



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

November 23, 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 October 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 23rd day of November, 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
October 2021

		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	4,011.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,666.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,462.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,340.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,322.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,434.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	3,689.5	0.3	0.0	0.5	0.8	0.7	0.5	0.3
8	8	4,007.7	14.8	0.0	18.1	19.5	12.3	17.0	16.0
9	9	4,268.9	37.9	0.0	44.6	40.5	31.6	38.6	42.2
10	10	4,684.1	40.2	0.0	49.1	48.8	46.0	46.9	45.9
11	11	5,162.2	43.3	0.0	51.5	50.3	56.2	48.7	48.6
12	12	5,670.9	42.9	0.0	50.4	49.5	58.3	47.7	48.8
13	13	6,152.6	41.5	0.0	49.0	50.5	53.2	49.5	47.2
14	14	6,537.7	40.2	0.0	47.2	50.1	46.0	47.7	46.4
15	15	6,815.7	42.2	0.0	45.5	44.1	41.1	44.3	47.7
16	16	7,003.1	36.1	0.0	40.8	39.3	30.8	38.6	40.1
17	17	7,084.2	25.9	0.0	27.0	24.8	17.2	24.5	29.5
18	18	7,005.5	5.5	0.0	5.4	5.6	2.8	5.1	6.5
19	19	6,720.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
20	20	6,477.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	6,096.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	5,602.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	5,043.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	4,402.0	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:
October 2021

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	11,498	20.6%	0.3%	3,673,462
LAKE PLACID	45.0	0	0.0%	0.0%	
TRENTON	74.9	13,298	23.9%	0.4%	
COLUMBIA	74.9	13,135	23.6%	0.4%	
DEBARY	74.5	12,279	22.2%	0.3%	
SANTA FE	74.9	12,677	22.7%	0.3%	
TWIN RIVERS	74.9	12,998	23.3%	0.4%	
DUETTE	74.5	3,904	31.2%	0.1%	
Total:	568.5	79,789	18.9%	2.2%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	91,868	\$6.01	321	\$109.69	786	\$179.01
LAKE PLACID	0	\$6.01	0	\$109.69	0	\$179.01
TRENTON	106,250	\$6.01	372	\$109.69	910	\$179.01
COLUMBIA	104,947	\$6.01	367	\$109.69	898	\$179.01
DEBARY	98,108	\$6.01	343	\$109.69	840	\$179.01
SANTA FE	101,288	\$6.01	354	\$109.69	867	\$179.01
TWIN RIVERS	103,853	\$6.01	363	\$109.69	889	\$179.01
DUETTE	31,193	\$6.01	109	\$109.69	267	\$179.01
Total:	637,505	\$3,834,338	2,230	\$244,609	5,457	\$976,939

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	7,322	4	0	0
LAKE PLACID	0	0	0	0
TRENTON	8,468	5	0	0
COLUMBIA	8,365	5	0	0
DEBARY	7,819	5	0	0
SANTA FE	8,073	5	0	0
TWIN RIVERS	8,277	5	0	0
DUETTE	2,486	2	0	0
Total:	50,811	31	1	1

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$70,317	\$675,799	\$305,821	\$16,388	\$0	\$1,068,325
LAKE PLACID	\$26,854	\$366,174	\$164,644	\$8,683	\$0	\$566,355
TRENTON	\$114,604	\$604,120	\$271,868	\$17,550	\$0	\$1,008,142
COLUMBIA	\$35,875	\$676,762	\$292,468	\$17,645	\$0	\$1,022,750
DEBARY	\$74,505	\$550,650	\$243,592	\$14,286	\$0	\$883,033
SANTA FE	\$53,016	\$685,154	\$280,151	\$17,384	\$0	\$1,035,705
TWIN RIVERS	\$31,925	\$610,632	\$244,335	\$15,572	\$0	\$902,464
DUETTE	\$0	\$633,756	\$0	\$20,420	\$0	\$654,176
Total:	\$407,096	\$4,803,047	\$1,802,879	\$127,928	\$0	\$7,140,950

Notes:

Santa Fe and Twin Rivers sites became active in March
Lake Placid Out of Service the Month of October for a planned outage during the battery storage construction period.
Duette became Active in October

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	130,955	24.0%	0.4%	35,620,985
LAKE PLACID	45.0	53,307	16.2%	0.1%	
TRENTON	74.9	144,402	26.4%	0.4%	
COLUMBIA	74.9	143,577	26.3%	0.4%	
DEBARY	74.5	114,522	21.1%	0.3%	
SANTA FE	74.9	119,154	27.5%	0.3%	
TWIN RIVERS	74.9	66,886	16.5%	0.2%	
DUETTE	74.5	3,904	31.2%	0.0%	
Total:	568.5	776,707	23.3%	2.2%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	1,036,071	\$4.01	8,493	\$91.63	9,052	\$56.18
LAKE PLACID	392,517	\$3.38	2,850	\$88.38	4,548	\$36.61
TRENTON	1,145,362	\$4.03	9,380	\$91.66	9,921	\$57.12
COLUMBIA	1,139,061	\$4.04	9,348	\$91.68	9,853	\$57.18
DEBARY	904,633	\$4.11	7,231	\$91.59	7,736	\$59.67
SANTA FE	974,425	\$3.96	8,307	\$92.70	8,725	\$58.96
TWIN RIVERS	595,489	\$4.62	5,764	\$94.43	3,115	\$101.40
DUETTE	31,193	\$6.01	109	\$109.69	267	\$179.01
Total:	6,218,752	\$26,560,402	51,481	\$4,837,741	53,217	\$4,032,058

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	85,196	60	10	1
LAKE PLACID	34,379	18	5	0
TRENTON	94,005	67	11	1
COLUMBIA	93,469	67	11	1
DEBARY	73,962	51	9	1
SANTA FE	80,705	64	10	1
TWIN RIVERS	45,136	44	4	0
DUETTE	2,486	2	0	0
Total:	509,338	373	60	5

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$1,034,803	\$6,835,423	\$3,050,472	\$163,880	\$0	\$11,084,578
LAKE PLACID	\$729,069	\$3,712,845	\$1,646,437	\$86,830	\$0	\$6,175,181
TRENTON	\$1,178,115	\$6,124,257	\$2,717,917	\$175,500	\$0	\$10,195,789
COLUMBIA	\$954,950	\$6,861,474	\$2,924,559	\$176,450	\$0	\$10,917,432
DEBARY	\$689,032	\$5,580,278	\$2,437,475	\$142,860	\$0	\$8,849,645
SANTA FE	\$294,179	\$4,791,410	\$1,948,209	\$139,072	\$0	\$7,172,869
TWIN RIVERS	\$512,632	\$4,168,428	\$1,626,536	\$124,576	\$0	\$6,432,172
DUETTE	\$0	\$633,756	\$0	\$20,420	\$0	\$654,176
Total:	\$5,392,780	\$38,707,871	\$16,351,603	\$1,029,588	\$0	\$61,481,842

Notes:
 Santa Fe and Twin Rivers sites became active in March - YTD Capacity Factors reflect in service date
 Lake Placid Out of Service August thru October for a planned outage during the battery storage construction period.
 Duette became Active in October