



Stephanie A. Cuello
SENIOR COUNSEL

March 31, 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 February 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/clg
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 31st day of March, 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
February, 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)
Hour of Day	System Firm Demand (MW)	Hamilton	Lake Placid	Trenton	Columbia	Debary	Santa Fe	Twin Rivers	Duette	Sandy Creek	Charlie Creek
1	1	3,266.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,044.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	2,925.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	2,885.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	2,922.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,134.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	3,554.7	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	8	3,906.3	2.8	1.8	2.6	3.0	3.2	2.1	2.3	4.1	1.8
9	9	4,080.3	27.3	9.7	21.6	21.1	18.0	19.4	21.8	30.4	19.0
10	10	4,180.0	43.4	16.6	39.5	37.6	35.8	37.0	35.5	48.8	32.4
11	11	4,267.6	49.6	19.6	46.1	43.9	48.3	43.1	39.8	53.0	37.1
12	12	4,384.5	53.4	21.3	49.9	49.1	55.0	47.2	42.8	53.1	45.6
13	13	4,569.1	51.9	21.8	51.8	50.7	54.8	48.1	43.0	53.2	46.1
14	14	4,716.3	53.4	21.4	48.2	50.3	53.3	47.1	43.1	49.3	49.3
15	15	4,900.9	51.8	20.0	49.5	48.4	48.9	46.0	42.7	49.9	52.0
16	16	5,092.3	51.9	17.9	47.8	45.8	37.4	43.6	42.0	47.8	47.4
17	17	5,252.9	46.8	14.5	42.1	39.4	22.4	39.0	38.6	37.9	37.8
18	18	5,302.0	17.2	5.3	15.6	16.1	6.5	15.9	14.6	12.9	17.0
19	19	5,307.7	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.4	0.9
20	20	5,196.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	4,900.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	4,528.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	4,068.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	3,608.9	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:
February, 2023

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	12,597	25.0%	0.5%	2,671,040
LAKE PLAC D	45.0	4,795	15.9%	0.2%	
TRENTON	74.9	11,622	23.1%	0.4%	
COLUMBIA	74.9	11,360	22.6%	0.4%	
DEBARY	74.5	10,747	21.5%	0.4%	
SANTA FE	74.9	10,891	21.6%	0.4%	
TW N RIVERS	74.9	10,258	20.4%	0.4%	
DUETTE	74.5	12,339	24.6%	0.5%	
SANDY CREEK	74.9	10,815	21.5%	0.4%	
CHARLIE CREEK	74.9	14,275	28.4%	0.5%	
Total	718.3	109,699.0	22.7%	4.1%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	96,657	\$2.53	15	\$126.69	52	\$66.46
LAKE PLAC D	36,792	\$2.53	6	\$126.69	20	\$66.46
TRENTON	89,176	\$2.53	14	\$126.69	48	\$66.46
COLUMBIA	87,166	\$2.53	13	\$126.69	47	\$66.46
DEBARY	82,462	\$2.53	13	\$126.69	44	\$66.46
SANTA FE	83,567	\$2.53	13	\$126.69	45	\$66.46
TW N RIVERS	78,710	\$2.53	12	\$126.69	42	\$66.46
DUETTE	94,678	\$2.53	15	\$126.69	51	\$66.46
SANDY CREEK	82,984	\$2.53	13	\$126.69	45	\$66.46
CHARLIE CREEK	109,533	\$2.53	17	\$126.69	59	\$66.46
Total	841,725	\$2,129,799	130	\$16,455	454	\$30,161

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	5,980	1	0	0
LAKE PLAC D	2,276	0	0	0
TRENTON	5,517	1	0	0
COLUMBIA	5,393	1	0	0
DEBARY	5,102	1	0	0
SANTA FE	5,170	1	0	0
TW N RIVERS	4,870	1	0	0
DUETTE	5,858	1	0	0
SANDY CREEK	5,134	1	0	0
CHARLIE CREEK	6,777	1	0	0
Total	52,079	11	1	0

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$43,310	\$644,565	\$313,207	\$16,388	\$0	\$1,017,470
LAKE PLAC D	\$51,293	\$350,330	\$168,705	\$8,683	\$0	\$579,011
TRENTON	\$35,773	\$573,769	\$277,662	\$17,550	\$0	\$904,754
COLUMBIA	\$35,195	\$646,420	\$295,284	\$17,645	\$0	\$994,544
DEBARY	\$30,061	\$523,636	\$245,835	\$14,286	\$0	\$813,818
SANTA FE	\$65,956	\$651,171	\$288,888	\$17,384	\$0	\$1,023,399
TW N RIVERS	\$61,358	\$599,722	\$263,364	\$15,572	\$0	\$940,016
DUETTE	\$50,298	\$630,322	\$273,336	\$20,420	\$0	\$974,376
SANDY CREEK	\$36,863	\$487,078	\$254,256	\$16,083	\$0	\$794,280
CHARLIE CREEK	\$38,287	\$513,717	\$268,609	\$21,047	\$0	\$841,660
Total	\$448,394	\$5,620,730	\$2,649,146	\$165,058	\$0	\$8,883,329

Notes:

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	24,351	23.0%	0.4%	5,674,803
LAKE PLACID	45.0	9,076	14.2%	0.2%	
TRENTON	74.9	23,226	21.9%	0.4%	
COLUMBIA	74.9	22,216	20.9%	0.4%	
DEBARY	74.5	21,998	20.9%	0.4%	
SANTA FE	74.9	16,109	15.2%	0.3%	
TWIN RIVERS	74.9	19,962	18.8%	0.4%	
DUETTE	74.5	23,085	21.9%	0.4%	
SANDY CREEK	74.9	20,581	19.4%	0.4%	
CHARLIE CREEK	74.9	26,605	25.1%	0.5%	
Total	718.3	207,209	20.4%	3.7%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	178,726	\$3.02	61	\$139.25	80	\$72.82
LAKE PLACID	66,683	\$3.01	22	\$139.11	30	\$72.63
TRENTON	170,198	\$3.04	59	\$139.46	75	\$73.10
COLUMBIA	162,965	\$3.03	56	\$139.32	72	\$72.92
DEBARY	161,019	\$3.05	57	\$139.59	71	\$73.30
SANTA FE	120,000	\$2.85	33	\$136.88	57	\$70.38
TWIN RIVERS	146,465	\$3.02	50	\$139.29	65	\$72.87
DUETTE	169,709	\$3.00	57	\$139.03	76	\$72.53
SANDY CREEK	151,172	\$3.01	51	\$139.15	68	\$72.68
CHARLIE CREEK	195,623	\$3.00	65	\$139.01	88	\$72.50
Total	1,522,561	\$4,573,909	510	\$70,960	682	\$49,494

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	11,039	2	0	0
LAKE PLACID	4,119	1	0	0
TRENTON	10,512	2	0	0
COLUMBIA	10,066	2	0	0
DEBARY	9,945	2	0	0
SANTA FE	7,416	1	0	0
TWIN RIVERS	9,047	2	0	0
DUETTE	10,483	2	0	0
SANDY CREEK	9,338	2	0	0
CHARLIE CREEK	12,084	2	0	0
Total	94,049	18	1	0

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$459,893	\$1,291,353	\$626,413	\$32,776	\$0	\$2,410,436
LAKE PLACID	\$267,249	\$701,822	\$337,411	\$17,366	\$0	\$1,323,848
TRENTON	\$194,377	\$1,149,471	\$555,324	\$35,100	\$0	\$1,934,272
COLUMBIA	\$91,867	\$1,294,955	\$590,568	\$35,290	\$0	\$2,012,680
DEBARY	\$62,642	\$1,048,975	\$491,670	\$28,572	\$0	\$1,631,859
SANTA FE	\$109,684	\$1,304,388	\$577,776	\$34,767	\$0	\$2,026,615
TWIN RIVERS	\$500,149	\$1,201,307	\$526,729	\$31,144	\$0	\$2,259,329
DUETTE	\$113,787	\$1,262,607	\$546,673	\$40,840	\$0	\$1,963,906
SANDY CREEK	\$98,231	\$975,619	\$508,511	\$32,167	\$0	\$1,614,528
CHARLIE CREEK	\$325,403	\$1,029,966	\$535,327	\$42,095	\$0	\$1,932,790
Total	\$2,223,282	\$11,260,463	\$5,296,401	\$330,117	\$0	\$19,110,263

Notes: