



Stephanie A. Cuello
SENIOR COUNSEL

April 29, 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 March 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/mw
Enclosure

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 29th day of April, 2022.

/s/ Stephanie A. Cuello

Attorney

<p>Ashley Weisenfeld / Jacob Imig Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 AWeisenf@psc.state.fl.us jimig@psc.state.fl.us</p> <p>J. Wahlen / M. Means Ausley McMullen P.O. Box 391 Tallahassee, FL 32302 jwahlen@ausley.com mmeans@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>Corey Allain 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 / S. Morse 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 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 Wynn Baker / Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar 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
March, 2022

		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
1	1	3,381.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,114.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	2,943.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	2,903.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	2,946.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,137.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	3,519.6	0.3	0.3	0.6	0.5	0.4	0.3	0.4
8	8	3,869.6	9.2	9.5	12.8	16.1	12.9	11.2	17.0
9	9	4,098.4	23.7	23.9	33.8	40.1	25.1	34.1	45.3
10	10	4,286.8	30.9	30.6	40.8	47.0	40.5	42.4	56.4
11	11	4,468.3	35.8	30.4	47.7	52.4	51.9	47.6	57.7
12	12	4,628.4	37.3	31.6	50.3	56.2	58.8	51.1	59.9
13	13	4,837.3	37.1	30.9	49.0	55.9	59.1	50.5	59.0
14	14	5,044.0	36.5	31.5	48.5	54.8	58.6	50.0	57.4
15	15	5,266.8	37.0	30.7	47.4	54.2	52.5	49.0	56.1
16	16	5,485.8	35.7	27.5	46.8	54.3	41.3	49.1	54.3
17	17	5,662.7	30.4	23.0	43.9	49.2	26.6	43.4	46.7
18	18	5,739.2	17.5	10.7	24.0	28.5	10.4	24.3	22.8
19	19	5,670.2	1.5	0.7	2.0	2.6	0.6	2.3	1.6
20	20	5,517.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	5,303.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	4,881.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	4,349.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	3,822.2	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:
March, 2022

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	10,316	18.5%	0.3%	3,201,572
LAKE PLACID	45.0	8,725	26.1%	0.3%	
TRENTON	74.9	13,870	24.9%	0.4%	
COLUMBIA	74.9	15,867	28.5%	0.5%	
DEBARY	74.5	13,481	24.3%	0.4%	
SANTA FE	74.9	14,167	25.4%	0.4%	
TWIN RIVERS	74.9	13,999	25.1%	0.4%	
DUETTE	74.5	16,577	29.9%	0.5%	
Total:	568.5	107,002	25.3%		

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	82,449	\$5.20	31	\$155.81	344	\$74.77
LAKE PLACID	69,733	\$5.20	26	\$155.81	291	\$74.77
TRENTON	110,854	\$5.20	41	\$155.81	462	\$74.77
COLUMBIA	126,815	\$5.20	47	\$155.81	528	\$74.77
DEBARY	107,745	\$5.20	40	\$155.81	449	\$74.77
SANTA FE	113,228	\$5.20	42	\$155.81	472	\$74.77
TWIN RIVERS	111,885	\$5.20	41	\$155.81	466	\$74.77
DUETTE	132,489	\$5.20	49	\$155.81	552	\$74.77
Total:	855,199	\$4,443,073	316	\$49,313	3,563	\$266,404

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	5,717	2	0	0
LAKE PLACID	4,835	2	0	0
TRENTON	7,686	3	0	0
COLUMBIA	8,793	3	0	0
DEBARY	7,471	3	0	0
SANTA FE	7,851	3	0	0
TWIN RIVERS	7,758	3	0	0
DUETTE	9,186	3	0	0
Total:	59,296	21	3	0

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$131,741	\$668,600	\$313,286	\$16,388	\$0	\$1,130,015
LAKE PLACID	\$61,084	\$360,576	\$167,654	\$8,683	\$0	\$597,997
TRENTON	\$61,251	\$594,549	\$277,505	\$17,550	\$0	\$950,855
COLUMBIA	\$73,304	\$667,586	\$295,284	\$17,645	\$0	\$1,053,819
DEBARY	\$70,565	\$542,169	\$245,767	\$14,286	\$0	\$872,787
SANTA FE	\$35,645	\$675,069	\$288,888	\$17,384	\$0	\$1,016,986
TWIN RIVERS	\$53,655	\$621,092	\$251,929	\$15,572	\$0	\$942,248
DUETTE	\$15,522	\$649,779	\$274,934	\$20,420	\$0	\$960,655
Total:	\$502,767	\$4,779,420	\$2,115,247	\$127,928	\$0	\$7,525,362

Notes:

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	29,622	18.3%	0.3%	9,610,705
LAKE PLACID	45.0	20,455	21.0%	0.2%	
TRENTON	74.9	37,240	23.0%	0.4%	
COLUMBIA	74.9	38,545	23.8%	0.4%	
DEBARY	74.5	33,410	20.8%	0.3%	
SANTA FE	74.9	34,543	21.4%	0.4%	
TWIN RIVERS	74.9	35,854	22.2%	0.4%	
DUETTE	74.5	41,312	25.7%	0.4%	
Total:	568.5	270,981	22.1%	2.8%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	201,062	\$5.01	336	\$116.84	1,628	\$67.94
LAKE PLACID	141,840	\$5.03	226	\$117.85	1,052	\$68.68
TRENTON	254,561	\$5.01	457	\$116.80	1,956	\$68.47
COLUMBIA	266,207	\$5.03	428	\$117.65	2,007	\$68.54
DEBARY	230,405	\$5.00	435	\$116.88	1,669	\$69.08
SANTA FE	238,482	\$5.03	389	\$117.57	1,795	\$68.57
TWIN RIVERS	246,259	\$5.02	424	\$117.14	1,871	\$68.53
DUETTE	284,529	\$5.02	467	\$117.46	2,163	\$68.48
Total:	1,863,344	\$9,352,591	3,162	\$370,781	14,140	\$969,150

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	15,666	5	2	0
LAKE PLACID	10,851	4	1	0
TRENTON	19,636	7	2	0
COLUMBIA	20,433	7	2	0
DEBARY	17,576	6	2	0
SANTA FE	18,301	6	2	0
TWIN RIVERS	18,945	7	2	0
DUETTE	21,880	8	2	0
Total:	143,287	50	13	1

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$583,474	\$2,012,360	\$939,752	\$49,164	\$0	\$3,584,750
LAKE PLACID	\$281,917	\$1,085,130	\$502,962	\$26,049	\$0	\$1,896,058
TRENTON	\$290,011	\$1,789,446	\$832,515	\$52,650	\$0	\$2,964,622
COLUMBIA	\$182,131	\$2,009,147	\$885,859	\$52,935	\$0	\$3,130,071
DEBARY	\$235,033	\$1,631,616	\$737,301	\$42,858	\$0	\$2,646,808
SANTA FE	\$111,897	\$2,031,300	\$866,652	\$52,152	\$0	\$3,062,001
TWIN RIVERS	\$498,189	\$1,865,070	\$755,775	\$46,716	\$0	\$3,165,751
DUETTE	\$45,396	\$1,951,536	\$821,502	\$61,260	\$0	\$2,879,694
Total:	\$2,228,048	\$14,375,605	\$6,342,318	\$383,784	\$0	\$23,329,755

Notes: