



Stephanie A. Cuello  
SENIOR COUNSEL

July 31, 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 June 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 31st day of July, 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. FIPUG 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 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>
---	--

Duke Energy Florida, LLC  
 Actual Data for Solar Generation Facilities  
 Solar Base Rate Adjustment (SoBRA) Reporting  
June, 2024

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	1	5,016.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	4,627.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	4,358.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	4,183.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	4,117.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	4,177.4	0.2	0.0	0.5	0.8	0.2	0.3	0.3	0.1	0.0	0.3
7	7	4,294.9	7.0	4.4	14.9	17.0	3.1	12.3	15.2	13.0	12.5	12.6
8	8	4,512.5	17.8	14.2	40.8	40.4	11.3	32.9	41.2	39.4	38.3	33.6
9	9	4,940.4	22.9	20.3	47.2	51.6	21.7	43.9	51.4	48.9	48.2	46.1
10	10	5,434.2	25.4	23.9	50.8	56.9	29.4	53.5	55.5	54.6	51.8	51.4
11	11	5,997.2	25.1	26.7	53.1	56.0	32.6	53.4	57.1	56.4	54.4	50.8
12	12	6,622.8	23.4	27.5	52.8	55.5	35.5	55.2	57.6	54.9	54.0	50.2
13	13	7,178.4	22.0	27.6	52.0	58.3	37.9	56.7	53.9	50.7	56.3	54.1
14	14	7,590.5	22.1	25.7	54.3	55.3	32.6	53.3	51.6	50.3	58.0	51.7
15	15	7,874.0	22.6	24.3	48.5	48.1	27.1	48.9	51.7	47.8	55.9	45.6
16	16	8,069.5	22.2	18.4	46.7	46.0	23.4	43.7	47.8	38.4	54.3	37.6
17	17	8,173.9	18.8	15.0	41.2	39.2	16.5	38.3	40.4	36.6	48.4	26.6
18	18	8,158.9	12.9	11.1	32.2	28.9	8.0	25.8	30.9	27.0	36.4	18.9
19	19	7,954.1	5.2	4.1	13.8	11.8	2.3	10.2	14.5	9.7	17.9	7.7
20	20	7,551.0	0.3	0.0	0.9	0.5	0.1	0.3	1.0	0.4	1.6	0.3
21	21	7,172.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	6,789.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	6,192.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	5,543.7	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:  
**June, 2024**

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	7,439	13.8%	0.2%	4,386,145
LAKE PLACID	45.0	7,295	22.5%	0.2%	
TRENTON	74.9	16,492	30.6%	0.4%	
COLUMBIA	74.9	16,990	31.5%	0.4%	
DEBARY	74.5	8,456	15.8%	0.2%	
SANTA FE	74.9	15,856	29.4%	0.4%	
TWIN RIVERS	74.9	17,099	31.7%	0.4%	
DUETTE	74.5	15,852	29.6%	0.4%	
SANDY CREEK	74.9	17,640	32.7%	0.4%	
CHARLIE CREEK	74.9	14,628	27.1%	0.3%	
<b>Total:</b>	<b>718.3</b>	<b>137,747.0</b>	<b>26.6%</b>	<b>3.1%</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	51,769	\$3.69	1,151	\$109.98	780	\$54.20
LAKE PLACID	50,767	\$3.69	1,128	\$109.98	765	\$54.20
TRENTON	114,771	\$3.69	2,551	\$109.98	1,728	\$54.20
COLUMBIA	118,237	\$3.69	2,628	\$109.98	1,781	\$54.20
DEBARY	58,847	\$3.69	1,308	\$109.98	886	\$54.20
SANTA FE	110,345	\$3.69	2,453	\$109.98	1,662	\$54.20
TWIN RIVERS	118,995	\$3.69	2,645	\$109.98	1,792	\$54.20
DUETTE	110,317	\$3.69	2,452	\$109.98	1,661	\$54.20
SANDY CREEK	122,760	\$3.69	2,729	\$109.98	1,849	\$54.20
CHARLIE CREEK	101,799	\$3.69	2,263	\$109.98	1,533	\$54.20
<b>Total:</b>	<b>958,608</b>	<b>\$3,538,911</b>	<b>21,307</b>	<b>\$2,343,323</b>	<b>14,436</b>	<b>\$782,380</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	5,257	7	2	0
LAKE PLACID	5,155	7	2	0
TRENTON	11,654	15	4	0
COLUMBIA	12,006	15	4	0
DEBARY	5,976	8	2	0
SANTA FE	11,205	14	4	0
TWIN RIVERS	12,083	15	4	0
DUETTE	11,202	14	4	0
SANDY CREEK	12,466	16	4	0
CHARLIE CREEK	10,337	13	3	0
<b>Total:</b>	<b>97,342</b>	<b>123</b>	<b>33</b>	<b>1</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$225,235	\$605,718	\$313,656	\$16,388	\$0	\$1,160,997
LAKE PLACID	\$275,439	\$340,679	\$172,043	\$8,683	\$0	\$796,844
TRENTON	\$79,064	\$556,933	\$280,605	\$17,550	\$0	\$934,152
COLUMBIA	\$86,743	\$613,393	\$297,137	\$17,645	\$0	\$1,014,917
DEBARY	\$62,419	\$509,006	\$245,835	\$14,286	\$0	\$831,546
SANTA FE	\$50,170	\$625,168	\$289,784	\$17,384	\$0	\$982,506
TWIN RIVERS	\$117,521	\$574,086	\$263,321	\$15,572	\$0	\$970,501
DUETTE	\$59,968	\$534,380	\$401,031	\$20,420	\$0	\$1,015,799
SANDY CREEK	(\$360,277)	\$576,615	\$252,819	\$16,083	\$0	\$485,240
CHARLIE CREEK	\$87,771	\$606,782	\$266,154	\$21,047	\$0	\$981,754
<b>Total:</b>	<b>\$684,053</b>	<b>\$5,542,759</b>	<b>\$2,782,385</b>	<b>\$165,058</b>	<b>\$0</b>	<b>\$9,174,256</b>

Notes: Sandy Creek - Lease Payment Adjustment

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	73,313	22.4%	0.4%	20,865,810
LAKE PLACID	45.0	42,475	21.6%	0.2%	
TRENTON	74.9	76,724	23.5%	0.4%	
COLUMBIA	74.9	79,844	24.4%	0.4%	
DEBARY	74.5	62,010	19.1%	0.3%	
SANTA FE	74.9	78,163	23.9%	0.4%	
TWIN RIVERS	74.9	82,525	25.2%	0.4%	
DUETTE	74.5	80,538	24.7%	0.4%	
SANDY CREEK	74.9	87,925	26.9%	0.4%	
CHARLIE CREEK	74.9	79,928	24.4%	0.4%	
<b>Total:</b>	<b>718.3</b>	<b>743,445</b>	<b>23.7%</b>	<b>3.6%</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	531,450	\$2.54	6,819	\$110.66	3,525	\$46.13
LAKE PLACID	309,590	\$2.54	4,032	\$110.59	2,187	\$47.09
TRENTON	559,987	\$2.58	8,155	\$110.55	4,133	\$47.95
COLUMBIA	572,569	\$2.65	8,237	\$110.53	4,332	\$48.07
DEBARY	448,905	\$2.56	5,438	\$110.62	3,126	\$46.48
SANTA FE	567,382	\$2.61	7,924	\$110.54	4,213	\$47.74
TWIN RIVERS	598,610	\$2.62	8,000	\$110.55	4,470	\$47.73
DUETTE	582,396	\$2.64	8,385	\$110.54	4,336	\$47.87
SANDY CREEK	635,554	\$2.64	8,815	\$110.54	4,791	\$47.70
CHARLIE CREEK	580,473	\$2.61	8,349	\$110.58	4,170	\$47.78
<b>Total:</b>	<b>5,386,915</b>	<b>\$13,996,271</b>	<b>74,153</b>	<b>\$8,199,131</b>	<b>39,283</b>	<b>\$1,864,143</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	42,567	39	9	0
LAKE PLACID	25,096	23	5	0
TRENTON	46,152	46	10	0
COLUMBIA	47,357	47	11	0
DEBARY	36,109	32	7	0
SANTA FE	46,656	45	10	0
TWIN RIVERS	49,109	46	11	0
DUETTE	48,031	47	11	0
SANDY CREEK	52,380	50	12	0
CHARLIE CREEK	47,560	47	10	0
<b>Total:</b>	<b>441,017</b>	<b>422</b>	<b>96</b>	<b>4</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$812,069	\$3,667,558	\$1,881,938	\$81,940	\$0	\$6,443,505
LAKE PLACID	\$770,000	\$2,061,297	\$1,029,462	\$43,415	\$0	\$3,904,173
TRENTON	\$679,630	\$3,371,541	\$1,683,446	\$87,750	\$0	\$5,822,367
COLUMBIA	\$482,850	\$3,711,977	\$1,782,820	\$88,225	\$0	\$6,065,872
DEBARY	\$324,984	\$3,080,241	\$1,475,010	\$71,430	\$0	\$4,951,664
SANTA FE	\$306,035	\$3,782,013	\$1,738,704	\$86,920	\$0	\$5,913,672
TWIN RIVERS	\$488,895	\$3,472,929	\$1,580,057	\$77,860	\$0	\$5,619,742
DUETTE	\$380,601	\$3,248,392	\$2,375,084	\$102,100	\$0	\$6,106,176
SANDY CREEK	\$714,299	\$3,487,113	\$1,517,140	\$80,415	\$0	\$5,798,967
CHARLIE CREEK	\$629,991	\$3,669,693	\$1,596,924	\$105,235	\$0	\$6,001,843
<b>Total:</b>	<b>\$5,589,354</b>	<b>\$33,552,753</b>	<b>\$16,660,584</b>	<b>\$825,290</b>	<b>\$0</b>	<b>\$56,627,981</b>

Notes: Sandy Creek - Lease Payment Adjustment