



Stephanie A. Cuello  
SENIOR COUNSEL

December 21, 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 November 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/vr  
Attachment

**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 21<sup>st</sup> day of December, 2022.

/s/ Stephanie A. Cuello

Attorney

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Duke Energy Florida, LLC  
 Actual Data for Solar Generation Facilities  
 Solar Base Rate Adjustment (SoBRA) Reporting  
November, 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)	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	Charlie Creek	
1	1	3,523.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,256.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,093.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,026.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,065.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,255.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	3,607.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
8	8	3,980.3	4.9	1.5	4.6	5.6	4.5	4.1	5.1	4.3	6.7	6.7
9	9	4,325.0	23.3	5.1	21.2	21.2	18.9	19.9	20.4	22.3	25.5	20.4
10	10	4,619.0	35.5	7.6	31.6	31.6	31.2	29.9	31.2	31.6	38.0	27.8
11	11	4,910.6	40.6	10.1	34.5	36.0	37.5	34.2	35.9	35.5	40.8	29.8
12	12	5,196.9	44.3	13.3	38.1	38.8	42.6	36.9	39.5	36.4	41.2	32.9
13	13	5,413.6	43.7	15.3	38.5	39.8	40.1	37.2	39.2	36.4	42.8	30.7
14	14	5,578.8	42.8	15.8	38.8	38.7	35.5	37.0	37.4	36.4	42.3	29.6
15	15	5,709.9	39.9	14.9	35.9	34.6	29.3	32.2	34.9	33.9	36.2	27.5
16	16	5,814.8	36.8	12.0	30.1	30.3	19.6	28.8	32.9	31.6	33.8	24.1
17	17	5,865.8	18.6	5.0	15.4	15.9	8.1	14.2	17.1	16.7	22.0	12.9
18	18	5,881.2	1.4	0.3	1.1	1.3	0.6	1.0	1.4	1.1	2.9	0.7
19	19	5,857.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	20	5,644.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	5,346.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	4,962.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	4,492.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	3,922.3	0.0	0.1	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:  
**November, 2022**

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	9,952	18.5%	0.3%	3,396,987
LAKE PLACID	45.0	3,065	9.5%	0.1%	
TRENTON	74.9	8,693	16.1%	0.3%	
COLUMBIA	74.9	8,817	16.3%	0.3%	
DEBARY	74.5	8,036	15.0%	0.2%	
SANTA FE	74.9	8,272	15.3%	0.2%	
TWIN RIVERS	74.9	8,817	16.3%	0.3%	
DUETTE	74.5	8,612	16.1%	0.3%	
SANDY CREEK	74.9	9,899	18.4%	0.3%	
CHARLIE CREEK	74.9	7,293	13.5%	0.2%	
<b>Total:</b>	<b>718.3</b>	<b>81,456.0</b>	<b>15.8%</b>	<b>2.4%</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	65,678	\$5.62	215	\$159.53	1,572	\$120.66
LAKE PLACID	20,227	\$5.62	66	\$159.53	484	\$120.66
TRENTON	57,369	\$5.62	187	\$159.53	1,373	\$120.66
COLUMBIA	58,187	\$5.62	190	\$159.53	1,393	\$120.66
DEBARY	53,033	\$5.62	173	\$159.53	1,270	\$120.66
SANTA FE	54,591	\$5.62	178	\$159.53	1,307	\$120.66
TWIN RIVERS	58,187	\$5.62	190	\$159.53	1,393	\$120.66
DUETTE	56,834	\$5.62	186	\$159.53	1,361	\$120.66
SANDY CREEK	65,328	\$5.62	213	\$159.53	1,564	\$120.66
CHARLIE CREEK	48,130	\$5.62	157	\$159.53	1,152	\$120.66
<b>Total:</b>	<b>537,565</b>	<b>\$3,021,403</b>	<b>1,757</b>	<b>\$280,223</b>	<b>12,869</b>	<b>\$1,552,695</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	7,278	3	2	0
LAKE PLACID	2,242	1	1	0
TRENTON	6,358	3	2	0
COLUMBIA	6,448	3	2	0
DEBARY	5,877	2	2	0
SANTA FE	6,050	3	2	0
TWIN RIVERS	6,448	3	2	0
DUETTE	6,298	3	2	0
SANDY CREEK	7,240	3	2	0
CHARLIE CREEK	5,334	2	2	0
<b>Total:</b>	<b>59,573</b>	<b>25</b>	<b>19</b>	<b>1</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$61,136	\$651,167	\$313,151	\$16,388	\$0	\$1,041,842
LAKE PLACID	\$26,948	\$352,450	\$167,654	\$8,683	\$0	\$555,735
TRENTON	\$93,835	\$579,229	\$277,505	\$17,550	\$0	\$968,119
COLUMBIA	\$44,638	\$652,765	\$295,284	\$17,645	\$0	\$1,010,332
DEBARY	\$86,063	\$528,747	\$245,835	\$14,286	\$0	\$874,931
SANTA FE	\$84,392	\$657,308	\$288,888	\$17,384	\$0	\$1,047,972
TWIN RIVERS	\$53,957	\$605,311	\$263,364	\$15,572	\$0	\$938,204
DUETTE	\$45,558	\$636,389	\$275,171	\$20,420	\$0	\$977,538
SANDY CREEK	\$64,767	\$489,422	\$252,174	\$16,083	\$0	\$822,446
CHARLIE CREEK	\$0	\$505,427	\$260,327	\$0	\$0	\$765,754
<b>Total:</b>	<b>\$561,294</b>	<b>\$5,658,214</b>	<b>\$2,639,354</b>	<b>\$144,011</b>	<b>\$0</b>	<b>\$9,002,873</b>

Notes:  
Sandy Creek Renewable Energy Center was placed in service as of 5/17/2022  
Charlie Creek Renewable Energy Center was placed in service as of 8/10/2022

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	162,395	27.0%	0.4%	41,814,468
LAKE PLACID	45.0	74,545	20.7%	0.2%	
TRENTON	74.9	155,822	26.0%	0.4%	
COLUMBIA	74.9	168,170	28.0%	0.4%	
DEBARY	74.5	132,568	22.2%	0.3%	
SANTA FE	74.9	150,706	25.1%	0.4%	
TWIN RIVERS	74.9	157,105	26.2%	0.4%	
DUETTE	74.5	151,314	25.3%	0.4%	
SANDY CREEK	74.9	104,960	29.5%	0.3%	
CHARLIE CREEK	74.9	37,053	18.2%	0.1%	
<b>Total:</b>	<b>718.3</b>	<b>1,294,638</b>	<b>25.4%</b>	<b>3.1%</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	1,269,093	\$8.00	15,986	\$164.35	12,207	\$176.66
LAKE PLACID	576,524	\$7.89	6,993	\$164.01	5,393	\$172.70
TRENTON	1,209,136	\$7.78	14,070	\$163.67	11,394	\$170.99
COLUMBIA	1,308,333	\$7.86	15,779	\$164.35	12,349	\$173.02
DEBARY	1,027,001	\$7.79	12,121	\$163.69	9,633	\$170.69
SANTA FE	1,170,727	\$7.82	13,868	\$164.47	11,150	\$170.57
TWIN RIVERS	1,219,350	\$7.83	14,561	\$164.28	11,631	\$171.11
DUETTE	1,165,955	\$7.83	13,861	\$164.33	11,108	\$168.32
SANDY CREEK	857,544	\$8.75	13,737	\$164.86	7,790	\$217.98
CHARLIE CREEK	338,853	\$8.80	4,486	\$155.84	3,279	\$203.65
<b>Total:</b>	<b>10,142,517</b>	<b>\$81,486,520</b>	<b>125,461</b>	<b>\$20,498,585</b>	<b>95,933</b>	<b>\$17,226,576</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	109,208	113	21	1
LAKE PLACID	49,177	50	9	0
TRENTON	103,032	102	19	1
COLUMBIA	111,782	113	20	1
DEBARY	87,502	87	16	1
SANTA FE	100,113	100	18	1
TWIN RIVERS	104,360	105	19	1
DUETTE	99,734	99	18	1
SANDY CREEK	74,218	92	16	1
CHARLIE CREEK	29,299	31	7	0
<b>Total:</b>	<b>868,425</b>	<b>891</b>	<b>163</b>	<b>9</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$1,175,043	\$7,283,549	\$3,758,636	\$196,656	\$0	\$12,413,884
LAKE PLACID	\$827,308	\$3,929,637	\$1,844,195	\$95,513	\$0	\$6,696,653
TRENTON	\$1,431,798	\$6,477,578	\$3,052,556	\$193,050	\$0	\$11,154,982
COLUMBIA	\$1,052,074	\$7,296,719	\$3,248,106	\$176,450	\$0	\$11,773,349
DEBARY	\$696,599	\$5,909,355	\$2,703,976	\$157,146	\$0	\$9,467,075
SANTA FE	\$640,249	\$7,351,007	\$3,177,757	\$191,224	\$0	\$11,360,237
TWIN RIVERS	\$947,362	\$6,754,207	\$2,794,080	\$171,292	\$0	\$10,666,941
DUETTE	\$519,764	\$7,097,955	\$3,022,537	\$224,620	\$0	\$10,864,875
SANDY CREEK	\$176,061	\$2,448,882	\$1,257,127	\$80,415	\$0	\$3,962,485
CHARLIE CREEK	\$0	\$2,014,689	\$776,190	\$0	\$0	\$2,790,879
<b>Total:</b>	<b>\$7,466,258</b>	<b>\$56,563,577</b>	<b>\$25,635,159</b>	<b>\$1,486,366</b>	<b>\$0</b>	<b>\$91,151,360</b>

Notes:  
Sandy Creek Renewable Energy Center was placed in service as of 5/17/2022  
Charlie Creek Renewable Energy Center was placed in service as of 8/10/2022