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SENIOR COUNSEL

September 29, 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 August 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 29th day of September, 2023.

/s/ Stephanie A. Cuello

Attorney

<p>Adria Harper / Jacob Imig Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 aharper@psc.state.fl.us jimig@psc.state.fl.us</p> <p>J. Wahlen / M. Means / V. Ponder Ausley McMullen P.O. Box 391 Tallahassee, FL 32302 jwahlen@ausley.com mmeans@ausley.com vponder@ausley.com</p> <p>Jon C. Moyle, Jr. Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com mqualls@moylelaw.com</p> <p>Maria Jose Moncada / Joel Baker 700 Universe Boulevard Juno Beach, FL 33408-0420 maria.moncada@fpl.com joel.baker@fpl.com</p> <p>James W. Brew / Laura Wynn Baker Stone Mattheis Xenopoulos & Brew, P.C. 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, DC 20007 jbrew@smxblaw.com lwb@smxblaw.com</p>	<p>M. Wessling/ P. Christensen / C. Rehwinkel Office of Public Counsel 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 wessling.mary@leg.state.fl.us christensen.patty@leg.state.fl.us rehwinkel.charles@leg.state.fl.us</p> <p>Paula K. Brown Tampa Electric Company Regulatory Affairs P.O. Box 111 Tampa, FL 33601 regdept@tecoenergy.com</p> <p>Kenneth Hoffman Florida Power & Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 ken.hoffman@fpl.com</p> <p>Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar Nucor c/o Stone Law Firm 1025 Thomas Jefferson Street, N.W. Eighth Floor, West Tower Washington, DC 20007 pjm@smxblaw.com mkl@smxblaw.com jrb@smxblaw.com</p>
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Duke Energy Florida, LLC
 Actual Data for Solar Generation Facilities
 Solar Base Rate Adjustment (SoBRA) Reporting
August, 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	5,443.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	2	5,037.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	3	4,762.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	4	4,583.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	5	4,525.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	6	4,615.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	7	4,831.0	5.1	1.3	5.4	6.4	2.1	4.9	4.6	5.1	3.6	8.5
8	8	5,013.0	31.3	9.3	29.4	32.6	13.1	27.3	28.6	26.5	27.2	38.5
9	9	5,364.3	49.2	15.8	46.1	49.1	28.5	41.5	45.5	39.4	45.1	51.4
10	10	5,933.8	56.7	17.3	49.6	51.6	39.6	43.7	52.8	42.4	54.3	54.7
11	11	6,621.5	55.0	18.5	50.0	53.4	48.2	44.9	51.6	40.6	58.5	54.7
12	12	7,350.5	55.9	19.9	51.6	52.1	52.2	44.8	51.9	37.6	59.9	54.0
13	13	7,985.4	53.5	20.1	50.1	51.6	52.3	42.3	49.4	37.3	57.8	49.1
14	14	8,429.8	53.3	18.3	46.6	43.8	45.4	39.2	49.9	35.4	57.9	45.4
15	15	8,673.6	50.8	16.3	44.2	43.1	37.7	38.3	48.4	30.1	54.3	41.8
16	16	8,816.5	46.4	14.2	41.1	42.6	28.9	36.4	43.2	26.5	49.4	33.2
17	17	8,887.7	35.5	11.5	38.1	37.7	20.8	35.5	31.9	27.7	42.4	27.7
18	18	8,853.5	22.6	7.1	26.9	28.1	10.5	24.3	20.2	19.2	32.9	20.2
19	19	8,640.5	5.6	1.0	7.9	6.1	2.4	5.5	5.3	5.9	11.2	5.7
20	20	8,262.2	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.4	0.0
21	21	7,922.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	7,386.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	6,661.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	5,959.1	0.0	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:
August, 2023

	Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
1	HAMILTON	74.9	16,155	29.0%	0.4%	4,607,870
1	LAKE PLACID	45.0	5,288	15.8%	0.1%	
1	TRENTON	74.9	15,096	27.1%	0.3%	
1	COLUMBIA	74.9	15,445	27.7%	0.3%	
1	DEBARY	74.5	11,835	21.4%	0.3%	
1	SANTA FE	74.9	13,287	23.8%	0.3%	
1	TWIN RIVERS	74.9	14,988	26.9%	0.3%	
1	DUETTE	74.5	11,585	20.9%	0.3%	
1	SANDY CREEK	74.9	17,194	30.9%	0.4%	
1	CHARLIE CREEK	74.9	15,033	27.0%	0.3%	
2	Total:	718.3	135,906.0	25.4%		

	Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
3	HAMILTON	131,940	\$3.45	3,189	\$137.50	848	\$54.59
3	LAKE PLACID	43,188	\$3.45	1,044	\$137.50	278	\$54.59
3	TRENTON	123,291	\$3.45	2,980	\$137.50	792	\$54.59
3	COLUMBIA	126,142	\$3.45	3,049	\$137.50	811	\$54.59
3	DEBARY	96,658	\$3.45	2,336	\$137.50	621	\$54.59
3	SANTA FE	108,517	\$3.45	2,623	\$137.50	697	\$54.59
3	TWIN RIVERS	122,409	\$3.45	2,958	\$137.50	787	\$54.59
3	DUETTE	94,616	\$3.45	2,287	\$137.50	608	\$54.59
3	SANDY CREEK	140,426	\$3.45	3,394	\$137.50	903	\$54.59
3	CHARLIE CREEK	122,777	\$3.45	2,967	\$137.50	789	\$54.59
4	Total:	1,109,964	\$3,832,939	26,826	\$3,688,505	7,134	\$389,485

	Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
5	HAMILTON	11,204	15	3	0
5	LAKE PLACID	3,667	5	1	0
5	TRENTON	10,469	14	3	0
5	COLUMBIA	10,711	14	3	0
5	DEBARY	8,208	11	2	0
5	SANTA FE	9,215	12	2	0
5	TWIN RIVERS	10,394	14	3	0
5	DUETTE	8,034	10	2	0
5	SANDY CREEK	11,924	16	3	0
5	CHARLIE CREEK	10,426	14	3	0
6	Total:	94,253	123	24	1

	Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
7	HAMILTON	\$78,264	\$631,204	\$313,210	\$16,388	\$0	\$1,039,066
7	LAKE PLACID	\$57,025	\$343,358	\$168,705	\$8,683	\$0	\$577,771
7	TRENTON	\$70,070	\$562,169	\$277,663	\$17,550	\$0	\$927,452
7	COLUMBIA	\$48,748	\$633,731	\$295,283	\$17,645	\$0	\$995,407
7	DEBARY	\$65,659	\$513,413	\$245,835	\$14,286	\$0	\$839,193
7	SANTA FE	\$54,185	\$641,030	\$289,762	\$17,384	\$0	\$1,002,361
7	TWIN RIVERS	\$48,502	\$588,544	\$263,364	\$15,572	\$0	\$915,982
7	DUETTE	\$55,660	\$618,650	\$273,336	\$20,420	\$0	\$968,066
7	SANDY CREEK	\$68,525	\$478,377	\$251,765	\$16,083	\$0	\$814,750
7	CHARLIE CREEK	\$40,979	\$502,233	\$265,438	\$21,047	\$0	\$829,697
8	Total:	\$587,617	\$5,512,709	\$2,644,361	\$165,058	\$0	\$8,909,745

Notes:

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	116,026	26.6%	0.4%	29,543,754
LAKE PLACID	45.0	45,471	17.3%	0.2%	
TRENTON	74.9	104,386	23.9%	0.4%	
COLUMBIA	74.9	102,170	23.4%	0.3%	
DEBARY	74.5	86,389	19.9%	0.3%	
SANTA FE	74.9	97,776	22.4%	0.3%	
TWIN RIVERS	74.9	106,653	24.4%	0.4%	
DUETTE	74.5	101,054	23.3%	0.3%	
SANDY CREEK	74.9	113,582	26.0%	0.4%	
CHARLIE CREEK	74.9	123,886	28.4%	0.4%	
Total:	718.3	997,393	23.8%	3.4%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	928,105	\$2.90	6,782	\$125.75	5,148	\$50.72
LAKE PLACID	366,734	\$2.83	2,356	\$125.11	1,944	\$50.97
TRENTON	835,300	\$2.91	6,138	\$126.35	4,550	\$50.99
COLUMBIA	817,857	\$2.91	6,075	\$126.58	4,443	\$50.90
DEBARY	691,057	\$2.89	4,671	\$126.60	3,510	\$51.17
SANTA FE	791,705	\$2.82	5,550	\$125.70	4,396	\$51.00
TWIN RIVERS	857,488	\$2.87	6,169	\$125.97	4,748	\$51.03
DUETTE	810,978	\$2.85	5,122	\$125.19	4,187	\$50.93
SANDY CREEK	912,359	\$2.89	6,938	\$126.18	5,178	\$50.86
CHARLIE CREEK	994,337	\$2.86	6,613	\$125.29	5,314	\$50.98
Total:	8,005,919	\$22,999,082	56,413	\$7,100,795	43,419	\$2,212,449

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	69,925	42	11	0
LAKE PLACID	27,298	15	4	0
TRENTON	62,781	38	10	0
COLUMBIA	61,476	37	10	0
DEBARY	51,235	29	8	0
SANTA FE	59,549	35	9	0
TWIN RIVERS	64,543	39	10	0
DUETTE	60,097	33	9	0
SANDY CREEK	69,103	42	11	0
CHARLIE CREEK	74,205	42	11	0
Total:	600,212	353	93	4

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$862,118	\$5,111,992	\$2,505,674	\$131,104	\$0	\$8,610,888
LAKE PLACID	\$806,437	\$2,779,400	\$1,349,643	\$69,464	\$0	\$5,004,944
TRENTON	\$972,593	\$4,551,481	\$2,221,297	\$140,400	\$0	\$7,885,771
COLUMBIA	\$815,079	\$5,129,064	\$2,362,271	\$141,160	\$0	\$8,447,574
DEBARY	\$391,056	\$4,155,010	\$1,966,680	\$114,288	\$0	\$6,627,034
SANTA FE	\$367,586	\$5,177,989	\$2,314,600	\$139,072	\$0	\$7,999,247
TWIN RIVERS	\$772,846	\$4,760,517	\$2,106,916	\$124,576	\$0	\$7,764,855
DUETTE	\$458,532	\$5,003,582	\$2,186,690	\$163,360	\$0	\$7,812,164
SANDY CREEK	\$1,100,087	\$3,867,540	\$2,026,571	\$128,664	\$0	\$7,122,862
CHARLIE CREEK	\$838,250	\$4,071,527	\$2,137,581	\$168,376	\$0	\$7,215,734
Total:	\$7,384,584	\$44,608,102	\$21,177,923	\$1,320,464	\$0	\$74,491,073

Notes: