



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

April 30, 2021

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. 20210007-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 March 2021, 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 30th day of April, 2021.

/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>Steven R. Griffin Beggs Law Firm P.O. Box 12950 Pensacola, FL 32591 srg@beggslane.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>Charles Rehwinkel / Richard Gentry 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 gentry.richard@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> <p>Maria Moncada 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 maria.moncada@fpl.com</p>
---	--

Duke Energy Florida, LLC
 Actual Data for Solar Generation Facilities
 Solar Base Rate Adjustment (SoBRA) Reporting
March, 2021

		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)	AVERAGE HOURLY NET OUTPUT (MWh)	AVERAGE HOURLY NET OUTPUT (MWh)
Hour of Day	System Firm Demand (MW)	Hamilton	Lake Placid	Trenton	Columbia	Debary	Santa Fe	Twin Rivers
1	1	3,346.4	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,104.3	0.0	0.0	0.0	0.0	0.0	0.0
3	3	2,972.6	0.0	0.0	0.0	0.0	0.0	0.0
4	4	2,897.2	0.0	0.0	0.0	0.0	0.0	0.0
5	5	2,920.7	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,090.7	0.0	0.0	0.0	0.0	0.0	0.0
7	7	3,407.3	0.4	0.2	0.6	0.5	0.3	0.0
8	8	3,722.8	12.3	9.5	15.4	15.3	7.3	1.0
9	9	3,901.7	35.7	25.0	42.1	40.2	20.8	3.3
10	10	4,057.8	44.7	31.4	50.9	51.2	35.3	4.8
11	11	4,231.9	51.8	32.8	54.6	52.8	45.3	6.6
12	12	4,436.9	54.9	34.5	55.3	52.6	49.6	8.5
13	13	4,671.7	54.7	34.3	54.8	56.1	49.6	9.3
14	14	4,900.5	53.7	34.3	53.9	56.8	46.7	7.9
15	15	5,116.3	49.2	32.9	50.8	53.0	40.5	7.7
16	16	5,297.7	48.0	33.1	49.5	48.3	32.3	7.6
17	17	5,451.2	42.7	29.0	44.3	43.3	20.0	5.6
18	18	5,505.7	23.4	12.8	24.5	24.1	8.4	1.8
19	19	5,434.1	1.9	0.8	1.8	2.2	0.4	0.2
20	20	5,290.3	0.0	0.0	0.0	0.0	0.0	0.0
21	21	5,069.3	0.0	0.0	0.0	0.0	0.0	0.0
22	22	4,671.5	0.0	0.0	0.0	0.0	0.0	0.0
23	23	4,189.4	0.0	0.0	0.0	0.0	0.0	0.0
24	24	3,697.0	0.0	0.0	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:
March, 2021

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	14,673	26.3%	0.5%	3,059,983
LAKE PLACID	45.0	9,627	28.8%	0.3%	
TRENTON	74.9	15,450	27.7%	0.5%	
COLUMBIA	74.9	15,388	27.6%	0.5%	
DEBARY	74.5	11,048	19.9%	0.4%	
SANTA FE	74.9	13,969	28.8%	0.5%	
TWIN RIVERS	74.9	687	3.5%	0.0%	
Total:	494.0	80,842	22.0%	2.6%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	89,436	\$2.80	996	\$84.63	2,105	\$35.80
LAKE PLACID	58,679	\$2.80	653	\$84.63	1,381	\$35.80
TRENTON	94,172	\$2.80	1,048	\$84.63	2,217	\$35.80
COLUMBIA	93,794	\$2.80	1,044	\$84.63	2,208	\$35.80
DEBARY	67,340	\$2.80	750	\$84.63	1,585	\$35.80
SANTA FE	95,671	\$2.80	1,065	\$84.63	2,252	\$35.80
TWIN RIVERS	12,184	\$2.80	136	\$84.63	287	\$35.80
Total:	511,277	\$1,431,523	5,692	\$481,726	12,036	\$430,922

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	10,164	7	2	0
LAKE PLACID	6,669	4	1	0
TRENTON	10,702	7	2	0
COLUMBIA	10,659	7	2	0
DEBARY	7,653	5	2	0
SANTA FE	10,873	7	2	0
TWIN RIVERS	1,385	1	0	0
Total:	58,105	38	13	1

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$103,594	\$687,877	\$304,534	\$16,388	\$0	\$1,112,393
LAKE PLACID	\$54,080	\$374,121	\$164,644	\$8,683	\$0	\$601,528
TRENTON	\$253,012	\$617,226	\$271,802	\$17,550	\$0	\$1,159,590
COLUMBIA	\$61,867	\$691,378	\$292,446	\$17,645	\$0	\$1,063,336
DEBARY	\$67,878	\$562,192	\$243,789	\$14,286	\$0	\$888,144
SANTA FE	\$0	\$0	\$0	\$17,384	\$0	\$17,384
TWIN RIVERS	\$0	\$0	\$0	\$15,572	\$0	\$15,572
Total:	\$540,431	\$2,932,794	\$1,277,213	\$107,508	\$0	\$4,857,947

Notes:
Santa Fe and Twin Rivers sites became active in March

Duke Energy Florida, LLC
Actual Data for Solar Generation Facilities
Solar Base Rate Adjustment (SoBRA) Reporting
YEAR-TO-DATE THROUGH:
March, 2021

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	34,139	21.1%	0.4%	8,734,559
LAKE PLACID	45.0	23,279	23.9%	0.3%	
TRENTON	74.9	36,290	22.4%	0.4%	
COLUMBIA	74.9	36,069	22.3%	0.4%	
DEBARY	74.5	32,142	20.0%	0.4%	
SANTA FE	74.9	13,969	28.8%	0.2%	
TWIN RIVERS	74.9	687	3.5%	0.0%	
Total:	494.0	176,575	22.3%	2.0%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	226,147	\$3.71	1,747	\$83.00	3,137	\$35.46
LAKE PLACID	155,002	\$3.76	1,196	\$82.91	2,088	\$35.45
TRENTON	241,649	\$3.76	1,892	\$82.94	3,278	\$35.47
COLUMBIA	239,817	\$3.75	1,870	\$82.96	3,274	\$35.46
DEBARY	215,405	\$3.84	1,561	\$82.67	2,706	\$35.37
SANTA FE	95,671	\$2.80	1,065	\$84.63	2,252	\$35.80
TWIN RIVERS	12,184	\$2.80	136	\$84.63	287	\$35.80
Total:	1,185,876	\$4,137,893	9,468	\$789,540	17,021	\$605,004

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	20,904	8	3	0
LAKE PLACID	14,200	5	2	0
TRENTON	22,199	8	4	0
COLUMBIA	22,069	8	4	0
DEBARY	19,291	6	3	0
SANTA FE	10,873	7	2	0
TWIN RIVERS	1,385	1	0	0
Total:	110,921	43	18	2

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$568,092	\$2,070,138	\$913,601	\$49,164	\$0	\$3,600,995
LAKE PLACID	\$271,065	\$1,125,783	\$493,931	\$26,049	\$0	\$1,916,828
TRENTON	\$351,556	\$1,856,329	\$815,110	\$52,650	\$0	\$3,075,644
COLUMBIA	\$135,380	\$2,080,283	\$877,337	\$52,935	\$0	\$3,145,935
DEBARY	\$171,476	\$1,691,574	\$731,225	\$42,858	\$0	\$2,637,133
SANTA FE	\$0	\$0	\$0	\$17,384	\$0	\$17,384
TWIN RIVERS	\$375,708	\$0	\$0	\$15,572	\$0	\$391,280
Total:	\$1,873,277	\$8,824,108	\$3,831,203	\$256,612	\$0	\$14,785,200

Notes:
Santa Fe and Twin Rivers sites became active in March