



Stephanie A. Cuello
SENIOR COUNSEL

October 27, 2022

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. 20220007-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 September 2022, 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. 20220007-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 27th day of October, 2022.

/s/ Stephanie A. Cuello

Attorney

<p>Jacob Imig Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 jimig@psc.state.fl.us</p> <p>J. Wahlen / M. Means / V. Ponder Tampa Electric Company Ausley McMullen P.O. Box 391 Tallahassee, FL 32302 jwahlen@ausley.com mmeans@ausley.com vponder@ausley.com</p> <p>Jon C. Moyle, Jr. Florida Industrial Power Users Group Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com mqualls@moylelaw.com</p> <p>Corey Allain Nucor Steel Florida, Inc. 22 Nucor Drive Frostproof FL 33843 corey.allain@nucor.com</p> <p>Maria Jose Moncada 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 maria.moncada@fpl.com</p>	<p>Richard Gentry / P. Christensen / C. Rehwinkel Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 christensen.patty@leg.state.fl.us gentry.richard@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 Wynn Baker / Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar PCS Phosphate-White Springs c/o Stone Law Firm 1025 Thomas Jefferson Street, N.W. Eighth Floor, West Tower Washington, DC 20007 jbrew@smxblaw.com lwb@smxblaw.com jrb@smxblaw.com mkl@smxblaw.com pjm@smxblaw.com</p> <p>Kenneth Hoffman Florida Power & Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 ken.hoffman@fpl.com</p>
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Duke Energy Florida, LLC
 Actual Data for Solar Generation Facilities
 Solar Base Rate Adjustment (SoBRA) Reporting
September, 2022

Hour of Day	System Firm Demand (MW)	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)
		Hamilton	Lake Placid	Trenton	Columbia	Debary	Santa Fe	Twin Rivers	Duette	Sandy Creek	Charlie Creek
1	4,527.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	4,178.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3,927.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	3,786.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	3,743.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	3,870.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	4,142.2	1.9	1.3	2.1	2.6	1.6	1.9	1.2	2.1	1.1	2.8
8	4,433.5	27.2	10.5	23.7	24.1	13.1	19.4	21.6	21.8	23.9	25.0
9	4,812.4	49.3	18.6	42.5	42.1	30.2	35.1	39.3	36.2	48.1	42.3
10	5,297.1	58.7	23.5	45.1	49.3	44.0	40.0	47.5	38.0	55.2	47.4
11	5,849.6	58.3	25.1	46.9	51.6	49.9	41.5	47.1	37.0	56.2	50.1
12	6,432.6	56.6	25.7	46.3	50.7	48.9	41.5	46.1	36.2	57.4	51.1
13	6,971.8	55.2	24.7	44.5	47.7	44.6	40.8	45.2	32.7	56.9	50.4
14	7,362.3	52.2	22.2	45.9	46.7	40.2	37.8	43.0	34.0	56.5	44.7
15	7,557.0	47.3	18.4	42.4	45.2	34.1	36.3	39.3	33.9	55.8	40.4
16	7,643.7	47.0	12.5	40.0	42.3	26.7	34.7	39.2	26.2	50.5	34.7
17	7,664.4	39.6	7.9	32.4	31.9	13.8	26.3	31.7	19.5	45.3	22.6
18	7,538.2	18.5	2.9	13.4	15.1	4.9	12.0	15.6	6.8	28.3	7.3
19	7,248.0	1.3	0.1	1.1	1.0	0.2	0.8	1.2	0.6	3.5	0.3
20	6,957.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	6,698.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	6,227.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	5,633.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	4,980.1	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:
September, 2022

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	15,391	28.5%	0.4%	3,990,333
LAKE PLACID	45.0	5,802	17.9%	0.1%	
TRENTON	74.9	12,789	23.7%	0.3%	
COLUMBIA	74.9	13,509	25.1%	0.3%	
DEBARY	74.5	10,568	19.7%	0.3%	
SANTA FE	74.9	11,045	20.5%	0.3%	
TWIN RIVERS	74.9	12,539	23.3%	0.3%	
DUETTE	74.5	9,749	18.2%	0.2%	
SANDY CREEK	74.9	16,157	30.0%	0.4%	
CHARLIE CREEK	74.9	12,577	23.3%	0.3%	
Total:	718.3	120,126.0	23.2%	3.0%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	130,657	\$9.12	2,285	\$151.46	1,036	\$249.82
LAKE PLACID	49,254	\$9.12	861	\$151.46	391	\$249.82
TRENTON	108,568	\$9.12	1,898	\$151.46	861	\$249.82
COLUMBIA	114,681	\$9.12	2,005	\$151.46	910	\$249.82
DEBARY	89,714	\$9.12	1,569	\$151.46	712	\$249.82
SANTA FE	93,763	\$9.12	1,639	\$151.46	744	\$249.82
TWIN RIVERS	106,446	\$9.12	1,861	\$151.46	844	\$249.82
DUETTE	82,761	\$9.12	1,447	\$151.46	656	\$249.82
SANDY CREEK	137,160	\$9.12	2,398	\$151.46	1,088	\$249.82
CHARLIE CREEK	106,769	\$9.12	1,867	\$151.46	847	\$249.82
Total:	1,019,773	\$9,295,468	17,831	\$2,700,728	8,089	\$2,020,745

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	11,091	16	2	0
LAKE PLACID	4,181	6	1	0
TRENTON	9,216	13	2	0
COLUMBIA	9,735	14	2	0
DEBARY	7,615	11	2	0
SANTA FE	7,959	11	2	0
TWIN RIVERS	9,036	13	2	0
DUETTE	7,025	10	2	0
SANDY CREEK	11,643	17	3	0
CHARLIE CREEK	9,063	13	2	0
Total:	86,563	124	19	1

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$61,197	\$655,545	\$313,151	\$16,388	\$0	\$1,046,281
LAKE PLACID	\$53,520	\$353,684	\$167,654	\$8,683	\$0	\$583,541
TRENTON	\$84,247	\$583,071	\$277,505	\$17,550	\$0	\$962,373
COLUMBIA	\$65,138	\$656,995	\$295,284	\$17,645	\$0	\$1,035,061
DEBARY	\$56,517	\$532,155	\$245,835	\$14,286	\$0	\$848,793
SANTA FE	\$77,311	\$661,400	\$288,888	\$17,384	\$0	\$1,044,983
TWIN RIVERS	\$62,288	\$609,000	\$251,929	\$15,572	\$0	\$938,789
DUETTE	\$58,858	\$640,494	\$275,167	\$20,420	\$0	\$994,939
SANDY CREEK	\$63,182	\$489,854	\$251,895	\$16,083	\$0	\$821,014
CHARLIE CREEK	\$197	\$507,068	\$255,862	\$21,047	\$0	\$784,174
Total:	\$582,455	\$5,689,266	\$2,623,169	\$165,058	\$0	\$9,059,948

Notes:
Sandy Creek Renewable Energy Center was placed in service as of 5/17/2022
Charlie Creek Renewable Energy Center was placed in service as of 8/10/2022

Duke Energy Florida, LLC
Actual Data for Solar Generation Facilities
Solar Base Rate Adjustment (SoBRA) Reporting
YEAR-TO-DATE THROUGH:
September, 2022

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	135,232	27.6%	0.4%	34,856,358
LAKE PLACID	45.0	67,549	22.9%	0.2%	
TRENTON	74.9	131,553	26.8%	0.4%	
COLUMBIA	74.9	143,633	29.3%	0.4%	
DEBARY	74.5	112,859	23.1%	0.3%	
SANTA FE	74.9	128,887	26.3%	0.4%	
TWIN RIVERS	74.9	133,578	27.2%	0.4%	
DUETTE	74.5	133,493	27.3%	0.4%	
SANDY CREEK	74.9	77,851	31.6%	0.2%	
CHARLIE CREEK	74.9	24,677	26.4%	0.1%	
Total:	718.3	1,089,312	26.9%	3.1%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	1,053,970	\$8.42	15,102	\$164.22	9,917	\$187.38
LAKE PLACID	522,163	\$8.10	6,774	\$163.94	4,745	\$178.75
TRENTON	1,016,519	\$8.13	13,277	\$163.49	9,371	\$179.74
COLUMBIA	1,113,648	\$8.20	14,977	\$164.22	10,300	\$181.49
DEBARY	872,610	\$8.13	11,494	\$163.55	7,877	\$179.97
SANTA FE	998,507	\$8.16	13,163	\$164.35	9,279	\$178.78
TWIN RIVERS	1,033,434	\$8.17	13,799	\$164.15	9,624	\$179.68
DUETTE	1,029,157	\$8.09	13,317	\$164.27	9,363	\$175.96
SANDY CREEK	642,780	\$9.71	12,854	\$164.74	5,508	\$254.32
CHARLIE CREEK	246,587	\$9.91	4,131	\$155.07	1,914	\$259.42
Total:	8,529,376	\$72,519,325	118,890	\$19,402,798	77,898	\$15,232,958

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	91,091	103	17	1
LAKE PLACID	44,460	47	8	0
TRENTON	86,865	93	16	1
COLUMBIA	95,434	104	17	1
DEBARY	74,274	79	13	1
SANTA FE	85,532	92	15	1
TWIN RIVERS	88,648	96	16	1
DUETTE	87,636	92	16	1
SANDY CREEK	56,140	81	13	1
CHARLIE CREEK	20,764	27	5	0
Total:	730,844	815	135	7

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$1,048,882	\$5,979,214	\$2,819,184	\$147,492	\$0	\$9,994,772
LAKE PLACID	\$770,252	\$3,224,733	\$1,508,887	\$78,147	\$0	\$5,582,018
TRENTON	\$1,246,355	\$5,316,992	\$2,497,546	\$157,950	\$0	\$9,218,843
COLUMBIA	\$984,757	\$5,977,029	\$2,657,538	\$158,805	\$0	\$9,778,130
DEBARY	\$573,552	\$4,850,251	\$2,212,306	\$128,574	\$0	\$7,764,682
SANTA FE	\$499,191	\$6,034,886	\$2,599,981	\$156,456	\$0	\$9,290,513
TWIN RIVERS	\$796,286	\$5,550,438	\$2,267,351	\$140,148	\$0	\$8,754,223
DUETTE	\$397,748	\$5,822,971	\$2,472,194	\$183,780	\$0	\$8,876,693
SANDY CREEK	\$174,476	\$1,959,155	\$752,939	\$64,332	\$0	\$2,950,902
CHARLIE CREEK	\$197	\$1,006,064	\$255,862	\$42,094	\$0	\$1,304,216
Total:	\$6,491,696	\$45,721,732	\$20,043,787	\$1,257,778	\$0	\$73,514,993

Notes:
Sandy Creek Renewable Energy Center was placed in service as of 5/17/2022
Charlie Creek Renewable Energy Center was placed in service as of 8/10/2022