



Stephanie A. Cuello
SENIOR COUNSEL

September 30, 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 August 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 30th day of September, 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 aharper@psc.state.fl.us jimig@psc.state.fl.us sfarooqi@psc.state.fl.us</p> <p>J. Wahlen / M. Means / V. Ponder Ausley McMullen Tampa Electric Company P.O. Box 391 Tallahassee, FL 32302 jwahlen@ausley.com mmeans@ausley.com vponder@ausley.com</p> <p>Jon C. Moyle, Jr. Moyle Law Firm, P.A. FIPUG 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com mqualls@moylelaw.com</p> <p>Maria Jose Moncada / Joel Baker Florida Power & Light Company 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 maria.moncada@fpl.com joel.baker@fpl.com</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 Trierweiler.walt@leg.state.fl.us christensen.patty@leg.state.fl.us rehwinkel.charles@leg.state.fl.us wessling.mary@leg.state.fl.us ponce.octavio@leg.state.fl.us watrous.austin@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>Kenneth Hoffiman Florida Power & Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 ken.hoffman@fpl.com</p> <p>James W. Brew / Laura Wynn Baker / Sarah B. Newman Stone Mattheis Xenopoulos & Brew, P.C. PCS Phosphate – White Springs 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, DC 20007 jbrew@smxblaw.com lwb@smxblaw.com sbn@smxblaw.com</p> <p>Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar Stone Mattheis Xenopoulos & Brew, PC NUCOR 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, DC 20007 pjm@smxblaw.com mkl@smxblaw.com jrb@smxblaw.com</p>
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Duke Energy Florida, LLC
 Actual Data for Solar Generation Facilities
 Solar Base Rate Adjustment (SoBRA) Reporting
August, 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	5,188.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	4,798.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	4,546.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	4,392.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	4,350.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	4,448.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	4,648.8	5.3	2.7	3.9	5.3	2.1	4.5	4.5	5.3	3.8
8	8	4,807.4	31.0	17.5	23.6	29.3	11.4	26.1	28.7	31.2	28.2
9	9	5,210.8	49.4	26.1	37.3	46.3	25.4	42.2	44.6	47.6	47.4
10	10	5,791.8	56.5	28.9	43.2	53.3	35.1	49.1	51.5	47.5	53.4
11	11	6,364.8	57.8	28.5	46.4	54.1	41.3	50.1	52.3	48.9	57.8
12	12	7,024.1	57.3	26.8	45.6	52.5	44.1	47.9	53.3	48.1	59.1
13	13	7,537.3	55.2	25.7	42.9	52.9	37.9	49.1	50.2	49.8	59.2
14	14	7,900.5	52.7	25.9	41.1	50.5	36.9	47.9	49.6	48.4	56.2
15	15	8,094.7	49.2	22.8	38.9	48.1	32.7	47.2	46.7	40.3	51.7
16	16	8,244.0	45.6	19.0	34.5	45.7	27.6	43.6	42.9	29.4	49.9
17	17	8,328.4	42.6	15.9	27.7	35.1	16.7	31.7	39.4	22.9	37.9
18	18	8,266.5	30.0	8.8	19.0	21.4	7.8	21.3	28.5	14.8	28.2
19	19	8,119.4	7.5	1.8	4.8	5.7	1.7	5.6	7.3	4.0	10.6
20	20	7,800.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.3
21	21	7,514.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	7,074.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	6,503.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	5,747.9	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:
August 2024

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	16,742	30.0%	0.4%	4,781,920
LAKE PLACID	45.0	7,774	23.2%	0.2%	
TRENTON	74.9	12,682	22.8%	0.3%	
COLUMBIA	74.9	15,505	27.8%	0.3%	
DEBARY	74.5	9,941	17.9%	0.2%	
SANTA FE	74.9	14,451	25.9%	0.3%	
TWIN RIVERS	74.9	15,495	27.8%	0.3%	
DUETTE	74.5	13,583	24.5%	0.3%	
SANDY CREEK	74.9	16,851	30.2%	0.4%	
CHARLIE CREEK	74.9	14,234	25.5%	0.3%	
Total:	718.3	137,258.0	25.7%	2.9%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	124,698	\$2.57	2,372	\$105.57	1,417	\$46.48
LAKE PLACID	57,902	\$2.57	1,101	\$105.57	658	\$46.48
TRENTON	94,458	\$2.57	1,797	\$105.57	1,073	\$46.48
COLUMBIA	115,485	\$2.57	2,196	\$105.57	1,312	\$46.48
DEBARY	74,043	\$2.57	1,408	\$105.57	841	\$46.48
SANTA FE	107,634	\$2.57	2,047	\$105.57	1,223	\$46.48
TWIN RIVERS	115,410	\$2.57	2,195	\$105.57	1,311	\$46.48
DUETTE	101,169	\$2.57	1,924	\$105.57	1,150	\$46.48
SANDY CREEK	125,510	\$2.57	2,387	\$105.57	1,426	\$46.48
CHARLIE CREEK	106,018	\$2.57	2,016	\$105.57	1,205	\$46.48
Total:	1,022,327	\$2,629,180	19,444	\$2,052,711	11,617	\$539,985

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	11,542	15	3	0
LAKE PLACID	5,359	7	2	0
TRENTON	8,743	11	3	0
COLUMBIA	10,689	14	3	0
DEBARY	6,853	9	2	0
SANTA FE	9,963	13	3	0
TWIN RIVERS	10,682	14	3	0
DUETTE	9,364	12	3	0
SANDY CREEK	11,617	15	3	0
CHARLIE CREEK	9,813	12	3	0
Total:	94,626	120	28	1

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$129,743	\$601,704	\$313,656	\$16,388	\$0	\$1,061,492
LAKE PLACID	\$87,648	\$339,497	\$172,043	\$8,683	\$0	\$607,871
TRENTON	\$72,606	\$552,928	\$280,606	\$17,550	\$0	\$923,689
COLUMBIA	(\$429,611)	\$609,164	\$297,137	\$17,645	\$0	\$494,335
DEBARY	\$158,967	\$505,511	\$245,835	\$14,286	\$0	\$924,599
SANTA FE	\$43,154	\$621,035	\$289,784	\$17,384	\$0	\$971,357
TWIN RIVERS	\$70,735	\$570,589	\$263,479	\$15,572	\$0	\$920,374
DUETTE	\$49,856	\$575,236	\$404,327	\$20,420	\$0	\$1,049,838
SANDY CREEK	\$166,806	\$573,020	\$252,835	\$16,083	\$0	\$1,008,743
CHARLIE CREEK	(\$146,263)	\$602,915	\$266,154	\$21,047	\$0	\$743,852
Total:	\$203,641	\$5,551,597	\$2,785,855	\$165,058	\$0	\$8,706,151

Notes: Columbia and Charlie Creek Lease Adjustments

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	106,429	24.3%	0.3%	30,506,717
LAKE PLACID	45.0	57,889	22.0%	0.2%	
TRENTON	74.9	104,020	23.7%	0.3%	
COLUMBIA	74.9	109,554	25.0%	0.4%	
DEBARY	74.5	82,598	18.9%	0.3%	
SANTA FE	74.9	106,803	24.4%	0.4%	
TWIN RIVERS	74.9	113,176	25.8%	0.4%	
DUETTE	74.5	109,502	25.1%	0.4%	
SANDY CREEK	74.9	120,483	27.5%	0.4%	
CHARLIE CREEK	74.9	110,010	25.1%	0.4%	
Total:	718.3	1,020,464	24.3%	3.3%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	776,246	\$2.60	10,912	\$109.94	6,436	\$46.38
LAKE PLACID	423,529	\$2.59	5,936	\$110.00	3,542	\$46.94
TRENTON	761,634	\$2.63	11,488	\$110.12	6,541	\$47.49
COLUMBIA	792,242	\$2.67	11,926	\$109.94	6,941	\$47.55
DEBARY	601,040	\$2.60	7,965	\$110.08	4,939	\$46.56
SANTA FE	779,088	\$2.64	11,463	\$109.99	6,731	\$47.34
TWIN RIVERS	825,185	\$2.65	11,788	\$109.97	7,165	\$47.34
DUETTE	796,380	\$2.67	11,926	\$110.09	6,890	\$47.44
SANDY CREEK	876,269	\$2.67	12,853	\$109.95	7,651	\$47.32
CHARLIE CREEK	802,731	\$2.65	12,031	\$110.09	6,821	\$47.36
Total:	7,434,343	\$19,591,473	108,288	\$11,913,626	63,656	\$3,002,721

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	65,229	65	15	1
LAKE PLACID	35,644	35	8	0
TRENTON	64,820	67	16	1
COLUMBIA	67,693	70	16	1
DEBARY	50,193	48	11	0
SANTA FE	66,254	68	16	1
TWIN RIVERS	70,083	70	17	1
DUETTE	67,841	70	16	1
SANDY CREEK	74,664	76	18	1
CHARLIE CREEK	68,135	71	16	1
Total:	630,556	641	151	6

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$1,115,402	\$4,872,973	\$2,509,251	\$131,104	\$0	\$8,628,730
LAKE PLACID	\$847,316	\$2,748,180	\$1,373,548	\$69,464	\$0	\$5,038,508
TRENTON	\$919,240	\$4,479,399	\$2,244,657	\$140,400	\$0	\$7,783,696
COLUMBIA	\$646,802	\$4,932,419	\$2,377,093	\$141,160	\$0	\$8,097,475
DEBARY	\$533,236	\$4,093,010	\$1,966,680	\$114,288	\$0	\$6,707,214
SANTA FE	\$406,636	\$5,026,149	\$2,318,271	\$139,072	\$0	\$7,890,129
TWIN RIVERS	\$622,463	\$4,615,918	\$2,106,858	\$124,576	\$0	\$7,469,815
DUETTE	\$509,949	\$4,681,076	\$3,183,716	\$163,360	\$0	\$8,538,100
SANDY CREEK	\$1,014,501	\$4,634,957	\$2,022,794	\$128,664	\$0	\$7,800,916
CHARLIE CREEK	\$864,831	\$4,877,455	\$2,129,232	\$168,376	\$0	\$8,039,894
Total:	\$7,480,376	\$44,961,538	\$22,232,099	\$1,320,464	\$0	\$75,994,477

Notes: Columbia and Charlie Creek Lease Adjustments