



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

July 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 June 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 July, 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
June 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	4,525.8	0.0	0.0	0.0	0.0	0.0	0.0
2	2	4,169.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,931.4	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,787.4	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,740.1	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,822.2	0.3	0.3	0.6	0.3	0.4	0.3
7	7	4,005.9	4.4	7.4	12.0	13.2	4.3	12.3
8	8	4,301.4	22.3	19.1	30.2	31.3	13.7	31.5
9	9	4,726.8	35.3	23.0	45.0	43.0	25.6	43.4
10	10	5,232.6	43.3	26.3	53.1	44.8	33.9	47.5
11	11	5,858.1	49.9	27.8	53.5	49.5	41.7	50.1
12	12	6,488.3	51.8	29.1	50.7	49.5	43.3	50.5
13	13	7,084.4	47.6	27.1	46.1	44.5	45.3	46.6
14	14	7,526.3	44.5	24.8	42.0	39.6	39.8	41.8
15	15	7,765.0	36.4	19.7	38.1	38.4	34.9	37.9
16	16	7,868.6	32.5	14.7	34.9	38.2	26.9	38.2
17	17	7,883.5	30.2	11.4	31.8	33.0	17.0	32.4
18	18	7,772.6	19.0	7.6	24.1	22.2	9.1	21.9
19	19	7,499.6	9.0	2.7	10.1	9.8	2.5	9.0
20	20	7,072.5	0.7	0.1	0.6	0.4	0.1	0.4
21	21	6,705.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	6,290.7	0.0	0.0	0.0	0.0	0.0	0.0
23	23	5,647.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	4,983.5	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:
June 2021

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	12,813	23.8%	0.3%	3,999,421
LAKE PLACID	45.0	7,230	22.3%	0.2%	
TRENTON	74.9	14,173	26.3%	0.4%	
COLUMBIA	74.9	13,735	25.5%	0.3%	
DEBARY	74.5	10,151	18.9%	0.3%	
SANTA FE	74.9	13,920	25.8%	0.3%	
TWIN RIVERS	74.9	12,317	22.8%	0.3%	
Total:	494.0	84,339	23.7%	2.1%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	119,311	\$3.48	1,443	\$94.47	351	\$39.96
LAKE PLACID	67,324	\$3.48	814	\$94.47	198	\$39.96
TRENTON	131,975	\$3.48	1,596	\$94.47	389	\$39.96
COLUMBIA	127,897	\$3.48	1,546	\$94.47	377	\$39.96
DEBARY	94,523	\$3.48	1,143	\$94.47	278	\$39.96
SANTA FE	129,619	\$3.48	1,567	\$94.47	382	\$39.96
TWIN RIVERS	114,693	\$3.48	1,387	\$94.47	338	\$39.96
Total:	785,342	\$2,736,381	9,495	\$897,002	2,313	\$92,434

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	8,623	10	1	0
LAKE PLACID	4,865	6	0	0
TRENTON	9,538	11	1	0
COLUMBIA	9,243	11	1	0
DEBARY	6,831	8	1	0
SANTA FE	9,368	11	1	0
TWIN RIVERS	8,289	10	1	0
Total:	56,756	65	5	0

Facility	O&M (\$)	Carrying Costs (\$)¹	Capital (\$)¹	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$74,630	\$681,371	\$304,534	\$16,388	\$0	\$1,076,922
LAKE PLACID	\$217,835	\$370,716	\$164,644	\$8,683	\$0	\$761,877
TRENTON	\$68,023	\$611,546	\$271,802	\$17,550	\$0	\$968,921
COLUMBIA	\$51,426	\$685,108	\$292,452	\$17,645	\$0	\$1,046,631
DEBARY	\$129,191	\$557,121	\$243,789	\$14,286	\$0	\$944,386
SANTA FE	\$16,070	\$687,411	\$279,942	\$17,384	\$0	\$1,000,807
TWIN RIVERS	\$0	\$608,979	\$240,941	\$15,572	\$0	\$865,492
Total:	\$557,175	\$4,202,251	\$1,798,104	\$107,508	\$0	\$6,665,038

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:
June 2021

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	81,575	25.1%	0.4%	19,326,717
LAKE PLACID	45.0	53,123	27.2%	0.3%	
TRENTON	74.9	89,423	27.5%	0.5%	
COLUMBIA	74.9	88,198	27.1%	0.5%	
DEBARY	74.5	69,869	21.6%	0.4%	
SANTA FE	74.9	66,162	31.2%	0.3%	
TWIN RIVERS	74.9	14,998	8.2%	0.1%	
Total:	494.0	463,348	24.7%	2.4%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	603,885	\$3.36	4,506	\$88.77	6,928	\$36.64
LAKE PLACID	390,863	\$3.38	2,832	\$88.34	4,544	\$36.60
TRENTON	664,611	\$3.37	4,997	\$88.81	7,531	\$36.68
COLUMBIA	654,553	\$3.36	4,915	\$88.78	7,455	\$36.67
DEBARY	515,720	\$3.43	3,747	\$88.35	5,726	\$36.55
SANTA FE	510,891	\$3.08	4,077	\$90.37	6,440	\$36.98
TWIN RIVERS	142,209	\$3.39	1,664	\$93.30	804	\$37.94
Total:	3,482,733	\$11,621,775	26,738	\$2,393,902	39,427	\$1,453,555

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	52,808	29	8	1
LAKE PLACID	34,261	18	5	0
TRENTON	57,943	32	8	1
COLUMBIA	57,140	32	8	1
DEBARY	44,663	23	6	1
SANTA FE	45,973	31	7	1
TWIN RIVERS	11,034	11	1	0
Total:	303,822	178	44	4

Facility	O&M (\$)	Carrying Costs (\$)¹	Capital (\$)¹	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$765,392	\$4,120,757	\$1,827,201	\$98,328	\$0	\$6,811,678
LAKE PLACID	\$555,290	\$2,241,336	\$987,862	\$52,098	\$0	\$3,836,586
TRENTON	\$840,460	\$3,696,653	\$1,630,516	\$105,300	\$0	\$6,272,929
COLUMBIA	\$294,431	\$4,141,869	\$1,754,687	\$105,870	\$0	\$6,296,857
DEBARY	\$419,020	\$3,368,007	\$1,462,591	\$85,716	\$0	\$5,335,334
SANTA FE	\$25,853	\$2,039,619	\$827,799	\$69,536	\$0	\$2,962,806
TWIN RIVERS	\$380,160	\$1,727,110	\$652,125	\$62,288	\$0	\$2,821,683
Total:	\$3,280,606	\$21,335,350	\$9,142,781	\$579,136	\$0	\$34,337,873

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.