



Stephanie A. Cuello
SENIOR COUNSEL

October 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 September 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 October, 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 Hoffman 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
September, 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)	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	4,759.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	4,440.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	4,221.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	4,083.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	4,044.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	4,146.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	4,374.1	1.3	1.1	1.0	1.2	1.1	0.8	1.2	2.1	0.6	1.4
8	8	4,516.3	14.0	10.1	12.5	12.4	10.6	12.9	13.6	22.4	12.9	14.6
9	9	4,812.0	26.8	20.9	24.6	22.3	23.1	26.2	27.1	42.5	29.8	30.6
10	10	5,283.6	33.2	23.9	30.3	28.2	32.2	34.4	34.1	51.0	36.8	41.3
11	11	5,781.1	35.7	25.8	33.3	30.9	38.3	38.8	36.8	53.1	36.5	47.3
12	12	6,407.5	37.4	25.4	34.0	33.5	38.8	40.9	38.3	53.3	40.8	51.6
13	13	7,071.3	37.5	24.1	38.0	35.7	37.3	41.7	39.4	49.6	39.8	51.6
14	14	7,574.4	38.6	22.6	36.5	35.7	33.4	43.5	42.0	50.8	41.3	46.5
15	15	7,841.9	36.6	22.0	31.9	30.3	24.6	37.1	39.8	46.1	35.8	38.6
16	16	8,059.3	30.4	18.1	28.9	28.6	19.3	34.3	33.2	38.5	33.0	29.5
17	17	8,124.7	27.1	13.0	22.2	25.0	11.5	25.8	28.3	28.5	28.1	16.9
18	18	8,054.8	12.1	5.0	10.0	10.9	3.5	10.6	12.8	10.4	16.7	6.2
19	19	7,787.6	1.1	0.2	0.7	0.7	0.1	0.6	1.1	0.5	1.8	0.4
20	20	7,430.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	7,095.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	6,523.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	5,910.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	5,242.1	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:
September, 2024

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	9,952	18.5%	0.2%	4,317,786
LAKE PLACID	45.0	6,365	19.6%	0.1%	
TRENTON	74.9	9,118	16.9%	0.2%	
COLUMBIA	74.9	8,865	16.4%	0.2%	
DEBARY	74.5	8,213	15.3%	0.2%	
SANTA FE	74.9	10,425	19.3%	0.2%	
TWIN RIVERS	74.9	10,431	19.3%	0.2%	
DUETTE	74.5	13,467	25.1%	0.3%	
SANDY CREEK	74.9	10,618	19.7%	0.2%	
CHARLIE CREEK	74.9	11,299	21.0%	0.3%	
Total:	718.3	98,753.0	19.1%	2.3%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	70,015	\$2.89	1,953	\$98.42	877	\$43.12
LAKE PLACID	44,779	\$2.89	1,249	\$98.42	561	\$43.12
TRENTON	64,147	\$2.89	1,789	\$98.42	803	\$43.12
COLUMBIA	62,367	\$2.89	1,739	\$98.42	781	\$43.12
DEBARY	57,780	\$2.89	1,611	\$98.42	724	\$43.12
SANTA FE	73,342	\$2.89	2,045	\$98.42	918	\$43.12
TWIN RIVERS	73,384	\$2.89	2,047	\$98.42	919	\$43.12
DUETTE	94,743	\$2.89	2,642	\$98.42	1,186	\$43.12
SANDY CREEK	74,700	\$2.89	2,083	\$98.42	935	\$43.12
CHARLIE CREEK	79,491	\$2.89	2,217	\$98.42	995	\$43.12
Total:	694,750	\$2,010,072	19,376	\$1,906,989	8,700	\$375,151

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	6,932	11	2	0
LAKE PLACID	4,434	7	1	0
TRENTON	6,351	10	2	0
COLUMBIA	6,175	10	2	0
DEBARY	5,721	9	2	0
SANTA FE	7,262	11	2	0
TWIN RIVERS	7,266	11	2	0
DUETTE	9,380	15	3	0
SANDY CREEK	7,396	11	2	0
CHARLIE CREEK	7,870	12	2	0
Total:	68,787	107	21	1

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$117,840	\$599,481	\$313,830	\$16,388	\$0	\$1,047,539
LAKE PLACID	\$124,329	\$338,326	\$171,973	\$8,683	\$0	\$643,311
TRENTON	\$83,557	\$550,925	\$280,513	\$17,550	\$0	\$932,545
COLUMBIA	\$87,106	\$607,155	\$297,137	\$17,645	\$0	\$1,009,043
DEBARY	(\$81,016)	\$503,764	\$245,835	\$14,286	\$0	\$682,869
SANTA FE	\$53,754	\$618,968	\$289,784	\$17,384	\$0	\$979,890
TWIN RIVERS	\$83,816	\$568,611	\$263,375	\$15,572	\$0	\$931,374
DUETTE	\$45,303	\$572,378	\$404,312	\$20,420	\$0	\$1,042,413
SANDY CREEK	\$129,587	\$571,196	\$252,823	\$16,083	\$0	\$969,688
CHARLIE CREEK	\$126,699	\$600,981	\$266,154	\$21,047	\$0	\$1,014,881
Total:	\$770,975	\$5,531,785	\$2,785,735	\$165,058	\$0	\$9,253,553

Notes: Debary Material Issue Correction

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	116,381	23.6%	0.3%	34,824,503
LAKE PLACID	45.0	64,254	21.7%	0.2%	
TRENTON	74.9	113,138	23.0%	0.3%	
COLUMBIA	74.9	118,419	24.0%	0.3%	
DEBARY	74.5	90,811	18.5%	0.3%	
SANTA FE	74.9	117,228	23.8%	0.3%	
TWIN RIVERS	74.9	123,607	25.1%	0.4%	
DUETTE	74.5	122,969	25.1%	0.4%	
SANDY CREEK	74.9	131,101	26.6%	0.4%	
CHARLIE CREEK	74.9	121,309	24.6%	0.3%	
Total:	718.3	1,119,217	23.7%	3.2%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	846,260	\$2.62	12,865	\$108.19	7,313	\$45.99
LAKE PLACID	468,308	\$2.62	7,185	\$107.99	4,103	\$46.41
TRENTON	825,781	\$2.65	13,277	\$108.54	7,344	\$47.01
COLUMBIA	854,610	\$2.69	13,666	\$108.48	7,722	\$47.10
DEBARY	658,820	\$2.63	9,577	\$108.12	5,663	\$46.12
SANTA FE	852,430	\$2.66	13,508	\$108.24	7,649	\$46.84
TWIN RIVERS	898,569	\$2.67	13,834	\$108.26	8,084	\$46.86
DUETTE	891,123	\$2.69	14,568	\$107.97	8,076	\$46.80
SANDY CREEK	950,969	\$2.68	14,936	\$108.34	8,586	\$46.86
CHARLIE CREEK	882,222	\$2.67	14,248	\$108.27	7,817	\$46.82
Total:	8,129,093	\$21,602,816	127,665	\$13,818,493	72,356	\$3,377,693

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	72,161	76	17	1
LAKE PLACID	40,077	42	10	0
TRENTON	71,171	77	18	1
COLUMBIA	73,868	80	18	1
DEBARY	55,914	57	13	1
SANTA FE	73,516	79	18	1
TWIN RIVERS	77,349	82	19	1
DUETTE	77,221	85	19	1
SANDY CREEK	82,060	88	20	1
CHARLIE CREEK	76,006	83	19	1
Total:	699,343	748	172	7

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$1,233,242	\$5,472,453	\$2,823,254	\$147,492	\$0	\$9,676,441
LAKE PLACID	\$971,645	\$3,086,506	\$1,545,520	\$78,147	\$0	\$5,681,819
TRENTON	\$1,002,798	\$5,030,325	\$2,525,170	\$157,950	\$0	\$8,716,242
COLUMBIA	\$733,908	\$5,539,574	\$2,674,230	\$158,805	\$0	\$9,106,517
DEBARY	\$452,219	\$4,596,774	\$2,212,515	\$128,574	\$0	\$7,390,082
SANTA FE	\$460,391	\$5,645,117	\$2,608,055	\$156,456	\$0	\$8,870,020
TWIN RIVERS	\$706,279	\$5,184,530	\$2,370,233	\$140,148	\$0	\$8,401,189
DUETTE	\$555,252	\$5,253,454	\$3,588,028	\$183,780	\$0	\$9,580,514
SANDY CREEK	\$1,144,087	\$5,206,153	\$2,275,616	\$144,747	\$0	\$8,770,603
CHARLIE CREEK	\$991,530	\$5,478,436	\$2,395,386	\$189,423	\$0	\$9,054,775
Total:	\$8,251,351	\$50,493,322	\$25,018,008	\$1,485,522	\$0	\$85,248,203

Notes: Debarry Material Issue Correction