



Stephanie A. Cuello
SENIOR COUNSEL

May 26, 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 April 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 and if you have any questions, please feel free to contact me at (850) 521-1425.

Sincerely,

s/ Stephanie A. Cuello

Stephanie A. Cuello

SAC/mw
Enclosure

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 26th day of May, 2022.

/s/ Stephanie A. Cuello

Attorney

<p>Ashley Weisenfeld / Jacob Imig Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 AWeisenf@psc.state.fl.us 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>
--	---

Duke Energy Florida, LLC
 Actual Data for Solar Generation Facilities
 Solar Base Rate Adjustment (SoBRA) Reporting
April, 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)
Hour of Day	System Firm Demand (MW)	Hamilton	Lake Placid	Trenton	Columbia	Debary	Santa Fe	Twin Rivers	Duette
1	1	3,692.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,363.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,156.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,045.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,050.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,215.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	3,546.3	5.6	2.2	5.0	6.9	3.1	6.1	5.0
8	8	3,839.3	36.8	14.6	35.7	36.9	16.6	35.5	37.1
9	9	4,093.1	55.8	23.8	53.3	58.0	34.1	56.1	57.2
10	10	4,367.1	60.3	28.9	55.6	65.3	48.0	63.0	61.6
11	11	4,649.9	60.7	29.3	56.2	64.1	54.8	63.9	62.4
12	12	4,967.7	62.3	30.4	57.6	64.1	55.4	61.7	63.7
13	13	5,305.5	61.1	29.0	54.6	63.1	55.8	60.1	61.9
14	14	5,636.5	60.3	29.2	53.1	61.2	56.5	57.5	61.7
15	15	5,922.5	58.2	26.7	51.2	56.8	54.1	56.2	59.0
16	16	6,181.0	53.7	25.5	46.3	56.6	43.2	53.9	56.4
17	17	6,384.3	48.3	20.6	45.1	51.3	29.2	48.3	48.2
18	18	6,469.9	33.1	12.0	31.9	37.5	12.1	37.1	33.9
19	19	6,337.0	6.4	1.4	5.6	6.7	1.6	6.1	6.3
20	20	6,015.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	5,814.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	5,377.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	4,812.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	4,199.2	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:
April, 2022

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	18,074	33.5%	0.5%	3,315,900
LAKE PLACID	45.0	8,211	25.3%	0.2%	
TRENTON	74.9	16,534	30.7%	0.5%	
COLUMBIA	74.9	18,853	35.0%	0.6%	
DEBARY	74.5	13,931	26.0%	0.4%	
SANTA FE	74.9	18,165	33.7%	0.5%	
TWIN RIVERS	74.9	18,436	34.2%	0.6%	
DUETTE	74.5	16,730	31.2%	0.5%	
Total:	568.5	128,934	31.5%	3.9%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	127,787	\$6.85	527	\$162.79	2,196	\$96.13
LAKE PLACID	58,053	\$6.85	239	\$162.79	998	\$96.13
TRENTON	116,899	\$6.85	482	\$162.79	2,009	\$96.13
COLUMBIA	133,294	\$6.85	550	\$162.79	2,291	\$96.13
DEBARY	98,495	\$6.85	406	\$162.79	1,693	\$96.13
SANTA FE	128,430	\$6.85	530	\$162.79	2,207	\$96.13
TWIN RIVERS	130,346	\$6.85	537	\$162.79	2,240	\$96.13
DUETTE	118,284	\$6.85	488	\$162.79	2,033	\$96.13
Total:	911,588	\$6,248,546	3,759	\$611,864	15,669	\$1,506,226

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	12,460	7	2	0
LAKE PLACID	5,661	3	1	0
TRENTON	11,399	7	2	0
COLUMBIA	12,997	8	2	0
DEBARY	9,604	6	2	0
SANTA FE	12,523	7	2	0
TWIN RIVERS	12,710	7	2	0
DUETTE	11,534	7	2	0
Total:	88,888	52	14	1

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$95,181	\$666,469	\$313,315	\$16,388	\$0	\$1,091,353
LAKE PLACID	\$121,596	\$359,421	\$167,654	\$8,683	\$0	\$657,354
TRENTON	\$431,006	\$592,617	\$277,505	\$17,550	\$0	\$1,318,678
COLUMBIA	\$64,356	\$665,442	\$295,260	\$17,645	\$0	\$1,042,703
DEBARY	\$55,600	\$540,539	\$245,830	\$14,286	\$0	\$856,255
SANTA FE	\$60,420	\$673,024	\$288,888	\$17,384	\$0	\$1,039,716
TWIN RIVERS	\$41,147	\$619,307	\$251,929	\$15,572	\$0	\$927,956
DUETTE	\$87,887	\$649,886	\$275,066	\$20,420	\$0	\$1,033,260
Total:	\$957,193	\$4,766,705	\$2,115,448	\$127,928	\$0	\$7,967,274

Notes:

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	47,696	22.1%	0.4%	12,926,605
LAKE PLACID	45.0	28,666	22.1%	0.2%	
TRENTON	74.9	53,774	24.9%	0.4%	
COLUMBIA	74.9	57,398	26.6%	0.4%	
DEBARY	74.5	47,341	22.1%	0.4%	
SANTA FE	74.9	52,708	24.4%	0.4%	
TWIN RIVERS	74.9	54,290	25.2%	0.4%	
DUETTE	74.5	58,042	27.1%	0.4%	
Total:	568.5	399,915	24.4%	3.1%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	328,848	\$5.73	863	\$144.89	3,824	\$84.13
LAKE PLACID	199,893	\$5.56	465	\$140.98	2,050	\$82.04
TRENTON	371,460	\$5.59	939	\$140.42	3,965	\$82.49
COLUMBIA	399,501	\$5.64	978	\$143.01	4,298	\$83.25
DEBARY	328,900	\$5.56	841	\$139.05	3,362	\$82.70
SANTA FE	366,912	\$5.67	918	\$143.64	4,002	\$83.77
TWIN RIVERS	376,606	\$5.65	962	\$142.65	4,112	\$83.57
DUETTE	402,813	\$5.56	954	\$140.62	4,196	\$81.88
Total:	2,774,932	\$15,593,923	6,920	\$982,050	29,809	\$2,473,522

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	28,126	13	4	0
LAKE PLACID	16,511	7	2	0
TRENTON	31,034	14	4	0
COLUMBIA	33,431	15	4	0
DEBARY	27,180	12	3	0
SANTA FE	30,824	14	4	0
TWIN RIVERS	31,655	14	4	0
DUETTE	33,413	14	4	0
Total:	232,175	102	28	3

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$678,655	\$2,678,829	\$1,253,067	\$65,552	\$0	\$4,676,103
LAKE PLACID	\$403,513	\$1,444,551	\$670,616	\$34,732	\$0	\$2,553,412
TRENTON	\$721,017	\$2,382,063	\$1,110,020	\$70,200	\$0	\$4,283,300
COLUMBIA	\$246,487	\$2,674,589	\$1,181,119	\$70,580	\$0	\$4,172,775
DEBARY	\$290,633	\$2,172,155	\$983,131	\$57,144	\$0	\$3,503,062
SANTA FE	\$172,317	\$2,704,323	\$1,155,540	\$69,536	\$0	\$4,101,717
TWIN RIVERS	\$539,336	\$2,484,377	\$1,007,705	\$62,288	\$0	\$4,093,706
DUETTE	\$133,284	\$2,601,422	\$1,096,569	\$81,680	\$0	\$3,912,955
Total:	\$3,185,242	\$19,142,310	\$8,457,766	\$511,712	\$0	\$31,297,030

Notes: