



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

June 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 May 2021, in accordance with Paragraph 15a. of the 2017 Second Revised and Restated Settlement Agreement, which was approved in FPSC 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.

Respectfully,

/s/ Dianne M. Triplett

Dianne M. Triplett

DMT/cmw
Enclosure

CERTIFICATE OF SERVICE

Docket No. 20210007-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, 2021.

/s/ Dianne M. Triplett

Attorney

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Duke Energy Florida, LLC
 Actual Data for Solar Generation Facilities
 Solar Base Rate Adjustment (SoBRA) Reporting
May 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	4,019.9	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,668.6	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,421.2	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,271.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,223.4	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,316.5	0.1	0.3	0.3	0.2	0.5	0.0
7	7	3,524.5	7.0	9.0	16.7	19.6	4.8	17.6
8	8	3,789.0	37.5	26.8	49.6	51.4	18.5	49.8
9	9	4,159.2	56.8	35.1	62.3	61.5	35.6	58.9
10	10	4,594.3	59.0	37.9	63.6	63.2	48.1	59.4
11	11	5,045.6	59.7	37.1	64.3	64.2	56.3	60.4
12	12	5,547.5	60.3	37.9	63.5	63.9	60.8	59.7
13	13	6,085.8	60.0	37.1	63.1	62.7	60.2	60.0
14	14	6,553.6	57.0	34.6	65.0	63.1	54.9	61.7
15	15	6,903.0	58.1	33.6	62.7	58.2	50.7	58.1
16	16	7,155.3	52.2	32.5	61.2	57.7	40.8	57.1
17	17	7,329.2	46.8	27.9	55.6	54.8	26.3	54.5
18	18	7,350.8	31.4	18.5	42.7	43.5	12.7	43.1
19	19	7,119.1	10.3	4.3	12.8	14.7	2.6	13.9
20	20	6,634.7	0.3	0.0	0.2	0.2	0.1	0.1
21	21	6,220.1	0.0	0.0	0.0	0.0	0.0	0.0
22	22	5,744.6	0.0	0.0	0.0	0.0	0.0	0.0
23	23	5,141.1	0.0	0.0	0.0	0.0	0.0	0.0
24	24	4,498.8	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 2021

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	18,492	33.2%	0.5%	3,603,754
LAKE PLACID	45.0	11,550	34.5%	0.3%	
TRENTON	74.9	21,197	38.0%	0.6%	
COLUMBIA	74.9	21,055	37.8%	0.6%	
DEBARY	74.5	14,653	26.4%	0.4%	
SANTA FE	74.9	20,296	36.4%	0.6%	
TWIN RIVERS	74.9	1,994	3.6%	0.1%	
Total:	494.0	109,237	29.7%	3.0%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	142,186	\$3.14	1,314	\$90.18	1,662	\$37.58
LAKE PLACID	88,809	\$3.14	821	\$90.18	1,038	\$37.58
TRENTON	162,985	\$3.14	1,506	\$90.18	1,905	\$37.58
COLUMBIA	161,893	\$3.14	1,496	\$90.18	1,892	\$37.58
DEBARY	112,668	\$3.14	1,041	\$90.18	1,317	\$37.58
SANTA FE	156,057	\$3.14	1,442	\$90.18	1,824	\$37.58
TWIN RIVERS	15,332	\$3.14	142	\$90.18	179	\$37.58
Total:	839,930	\$2,639,151	7,762	\$699,991	9,817	\$368,952

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	12,613	9	2	0
LAKE PLACID	7,878	6	1	0
TRENTON	14,458	11	2	0
COLUMBIA	14,361	10	2	0
DEBARY	9,994	7	1	0
SANTA FE	13,843	10	2	0
TWIN RIVERS	1,360	1	0	0
Total:	74,506	54	11	1

Facility	O&M (\$)	Carrying Costs (\$)¹	Capital (\$)¹	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$45,827	\$683,539	\$304,534	\$16,388	\$0	\$1,050,288
LAKE PLACID	\$23,099	\$371,851	\$164,644	\$8,683	\$0	\$568,277
TRENTON	\$45,155	\$613,441	\$271,802	\$17,550	\$0	\$947,948
COLUMBIA	\$55,446	\$687,195	\$292,452	\$17,645	\$0	\$1,052,739
DEBARY	\$55,037	\$558,811	\$243,789	\$14,286	\$0	\$871,923
SANTA FE	\$933	\$679,569	\$275,793	\$17,384	\$0	\$973,680
TWIN RIVERS	\$0	\$609,836	\$205,592	\$15,572	\$0	\$831,000
Total:	\$225,497	\$4,204,243	\$1,758,606	\$107,508	\$0	\$6,295,854

Notes:

Santa Fe and Twin Rivers sites became active in March.

1) Project costs for Santa Fe & Twin Rivers are estimated during final punch list item completion; future reports to be updated to reflect actual costs.

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	68,762	25.3%	0.4%	15,327,296
LAKE PLACID	45.0	45,893	28.1%	0.3%	
TRENTON	74.9	75,250	27.7%	0.5%	
COLUMBIA	74.9	74,463	27.4%	0.5%	
DEBARY	74.5	59,718	22.1%	0.4%	
SANTA FE	74.9	52,242	33.0%	0.3%	
TWIN RIVERS	74.9	2,681	2.1%	0.0%	
Total:	494.0	379,009	25.0%	2.5%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	484,574	\$3.32	3,064	\$86.08	6,577	\$36.46
LAKE PLACID	323,539	\$3.35	2,018	\$85.87	4,346	\$36.45
TRENTON	532,636	\$3.34	3,401	\$86.15	7,142	\$36.50
COLUMBIA	526,657	\$3.33	3,369	\$86.17	7,078	\$36.50
DEBARY	421,197	\$3.42	2,604	\$85.67	5,447	\$36.38
SANTA FE	381,272	\$2.94	2,510	\$87.82	6,058	\$36.79
TWIN RIVERS	27,516	\$2.99	277	\$87.46	466	\$36.49
Total:	2,697,392	\$8,746,226	17,243	\$1,490,811	37,114	\$1,354,996

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	44,185	19	7	1
LAKE PLACID	29,396	13	4	0
TRENTON	48,405	21	7	1
COLUMBIA	47,897	21	7	1
DEBARY	37,832	15	6	1
SANTA FE	36,605	20	6	1
TWIN RIVERS	2,745	2	1	0
Total:	247,066	112	38	3

Facility	O&M (\$)	Carrying Costs (\$)¹	Capital (\$)¹	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$690,762	\$3,439,386	\$1,522,668	\$81,940	\$0	\$5,734,756
LAKE PLACID	\$337,455	\$1,870,620	\$823,218	\$43,415	\$0	\$3,074,709
TRENTON	\$772,437	\$3,085,107	\$1,358,714	\$87,750	\$0	\$5,304,008
COLUMBIA	\$243,006	\$3,456,761	\$1,462,235	\$88,225	\$0	\$5,250,227
DEBARY	\$289,829	\$2,810,887	\$1,218,802	\$71,430	\$0	\$4,390,948
SANTA FE	\$9,783	\$1,352,207	\$547,857	\$52,152	\$0	\$1,961,999
TWIN RIVERS	\$380,160	\$1,118,131	\$411,184	\$46,716	\$0	\$1,956,191
Total:	\$2,723,432	\$17,133,099	\$7,344,678	\$471,628	\$0	\$27,672,837

Notes:

Santa Fe and Twin Rivers sites became active in March.

1) Project costs for Santa Fe & Twin Rivers are estimated during final punch list item completion; future reports to be updated to reflect actual costs.