



Dianne M. Triplett  
DEPUTY GENERAL COUNSEL

September 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 August 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 30<sup>th</sup> day of September, 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  
August 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	4,774.3	0.0	0.0	0.0	0.0	0.0	0.0
2	2	4,439.5	0.0	0.0	0.0	0.0	0.0	0.0
3	3	4,201.4	0.0	0.0	0.0	0.0	0.0	0.0
4	4	4,049.3	0.0	0.0	0.0	0.0	0.0	0.0
5	5	4,012.2	0.0	0.0	0.0	0.0	0.0	0.0
6	6	4,105.9	0.0	0.0	0.0	0.0	0.0	0.0
7	7	4,325.6	3.6	0.0	4.9	5.4	1.9	4.3
8	8	4,585.1	21.1	0.0	25.1	26.2	12.2	21.2
9	9	4,978.7	36.2	0.0	43.4	41.0	26.1	36.2
10	10	5,674.9	41.3	0.0	46.0	48.0	38.2	44.8
11	11	6,424.2	43.5	0.0	46.9	47.7	47.8	45.0
12	12	7,159.7	43.5	0.0	47.5	46.9	49.2	45.0
13	13	7,819.8	44.6	0.0	45.9	48.8	47.8	46.3
14	14	8,239.9	41.1	0.0	45.3	47.6	46.2	43.9
15	15	8,442.7	37.5	0.0	42.0	45.9	36.4	42.9
16	16	8,507.9	28.9	0.0	37.2	38.7	27.3	36.9
17	17	8,506.4	26.6	0.0	29.6	26.5	18.3	24.6
18	18	8,378.7	18.3	0.0	16.9	15.1	7.5	14.0
19	19	8,092.5	4.6	0.0	5.0	3.5	1.7	2.9
20	20	7,639.3	0.1	0.0	0.1	0.0	0.0	0.0
21	21	7,278.7	0.0	0.0	0.0	0.0	0.0	0.0
22	22	6,731.2	0.0	0.0	0.0	0.0	0.0	0.0
23	23	6,037.9	0.0	0.0	0.0	0.0	0.0	0.0
24	24	5,233.3	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:  
**August 2021**

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	12,119	21.7%	0.3%	4,468,653
LAKE PLACID	45.0	0	0.0%	0.0%	
TRENTON	74.9	13,515	24.3%	0.3%	
COLUMBIA	74.9	13,672	24.5%	0.3%	
DEBARY	74.5	11,177	20.2%	0.3%	
SANTA FE	74.9	12,652	22.7%	0.3%	
TWIN RIVERS	74.9	13,716	24.6%	0.3%	
<b>Total:</b>	<b>494.0</b>	<b>76,851</b>	<b>20.9%</b>	<b>1.7%</b>	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	105,891	\$4.40	2,262	\$92.70	537	\$54.20
LAKE PLACID	0	\$4.40	0	\$92.70	0	\$54.20
TRENTON	118,088	\$4.40	2,523	\$92.70	599	\$54.20
COLUMBIA	119,460	\$4.40	2,552	\$92.70	606	\$54.20
DEBARY	97,660	\$4.40	2,086	\$92.70	495	\$54.20
SANTA FE	110,548	\$4.40	2,362	\$92.70	561	\$54.20
TWIN RIVERS	119,845	\$4.40	2,560	\$92.70	608	\$54.20
<b>Total:</b>	<b>671,492</b>	<b>\$2,952,469</b>	<b>14,344</b>	<b>\$1,329,683</b>	<b>3,406</b>	<b>\$184,601</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	8,563	14	1	0
LAKE PLACID	0	0	0	0
TRENTON	9,550	16	1	0
COLUMBIA	9,661	16	1	0
DEBARY	7,898	13	1	0
SANTA FE	8,940	15	1	0
TWIN RIVERS	9,692	16	1	0
<b>Total:</b>	<b>54,303</b>	<b>89</b>	<b>8</b>	<b>0</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$56,375	\$680,140	\$305,821	\$16,388	\$0	\$1,058,724
LAKE PLACID	\$28,815	\$368,445	\$164,644	\$8,683	\$0	\$570,587
TRENTON	\$80,188	\$607,826	\$271,862	\$17,550	\$0	\$977,426
COLUMBIA	\$39,709	\$680,954	\$292,475	\$17,645	\$0	\$1,030,783
DEBARY	\$58,032	\$553,884	\$243,911	\$14,286	\$0	\$870,113
SANTA FE	\$64,138	\$688,885	\$280,086	\$17,384	\$0	\$1,050,493
TWIN RIVERS	\$29,800	\$610,443	\$244,240	\$15,572	\$0	\$900,055
<b>Total:</b>	<b>\$357,057</b>	<b>\$4,190,578</b>	<b>\$1,803,038</b>	<b>\$107,508</b>	<b>\$0</b>	<b>\$6,458,180</b>

**Notes:**

Santa Fe and Twin Rivers sites became active in March.

Lake Placid Out of Service the Month of August for a planned outage during the battery storage construction period.

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	107,514	24.6%	0.4%	28,109,824
LAKE PLACID	45.0	53,307	20.3%	0.2%	
TRENTON	74.9	117,526	26.9%	0.4%	
COLUMBIA	74.9	116,704	26.7%	0.4%	
DEBARY	74.5	91,261	21.0%	0.3%	
SANTA FE	74.9	93,734	29.0%	0.3%	
TWIN RIVERS	74.9	39,976	13.6%	0.1%	
<b>Total:</b>	<b>494.0</b>	<b>620,022</b>	<b>23.8%</b>	<b>2.2%</b>	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	834,058	\$3.60	8,077	\$90.85	7,801	\$38.30
LAKE PLACID	392,517	\$3.38	2,850	\$88.38	4,548	\$36.61
TRENTON	913,887	\$3.61	8,900	\$90.84	8,484	\$38.35
COLUMBIA	907,413	\$3.61	8,871	\$90.86	8,421	\$38.38
DEBARY	705,242	\$3.65	6,801	\$90.60	6,469	\$38.31
SANTA FE	755,613	\$3.45	7,851	\$91.87	7,363	\$38.79
TWIN RIVERS	363,331	\$3.92	5,290	\$93.31	1,685	\$45.29
<b>Total:</b>	<b>4,872,062</b>	<b>\$17,553,853</b>	<b>48,640</b>	<b>\$4,424,311</b>	<b>44,773</b>	<b>\$1,752,653</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	70,201	52	10	1
LAKE PLACID	34,379	18	5	0
TRENTON	76,814	58	11	1
COLUMBIA	76,279	57	11	1
DEBARY	59,088	43	8	1
SANTA FE	64,446	55	9	1
TWIN RIVERS	27,921	35	4	0
<b>Total:</b>	<b>409,129</b>	<b>319</b>	<b>57</b>	<b>4</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$888,605	\$5,481,647	\$2,438,831	\$131,104	\$0	\$8,940,187
LAKE PLACID	\$642,305	\$2,979,361	\$1,317,149	\$69,464	\$0	\$5,008,280
TRENTON	\$992,964	\$4,914,130	\$2,174,181	\$140,400	\$0	\$8,221,674
COLUMBIA	\$855,726	\$5,505,845	\$2,339,623	\$141,160	\$0	\$8,842,354
DEBARY	\$547,062	\$4,477,322	\$1,950,290	\$114,288	\$0	\$7,088,962
SANTA FE	\$184,439	\$3,419,197	\$1,387,906	\$104,304	\$0	\$5,095,846
TWIN RIVERS	\$419,466	\$2,945,548	\$1,137,884	\$93,432	\$0	\$4,596,330
<b>Total:</b>	<b>\$4,530,567</b>	<b>\$29,723,049</b>	<b>\$12,745,864</b>	<b>\$794,152</b>	<b>\$0</b>	<b>\$47,793,632</b>

**Notes:**

Santa Fe and Twin Rivers sites became active in March.

Lake Placid Out of Service the Month of August for a planned outage during the battery storage construction period.