.b.ii of the Company's Standard Offer Contract.

- 1. **Dispatch Requirements:** The CEP shall provide peaking capacity to the Company on a firm commitment, first-call, on-call, as-needed basis. In order to receive a Contracted Capacity Payment for each calendar month that the Facility is to be dispatched, the CEP must meet or exceed both the minimum Monthly Availability and Monthly Capacity Factor requirements.
- Dispatch Procedure: Commencing on the calendar day prior to the Facility In-Service Date or the Extended Facility In-Service Date, as applicable, and continuing each calendar day thereafter during the Term, by 7:00 A.M. EPT, the CEP shall electronically transmit a schedule ("Available Schedule") of the hour-by-hour amounts of Contracted Capacity expected to be available from the Facility the next day ("Committed Capacity"). Commencing on the calendar day prior to the Facility In-Service Date or the Extended Facility In-Service Date, as applicable, and continuing each calendar day thereafter during the Term, by 3:00 P.M. EPT, the Company shall electronically transmit the hour-by-hour amounts of Contracted Capacity that the Company desires the CEP to dispatch from the Facility the next day based on the Available Schedule supplied at 7:00 A.M. EPT by the CEP ("Dispatch Schedule"). The CEP's Available Schedule and the Company's Dispatch

Continued to Sheet No. 8.408



### FOURTH REVISED SHEET NO. 8.416 CANCELS THIRD REVISED SHEET NO. 8.416

#### Continued from Sheet No. 8.414

- 4. **Annual Scheduled Maintenance:** Each year the CEP shall prepare, coordinate, and provide by April 1st all planned maintenance with the Company. The Company will review and approve annual/major scheduled maintenance by July 1st for the balance of the current year and following calendar year. A maximum of 10 days (240 hours) each year for annual maintenance and a maximum of 4 weeks (672 hours) every fifteenth year for major maintenance will be allowed. Scheduled maintenance shall not be planned during January, July, August, or December. At the option of the CEP and with written consent from the Company, scheduled outage time may be utilized during any other months to improve the CEP's Availability and Capacity Factors and such scheduled outage hours will be disregarded from the Monthly Availability Factor and Capacity Factor calculations. However, once allowable maintenance hours have been utilized, all other hours during the year will be considered in Availability and Capacity Factor calculations.
- 5. **Monthly Capacity Payment**: Starting with the CEP's Commercial In-Service Date, for months when the CEP unit has been dispatched (provided that CEP has achieved at least a 90% Monthly Availability Factor), the Monthly Capacity Payment for each Monthly Period shall be calculated according to the following:
  - a. In the event that the Monthly Capacity Factor is less than 80%, no Monthly Capacity Payment shall be paid to the CEP. That is:

b. In the event that the Monthly Capacity Factor is greater than or equal to 80% but less than 90%, the Monthly Capacity Payment shall be calculated from the following formula:

$$MCP = [(BCC) \times (.02 \times (CF - 45))] \times CC$$

Continued on Sheet No. 8.418



### EIGHTH REVISED SHEET NO. 8.422 CANCELS SEVENTH REVISED SHEET NO. 8.422

Continued from Sheet No. 8.418

#### PARAMETERS FOR AVOIDED CAPACITY COSTS

Beginning with the in-service date (5/1/2021) of the Company's Designated Avoided Unit, a 220MW (Winter Rating) natural gas-fired Combustion Turbine, for a 1 year deferral:

			VALUE
VAC	<sub>m</sub> =	Company's monthly value of avoided capacity, \$/kW/month, for each month of year n	7.29
К	=	present value of carrying charges for one dollar of investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present value to the middle of the first year	1.4600
I <sub>n</sub>	=	total direct and indirect cost, in mid-year \$/kW including AFUDC but excluding CWIP, of the Designated Avoided Unit(s) with an in-service date of year n, including all identifiable and quantifiable costs relating to the construction of the Designated Avoided Unit that would have been paid had the Designated Avoided Unit(s) been constructed	744.46
On	=	total fixed operation and maintenance expense for the year n, in mid-year \$/kW/year, of the Designated Avoided Unit(s);	13.49
i <sub>p</sub>	=	annual escalation rate associated with the plant cost of the Designated Avoided Unit(s)	2.1%
i <sub>o</sub>	=	annual escalation rate associated with the operation and maintenance expense of the Designated Avoided Unit(s);	2.5%
r	=	discount rate, defined as the Company's incremental after tax cost of capital;	7.29%

Continued to Sheet No. 4.424



# EIGHTH REVISED SHEET NO. 8.424 CANCELS SEVENTH REVISED SHEET NO. 8.424

		Continued from Sheet No. 8.422		
L	=	expected life of the Designated Avoided Unit(s); and	25	
n	=	year for which the Designated Avoided Unit is deferred starting with its original anticipated in-service date and ending with the termination of the contract for the purchase of firm capacity and energy.	2021	
$A_{m}$	=	monthly early capacity payments to be made to the CEP for each month of the contract year n, in \$/kW/month, if payments start in 2015;	3.41	
m	=	Earliest year in which early capacity payments to the CEP may begin;	2015*	
F	=	the cumulative present value, in the year contractual payments will begin, of the avoided capital cost component of capacity payments over the term of the contract which would have been made had capacity payments commenced with the anticipated in-service date of the Designated Avoided Unit(s);	392.09*	
t	=	the term, in years, of the contract for the purchase of firm capacity if early capacity payments commence in year m;	16*	

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

Continued to Sheet No. 8.426



# EIGHTH REVISED SHEET NO. 8.426 CANCELS SEVENTH REVISED SHEET NO. 8.426

### Continued from Sheet No. 8.424

2021 COMBUSTION TURBINE - AVOIDED UNIT								
MONTHLY CAPACITY PAYMENT RATE ( \$/KW-MONTH)								
	NON-LEVELIZED PAYMENT OPTIONS							
		OPTION 1			OPTI	ON 2		
		NORMAL PAYMENT		EARLY PAYMENT				
CONTRA	CT YEAR	Starting 5/1/21	Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15
FROM	то	\$/kw-mo						
5/1/15	4/30/16							3.41
5/1/16	4/30/17						3.82	3.48
5/1/17	4/30/18					4.29	3.90	3.56
5/1/18	4/30/19				4.85	4.39	3.98	3.63
5/1/19	4/30/20			5.52	4.96	4.48	4.07	3.71
5/1/20	4/30/21		6.32	5.64	5.06	4.58	4.16	3.79
5/1/21	4/30/22	7.29	6.45	5.76	5.17	4.68	4.25	3.87
5/1/22	4/30/23	7.45	6.59	5.88	5.29	4.78	4.34	3.96
5/1/23	4/30/24	7.61	6.73	6.01	5.40	4.88	4.43	4.04
5/1/24	4/30/25	7.77	6.88	6.14	5.52	4.99	4.53	4.13
5/1/25	4/30/26	7.94	7.03	6.27	5.64	5.09	4.63	4.22
5/1/26	4/30/27	8.11	7.18	6.41	5.76	5.20	4.73	4.31
5/1/27	4/30/28	8.29	7.34	6.55	5.88	5.32	4.83	4.40
5/1/28	4/30/29	8.47	7.50	6.69	6.01	5.43	4.93	4.50
5/1/29	4/30/30	8.65	7.66	6.83	6.14	5.55	5.04	4.60
5/1/30	4/30/31	8.84	7.82	6.98	6.27	5.67	5.15	4.70

Continued to Sheet No. 8.427



# THIRD REVISED SHEET NO. 8.427 CANCELS SECOND REVISED SHEET NO. 8.427

		2021 C	OMBUSTIO	N TURBINE	- AVOIDED	UNIT		
	MONTHLY CAPACITY PAYMENT RATE ( \$/KW-MONTH)							
	LEVELIZED PAYMENT OPTIONS							
		OPTION 3			OPTI	ON 4		
		LEVELIZED NORMAL PAYMENT		LEV	'ELIZED EA	RLY PAYM	ENT	
CONTRA	CT YEAR	Starting 5/1/21	Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15
FROM	то	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo
5/1/15	4/30/16							3.81
5/1/16	4/30/17						4.24	3.82
5/1/17	4/30/18					4.74	4.25	3.83
5/1/18	4/30/19				5.32	4.75	4.27	3.85
5/1/19	4/30/20			6.01	5.34	4.77	4.28	3.86
5/1/20	4/30/21		6.83	6.03	5.36	4.79	4.30	3.88
5/1/21	4/30/22	7.82	6.85	6.05	5.38	4.80	4.31	3.89
5/1/22	4/30/23	7.85	6.88	6.07	5.40	4.82	4.33	3.90
5/1/23	4/30/24	7.88	6.90	6.09	5.42	4.84	4.35	3.92
5/1/24	4/30/25	7.91	6.93	6.12	5.44	4.86	4.36	3.94
5/1/25	4/30/26	7.94	6.96	6.14	5.46	4.88	4.38	3.95
5/1/26	4/30/27	7.97	6.98	6.17	5.48	4.90	4.40	3.97
5/1/27	4/30/28	8.00	7.01	6.19	5.50	4.92	4.42	3.99
5/1/28	4/30/29	8.04	7.04	6.22	5.53	4.94	4.44	4.00
5/1/29	4/30/30	8.07	7.07	6.24	5.55	4.96	4.46	4.02
5/1/30	4/30/31	8.10	7.10	6.27	5.58	4.99	4.48	4.04

Continued to Sheet No. 8.428



#### SIXTH REVISED SHEET NO. 8.434 CANCELS FIFTH REVISED SHEET NO. 8.434

Continued from Sheet No. 8.428

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

by:

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

where;

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

FP = GC/(1-FRP) + TC

where:

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

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

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

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

Continued to Sheet No. 8.436



### EIGHTH REVISED SHEET NO. 8.436 CANCELS SEVENTH REVISED SHEET NO. 8.436

Continued from Sheet No. 8.428

# PARAMETERS FOR AVOIDED UNIT ENERGY AND VARIABLE OPERATION AND MAINTENANCE COSTS

Beginning on May 1, 2021, to the extent that the Designated Avoided Unit(s) would have been operated had it been installed by the Company:

			VALUE
$O_V$	=	total variable operating and maintenance expense, in \$/MWH, of the Designated Avoided Unit(s), in year n	2.18
Н	=	The average annual heat rate, in British Thermal Units (Btus) per kilowatt-hour (Btu/kWh), of the Designated Avoided Unit(s)	10,046



# TWELFTH REVISED SHEET NO. 8.010 CANCELS ELEVENTH REVISED SHEET NO. 8.010

### **COGENERATION and SMALL POWER PRODUCTION**

Title	Sheet No.
<u>Schedule COG-1, As-Available Energy:</u> Standard Rate for Purchase of As-Available Energy from Qualifying Cogeneration and Small Power Production Facilities (Qualifying Facilities)	8.020
<b>Appendix A</b> - Methodology to be Used in the Calculation of Avoided Energy Cost - Schedule COG-1	8.101
Standard Offer Contract: Standard Offer Contract for the Purchase of Contracted Capacity and Associated Energy from a Renewable Generating Facility or a Small Qualifying Facility	8.202
<b>Evaluation Procedure for Standard Offer Contracts</b>	8.266
Schedule COG-2: Standard Offer Contract Rate for the Purchase of Contracted Capacity and Associated Energy	8.284
Appendix A: Value of Deferral Methodology	8.328
<b>Appendix B:</b> Methodology to be Used in Calculation of Avoided Energy Cost	8.344
Appendix C: 2021 Combustion Turbine	8.406
Appendix D: Reserved for Future Use	-
Appendix E: Reserved for Future Use	-
Appendix F: Reserved for Future Use	-
Interconnection Agreement: Interconnection Agreement	8.600
<u>General Standards for Safety:</u> General Standards for Safety and Interconnection of Cogeneration and Small Power Production Facilities to the Electric Utility System	8.700
Service Agreement For The Purchase of Emergency On-Demand Energy At Negotiated Rates	8.800

**ISSUED BY:** G. L. Gillette, President

**DATE EFFECTIVE:** 



### RATE SCHEDULE COG-2 TABLE OF APPENDICES

APPENDIX	TITLE	SHEET NO.
А	VALUE OF DEFERRAL METHODOLGY	8.328
В	METHODOLOGY TO BE USED IN THE CALCULATION OF AVOIDED ENERGY COST	8.344
С	<ul> <li>2021 COMBUSTION TURBINE</li> <li>Minimum Performance Standard</li> <li>Parameters for Avoided Unit Capacity Costs</li> <li>Exemplary Capacity Payment Schedules</li> <li>Parameters for Avoided Unit Energy Costs</li> </ul>	8.406
D	RESERVED FOR FUTURE USE	-
E	RESERVED FOR FUTURE USE	-
F	RESERVED FOR FUTURE USE	-

ISSUED BY: G. L. Gillette, President

### SIXTH REVISED SHEET NO. 8.406 CANCELS FIFTH REVISED SHEET NO. 8.406

#### RATE SCHEDULE COG-2 APPENDIX C

#### **2021 COMBUSTION TURBINE**

This Designated Avoided Unit is a 220 MW (winter rating) natural gas-fired combustion turbine with a May 1, 2021, in-service date.

#### MINIMUM PERFORMANCE STANDARDS

In order to receive a Monthly Capacity Payment, all Contracted Capacity and Associated Energy provided by CEPs shall meet or exceed the following MPS on a monthly basis. The MPS are based on the anticipated peak and off-peak dispatchability, unit availability, and operating factor of the Designated Avoided Unit over the term of this Standard Offer Contract. The CEP's proposed generating facility ("the Facility") as defined in the Standard Offer Contract will be evaluated against the anticipated performance of a combustion turbine, starting with the first Monthly Period following the date selected in Paragraph 6.b.ii of the Company's Standard Offer Contract.

- 1. **Dispatch Requirements:** The CEP shall provide peaking capacity to the Company on a firm commitment, first-call, on-call, as-needed basis. In order to receive a Contracted Capacity Payment for each calendar month that the Facility is to be dispatched, the CEP must meet or exceed both the minimum Monthly Availability and Monthly Capacity Factor requirements.
- Dispatch Procedure: Commencing on the calendar day prior to the Facility In-Service Date or the Extended Facility In-Service Date, as applicable, and continuing each calendar day thereafter during the Term, by 7:00 A.M. EPT, the CEP shall electronically transmit a schedule ("Available Schedule") of the hour-by-hour amounts of Contracted Capacity expected to be available from the Facility the next day ("Committed Capacity"). Commencing on the calendar day prior to the Facility In-Service Date or the Extended Facility In-Service Date, as applicable, and continuing each calendar day thereafter during the Term, by 3:00 P.M. EPT, the Company shall electronically transmit the hour-by-hour amounts of Contracted Capacity that the Company desires the CEP to dispatch from the Facility the next day based on the Available Schedule supplied at 7:00 A.M. EPT by the CEP ("Dispatch Schedule"). The CEP's Available Schedule and the Company's Dispatch

Continued to Sheet No. 8.408



### FOURTH REVISED SHEET NO. 8.416 CANCELS THIRD REVISED SHEET NO. 8.416

#### Continued from Sheet No. 8.414

- 4. **Annual Scheduled Maintenance:** Each year the CEP shall prepare, coordinate, and provide by April 1st all planned maintenance with the Company. The Company will review and approve annual/major scheduled maintenance by July 1st for the balance of the current year and following calendar year. A maximum of 10 days (240 hours) each year for annual maintenance and a maximum of 4 weeks (672 hours) every fifteenth year for major maintenance will be allowed. Scheduled maintenance shall not be planned during January, July, August, or December. At the option of the CEP and with written consent from the Company, scheduled outage time may be utilized during any other months to improve the CEP's Availability and Capacity Factors and such scheduled outage hours will be disregarded from the Monthly Availability Factor and Capacity Factor calculations. However, once allowable maintenance hours have been utilized, all other hours during the year will be considered in Availability and Capacity Factor calculations.
- 5. **Monthly Capacity Payment**: Starting with the CEP's Commercial In-Service Date, for months when the CEP unit has been dispatched (provided that CEP has achieved at least a 90% Monthly Availability Factor), the Monthly Capacity Payment for each Monthly Period shall be calculated according to the following:
  - a. In the event that the Monthly Capacity Factor is less than 80%, no Monthly Capacity Payment shall be paid to the CEP. That is:

b. In the event that the Monthly Capacity Factor is greater than or equal to 80% but less than 90%, the Monthly Capacity Payment shall be calculated from the following formula:

$$MCP = [(BCC) \times (.02 \times (CF - 45))] \times CC$$

Continued on Sheet No. 8.418



### EIGHTH REVISED SHEET NO. 8.422 CANCELS SEVENTH REVISED SHEET NO. 8.422

Continued from Sheet No. 8.418

#### PARAMETERS FOR AVOIDED CAPACITY COSTS

Beginning with the in-service date (5/1/2021) of the Company's Designated Avoided Unit, a 220MW (Winter Rating) natural gas-fired Combustion Turbine, for a 1 year deferral:

			VALUE
VAC	<sub>m</sub> =	Company's monthly value of avoided capacity, \$/kW/month, for each month of year n	7.29
К	=	present value of carrying charges for one dollar of investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present value to the middle of the first year	1.4600
I <sub>n</sub>	=	total direct and indirect cost, in mid-year \$/kW including AFUDC but excluding CWIP, of the Designated Avoided Unit(s) with an in-service date of year n, including all identifiable and quantifiable costs relating to the construction of the Designated Avoided Unit that would have been paid had the Designated Avoided Unit(s) been constructed	744.46
On	=	total fixed operation and maintenance expense for the year n, in mid-year \$/kW/year, of the Designated Avoided Unit(s);	13.49
i <sub>p</sub>	=	annual escalation rate associated with the plant cost of the Designated Avoided Unit(s)	2.1%
i <sub>o</sub>	=	annual escalation rate associated with the operation and maintenance expense of the Designated Avoided Unit(s);	2.5%
r	=	discount rate, defined as the Company's incremental after tax cost of capital;	7.29%

Continued to Sheet No. 4.424



# EIGHTH REVISED SHEET NO. 8.424 CANCELS SEVENTH REVISED SHEET NO. 8.424

		Continued from Sheet No. 8.422		
L	=	expected life of the Designated Avoided Unit(s); and	25	
n	=	year for which the Designated Avoided Unit is deferred starting with its original anticipated in-service date and ending with the termination of the contract for the purchase of firm capacity and energy.	2021	
$A_{m}$	=	monthly early capacity payments to be made to the CEP for each month of the contract year n, in \$/kW/month, if payments start in 2015;	3.41	
m	=	Earliest year in which early capacity payments to the CEP may begin;	2015*	
F	=	the cumulative present value, in the year contractual payments will begin, of the avoided capital cost component of capacity payments over the term of the contract which would have been made had capacity payments commenced with the anticipated in-service date of the Designated Avoided Unit(s);	392.09*	
t	=	the term, in years, of the contract for the purchase of firm capacity if early capacity payments commence in year m;	16*	

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

Continued to Sheet No. 8.426



# EIGHTH REVISED SHEET NO. 8.426 CANCELS SEVENTH REVISED SHEET NO. 8.426

### Continued from Sheet No. 8.424

2021 COMBUSTION TURBINE - AVOIDED UNIT									
	MONTHLY CAPACITY PAYMENT RATE ( \$/KW-MONTH)								
		NC	N-LEVELIZ	ED PAYMEI	NT OPTIONS	3			
		OPTION 1			OPTI	ON 2			
		NORMAL PAYMENT			EARLY P	AYMENT			
CONTRA	CT YEAR	Starting 5/1/21	Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	
FROM	то	\$/kw-mo							
5/1/15	4/30/16							3.41	
5/1/16	4/30/17						3.82	3.48	
5/1/17	4/30/18					4.29	3.90	3.56	
5/1/18	4/30/19				4.85	4.39	3.98	3.63	
5/1/19	4/30/20			5.52	4.96	4.48	4.07	3.71	
5/1/20	4/30/21		6.32	5.64	5.06	4.58	4.16	3.79	
5/1/21	4/30/22	7.29	6.45	5.76	5.17	4.68	4.25	3.87	
5/1/22	4/30/23	7.45	6.59	5.88	5.29	4.78	4.34	3.96	
5/1/23	4/30/24	7.61	6.73	6.01	5.40	4.88	4.43	4.04	
5/1/24	4/30/25	7.77	6.88	6.14	5.52	4.99	4.53	4.13	
5/1/25	4/30/26	7.94	7.03	6.27	5.64	5.09	4.63	4.22	
5/1/26	4/30/27	8.11	7.18	6.41	5.76	5.20	4.73	4.31	
5/1/27	4/30/28	8.29	7.34	6.55	5.88	5.32	4.83	4.40	
5/1/28	4/30/29	8.47	7.50	6.69	6.01	5.43	4.93	4.50	
5/1/29	4/30/30	8.65	7.66	6.83	6.14	5.55	5.04	4.60	
5/1/30	4/30/31	8.84	7.82	6.98	6.27	5.67	5.15	4.70	

Continued to Sheet No. 8.427



# THIRD REVISED SHEET NO. 8.427 CANCELS SECOND REVISED SHEET NO. 8.427

		2021 C	OMBUSTIO	N TURBINE	- AVOIDED	UNIT		
	MONTHLY CAPACITY PAYMENT RATE ( \$/KW-MONTH)							
			LEVELIZED	PAYMENT	OPTIONS			
		OPTION 3			OPTI	ON 4		
		LEVELIZED NORMAL PAYMENT		LEV	'ELIZED EA	RLY PAYM	ENT	
CONTRA	CT YEAR	Starting 5/1/21	Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15
FROM	то	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo
5/1/15	4/30/16							3.81
5/1/16	4/30/17						4.24	3.82
5/1/17	4/30/18					4.74	4.25	3.83
5/1/18	4/30/19				5.32	4.75	4.27	3.85
5/1/19	4/30/20			6.01	5.34	4.77	4.28	3.86
5/1/20	4/30/21		6.83	6.03	5.36	4.79	4.30	3.88
5/1/21	4/30/22	7.82	6.85	6.05	5.38	4.80	4.31	3.89
5/1/22	4/30/23	7.85	6.88	6.07	5.40	4.82	4.33	3.90
5/1/23	4/30/24	7.88	6.90	6.09	5.42	4.84	4.35	3.92
5/1/24	4/30/25	7.91	6.93	6.12	5.44	4.86	4.36	3.94
5/1/25	4/30/26	7.94	6.96	6.14	5.46	4.88	4.38	3.95
5/1/26	4/30/27	7.97	6.98	6.17	5.48	4.90	4.40	3.97
5/1/27	4/30/28	8.00	7.01	6.19	5.50	4.92	4.42	3.99
5/1/28	4/30/29	8.04	7.04	6.22	5.53	4.94	4.44	4.00
5/1/29	4/30/30	8.07	7.07	6.24	5.55	4.96	4.46	4.02
5/1/30	4/30/31	8.10	7.10	6.27	5.58	4.99	4.48	4.04

Continued to Sheet No. 8.428



#### SIXTH REVISED SHEET NO. 8.434 CANCELS FIFTH REVISED SHEET NO. 8.434

Continued from Sheet No. 8.428

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

by:

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

where;

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

FP = GC/(1-FRP) + TC

where:

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

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

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

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

Continued to Sheet No. 8.436



### EIGHTH REVISED SHEET NO. 8.436 CANCELS SEVENTH REVISED SHEET NO. 8.436

Continued from Sheet No. 8.428

# PARAMETERS FOR AVOIDED UNIT ENERGY AND VARIABLE OPERATION AND MAINTENANCE COSTS

Beginning on May 1, 2021, to the extent that the Designated Avoided Unit(s) would have been operated had it been installed by the Company:

			VALUE
$O_V$	=	total variable operating and maintenance expense, in \$/MWH, of the Designated Avoided Unit(s), in year n	2.18
Н	=	The average annual heat rate, in British Thermal Units (Btus) per kilowatt-hour (Btu/kWh), of the Designated Avoided Unit(s)	10,046



### **COGENERATION and SMALL POWER PRODUCTION**

Title	Sheet No.
<u>Schedule COG-1, As-Available Energy:</u> Standard Rate for Purchase of As-Available Energy from Qualifying Cogeneration and Small Power Production Facilities (Qualifying Facilities)	8.020
<b>Appendix A</b> - Methodology to be Used in the Calculation of Avoided Energy Cost - Schedule COG-1	8.101
<u>Standard Offer Contract:</u> Standard Offer Contract for the Purchase of Contracted Capacity and Associated Energy from a Renewable Generating Facility or a Small Qualifying Facility	8.202
Evaluation Procedure for Standard Offer Contracts	8.266
Schedule COG-2: Standard Offer Contract Rate for the Purchase of Contracted Capacity and Associated Energy	8.284
Appendix A: Value of Deferral Methodology	8.328
Appendix B: Methodology to be Used in Calculation of Avoided Energy Cost	8.344
Appendix C: 2020-2021 Combustion Turbine	8.406
Appendix D: Reserved for Future Use	-
Appendix E: Reserved for Future Use	-
Appendix F: Reserved for Future Use	-
Interconnection Agreement: Interconnection Agreement	8.600
General Standards for Safety: General Standards for Safety and Interconnection of Cogeneration and Small Power Production Facilities to the Electric Utility System	8.700
Service Agreement For The Purchase of Emergency On-Demand Energy At Negotiated Rates	8.800



#### RATE SCHEDULE COG-2 TABLE OF APPENDICES

APPENDIX	TITLE	SHEET NO.
Α	VALUE OF DEFERRAL METHODOLGY	8.328
В	METHODOLOGY TO BE USED IN THE CALCULATION OF AVOIDED ENERGY COST	8.344
С	<ul> <li>2020-2021 COMBUSTION TURBINE</li> <li>Minimum Performance Standard</li> <li>Parameters for Avoided Unit Capacity Costs</li> <li>Exemplary Capacity Payment Schedules</li> <li>Parameters for Avoided Unit Energy Costs</li> </ul>	8.406
D	RESERVED FOR FUTURE USE	-
E	RESERVED FOR FUTURE USE	-
F	RESERVED FOR FUTURE USE	-

### FIFTH SIXTH REVISED SHEET NO. 8.406 CANCELS FOURTH FIFTH REVISED SHEET NO. 8.406

#### RATE SCHEDULE COG-2 APPENDIX C

#### **2020 2021** COMBUSTION TURBINE

This Designated Avoided Unit is a 220 MW (winter rating) natural gas-fired combustion turbine with a May 1, 20202021, in-service date.

#### MINIMUM PERFORMANCE STANDARDS

In order to receive a Monthly Capacity Payment, all Contracted Capacity and Associated Energy provided by CEPs shall meet or exceed the following MPS on a monthly basis. The MPS are based on the anticipated peak and off-peak dispatchability, unit availability, and operating factor of the Designated Avoided Unit over the term of this Standard Offer Contract. The CEP's proposed generating facility ("the Facility") as defined in the Standard Offer Contract will be evaluated against the anticipated performance of a combustion turbine, starting with the first Monthly Period following the date selected in Paragraph 6.b.ii of the Company's Standard Offer Contract.

- Dispatch Requirements: The CEP shall provide peaking capacity to the Company on a firm commitment, first-call, on-call, as-needed basis. In order to receive a Contracted Capacity Payment for each calendar month that the Facility is to be dispatched, the CEP must meet or exceed both the minimum Monthly Availability and Monthly Capacity Factor requirements.
- 2. **Dispatch Procedure:** Commencing on the calendar day prior to the Facility In-Service Date or the Extended Facility In-Service Date, as applicable, and continuing each calendar day thereafter during the Term, by 7:00 A.M. EPT, the CEP shall electronically transmit a schedule ("Available Schedule") of the hour-by-hour amounts of Contracted Capacity expected to be available from the Facility the next day ("Committed Capacity"). Commencing on the calendar day prior to the Facility In-Service Date or the Extended Facility In-Service Date, as applicable, and continuing each calendar day thereafter during the Term, by 3:00 P.M. EPT, the Company shall electronically transmit the hour-by-hour amounts of Contracted Capacity that the Company desires the CEP to dispatch from the Facility the next day based on the Available Schedule supplied at 7:00 A.M. EPT by the CEP ("Dispatch Schedule"). The CEP's Available Schedule and the Company's Dispatch

Continued to Sheet No. 8.408



# THIRD FOURTH REVISED SHEET NO. 8.416 CANCELS SECOND THIRD REVISED SHEET NO. 8.416

#### Continued from Sheet No. 8.414

- 4. Annual Scheduled Maintenance: Each year the CEP shall prepare, coordinate, and provide by April 1st all planned maintenance with the Company. The Company will review and approve annual/major scheduled maintenance by July 1st for the balance of the current year and following calendar year. A maximum of 10 days (240 hours) each year for annual maintenance and a maximum of 4 weeks (672 hours) every fifteenth year for major maintenance will be allowed. Scheduled maintenance shall not be planned during January, July, August, or December through February without prior written consent from the Company. At the option of the CEP and by with written notification consent to from the Company, scheduled outage time may be utilized during any other months to improve the CEP's Availability and Capacity Factors and such scheduled outage hours will be disregarded from the Monthly Availability Factor and Capacity Factor calculations. However, once allowable maintenance hours have been utilized, all other hours during the year will be considered in Availability and Capacity Factor calculations.
- 5. **Monthly Capacity Payment**: Starting with the CEP's Commercial In-Service Date, for months when the CEP unit has been dispatched (provided that CEP has achieved at least a 90% Monthly Availability Factor), the Monthly Capacity Payment for each Monthly Period shall be calculated according to the following:
  - a. In the event that the Monthly Capacity Factor is less than 80%, no Monthly Capacity Payment shall be paid to the CEP. That is:

b. In the event that the Monthly Capacity Factor is greater than or equal to 80% but less than 90%, the Monthly Capacity Payment shall be calculated from the following formula:

$$MCP = [(BCC) \times (.02 \times (CF - 45))] \times CC$$

Continued on Sheet No. 8.418



### **SEVENTH** REVISED SHEET NO. 8.422 CANCELS SIXTH-SEVENTH REVISED SHEET NO. 8.422

Continued from Sheet No. 8.418

#### PARAMETERS FOR AVOIDED CAPACITY COSTS

Beginning with the in-service date (5/1/<del>2020</del>2021) of the Company's Designated Avoided Unit, a 220MW (Winter Rating) natural gas-fired Combustion Turbine, for a 1 year deferral:

	VALUE
VAC <sub>m</sub> =	Company's monthly value of avoided capacity, 7.137.29 \$/kW/month, for each month of year n
K =	present value of carrying charges for one dollar of 1.46251.4600 investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present value to the middle of the first year
I <sub>n</sub> =	total direct and indirect cost, in mid-year \$/kW including AFUDC but excluding CWIP, of the Designated Avoided Unit(s) with an in-service date of year n, including all identifiable and quantifiable costs relating to the construction of the Designated Avoided Unit that would have been paid had the Designated Avoided Unit(s) been constructed
O <sub>n</sub> =	total fixed operation and maintenance expense for the year n, in mid-year \$/kW/year, of the Designated Avoided Unit(s);
i <sub>p</sub> =	annual escalation rate associated with the plant cost of the 3.02.1% Designated Avoided Unit(s)
i <sub>o</sub> =	annual escalation rate associated with the operation and maintenance expense of the Designated Avoided Unit(s);
r =	discount rate, defined as the Company's incremental after tax cost of capital; 7.347.29%
	Continued to Sheet No. 4.424



# SEVENTH-EIGHTH REVISED SHEET NO. 8.424 CANCELS SIXTH-SEVENTH REVISED SHEET NO. 8.424

		Continued from Sheet No. 8.422	
L	=	expected life of the Designated Avoided Unit(s); and	25
n	=	year for which the Designated Avoided Unit is deferred starting with its original anticipated in-service date and ending with the termination of the contract for the purchase of firm capacity and energy.	<del>2020</del> 2021
A <sub>m</sub>	=	monthly early capacity payments to be made to the CEP for each month of the contract year n, in \$/kW/month, if payments start in 20132015;	<del>3.27</del> <u>3.41</u>
m	=	Earliest year in which early capacity payments to the CEP may begin;	<del>2014</del> 2015*
F	=	the cumulative present value, in the year contractual payments will begin, of the avoided capital cost component of capacity payments over the term of the contract which would have been made had capacity payments commenced with the anticipated in-service date of the Designated Avoided Unit(s);	<del>395.16</del> 392.09*
t	=	the term, in years, of the contract for the purchase of firm capacity if early capacity payments commence in year m;	16*

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

Continued to Sheet No. 8.426

# **SEVENTH\_EIGHTH** REVISED SHEET NO. 8.426 CANCELS SIXTH-SEVENTH REVISED SHEET NO. 8.426

### Continued from Sheet No. 8.424

		OPTION 1	OPTION 2						
		NORMAL PAYMENT			EARLY F	AYMENT			
CONTRACT YEAR		Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	Starting 5/1/14	
FROM	ТО	\$/kw-mo							
5/1/14	4/30/15						0.07	3.27	
5/1/15 5/1/16	4/30/16 4/30/17					4.15	3.67 3.78	3.36 3.46	
5/1/17	4/30/18				4.70	4.27	3.89	3.56	
5/1/18	4/30/19			5.36	4.84	4.39	4.00	3.66	
5/1/19	4/30/20		6.16	5.52	4.98	4.52	4.12	3.77	
5/1/20	4/30/21	7.13	6.34	5.68	5.12	4.65	4.24	3.88	
5/1/21	4/30/22	7.34	6.52	5.84	5.27	4.78	4.36	3.99	
5/1/22	4/30/23	7.55	6.71	6.01	5.42	4.92	4.49	4.11	
5/1/23	4/30/24	7.77	6.90	6.18	5.58	5.06	4.62	4.23	
5/1/24	4/30/25	7.99	7.10	6.36	5.74	5.21	4.75	4.35	
5/1/25	4/30/26	8.22	7.31	6.55	5.91	5.36	4.89	4.47	
5/1/26	4/30/27	8.46	7.52	6.74	6.08	5.51	5.03	4.60	
5/1/27	4/30/28	8.71	7.74	6.93	6.25	5.67	5.17	4.74	
5/1/28	4/30/29	8.96	7.96	7.13	6.43	5.84	5.32	4.88	
5/1/29	4/30/30	9.22	8.19	7.34	6.62	6.01	5.48	5.02	



# **SEVENTH\_EIGHTH** REVISED SHEET NO. 8.426 CANCELS SIXTH-SEVENTH REVISED SHEET NO. 8.426

	2021 COMBUSTION TURBINE - AVOIDED UNIT									
		MONTHLY	CAPACITY I	PAYMENT F	RATE (\$/KW	/-MONTH)				
		NC	N-LEVELIZI	ED PAYMEI	NT OPTIONS	3				
		OPTION 1			OPTI	ON 2				
		NORMAL PAYMENT			EARLY P	AYMENT				
CONTRA	CT YEAR	Starting 5/1/21	Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15		
FROM	то	\$/kw-mo								
5/1/15	4/30/16							3.41		
5/1/16	4/30/17						3.82	3.48		
5/1/17	4/30/18					4.29	3.90	3.56		
5/1/18	4/30/19				4.85	4.39	3.98	3.63		
5/1/19	4/30/20			5.52	4.96	4.48	4.07	3.71		
5/1/20	4/30/21		6.32	5.64	5.06	4.58	4.16	3.79		
5/1/21	4/30/22	7.29	6.45	5.76	5.17	4.68	4.25	3.87		
5/1/22	4/30/23	7.45	6.59	5.88	5.29	4.78	4.34	3.96		
5/1/23	4/30/24	7.61	6.73	6.01	5.40	4.88	4.43	4.04		
5/1/24	4/30/25	7.77	6.88	6.14	5.52	4.99	4.53	4.13		
5/1/25	4/30/26	7.94	7.03	6.27	5.64	5.09	4.63	4.22		
5/1/26	4/30/27	8.11	7.18	6.41	5.76	5.20	4.73	4.31		
5/1/27	4/30/28	8.29	7.34	6.55	5.88	5.32	4.83	4.40		
5/1/28	4/30/29	8.47	7.50	6.69	6.01	5.43	4.93	4.50		
5/1/29	4/30/30	8.65	7.66	6.83	6.14	5.55	5.04	4.60		
5/1/30	4/30/31	8.84	7.82	6.98	6.27	5.67	5.15	4.70		

Continued to Sheet No. 8.427

# **SECOND** THIRD REVISED SHEET NO. 8.427 CANCELS FIRST SECOND REVISED SHEET NO. 8.427

### Continued from Sheet No. 8.426

		OPTION 3	OPTION 4						
		LEVELIZED NORMAL PAYMENT	LEVELIZED EARLY PAYMENT						
CONTRACT YEAR		Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	Starting 5/1/14	
FROM	ТО	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	
F /4 /4 A	4/00/45							2.04	
5/1/14 5/1/15	4/30/15 4/30/16						4.27	3.84 3.85	
5/1/15	4/30/16					4.77	4.27	3.86	
5/1/17	4/30/17				5.36	4.77	4.20	3.87	
5/1/18	4/30/18			6.06	5.38	4.79	4.31	3.89	
5/1/19	4/30/19		6.89	6.08	5.40	4.82	4.33	3.90	
5/1/20	4/30/21	7.89	6.91	6.10	5.42	4.84	4.34	3.91	
5/1/21	4/30/22	7.92	6.93	6.12	5.43	4.85	4.36	3.93	
5/1/22	4/30/23	7.95	6.96	6.14	5.45	4.87	4.37	3.94	
5/1/23	4/30/24	7.97	6.98	6.16	5.47	4.89	4.39	3.95	
5/1/24	4/30/25	8.00	7.00	6.18	5.49	4.90	4.40	3.97	
5/1/25	4/30/26	8.03	7.03	6.20	5.51	4.92	4.42	3.98	
5/1/26	4/30/27	8.06	7.05	6.23	5.53	4.94	4.44	4.00	
5/1/27	4/30/28	8.09	7.08	6.25	5.55	4.96	4.45	4.01	
5/1/28	4/30/29	8.12	7.11	6.27	5.57	4.98	4.47	4.03	
5/1/29	4/30/30	8.15	7.13	6.30	5.59	5.00	4.49	4.05	



# **SECOND** THIRD REVISED SHEET NO. 8.427 CANCELS FIRST SECOND REVISED SHEET NO. 8.427

	2021 COMBUSTION TURBINE - AVOIDED UNIT											
MONTHLY CAPACITY PAYMENT RATE ( \$/KW-MONTH)												
LEVELIZED PAYMENT OPTIONS												
		OPTION 3	TION 3 OPTION 4									
		LEVELIZED NORMAL PAYMENT	LEVELIZED EARLY PAYMENT									
CONTRA	CONTRACT YEAR		Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15				
FROM	то	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo				
5/4/45	4/00/40							2.04				
5/1/15	4/30/16						4.04	3.81				
5/1/16	4/30/17					474	4.24	3.82				
5/1/17	4/30/18				F 00	4.74	4.25	3.83				
5/1/18	4/30/19			0.04	5.32	4.75	4.27	3.85				
5/1/19	4/30/20			6.01	5.34	4.77	4.28	3.86				
5/1/20	4/30/21		6.83	6.03	5.36	4.79	4.30	3.88				
5/1/21	4/30/22	7.82	6.85	6.05	5.38	4.80	4.31	3.89				
5/1/22	4/30/23	7.85	6.88	6.07	5.40	4.82	4.33	3.90				
5/1/23	4/30/24	7.88	6.90	6.09	5.42	4.84	4.35	3.92				
5/1/24	4/30/25	7.91	6.93	6.12	5.44	4.86	4.36	3.94				
5/1/25	4/30/26	7.94	6.96	6.14	5.46	4.88	4.38	3.95				
5/1/26	4/30/27	7.97	6.98	6.17	5.48	4.90	4.40	3.97				
5/1/27	4/30/28	8.00	7.01	6.19	5.50	4.92	4.42	3.99				
5/1/28	4/30/29	8.04	7.04	6.22	5.53	4.94	4.44	4.00				
5/1/29	4/30/30	8.07	7.07	6.24	5.55	4.96	4.46	4.02				
5/1/30	4/30/31	8.10	7.10	6.27	5.58	4.99	4.48	4.04				

Continued to Sheet No. 8.428



### FIFTH SIXTH REVISED SHEET NO. 8.434 CANCELS FOURTH FIFTH REVISED SHEET NO. 8.434

Continued from Sheet No. 8.428

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

by:

 $FC = \underline{10,046 \text{ Btu/kWh x FP}}$ 

1,000

where;

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

FP = GC/(1-FRP) + TC

where:

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

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

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

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

Continued to Sheet No. 8.436



## **SEVENTH-EIGHTH** REVISED SHEET NO. 8.436 CANCELS **SIXTH-SEVENTH** REVISED SHEET NO. 8.436

Continued from Sheet No. 8.428

## PARAMETERS FOR AVOIDED UNIT ENERGY AND VARIABLE OPERATION AND MAINTENANCE COSTS

Beginning on May 1, 20202021, to the extent that the Designated Avoided Unit(s) would have been operated had it been installed by the Company:

**VALUE** 

O<sub>V</sub> = total variable operating and maintenance expense, in \$/MWH, of the Designated Avoided Unit(s), in year n

<del>2.11</del>2.18

H = The average annual heat rate, in British Thermal Units (Btus) per kilowatt-hour (Btu/kWh), of the Designated Avoided Unit(s)

10,046



### **COGENERATION and SMALL POWER PRODUCTION**

Title	Sheet No.
<u>Schedule COG-1, As-Available Energy:</u> Standard Rate for Purchase of As-Available Energy from Qualifying Cogeneration and Small Power Production Facilities (Qualifying Facilities)	8.020
<b>Appendix A</b> - Methodology to be Used in the Calculation of Avoided Energy Cost - Schedule COG-1	8.101
<u>Standard Offer Contract:</u> Standard Offer Contract for the Purchase of Contracted Capacity and Associated Energy from a Renewable Generating Facility or a Small Qualifying Facility	8.202
Evaluation Procedure for Standard Offer Contracts	8.266
Schedule COG-2: Standard Offer Contract Rate for the Purchase of Contracted Capacity and Associated Energy	8.284
Appendix A: Value of Deferral Methodology	8.328
Appendix B: Methodology to be Used in Calculation of Avoided Energy Cost	8.344
Appendix C: 2020-2021 Combustion Turbine	8.406
Appendix D: Reserved for Future Use	-
Appendix E: Reserved for Future Use	-
Appendix F: Reserved for Future Use	-
Interconnection Agreement: Interconnection Agreement	8.600
General Standards for Safety: General Standards for Safety and Interconnection of Cogeneration and Small Power Production Facilities to the Electric Utility System	8.700
Service Agreement For The Purchase of Emergency On-Demand Energy At Negotiated Rates	8.800



### RATE SCHEDULE COG-2 TABLE OF APPENDICES

APPENDIX	TITLE	SHEET NO.
Α	VALUE OF DEFERRAL METHODOLGY	8.328
В	METHODOLOGY TO BE USED IN THE CALCULATION OF AVOIDED ENERGY COST	8.344
С	<ul> <li>2020-2021 COMBUSTION TURBINE</li> <li>Minimum Performance Standard</li> <li>Parameters for Avoided Unit Capacity Costs</li> <li>Exemplary Capacity Payment Schedules</li> <li>Parameters for Avoided Unit Energy Costs</li> </ul>	8.406
D	RESERVED FOR FUTURE USE	-
E	RESERVED FOR FUTURE USE	-
F	RESERVED FOR FUTURE USE	-

### FIFTH SIXTH REVISED SHEET NO. 8.406 CANCELS FOURTH FIFTH REVISED SHEET NO. 8.406

### RATE SCHEDULE COG-2 APPENDIX C

#### **2020 2021** COMBUSTION TURBINE

This Designated Avoided Unit is a 220 MW (winter rating) natural gas-fired combustion turbine with a May 1, 20202021, in-service date.

#### MINIMUM PERFORMANCE STANDARDS

In order to receive a Monthly Capacity Payment, all Contracted Capacity and Associated Energy provided by CEPs shall meet or exceed the following MPS on a monthly basis. The MPS are based on the anticipated peak and off-peak dispatchability, unit availability, and operating factor of the Designated Avoided Unit over the term of this Standard Offer Contract. The CEP's proposed generating facility ("the Facility") as defined in the Standard Offer Contract will be evaluated against the anticipated performance of a combustion turbine, starting with the first Monthly Period following the date selected in Paragraph 6.b.ii of the Company's Standard Offer Contract.

- Dispatch Requirements: The CEP shall provide peaking capacity to the Company on a firm commitment, first-call, on-call, as-needed basis. In order to receive a Contracted Capacity Payment for each calendar month that the Facility is to be dispatched, the CEP must meet or exceed both the minimum Monthly Availability and Monthly Capacity Factor requirements.
- 2. **Dispatch Procedure:** Commencing on the calendar day prior to the Facility In-Service Date or the Extended Facility In-Service Date, as applicable, and continuing each calendar day thereafter during the Term, by 7:00 A.M. EPT, the CEP shall electronically transmit a schedule ("Available Schedule") of the hour-by-hour amounts of Contracted Capacity expected to be available from the Facility the next day ("Committed Capacity"). Commencing on the calendar day prior to the Facility In-Service Date or the Extended Facility In-Service Date, as applicable, and continuing each calendar day thereafter during the Term, by 3:00 P.M. EPT, the Company shall electronically transmit the hour-by-hour amounts of Contracted Capacity that the Company desires the CEP to dispatch from the Facility the next day based on the Available Schedule supplied at 7:00 A.M. EPT by the CEP ("Dispatch Schedule"). The CEP's Available Schedule and the Company's Dispatch

Continued to Sheet No. 8.408



# THIRD FOURTH REVISED SHEET NO. 8.416 CANCELS SECOND THIRD REVISED SHEET NO. 8.416

#### Continued from Sheet No. 8.414

- 4. Annual Scheduled Maintenance: Each year the CEP shall prepare, coordinate, and provide by April 1st all planned maintenance with the Company. The Company will review and approve annual/major scheduled maintenance by July 1st for the balance of the current year and following calendar year. A maximum of 10 days (240 hours) each year for annual maintenance and a maximum of 4 weeks (672 hours) every fifteenth year for major maintenance will be allowed. Scheduled maintenance shall not be planned during January, July, August, or December through February without prior written consent from the Company. At the option of the CEP and by with written notification consent to from the Company, scheduled outage time may be utilized during any other months to improve the CEP's Availability and Capacity Factors and such scheduled outage hours will be disregarded from the Monthly Availability Factor and Capacity Factor calculations. However, once allowable maintenance hours have been utilized, all other hours during the year will be considered in Availability and Capacity Factor calculations.
- 5. **Monthly Capacity Payment**: Starting with the CEP's Commercial In-Service Date, for months when the CEP unit has been dispatched (provided that CEP has achieved at least a 90% Monthly Availability Factor), the Monthly Capacity Payment for each Monthly Period shall be calculated according to the following:
  - a. In the event that the Monthly Capacity Factor is less than 80%, no Monthly Capacity Payment shall be paid to the CEP. That is:

b. In the event that the Monthly Capacity Factor is greater than or equal to 80% but less than 90%, the Monthly Capacity Payment shall be calculated from the following formula:

$$MCP = [(BCC) \times (.02 \times (CF-45))] \times CC$$

Continued on Sheet No. 8.418



# **SEVENTH** REVISED SHEET NO. 8.422 CANCELS SIXTH-SEVENTH REVISED SHEET NO. 8.422

Continued from Sheet No. 8.418

### PARAMETERS FOR AVOIDED CAPACITY COSTS

Beginning with the in-service date (5/1/<del>2020</del>2021) of the Company's Designated Avoided Unit, a 220MW (Winter Rating) natural gas-fired Combustion Turbine, for a 1 year deferral:

	VALUE
VAC <sub>m</sub> =	Company's monthly value of avoided capacity, 7.137.29 \$/kW/month, for each month of year n
K =	present value of carrying charges for one dollar of 1.46251.4600 investment over L years with carrying charges computed using average annual rate base and assumed to be paid at the middle of each year and present value to the middle of the first year
I <sub>n</sub> =	total direct and indirect cost, in mid-year \$/kW including AFUDC but excluding CWIP, of the Designated Avoided Unit(s) with an in-service date of year n, including all identifiable and quantifiable costs relating to the construction of the Designated Avoided Unit that would have been paid had the Designated Avoided Unit(s) been constructed
O <sub>n</sub> =	total fixed operation and maintenance expense for the year n, in mid-year \$/kW/year, of the Designated Avoided Unit(s);
i <sub>p</sub> =	annual escalation rate associated with the plant cost of the 3.02.1% Designated Avoided Unit(s)
i <sub>o</sub> =	annual escalation rate associated with the operation and maintenance expense of the Designated Avoided Unit(s);
r =	discount rate, defined as the Company's incremental after tax cost of capital; 7.347.29%
	Continued to Sheet No. 4.424



# SEVENTH-EIGHTH REVISED SHEET NO. 8.424 CANCELS SIXTH-SEVENTH REVISED SHEET NO. 8.424

		Continued from Sheet No. 8.422	
L	=	expected life of the Designated Avoided Unit(s); and	25
n	=	year for which the Designated Avoided Unit is deferred starting with its original anticipated in-service date and ending with the termination of the contract for the purchase of firm capacity and energy.	<del>2020</del> 2021
A <sub>m</sub>	=	monthly early capacity payments to be made to the CEP for each month of the contract year n, in \$/kW/month, if payments start in 20132015;	<del>3.27</del> <u>3.41</u>
m	=	Earliest year in which early capacity payments to the CEP may begin;	<del>2014</del> 2015*
F	=	the cumulative present value, in the year contractual payments will begin, of the avoided capital cost component of capacity payments over the term of the contract which would have been made had capacity payments commenced with the anticipated in-service date of the Designated Avoided Unit(s);	<del>395.16</del> 392.09*
t	=	the term, in years, of the contract for the purchase of firm capacity if early capacity payments commence in year m;	16*

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

Continued to Sheet No. 8.426

# **SEVENTH\_EIGHTH** REVISED SHEET NO. 8.426 CANCELS SIXTH-SEVENTH REVISED SHEET NO. 8.426

### Continued from Sheet No. 8.424

		OPTION 1		OPTION 2				
		NORMAL PAYMENT		EARLY PAYMENT				
CONTRACT YEAR		Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	Starting 5/1/14
FROM	ТО	\$/kw-mo						
5/1/14	4/30/15						0.07	3.27
5/1/15 5/1/16	4/30/16 4/30/17					4.15	3.67 3.78	3.36 3.46
5/1/17	4/30/18				4.70	4.27	3.89	3.56
5/1/18	4/30/19			5.36	4.84	4.39	4.00	3.66
5/1/19	4/30/20		6.16	5.52	4.98	4.52	4.12	3.77
5/1/20	4/30/21	7.13	6.34	5.68	5.12	4.65	4.24	3.88
5/1/21	4/30/22	7.34	6.52	5.84	5.27	4.78	4.36	3.99
5/1/22	4/30/23	7.55	6.71	6.01	5.42	4.92	4.49	4.11
5/1/23	4/30/24	7.77	6.90	6.18	5.58	5.06	4.62	4.23
5/1/24	4/30/25	7.99	7.10	6.36	5.74	5.21	4.75	4.35
5/1/25	4/30/26	8.22	7.31	6.55	5.91	5.36	4.89	4.47
5/1/26	4/30/27	8.46	7.52	6.74	6.08	5.51	5.03	4.60
5/1/27	4/30/28	8.71	7.74	6.93	6.25	5.67	5.17	4.74
5/1/28	4/30/29	8.96	7.96	7.13	6.43	5.84	5.32	4.88
5/1/29	4/30/30	9.22	8.19	7.34	6.62	6.01	5.48	5.02



# **SEVENTH\_EIGHTH** REVISED SHEET NO. 8.426 CANCELS SIXTH-SEVENTH REVISED SHEET NO. 8.426

2021 COMBUSTION TURBINE - AVOIDED UNIT								
MONTHLY CAPACITY PAYMENT RATE ( \$/KW-MONTH)								
	NON-LEVELIZED PAYMENT OPTIONS							
		OPTION 1			OPTI	ON 2		
		NORMAL PAYMENT			EARLY P	AYMENT		
CONTRA	CT YEAR	Starting 5/1/21	Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15
FROM	ТО	\$/kw-mo						
5/1/15	4/30/16							3.41
5/1/16	4/30/17						3.82	3.48
5/1/17	4/30/18					4.29	3.90	3.56
5/1/18	4/30/19				4.85	4.39	3.98	3.63
5/1/19	4/30/20			5.52	4.96	4.48	4.07	3.71
5/1/20	4/30/21		6.32	5.64	5.06	4.58	4.16	3.79
5/1/21	4/30/22	7.29	6.45	5.76	5.17	4.68	4.25	3.87
5/1/22	4/30/23	7.45	6.59	5.88	5.29	4.78	4.34	3.96
5/1/23	4/30/24	7.61	6.73	6.01	5.40	4.88	4.43	4.04
5/1/24	4/30/25	7.77	6.88	6.14	5.52	4.99	4.53	4.13
5/1/25	4/30/26	7.94	7.03	6.27	5.64	5.09	4.63	4.22
5/1/26	4/30/27	8.11	7.18	6.41	5.76	5.20	4.73	4.31
5/1/27	4/30/28	8.29	7.34	6.55	5.88	5.32	4.83	4.40
5/1/28	4/30/29	8.47	7.50	6.69	6.01	5.43	4.93	4.50
5/1/29	4/30/30	8.65	7.66	6.83	6.14	5.55	5.04	4.60
5/1/30	4/30/31	8.84	7.82	6.98	6.27	5.67	5.15	4.70

Continued to Sheet No. 8.427

# **SECOND THIRD** REVISED SHEET NO. 8.427 CANCELS **FIRST SECOND** REVISED SHEET NO. 8.427

### Continued from Sheet No. 8.426

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



# **SECOND** THIRD REVISED SHEET NO. 8.427 CANCELS FIRST SECOND REVISED SHEET NO. 8.427

	2021 COMBUSTION TURBINE - AVOIDED UNIT								
	MONTHLY CAPACITY PAYMENT RATE ( \$/KW-MONTH)								
	LEVELIZED PAYMENT OPTIONS								
		OPTION 3			OPTI	ON 4			
		LEVELIZED NORMAL PAYMENT		LEV	'ELIZED EA	RLY PAYM	ENT		
CONTRA	CT YEAR	Starting 5/1/21	Starting 5/1/20	Starting 5/1/19	Starting 5/1/18	Starting 5/1/17	Starting 5/1/16	Starting 5/1/15	
FROM	то	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	\$/kw-mo	
5/4/45	4/00/40							2.04	
5/1/15	4/30/16						4.04	3.81	
5/1/16	4/30/17					474	4.24	3.82	
5/1/17	4/30/18				F 00	4.74	4.25	3.83	
5/1/18	4/30/19			0.04	5.32	4.75	4.27	3.85	
5/1/19	4/30/20			6.01	5.34	4.77	4.28	3.86	
5/1/20	4/30/21		6.83	6.03	5.36	4.79	4.30	3.88	
5/1/21	4/30/22	7.82	6.85	6.05	5.38	4.80	4.31	3.89	
5/1/22	4/30/23	7.85	6.88	6.07	5.40	4.82	4.33	3.90	
5/1/23	4/30/24	7.88	6.90	6.09	5.42	4.84	4.35	3.92	
5/1/24	4/30/25	7.91	6.93	6.12	5.44	4.86	4.36	3.94	
5/1/25	4/30/26	7.94	6.96	6.14	5.46	4.88	4.38	3.95	
5/1/26	4/30/27	7.97	6.98	6.17	5.48	4.90	4.40	3.97	
5/1/27	4/30/28	8.00	7.01	6.19	5.50	4.92	4.42	3.99	
5/1/28	4/30/29	8.04	7.04	6.22	5.53	4.94	4.44	4.00	
5/1/29	4/30/30	8.07	7.07	6.24	5.55	4.96	4.46	4.02	
5/1/30	4/30/31	8.10	7.10	6.27	5.58	4.99	4.48	4.04	

Continued to Sheet No. 8.428



## FIFTH SIXTH REVISED SHEET NO. 8.434 CANCELS FOURTH FIFTH REVISED SHEET NO. 8.434

Continued from Sheet No. 8.428

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

by:

 $FC = \underline{10,046 \text{ Btu/kWh x FP}}$ 

1,000

where;

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

FP = GC/(1-FRP) + TC

where:

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

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

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

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

Continued to Sheet No. 8.436



## **SEVENTH-EIGHTH** REVISED SHEET NO. 8.436 CANCELS **SIXTH-SEVENTH** REVISED SHEET NO. 8.436

Continued from Sheet No. 8.428

## PARAMETERS FOR AVOIDED UNIT ENERGY AND VARIABLE OPERATION AND MAINTENANCE COSTS

Beginning on May 1, 20202021, to the extent that the Designated Avoided Unit(s) would have been operated had it been installed by the Company:

**VALUE** 

O<sub>V</sub> = total variable operating and maintenance expense, in \$/MWH, of the Designated Avoided Unit(s), in year n

<del>2.11</del>2.18

H = The average annual heat rate, in British Thermal Units (Btus) per kilowatt-hour (Btu/kWh), of the Designated Avoided Unit(s)

10,046