



Stephanie A. Cuello  
SENIOR COUNSEL

February 27, 2023

**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. 20230007-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 January 2023, 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. 20230007-EI*

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 27<sup>th</sup> day of February, 2023.

/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  
 January, 2023

		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	3,502.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	2	3,352.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	3	3,295.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	4	3,302.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	5	3,407.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	6	3,697.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	7	4,151.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	8	4,534.2	0.9	0.5	1.0	1.5	1.2	0.5	1.2	0.4	2.3	
9	9	4,645.5	21.5	5.5	23.1	22.5	15.0	9.5	17.1	19.3	13.4	
10	10	4,567.5	44.3	11.2	44.7	39.8	33.4	18.3	36.3	36.4	32.2	
11	11	4,446.0	46.3	14.5	48.0	43.6	47.8	21.0	38.0	40.8	35.5	
12	12	4,339.7	47.6	17.1	49.0	45.4	55.1	22.0	38.7	43.4	38.0	
13	13	4,297.7	47.9	19.5	46.9	44.8	57.0	21.6	39.5	45.6	41.6	
14	14	4,294.0	45.7	20.5	45.1	43.4	54.2	20.8	38.3	44.8	40.5	
15	15	4,319.4	43.7	19.7	42.7	40.6	47.1	19.2	36.9	43.3	39.1	
16	16	4,422.7	44.5	17.4	40.1	36.9	32.9	19.2	36.5	39.4	37.8	
17	17	4,563.4	31.2	11.0	28.7	27.0	16.5	13.8	26.4	27.3	29.0	
18	18	4,747.6	5.5	1.3	4.9	4.8	2.6	2.6	4.9	5.2	7.5	
19	19	4,984.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
20	20	4,933.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
21	21	4,754.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
22	22	4,470.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
23	23	4,112.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
24	24	3,745.8	0.0	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:  
January, 2023

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	11,754	21.1%	0.4%	3,003,763
LAKE PLACID	45.0	4,281	12.8%	0.1%	
TRENTON	74.9	11,604	20.8%	0.4%	
COLUMBIA	74.9	10,856	19.5%	0.4%	
DEBARY	74.5	11,251	20.3%	0.4%	
SANTA FE	74.9	5,218	9.4%	0.2%	
TWIN RIVERS	74.9	9,704	17.4%	0.3%	
DUETTE	74.5	10,746	19.4%	0.4%	
SANDY CREEK	74.9	9,766	17.5%	0.3%	
CHARLIE CREEK	74.9	12,330	22.1%	0.4%	
<b>Total:</b>	<b>718.3</b>	<b>97,510.0</b>	<b>18.2%</b>	<b>3.2%</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	82,069	\$3.60	46	\$143.34	28	\$84.86
LAKE PLACID	29,891	\$3.60	17	\$143.34	10	\$84.86
TRENTON	81,022	\$3.60	45	\$143.34	27	\$84.86
COLUMBIA	75,799	\$3.60	42	\$143.34	25	\$84.86
DEBARY	78,557	\$3.60	44	\$143.34	26	\$84.86
SANTA FE	36,433	\$3.60	20	\$143.34	12	\$84.86
TWIN RIVERS	67,755	\$3.60	38	\$143.34	23	\$84.86
DUETTE	75,031	\$3.60	42	\$143.34	25	\$84.86
SANDY CREEK	68,188	\$3.60	38	\$143.34	23	\$84.86
CHARLIE CREEK	86,091	\$3.60	48	\$143.34	29	\$84.86
<b>Total:</b>	<b>680,836</b>	<b>\$2,449,915</b>	<b>381</b>	<b>\$54,550</b>	<b>228</b>	<b>\$19,361</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	5,059	1	0	0
LAKE PLACID	1,843	0	0	0
TRENTON	4,995	1	0	0
COLUMBIA	4,673	1	0	0
DEBARY	4,843	1	0	0
SANTA FE	2,246	0	0	0
TWIN RIVERS	4,177	1	0	0
DUETTE	4,625	1	0	0
SANDY CREEK	4,203	1	0	0
CHARLIE CREEK	5,307	1	0	0
<b>Total:</b>	<b>41,970</b>	<b>7</b>	<b>0</b>	<b>0</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$416,583	\$646,788	\$313,207	\$16,388	\$0	\$1,392,966
LAKE PLACID	\$215,957	\$351,492	\$168,705	\$8,683	\$0	\$744,837
TRENTON	\$158,604	\$575,702	\$277,662	\$17,550	\$0	\$1,029,518
COLUMBIA	\$56,672	\$648,535	\$295,284	\$17,645	\$0	\$1,018,136
DEBARY	\$32,581	\$525,340	\$245,835	\$14,286	\$0	\$818,042
SANTA FE	\$43,728	\$653,217	\$288,888	\$17,384	\$0	\$1,003,216
TWIN RIVERS	\$438,791	\$601,585	\$263,364	\$15,572	\$0	\$1,319,312
DUETTE	\$63,489	\$628,283	\$273,336	\$20,420	\$0	\$985,528
SANDY CREEK	\$61,369	\$488,541	\$254,256	\$16,083	\$0	\$820,249
CHARLIE CREEK	\$287,116	\$516,249	\$266,718	\$21,047	\$0	\$1,091,130
<b>Total:</b>	<b>\$1,774,890</b>	<b>\$5,635,731</b>	<b>\$2,647,255</b>	<b>\$165,058</b>	<b>\$0</b>	<b>\$10,222,934</b>

Notes:

Duke Energy Florida, LLC  
Actual Data for Solar Generation Facilities  
Solar Base Rate Adjustment (SoBRA) Reporting  
YEAR-TO-DATE THROUGH:  
January, 2023

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Notes: