



Stephanie A. Cuello  
SENIOR COUNSEL

August 31, 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 July 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 31<sup>st</sup> day of August, 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 <a href="mailto:jimig@psc.state.fl.us">jimig@psc.state.fl.us</a></p> <p>J. Wahlen / M. Means / V. Ponder Tampa Electric Company Ausley McMullen P.O. Box 391 Tallahassee, FL 32302 <a href="mailto:jwahlen@ausley.com">jwahlen@ausley.com</a> <a href="mailto:mmeans@ausley.com">mmeans@ausley.com</a> <a href="mailto:vponder@ausley.com">vponder@ausley.com</a></p> <p>Jon C. Moyle, Jr. Florida Industrial Power Users Group Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, FL 32301 <a href="mailto:jmoyle@moylelaw.com">jmoyle@moylelaw.com</a> <a href="mailto:mqualls@moylelaw.com">mqualls@moylelaw.com</a></p> <p>Corey Allain Nucor Steel Florida, Inc. 22 Nucor Drive Frostproof FL 33843 <a href="mailto:corey.allain@nucor.com">corey.allain@nucor.com</a></p> <p>Maria Jose Moncada 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 <a href="mailto:maria.moncada@fpl.com">maria.moncada@fpl.com</a></p>	<p>Richard Gentry / P. Christensen / C. Rehwinkel / S. Morse / Steven Baird Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 <a href="mailto:christensen.patty@leg.state.fl.us">christensen.patty@leg.state.fl.us</a> <a href="mailto:gentry.richard@leg.state.fl.us">gentry.richard@leg.state.fl.us</a> <a href="mailto:morse.stephanie@leg.state.fl.us">morse.stephanie@leg.state.fl.us</a> <a href="mailto:rehwinkel.charles@leg.state.fl.us">rehwinkel.charles@leg.state.fl.us</a> <a href="mailto:baird.steven@leg.state.fl.us">baird.steven@leg.state.fl.us</a></p> <p>Paula K. Brown Tampa Electric Company Regulatory Affairs P.O. Box 111 Tampa, FL 33601 <a href="mailto:regdept@tecoenergy.com">regdept@tecoenergy.com</a></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 <a href="mailto:jbrew@smxblaw.com">jbrew@smxblaw.com</a> <a href="mailto:lwb@smxblaw.com">lwb@smxblaw.com</a> <a href="mailto:jrb@smxblaw.com">jrb@smxblaw.com</a> <a href="mailto:mkl@smxblaw.com">mkl@smxblaw.com</a> <a href="mailto:pjm@smxblaw.com">pjm@smxblaw.com</a></p> <p>Kenneth Hoffman Florida Power &amp; Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 <a href="mailto:ken.hoffman@fpl.com">ken.hoffman@fpl.com</a></p>
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Duke Energy Florida, LLC  
 Actual Data for Solar Generation Facilities  
 Solar Base Rate Adjustment (SoBRA) Reporting  
 July, 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)	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
1	1	5,568.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	5,068.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	4,683.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	4,440.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	4,360.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	4,433.0	0.1	0.0	0.0	0.3	0.1	0.1	0.0	0.0
7	7	4,636.6	12.6	4.9	8.6	14.6	3.7	11.9	10.5	11.7
8	8	4,983.3	45.8	17.5	31.1	42.8	17.1	35.6	39.8	43.0
9	9	5,605.7	61.3	24.1	42.6	57.6	34.4	49.0	52.5	57.2
10	10	6,294.5	60.0	26.6	40.9	56.0	48.1	48.1	53.0	57.7
11	11	6,969.6	56.7	28.5	40.1	52.3	55.7	45.2	50.8	58.4
12	12	7,603.5	54.9	30.1	40.2	55.9	59.7	49.3	49.5	59.2
13	13	8,164.0	55.5	28.2	40.8	57.7	56.0	48.2	51.6	56.5
14	14	8,512.3	52.6	27.2	42.9	54.4	54.2	47.3	46.3	55.7
15	15	8,707.1	46.7	24.3	37.9	51.5	44.5	41.8	41.9	51.1
16	16	8,823.7	42.1	19.9	36.4	41.8	36.5	37.6	39.5	43.1
17	17	8,838.5	38.3	14.8	31.7	36.2	22.1	30.6	34.9	34.9
18	18	8,749.5	32.1	9.1	23.3	30.1	11.5	24.0	29.3	26.3
19	19	8,529.1	15.9	2.8	9.5	13.8	2.7	10.4	13.9	8.2
20	20	8,123.7	0.8	0.1	0.5	1.5	0.1	0.4	0.7	0.2
21	21	7,759.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	7,373.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	6,832.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	6,166.9	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:  
July, 2022

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	17,839	32.0%	0.4%	4,750,884
LAKE PLACID	45.0	7,999	23.9%	0.2%	
TRENTON	74.9	13,227	23.7%	0.3%	
COLUMBIA	74.9	17,560	31.5%	0.4%	
DEBARY	74.5	13,841	25.0%	0.3%	
SANTA FE	74.9	14,868	26.7%	0.3%	
TWIN RIVERS	74.9	15,945	28.6%	0.3%	
DUETTE	74.5	17,452	31.5%	0.4%	
SANDY CREEK	74.9	16,140	29.0%	0.3%	
<b>Total:</b>	<b>643.4</b>	<b>134,871</b>	<b>28.2%</b>	<b>2.8%</b>	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	143,577	\$11.32	4,488	\$170.06	1,257	\$281.27
LAKE PLACID	64,380	\$11.32	2,012	\$170.06	563	\$281.27
TRENTON	106,457	\$11.32	3,328	\$170.06	932	\$281.27
COLUMBIA	141,331	\$11.32	4,418	\$170.06	1,237	\$281.27
DEBARY	111,399	\$11.32	3,482	\$170.06	975	\$281.27
SANTA FE	119,665	\$11.32	3,741	\$170.06	1,047	\$281.27
TWIN RIVERS	128,333	\$11.32	4,012	\$170.06	1,123	\$281.27
DUETTE	140,462	\$11.32	4,391	\$170.06	1,229	\$281.27
SANDY CREEK	129,903	\$11.32	4,061	\$170.06	1,137	\$281.27
<b>Total:</b>	<b>1,085,508</b>	<b>\$12,292,334</b>	<b>33,932</b>	<b>\$5,770,444</b>	<b>9,500</b>	<b>\$2,672,129</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	13,340	24	4	0
LAKE PLACID	5,981	11	2	0
TRENTON	9,891	18	3	0
COLUMBIA	13,131	24	4	0
DEBARY	10,350	19	3	0
SANTA FE	11,118	20	3	0
TWIN RIVERS	11,923	22	4	0
DUETTE	13,050	24	4	0
SANDY CREEK	12,069	22	4	0
<b>Total:</b>	<b>100,854</b>	<b>185</b>	<b>31</b>	<b>1</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$109,363	\$660,081	\$313,151	\$16,388	\$0	\$1,098,982
LAKE PLACID	\$44,684	\$355,994	\$167,654	\$8,683	\$0	\$577,015
TRENTON	\$80,250	\$586,936	\$277,505	\$17,550	\$0	\$962,241
COLUMBIA	\$507,162	\$661,224	\$295,284	\$17,645	\$0	\$1,481,315
DEBARY	\$71,508	\$535,562	\$245,835	\$14,286	\$0	\$867,191
SANTA FE	\$76,583	\$665,360	\$288,888	\$17,384	\$0	\$1,048,215
TWIN RIVERS	\$33,745	\$612,573	\$251,929	\$15,572	\$0	\$913,819
DUETTE	\$55,132	\$644,313	\$275,115	\$20,420	\$0	\$994,980
SANDY CREEK	\$102,369	\$489,941	\$249,355	\$16,083	\$0	\$857,748
<b>Total:</b>	<b>\$1,080,796</b>	<b>\$5,211,984</b>	<b>\$2,364,716</b>	<b>\$144,011</b>	<b>\$0</b>	<b>\$8,801,507</b>

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

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	104,081	27.3%	0.4%	26,198,924
LAKE PLACID	45.0	53,977	23.6%	0.2%	
TRENTON	74.9	103,017	27.0%	0.4%	
COLUMBIA	74.9	114,540	30.1%	0.4%	
DEBARY	74.5	89,479	23.6%	0.3%	
SANTA FE	74.9	104,306	27.4%	0.4%	
TWIN RIVERS	74.9	107,387	28.2%	0.4%	
DUETTE	74.5	109,198	28.8%	0.4%	
SANDY CREEK	74.9	46,461	34.0%	0.2%	
<b>Total:</b>	<b>643.4</b>	<b>832,446</b>	<b>27.5%</b>	<b>3.2%</b>	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	790,000	\$7.95	10,659	\$168.20	7,863	\$168.84
LAKE PLACID	407,183	\$7.59	4,849	\$167.45	3,852	\$160.04
TRENTON	774,748	\$7.58	9,221	\$167.24	7,492	\$159.84
COLUMBIA	867,143	\$7.73	10,838	\$167.80	8,384	\$163.81
DEBARY	674,520	\$7.61	8,171	\$167.05	6,338	\$160.76
SANTA FE	790,243	\$7.70	9,669	\$167.75	7,661	\$161.81
TWIN RIVERS	811,506	\$7.71	10,067	\$167.63	7,898	\$162.43
DUETTE	823,352	\$7.62	9,878	\$167.41	7,767	\$158.70
SANDY CREEK	376,765	\$9.64	8,370	\$170.21	3,436	\$252.11
<b>Total:</b>	<b>6,315,460</b>	<b>\$49,918,008</b>	<b>81,722</b>	<b>\$13,717,916</b>	<b>60,691</b>	<b>\$10,441,229</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	68,844	74	12	1
LAKE PLACID	34,779	35	6	0
TRENTON	66,502	66	11	1
COLUMBIA	74,668	77	13	1
DEBARY	57,589	58	10	1
SANTA FE	67,991	69	11	1
TWIN RIVERS	69,948	71	12	1
DUETTE	70,314	70	12	1
SANDY CREEK	33,714	52	8	0
<b>Total:</b>	<b>544,348</b>	<b>572</b>	<b>93</b>	<b>6</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$923,789	\$4,665,815	\$2,192,883	\$114,716	\$0	\$7,897,203
LAKE PLACID	\$661,343	\$2,516,210	\$1,173,579	\$60,781	\$0	\$4,411,913
TRENTON	\$1,024,569	\$4,148,918	\$1,942,536	\$122,850	\$0	\$7,238,872
COLUMBIA	\$841,214	\$4,660,925	\$2,066,970	\$123,515	\$0	\$7,692,625
DEBARY	\$428,486	\$3,784,237	\$1,720,636	\$100,002	\$0	\$6,033,361
SANTA FE	\$337,359	\$4,710,105	\$2,022,205	\$121,688	\$0	\$7,191,357
TWIN RIVERS	\$674,223	\$4,330,652	\$1,763,493	\$109,004	\$0	\$6,877,371
DUETTE	\$278,922	\$4,540,076	\$1,921,913	\$142,940	\$0	\$6,883,851
SANDY CREEK	\$102,369	\$978,315	\$249,355	\$32,166	\$0	\$1,362,205
<b>Total:</b>	<b>\$5,272,274</b>	<b>\$34,335,254</b>	<b>\$15,053,568</b>	<b>\$927,662</b>	<b>\$0</b>	<b>\$55,588,758</b>

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