



Stephanie A. Cuello  
SENIOR COUNSEL

March 25, 2024

**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. 20240007-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 February 2024, 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. 20240007-EI*

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 25th day of March, 2024.

/s/ Stephanie A. Cuello

Attorney

<p>Adria Harper / Jacob Imig / Saad Farooqi Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 <a href="mailto:aharper@psc.state.fl.us">aharper@psc.state.fl.us</a> <a href="mailto:jimig@psc.state.fl.us">jimig@psc.state.fl.us</a> <a href="mailto:sfarooqi@psc.state.fl.us">sfarooqi@psc.state.fl.us</a></p> <p>J. Wahlen / M. Means / V. Ponder Ausley McMullen Tampa Electric Company 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. 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>Maria Jose Moncada / Joel Baker Florida Power &amp; Light Company 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 <a href="mailto:maria.moncada@fpl.com">maria.moncada@fpl.com</a> <a href="mailto:joel.baker@fpl.com">joel.baker@fpl.com</a></p>	<p>W. Trierweiler / P. Christensen / C. Rehwinkel / M. Wessling / O. Ponce / A. Watrous 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:rehwinkel.charles@leg.state.fl.us">rehwinkel.charles@leg.state.fl.us</a> <a href="mailto:wessling.mary@leg.state.fl.us">wessling.mary@leg.state.fl.us</a> <a href="mailto:ponce.octavio@leg.state.fl.us">ponce.octavio@leg.state.fl.us</a> <a href="mailto:watrous.austin@leg.state.fl.us">watrous.austin@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>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> <p>James W. Brew / Laura Wynn Baker / Sarah B. Newman Stone Mattheis Xenopoulos &amp; Brew, P.C. PCS Phosphate –White Springs 1025 Thomas Jefferson Street, NW 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:sbn@smxblaw.com">sbn@smxblaw.com</a></p> <p>Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar Stone Mattheis Xenopoulos &amp; Brew, PC NUCOR 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, DC 20007 <a href="mailto:pjm@smxblaw.com">pjm@smxblaw.com</a> <a href="mailto:mkl@smxblaw.com">mkl@smxblaw.com</a> <a href="mailto:jrb@smxblaw.com">jrb@smxblaw.com</a></p>
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Duke Energy Florida, LLC  
 Actual Data for Solar Generation Facilities  
 Solar Base Rate Adjustment (SoBRA) Reporting  
**February, 2024**

		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)	
Hour of Day	System Firm Demand (MW)	Hamilton	Lake Placid	Trenton	Columbia	Debary	Santa Fe	Twin Rivers	Duette	Sandy Creek	Charlie Creek	
1	1	3,419.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	2	3,277.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	3	3,223.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	4	3,237.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	5	3,362.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	6	3,702.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	7	4,298.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	8	4,681.5	3.8	2.6	3.2	4.8	2.8	4.1	3.2	3.9	2.2	4.4
9	9	4,657.6	25.7	12.3	24.2	26.0	15.8	25.7	24.6	24.4	22.0	23.3
10	10	4,388.4	40.4	21.0	35.8	38.2	30.0	41.0	40.5	39.0	40.4	39.5
11	11	4,157.0	42.5	26.2	40.2	40.7	42.2	42.2	44.4	42.5	43.0	44.8
12	12	4,008.6	45.8	28.5	40.4	44.2	49.1	46.1	45.9	45.6	48.4	46.7
13	13	3,962.1	46.1	29.9	40.9	43.5	48.0	46.2	46.9	49.3	48.5	48.5
14	14	3,953.6	45.8	29.1	40.2	41.3	46.6	44.0	46.1	51.1	48.4	49.2
15	15	3,986.9	45.3	26.8	39.1	40.1	41.8	42.3	45.1	49.1	47.3	46.5
16	16	4,127.8	43.9	23.3	36.7	37.0	33.8	40.1	42.2	44.6	44.9	40.4
17	17	4,346.1	36.7	15.8	31.4	31.1	20.2	32.4	36.1	34.9	36.1	29.9
18	18	4,559.3	13.6	4.9	12.1	12.3	5.9	12.2	13.7	11.7	16.4	10.1
19	19	4,784.4	0.3	0.1	0.4	0.2	0.1	0.2	0.2	0.2	1.0	0.1
20	20	4,804.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	4,625.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	4,349.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	3,995.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	3,648.1	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:  
**February, 2024**

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	11,304	21.7%	0.4%	2,782,023
LAKE PLACID	45.0	6,394	20.4%	0.2%	
TRENTON	74.9	9,995	19.2%	0.4%	
COLUMBIA	74.9	10,421	20.0%	0.4%	
DEBARY	74.5	9,753	18.8%	0.4%	
SANTA FE	74.9	10,921	20.9%	0.4%	
TWIN RIVERS	74.9	11,279	21.6%	0.4%	
DUETTE	74.5	11,491	22.2%	0.4%	
SANDY CREEK	74.9	11,565	22.2%	0.4%	
CHARLIE CREEK	74.9	11,121	21.3%	0.4%	
<b>Total:</b>	<b>718.3</b>	<b>104,244.0</b>	<b>20.9%</b>	<b>3.7%</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	81,195	\$2.00	0	\$124.51	304	\$46.48
LAKE PLACID	45,927	\$2.00	0	\$124.51	172	\$46.48
TRENTON	71,793	\$2.00	0	\$124.51	268	\$46.48
COLUMBIA	74,853	\$2.00	0	\$124.51	280	\$46.48
DEBARY	70,054	\$2.00	0	\$124.51	262	\$46.48
SANTA FE	78,444	\$2.00	0	\$124.51	293	\$46.48
TWIN RIVERS	81,015	\$2.00	0	\$124.51	303	\$46.48
DUETTE	82,538	\$2.00	0	\$124.51	309	\$46.48
SANDY CREEK	83,070	\$2.00	0	\$124.51	311	\$46.48
CHARLIE CREEK	79,881	\$2.00	0	\$124.51	299	\$46.48
<b>Total:</b>	<b>748,769</b>	<b>\$1,498,594</b>	<b>0</b>	<b>\$0</b>	<b>2,799</b>	<b>\$130,129</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	5,538	1	0	0
LAKE PLACID	3,133	1	0	0
TRENTON	4,897	1	0	0
COLUMBIA	5,105	1	0	0
DEBARY	4,778	1	0	0
SANTA FE	5,350	1	0	0
TWIN RIVERS	5,526	1	0	0
DUETTE	5,630	1	0	0
SANDY CREEK	5,666	1	0	0
CHARLIE CREEK	5,448	1	0	0
<b>Total:</b>	<b>51,071</b>	<b>10</b>	<b>4</b>	<b>0</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$116,797	\$618,397	\$313,656	\$16,388	\$0	\$1,065,239
LAKE PLACID	\$119,124	\$337,813	\$171,393	\$8,683	\$0	\$637,013
TRENTON	\$75,872	\$550,894	\$280,518	\$17,550	\$0	\$924,834
COLUMBIA	\$86,755	\$625,676	\$297,137	\$17,645	\$0	\$1,027,213
DEBARY	\$42,227	\$503,190	\$245,835	\$14,286	\$0	\$805,538
SANTA FE	\$55,385	\$628,720	\$289,784	\$17,384	\$0	\$991,273
TWIN RIVERS	\$60,442	\$577,367	\$263,364	\$15,572	\$0	\$916,746
DUETTE	\$85,876	\$541,528	\$393,194	\$20,420	\$0	\$1,041,018
SANDY CREEK	\$111,289	\$469,401	\$252,819	\$16,083	\$0	\$849,592
CHARLIE CREEK	(\$146,636)	\$492,528	\$266,154	\$21,047	\$0	\$633,093
<b>Total:</b>	<b>\$607,131</b>	<b>\$5,345,514</b>	<b>\$2,773,854</b>	<b>\$165,058</b>	<b>\$0</b>	<b>\$8,891,558</b>

Notes:

Duke Energy Florida, LLC  
 Actual Data for Solar Generation Facilities  
 Solar Base Rate Adjustment (SoBRA) Reporting  
 YEAR-TO-DATE THROUGH:  
**February, 2024**

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	20,437	18.9%	0.3%	5,913,688
LAKE PLACID	45.0	9,921	15.3%	0.2%	
TRENTON	74.9	14,588	13.5%	0.2%	
COLUMBIA	74.9	18,431	17.1%	0.3%	
DEBARY	74.5	17,381	16.2%	0.3%	
SANTA FE	74.9	17,462	16.2%	0.3%	
TWIN RIVERS	74.9	19,114	17.7%	0.3%	
DUETTE	74.5	19,148	17.8%	0.3%	
SANDY CREEK	74.9	20,676	19.2%	0.3%	
CHARLIE CREEK	74.9	18,366	17.0%	0.3%	
<b>Total:</b>	<b>718.3</b>	<b>175,524</b>	<b>17.0%</b>	<b>3.0%</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	135,237	\$2.94	0	\$123.01	931	\$45.95
LAKE PLACID	66,797	\$2.74	0	\$123.39	414	\$46.02
TRENTON	98,970	\$2.65	0	\$123.54	584	\$46.06
COLUMBIA	117,723	\$2.86	0	\$123.17	777	\$45.98
DEBARY	115,191	\$2.92	0	\$123.05	786	\$45.96
SANTA FE	117,148	\$2.78	0	\$123.31	742	\$46.00
TWIN RIVERS	127,377	\$2.86	0	\$123.17	841	\$45.98
DUETTE	127,846	\$2.84	0	\$123.21	834	\$45.98
SANDY CREEK	136,981	\$2.93	0	\$123.04	936	\$45.95
CHARLIE CREEK	122,751	\$2.82	0	\$123.23	796	\$45.99
<b>Total:</b>	<b>1,166,021</b>	<b>\$3,303,759</b>	<b>0</b>	<b>\$0</b>	<b>7,642</b>	<b>\$351,434</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	10,089	2	1	0
LAKE PLACID	4,890	1	1	0
TRENTON	7,186	2	1	0
COLUMBIA	8,716	2	1	0
DEBARY	8,579	2	1	0
SANTA FE	8,610	2	1	0
TWIN RIVERS	9,430	2	1	0
DUETTE	9,445	2	1	0
SANDY CREEK	10,206	2	1	0
CHARLIE CREEK	9,059	2	1	0
<b>Total:</b>	<b>86,211</b>	<b>18</b>	<b>12</b>	<b>1</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$230,316	\$1,239,025	\$627,313	\$32,776	\$0	\$2,129,430
LAKE PLACID	\$219,915	\$676,535	\$342,829	\$17,366	\$0	\$1,256,645
TRENTON	\$217,283	\$1,103,710	\$561,032	\$35,100	\$0	\$1,917,125
COLUMBIA	\$163,819	\$1,253,448	\$594,273	\$35,290	\$0	\$2,046,830
DEBARY	\$66,574	\$1,008,084	\$491,670	\$28,572	\$0	\$1,594,900
SANTA FE	\$128,862	\$1,259,492	\$579,568	\$34,768	\$0	\$2,002,690
TWIN RIVERS	\$156,340	\$1,156,597	\$526,729	\$31,144	\$0	\$1,870,810
DUETTE	\$135,318	\$1,085,819	\$786,396	\$40,840	\$0	\$2,048,373
SANDY CREEK	\$238,054	\$940,480	\$505,865	\$32,166	\$0	\$1,716,565
CHARLIE CREEK	\$235,322	\$986,605	\$532,308	\$42,094	\$0	\$1,796,329
<b>Total:</b>	<b>\$1,791,803</b>	<b>\$10,709,796</b>	<b>\$5,547,983</b>	<b>\$330,116</b>	<b>\$0</b>	<b>\$18,379,698</b>

Notes: