



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

June 30, 2022

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. 20220007-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 May 2022, 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/ts
Enclosures

CERTIFICATE OF SERVICE

Docket No. 20220007-EI

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 June, 2022.

/s/ Dianne M. Triplett

Attorney

<p>Jacob Imig Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 jimig@psc.state.fl.us</p> <p>J. Wahlen / M. Means Tampa Electric Company Ausley McMullen P.O. Box 391 Tallahassee, FL 32302 jwahlen@ausley.com mmeans@ausley.com</p> <p>Jon C. Moyle, Jr. Florida Industrial Power Users Group Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com mqualls@moylelaw.com</p> <p>Corey Allain Nucor Steel Florida, Inc. 22 Nucor Drive Frostproof FL 33843 corey.allain@nucor.com</p> <p>Maria Jose Moncada 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 maria.moncada@fpl.com</p>	<p>Richard Gentry / P. Christensen / C. Rehwinkel / S. Morse / Steven Baird Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 christensen.patty@leg.state.fl.us gentry.richard@leg.state.fl.us morse.stephanie@leg.state.fl.us rehwinkel.charles@leg.state.fl.us baird.steven@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 Wynn Baker / Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar PCS Phosphate-White Springs c/o Stone Law Firm 1025 Thomas Jefferson Street, N.W. Eighth Floor, West Tower Washington, DC 20007 jbrew@smxblaw.com lwb@smxblaw.com jrb@smxblaw.com mkl@smxblaw.com pjm@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
 May, 2022

		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)	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	Duette	Sandy Creek
1	1	4,501.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	4,055.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,737.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,563.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,512.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,628.6	0.3	0.1	0.2	0.3	0.2	0.2	0.0	0.0
7	7	3,913.8	13.3	5.1	13.2	15.9	5.2	14.8	11.5	11.8
8	8	4,256.4	44.4	17.5	44.2	46.5	19.2	45.6	40.7	42.3
9	9	4,683.0	60.5	23.5	54.6	61.4	36.4	60.8	56.7	54.4
10	10	5,149.3	65.7	27.2	57.4	64.9	49.8	63.0	64.2	59.1
11	11	5,664.9	64.7	31.1	59.9	66.5	58.2	65.1	64.2	59.2
12	12	6,138.3	62.9	32.1	58.1	65.6	60.3	61.7	61.9	61.3
13	13	6,605.5	62.8	31.2	55.6	62.2	60.1	59.7	62.7	59.4
14	14	6,994.8	54.8	29.5	54.4	60.7	58.8	57.7	56.9	59.5
15	15	7,310.5	52.1	28.2	51.1	58.6	52.4	56.9	53.2	58.3
16	16	7,556.6	48.4	24.6	47.0	52.0	39.8	46.5	48.7	54.0
17	17	7,706.2	43.4	20.2	43.8	43.9	27.0	42.9	43.3	41.9
18	18	7,712.3	35.0	12.3	32.1	31.6	11.7	31.0	33.8	31.3
19	19	7,530.5	11.5	2.6	10.1	11.2	2.5	10.2	11.2	7.8
20	20	7,105.1	0.2	0.1	0.1	0.3	0.1	0.2	0.2	0.0
21	21	6,771.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	6,345.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	5,767.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	5,089.4	0.0	0.0	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:
May, 2022

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAM LTON	74.9	19,220	34.5%	0.5%	3,949,451
LAKE PLAC D	45.0	8,842	26.4%	0.2%	
TRENTON	74.9	18,034	32.4%	0.5%	
COLUMBIA	74.9	19,887	35.7%	0.5%	
DEBARY	74.5	14,926	26.9%	0.4%	
SANTA FE	74.9	19,106	34.3%	0.5%	
TWIN RIVERS	74.9	18,884	33.9%	0.5%	
DUETTE	74.5	18,605	33.6%	0.5%	
SANDY CREEK	74.9	12,904	47.9%	0.3%	
Total	643.4	150,408	31.4%	3.8%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAM LTON	171,176	\$8.60	2,066	\$171.09	903	\$199.38
LAKE PLAC D	78,748	\$8.60	950	\$171.09	415	\$199.38
TRENTON	160,613	\$8.60	1,938	\$171.09	847	\$199.38
COLUMBIA	177,117	\$8.60	2,137	\$171.09	934	\$199.38
DEBARY	132,933	\$8.60	1,604	\$171.09	701	\$199.38
SANTA FE	170,161	\$8.60	2,054	\$171.09	898	\$199.38
TWIN RIVERS	168,184	\$8.60	2,030	\$171.09	887	\$199.38
DUETTE	165,699	\$8.60	2,000	\$171.09	874	\$199.38
SANDY CREEK	114,925	\$8.60	1,387	\$171.09	606	\$199.38
Total	1,339,556	\$11,515,802	16,166	\$2,765,792	7,067	\$1,408,956

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAM LTON	13,179	16	1	0
LAKE PLAC D	6,063	7	0	0
TRENTON	12,366	15	1	0
COLUMBIA	13,636	16	1	0
DEBARY	10,234	12	1	0
SANTA FE	13,101	16	1	0
TWIN RIVERS	12,948	15	1	0
DUETTE	12,757	15	1	0
SANDY CREEK	8,848	11	1	0
Total	103,131	123	8	1

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAM LTON	\$63,053	\$664,815	\$313,315	\$16,388	\$0	\$1,057,571
LAKE PLAC D	\$38,147	\$358,555	\$167,654	\$8,683	\$0	\$573,039
TRENTON	\$116,666	\$591,167	\$277,505	\$17,550	\$0	\$1,002,888
COLUMBIA	\$42,540	\$663,871	\$295,284	\$17,645	\$0	\$1,019,339
DEBARY	\$36,406	\$539,304	\$245,835	\$14,286	\$0	\$835,831
SANTA FE	\$53,005	\$671,490	\$288,888	\$17,384	\$0	\$1,030,767
TWIN RIVERS	\$38,154	\$617,967	\$251,929	\$15,572	\$0	\$923,623
DUETTE	\$51,004	\$648,129	\$275,115	\$20,420	\$0	\$994,667
SANDY CREEK	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$438,975	\$4,755,297	\$2,115,525	\$127,928	\$0	\$7,437,726

Notes:
Sandy Creek Renewable Energy Center was placed in service as of 5/17/2022

Duke Energy Florida, LLC
Actual Data for Solar Generation Facilities
Solar Base Rate Adjustment (SoBRA) Reporting
YEAR-TO-DATE THROUGH:
May, 2022

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAM LTON	74.9	66,916	24.7%	0.4%	16,876,056
LAKE PLAC D	45.0	37,508	23.0%	0.2%	
TRENTON	74.9	71,808	26.5%	0.4%	
COLUMBIA	74.9	77,285	28.5%	0.5%	
DEBARY	74.5	62,267	23.1%	0.4%	
SANTA FE	74.9	71,814	26.5%	0.4%	
TWIN RIVERS	74.9	73,174	27.0%	0.4%	
DUETTE	74.5	76,647	28.4%	0.5%	
SANDY CREEK	74.9	12,904	47.9%	0.1%	
Total	643.4	550,323	26.4%	3.3%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAM LTON	500,025	\$6.71	2,929	\$163.37	4,727	\$106.15
LAKE PLAC D	278,641	\$6.42	1,415	\$161.20	2,465	\$101.82
TRENTON	532,073	\$6.50	2,877	\$161.08	4,812	\$103.07
COLUMBIA	576,617	\$6.55	3,116	\$162.27	5,232	\$103.99
DEBARY	461,833	\$6.43	2,445	\$160.07	4,063	\$102.84
SANTA FE	537,073	\$6.59	2,972	\$162.61	4,900	\$104.95
TWIN RIVERS	544,789	\$6.56	2,991	\$161.95	4,999	\$104.12
DUETTE	568,512	\$6.45	2,954	\$161.25	5,070	\$102.14
SANDY CREEK	114,925	\$8.60	1,387	\$171.09	606	\$199.38
Total	4,114,488	\$27,798,397	23,086	\$3,757,597	36,876	\$4,213,870

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAM LTON	41,305	28	5	0
LAKE PLAC D	22,574	14	2	0
TRENTON	43,400	28	5	0
COLUMBIA	47,067	31	5	0
DEBARY	37,415	24	4	0
SANTA FE	43,925	29	5	0
TWIN RIVERS	44,603	29	5	0
DUETTE	46,170	29	5	0
SANDY CREEK	8,848	11	1	0
Total	335,306	224	36	3

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAM LTON	\$741,707	\$3,343,645	\$1,566,382	\$81,940	\$0	\$5,733,673
LAKE PLAC D	\$441,660	\$1,803,106	\$838,271	\$43,415	\$0	\$3,126,451
TRENTON	\$837,683	\$2,973,230	\$1,387,525	\$87,750	\$0	\$5,286,189
COLUMBIA	\$289,027	\$3,338,460	\$1,476,403	\$88,225	\$0	\$5,192,114
DEBARY	\$327,039	\$2,711,458	\$1,228,966	\$71,430	\$0	\$4,338,893
SANTA FE	\$225,321	\$3,375,813	\$1,444,428	\$86,920	\$0	\$5,132,482
TWIN RIVERS	\$577,490	\$3,102,345	\$1,259,634	\$77,860	\$0	\$5,017,329
DUETTE	\$184,288	\$3,249,551	\$1,371,683	\$102,100	\$0	\$4,907,622
SANDY CREEK	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$3,624,215	\$23,897,608	\$10,573,292	\$639,640	\$0	\$38,734,754

Notes:
Sandy Creek Renewable Energy Center was placed in service as of 5/17/2022