



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

October 21, 2020

VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Duke Energy Florida, LLC's Solar Plant Operation Status Report*
Docket No. 20200007-EI

Dear Mr. Teitzman:

Enclosed for filing on behalf of Duke Energy Florida, LLC ("DEF") is DEF's Solar Plant Operation Status Report for the month of September 2020, in accordance with Paragraph 15a. of the 2017 Second Revised and Restated Settlement Agreement, which was approved in Order No. PSC-2017-0451-AS-EU, dated November 20, 2017.

Thank you for your assistance in this matter. Please feel free to call me at (727) 820-4692 should you have any questions concerning this filing.

Sincerely,

/s/ Dianne M. Triplett

Dianne M. Triplett

DMT/cmck
Enclosures

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 21st day of October, 2020.

/s/ Dianne M. Triplett

Attorney

<p>Charles Murphy Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 cmurphy@psc.state.fl.us</p> <p>J. Beasley / J. Wahlen / M. Means Ausley McMullen P.O. Box 391 Tallahassee, FL 32302 jbeasley@ausley.com jwahlen@ausley.com mmeans@ausley.com</p> <p>Russell A. Badders Gulf Power Company One Energy Place, Bin 100 Pensacola, FL 32520-0100 russell.badders@nexteraenergy.com</p> <p>Jon C. Moyle, Jr. Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com mqualls@moylelaw.com</p> <p>Maria Moncada / David Lee 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 maria.moncada@fpl.com david.lee@fpl.com</p>	<p>J.R. Kelly / P. Christensen / C. Rehwinkel / T. David / S. Morse / M. Fall-Fry Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 rehwinkel.charles@leg.state.fl.us kelly.jr@leg.state.fl.us christensen.patty@leg.state.fl.us david.tad@leg.state.fl.us fall-fry_mireille@leg.state.fl.us morse.stephanie@leg.state.fl.us</p> <p>Paula K. Brown Tampa Electric Company Regulatory Affairs P.O. Box 111 Tampa, FL 33601 regdept@tecoenergy.com</p> <p>James W. Brew / Laura W. Baker Stone Law Firm 1025 Thomas Jefferson Street, N.W. Eighth Floor, West Tower Washington, DC 20007 jbrew@smxblaw.com lwb@smxblaw.com</p> <p>Kenneth Hoffman Florida Power & Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 ken_hoffman@fpl.com</p>
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Duke Energy Florida, LLC
 Actual Data for Solar Generation Facilities
 Solar Base Rate Adjustment (SoBRA) Reporting
September, 2020

		AVERAGE HOURLY NET OUTPUT (MWh)	AVERAGE HOURLY NET OUTPUT (MWh)	AVERAGE HOURLY NET OUTPUT (MWh)	AVERAGE HOURLY NET OUTPUT (MWh)	AVERAGE HOURLY NET OUTPUT (MWh)
Hour of Day	System Firm Demand (MW)	Hamilton	Lake Placid	Trenton	Columbia	Debary
1	1	4,333.3	0.0	0.0	0.0	0.0
2	2	4,037.9	0.0	0.0	0.0	0.0
3	3	3,833.1	0.0	0.0	0.0	0.0
4	4	3,720.4	0.0	0.0	0.0	0.0
5	5	3,694.4	0.0	0.0	0.0	0.0
6	6	3,803.2	0.0	0.0	0.0	0.0
7	7	4,036.8	1.9	1.7	1.9	1.4
8	8	4,294.4	21.0	14.1	22.5	12.7
9	9	4,632.8	37.6	23.9	40.3	28.6
10	10	5,105.9	46.1	26.0	46.3	40.2
11	11	5,684.1	49.3	29.6	51.8	47.3
12	12	6,334.4	51.4	29.5	50.3	49.7
13	13	6,917.8	49.3	30.2	49.6	46.3
14	14	7,340.5	46.6	28.7	46.9	39.7
15	15	7,585.5	41.6	27.2	42.8	33.5
16	16	7,636.3	34.4	23.5	34.6	23.3
17	17	7,578.3	26.0	15.0	28.1	11.7
18	18	7,385.6	12.8	5.2	13.7	3.8
19	19	7,017.9	1.4	0.3	1.1	0.3
20	20	6,640.4	0.0	0.0	0.0	0.0
21	21	6,312.2	0.0	0.0	0.0	0.0
22	22	5,798.5	0.0	0.0	0.0	0.0
23	23	5,263.2	0.0	0.0	0.0	0.0
24	24	4,703.6	0.0	0.0	0.0	0.0

Duke Energy Florida, LLC
Actual Data for Solar Generation Facilities
Solar Base Rate Adjustment (SoBRA) Reporting
PERIOD:
September, 2020

Facility	Net Capability (MW)	Net Generation (MWh) ⁽¹⁾	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh) ⁽²⁾
HAMILTON	74.9	12,581	23.3%	0.3%	3,811,409
LAKE PLACID	45.0	7,646	23.6%	0.2%	
TRENTON	74.9	12,893	23.9%	0.3%	
COLUMBIA	74.9	13,289	24.6%	0.3%	
DEBARY	74.5	10,152	18.9%	0.3%	
Total:	344.2	56,561.0	22.8%	1.5%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF) ⁽³⁾	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl) ⁽³⁾	Coal Displaced (Tons)	Cost of Coal (\$/Ton) ⁽³⁾
HAMILTON	83,856	\$2.28	660	\$55.22	1,796	\$34.22
LAKE PLACID	49,730	\$2.28	391	\$55.22	1,065	\$34.22
TRENTON	83,856	\$2.28	660	\$55.22	1,796	\$34.22
COLUMBIA	86,432	\$2.28	680	\$55.22	1,852	\$34.22
DEBARY	66,029	\$2.28	520	\$55.22	1,414	\$34.22
Total:	369,902	\$843,895	2,911	\$160,739	7,924	\$271,155

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	9,043	6	2	0
LAKE PLACID	5,363	4	1	0
TRENTON	9,043	6	2	0
COLUMBIA	9,320	6	2	0
DEBARY	7,120	5	2	0
Total:	39,888	27	9	1

Facility	O&M (\$)	Carrying Costs (\$) ⁽⁴⁾	Capital (\$) ⁽⁵⁾	Other (\$) ⁽⁶⁾	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$62,910	\$700,887	\$304,534	\$16,388	\$0	\$1,084,718
LAKE PLACID	\$30,325	\$381,368	\$164,915	\$8,683	\$0	\$585,291
TRENTON	\$32,896	\$628,255	\$271,662	\$17,550	\$0	\$950,363
COLUMBIA	\$48,552	\$703,143	\$292,174	\$17,645	\$0	\$1,061,514
DEBARY	\$32,265	\$571,160	\$242,916	\$14,286	\$0	\$860,627
Total:	\$206,948	\$2,984,813	\$1,276,201	\$74,552	\$0	\$4,542,513

(1) Net Generation data represents a calendar month.

(2) Total System Net Generation from Monthly Operating Report.

(3) Fuel Cost per unit data from Schedules A3 & A4.

(4) Carrying Cost data represents return on average net investment.

(5) Capital Cost data represents depreciation expense on net investment. 1 Month lag for Debary

(6) Other Cost data represents dismantlement costs and amortization on ITC (no ITC amortization for Hamilton, Lake Placid, Trenton, Columbia, Debary yet).

Duke Energy Florida, LLC
Actual Data for Solar Generation Facilities
Solar Base Rate Adjustment (SoBRA) Reporting
YEAR-TO-DATE THROUGH:
September, 2020

Facility	Net Capability (MW)	Net Generation (MWh) ⁽¹⁾	Capacity Factor (%) ⁽⁷⁾	Percent of Total Generation (%)	Total System Net Generation (MWh) ⁽²⁾
HAMILTON	74.9	140,333	28.5%	0.4%	31,489,245
LAKE PLACID	45.0	77,733	26.3%	0.2%	
TRENTON	74.9	134,798	27.4%	0.4%	
COLUMBIA	74.9	110,216	31.9%	0.4%	
DEBARY	74.5	57,135	22.8%	0.2%	
Total:	344.2	520,215	27.7%	1.7%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF) ⁽³⁾	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl) ⁽³⁾	Coal Displaced (Tons)	Cost of Coal (\$/Ton) ⁽³⁾
HAMILTON	1,194,867	\$1.99	3,945	\$55.79	5,676	\$35.47
LAKE PLACID	660,283	\$2.00	2,228	\$55.72	3,185	\$35.41
TRENTON	1,145,869	\$2.00	3,809	\$55.76	5,483	\$35.44
COLUMBIA	931,063	\$1.99	3,421	\$54.74	5,786	\$35.42
DEBARY	473,911	\$2.06	1,938	\$55.97	4,052	\$35.05
Total:	4,405,993	\$8,848,330	15,342	\$852,936	24,181	\$855,047

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	85,881	46	7	1
LAKE PLACID	47,579	26	4	0
TRENTON	82,453	44	7	1
COLUMBIA	69,849	37	7	1
DEBARY	37,890	20	5	0
Total:	323,652	173	29	2

Facility	O&M (\$)	Carrying Costs (\$) ⁽⁴⁾	Capital (\$) ⁽⁵⁾	Other (\$) ⁽⁶⁾	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$1,107,181	\$6,385,226	\$2,740,550	\$147,492	\$0	\$10,380,449
LAKE PLACID	\$412,046	\$3,064,496	\$1,309,892	\$78,147	\$0	\$4,864,580
TRENTON	\$633,585	\$5,549,287	\$2,380,924	\$157,950	\$0	\$8,721,745
COLUMBIA	\$621,405	\$4,830,773	\$1,729,154	\$123,515	\$0	\$7,304,847
DEBARY	\$65,384	\$2,558,086	\$968,863	\$71,430	\$0	\$3,663,764
Total:	\$2,839,601	\$22,387,868	\$9,129,383	\$578,534	\$0	\$34,935,385

- (1) Net Generation data represents a year-to-date value.
(2) Total System Net Generation from Monthly Operating Reports.
(3) Fuel Cost per unit data from Schedules A3 & A4.
(4) Carrying Cost data represents return on average net investment.
(5) Capital Cost data represents depreciation expense on net investment.
(6) Other Cost data represents dismantlement costs and amortization on ITC (no ITC amortization for Hamilton, Lake Placid, Trenton, Columbia, Debary yet).
(7) YTD Capacity Factors adjusted for Columbia and Debary mid 2020 start up dates.