



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

August 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 July 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 30th day of August, 2021.

/s/ Dianne M. Triplett

Attorney

<p>Charles Murphy Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 cmurphy@psc.state.fl.us</p> <p>J. Beasley / J. Wahlen / M. Means Ausley McMullen P.O. Box 391 Tallahassee, FL 32302 jbeasley@ausley.com jwahlen@ausley.com mmeans@ausley.com</p> <p>Steven R. Griffin Beggs Law Firm P.O. Box 12950 Pensacola, FL 32591 srg@beggsllane.com</p> <p>Russell A. Badders Gulf Power Company One Energy Place, Bin 100 Pensacola, FL 32520-0100 russell.badders@nexteraenergy.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>Richard Gentry / P. Christensen /A. Pirrello / S. Morse / C. Rehwinkel Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 gentry.richard@leg.state.fl.us christensen.patty@leg.state.fl.us pirrello.anastacia@leg.state.fl.us morse.stephanie@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>James W. Brew / Laura W. Baker Stone Law Firm 1025 Thomas Jefferson Street, N.W. Eighth Floor, West Tower Washington, DC 20007 jbrew@smxblaw.com lwb@smxblaw.com</p> <p>Kenneth Hoffman Florida Power & Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 ken.hoffman@fpl.com</p> <p>Maria Moncada 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 maria.moncada@fpl.com</p>
---	---

Duke Energy Florida, LLC
 Actual Data for Solar Generation Facilities
 Solar Base Rate Adjustment (SoBRA) Reporting
July 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	4,684.7	0.0	0.0	0.0	0.0	0.0	0.0
2	2	4,324.1	0.0	0.0	0.0	0.0	0.0	0.0
3	3	4,068.2	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,906.3	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,851.4	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,907.2	0.1	0.0	0.1	0.0	0.0	0.0
7	7	4,072.2	7.1	0.3	9.7	10.3	3.0	9.5
8	8	4,364.7	27.6	0.3	34.5	31.2	13.3	31.5
9	9	4,816.5	40.0	0.7	50.0	44.7	24.7	46.9
10	10	5,443.0	43.8	1.0	51.9	51.7	35.8	51.2
11	11	6,167.8	44.2	1.1	50.8	49.3	42.7	49.6
12	12	6,866.7	45.3	0.8	48.8	49.7	45.4	51.2
13	13	7,462.5	46.9	1.0	47.3	49.2	42.7	49.3
14	14	7,847.1	46.0	0.9	43.3	46.9	38.5	46.5
15	15	8,052.3	44.5	0.0	39.9	43.7	33.1	41.9
16	16	8,130.5	36.5	0.0	37.0	38.7	23.5	39.3
17	17	8,113.1	30.5	0.0	27.4	32.7	16.5	32.5
18	18	8,037.2	24.5	0.0	20.0	21.5	7.9	22.9
19	19	7,790.8	8.5	0.0	9.5	8.6	2.3	8.7
20	20	7,374.4	0.4	0.0	0.4	0.4	0.0	0.3
21	21	7,019.3	0.0	0.0	0.0	0.0	0.0	0.0
22	22	6,609.9	0.0	0.0	0.0	0.0	0.0	0.0
23	23	5,987.7	0.0	0.0	0.0	0.0	0.0	0.0
24	24	5,230.4	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:
July 2021

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	13,820	24.8%	0.3%	4,314,454
LAKE PLACID	45.0	184	0.5%	0.0%	
TRENTON	74.9	14,588	26.2%	0.3%	
COLUMBIA	74.9	14,834	26.6%	0.3%	
DEBARY	74.5	10,215	18.4%	0.2%	
SANTA FE	74.9	14,920	26.8%	0.3%	
TWIN RIVERS	74.9	11,262	20.2%	0.3%	
Total:	494.0	79,823	21.7%	1.9%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	124,281	\$4.11	1,308	\$94.81	336	\$47.08
LAKE PLACID	1,655	\$4.11	17	\$94.81	4	\$47.08
TRENTON	131,188	\$4.11	1,381	\$94.81	354	\$47.08
COLUMBIA	133,400	\$4.11	1,404	\$94.81	360	\$47.08
DEBARY	91,862	\$4.11	967	\$94.81	248	\$47.08
SANTA FE	134,173	\$4.11	1,413	\$94.81	362	\$47.08
TWIN RIVERS	101,278	\$4.11	1,066	\$94.81	274	\$47.08
Total:	717,837	\$2,947,811	7,558	\$716,575	1,939	\$91,286

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	8,830	9	1	0
LAKE PLACID	118	0	0	0
TRENTON	9,321	9	1	0
COLUMBIA	9,478	10	1	0
DEBARY	6,527	7	1	0
SANTA FE	9,533	10	1	0
TWIN RIVERS	7,196	7	1	0
Total:	51,004	52	5	0

Facility	O&M (\$)	Carrying Costs (\$)¹	Capital (\$)¹	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$66,837	\$680,751	\$305,809	\$16,388	\$0	\$1,069,785
LAKE PLACID	\$58,200	\$369,580	\$164,644	\$8,683	\$0	\$601,107
TRENTON	\$72,317	\$609,651	\$271,802	\$17,550	\$0	\$971,320
COLUMBIA	\$521,585	\$683,022	\$292,461	\$17,645	\$0	\$1,514,713
DEBARY	\$70,010	\$555,430	\$243,789	\$14,286	\$0	\$883,515
SANTA FE	\$94,448	\$690,693	\$280,022	\$17,384	\$0	\$1,082,547
TWIN RIVERS	\$9,506	\$607,994	\$241,519	\$15,572	\$0	\$874,591
Total:	\$892,903	\$4,197,122	\$1,800,045	\$107,508	\$0	\$6,997,577

Notes:

Santa Fe and Twin Rivers sites became active in March.

1) Project costs for Santa Fe & Twin Rivers are estimated during final punch list item completion; future reports to be updated to reflect actual costs.

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	95,395	25.0%	0.4%	23,641,171
LAKE PLACID	45.0	53,307	23.3%	0.2%	
TRENTON	74.9	104,011	27.3%	0.4%	
COLUMBIA	74.9	103,032	27.0%	0.4%	
DEBARY	74.5	80,084	21.1%	0.3%	
SANTA FE	74.9	81,082	30.3%	0.3%	
TWIN RIVERS	74.9	26,260	11.0%	0.1%	
Total:	494.0	543,171	24.2%	2.3%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	728,167	\$3.48	5,815	\$90.13	7,264	\$37.12
LAKE PLACID	392,517	\$3.38	2,850	\$88.38	4,548	\$36.61
TRENTON	795,799	\$3.49	6,378	\$90.11	7,885	\$37.15
COLUMBIA	787,953	\$3.49	6,319	\$90.12	7,815	\$37.15
DEBARY	607,582	\$3.53	4,714	\$89.68	5,974	\$36.99
SANTA FE	645,065	\$3.29	5,490	\$91.52	6,803	\$37.52
TWIN RIVERS	243,486	\$3.69	2,730	\$93.89	1,077	\$40.26
Total:	4,200,570	\$14,613,533	34,296	\$3,105,347	41,366	\$1,553,015

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	61,638	38	9	1
LAKE PLACID	34,379	18	5	0
TRENTON	67,264	42	9	1
COLUMBIA	66,619	42	9	1
DEBARY	51,190	30	7	1
SANTA FE	55,506	41	8	1
TWIN RIVERS	18,229	19	2	0
Total:	354,826	230	49	4

Facility	O&M (\$)	Carrying Costs (\$)¹	Capital (\$)¹	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$832,229	\$4,801,507	\$2,133,010	\$114,716	\$0	\$7,881,462
LAKE PLACID	\$613,490	\$2,610,916	\$1,152,506	\$60,781	\$0	\$4,437,693
TRENTON	\$912,777	\$4,306,303	\$1,902,318	\$122,850	\$0	\$7,244,249
COLUMBIA	\$816,017	\$4,824,891	\$2,047,148	\$123,515	\$0	\$7,811,571
DEBARY	\$489,030	\$3,923,438	\$1,706,379	\$100,002	\$0	\$6,218,849
SANTA FE	\$120,301	\$2,730,311	\$1,107,821	\$86,920	\$0	\$4,045,353
TWIN RIVERS	\$389,666	\$2,335,105	\$893,644	\$77,860	\$0	\$3,696,274
Total:	\$4,173,510	\$25,532,472	\$10,942,826	\$686,644	\$0	\$41,335,452

Notes:

Santa Fe and Twin Rivers sites became active in March.

1) Project costs for Santa Fe & Twin Rivers are estimated during final punch list item completion; future reports to be updated to reflect actual costs.