



Stephanie A. Cuello
SENIOR COUNSEL

December 20, 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 November 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 20th day of December, 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
November, 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	3,754.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,522.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,372.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,296.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,327.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,493.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	3,806.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	8	4,058.4	4.9	1.8	6.7	8.3	5.7	5.9	4.1	8.7	2.2
9	9	4,324.4	29.9	7.8	33.3	33.3	21.8	28.7	27.8	36.9	15.2
10	10	4,561.5	45.0	9.2	44.9	44.4	36.9	41.1	41.9	47.8	22.1
11	11	4,739.7	48.1	8.6	45.7	43.2	43.5	41.3	44.5	49.7	23.9
12	12	5,051.6	46.8	9.0	43.8	41.5	46.8	41.0	42.8	48.3	24.7
13	13	5,330.7	44.9	9.1	43.9	41.7	44.5	41.5	40.3	46.1	26.3
14	14	5,597.1	42.1	8.3	41.2	37.8	41.2	38.2	38.6	45.6	26.7
15	15	5,763.1	39.7	8.4	39.1	35.6	35.0	35.8	37.5	44.2	25.3
16	16	5,882.5	36.0	7.3	33.8	30.2	22.2	30.2	33.9	38.3	23.9
17	17	5,966.0	18.3	4.2	18.0	15.9	8.5	14.6	18.0	18.6	14.7
18	18	5,958.1	1.0	0.3	1.2	1.1	0.6	1.0	1.2	1.2	1.8
19	19	5,936.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
20	20	5,713.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	5,461.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	5,105.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	4,704.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	4,149.3	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:
November, 2024

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	10,700	19.8%	0.3%	3,410,066
LAKE PLACID	45.0	2,217	6.8%	0.1%	
TRENTON	74.9	10,548	19.6%	0.3%	
COLUMBIA	74.9	9,993	18.5%	0.3%	
DEBARY	74.5	9,202	17.2%	0.3%	
SANTA FE	74.9	9,575	17.8%	0.3%	
TWIN RIVERS	74.9	9,919	18.4%	0.3%	
DUETTE	74.5	11,566	21.6%	0.3%	
SANDY CREEK	74.9	6,202	11.5%	0.2%	
CHARLIE CREEK	74.9	9,929	18.4%	0.3%	
Total:	718.3	89,851.0	17.4%	2.6%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	85,922	\$2.37	454	\$101.85	48	\$45.30
LAKE PLACID	17,803	\$2.37	94	\$101.85	10	\$45.30
TRENTON	84,702	\$2.37	447	\$101.85	48	\$45.30
COLUMBIA	80,245	\$2.37	424	\$101.85	45	\$45.30
DEBARY	73,893	\$2.37	390	\$101.85	42	\$45.30
SANTA FE	76,889	\$2.37	406	\$101.85	43	\$45.30
TWIN RIVERS	79,651	\$2.37	421	\$101.85	45	\$45.30
DUETTE	92,877	\$2.37	491	\$101.85	52	\$45.30
SANDY CREEK	49,803	\$2.37	263	\$101.85	28	\$45.30
CHARLIE CREEK	79,731	\$2.37	421	\$101.85	45	\$45.30
Total:	721,516	\$1,713,406	3,811	\$388,162	406	\$18,403

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	5,524	4	0	0
LAKE PLACID	1,145	1	0	0
TRENTON	5,445	4	0	0
COLUMBIA	5,159	3	0	0
DEBARY	4,750	3	0	0
SANTA FE	4,943	3	0	0
TWIN RIVERS	5,121	3	0	0
DUETTE	5,971	4	0	0
SANDY CREEK	3,202	2	0	0
CHARLIE CREEK	5,126	3	0	0
Total:	46,385	30	2	0

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$122,137	\$595,322	\$314,018	\$16,388	\$0	\$1,047,865
LAKE PLACID	\$133,085	\$335,915	\$171,986	\$8,683	\$0	\$649,669
TRENTON	\$112,011	\$547,626	\$280,532	\$17,550	\$0	\$957,720
COLUMBIA	\$64,440	\$602,883	\$297,163	\$17,645	\$0	\$982,131
DEBARY	\$91,195	\$500,826	\$245,835	\$14,286	\$0	\$852,142
SANTA FE	\$37,689	\$614,834	\$289,784	\$17,384	\$0	\$959,691
TWIN RIVERS	\$79,433	\$564,995	\$263,439	\$15,572	\$0	\$923,439
DUETTE	\$56,439	\$566,854	\$406,620	\$20,420	\$0	\$1,050,333
SANDY CREEK	\$115,351	\$567,577	\$252,823	\$16,083	\$0	\$951,833
CHARLIE CREEK	\$70,820	\$597,114	\$266,154	\$21,047	\$0	\$955,135
Total:	\$882,600	\$5,493,945	\$2,788,353	\$165,058	\$0	\$9,329,956

Notes:

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	141,485	23.5%	0.3%	41,720,162
LAKE PLACID	45.0	68,870	19.0%	0.2%	
TRENTON	74.9	135,936	22.6%	0.3%	
COLUMBIA	74.9	140,920	23.4%	0.3%	
DEBARY	74.5	108,832	18.2%	0.3%	
SANTA FE	74.9	138,377	23.0%	0.3%	
TWIN RIVERS	74.9	147,169	24.4%	0.4%	
DUETTE	74.5	145,366	24.3%	0.3%	
SANDY CREEK	74.9	148,055	24.6%	0.4%	
CHARLIE CREEK	74.9	139,858	23.2%	0.3%	
Total:	718.3	1,314,868	22.8%	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	1,051,177	\$2.60	15,450	\$107.09	7,361	\$45.99
LAKE PLACID	505,930	\$2.61	7,634	\$107.62	4,113	\$46.41
TRENTON	1,011,683	\$2.62	15,537	\$107.53	7,392	\$47.00
COLUMBIA	1,038,186	\$2.65	15,941	\$107.50	7,767	\$47.09
DEBARY	805,569	\$2.60	11,272	\$107.14	5,704	\$46.11
SANTA FE	1,024,934	\$2.63	15,627	\$107.34	7,692	\$46.83
TWIN RIVERS	1,090,928	\$2.64	16,274	\$107.27	8,128	\$46.85
DUETTE	1,073,477	\$2.66	16,662	\$107.17	8,128	\$46.79
SANDY CREEK	1,089,597	\$2.66	16,790	\$107.60	8,615	\$46.86
CHARLIE CREEK	1,033,165	\$2.64	15,945	\$107.57	7,861	\$46.81
Total:	9,724,645	\$25,577,829	147,131	\$15,799,360	72,762	\$3,396,108

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	85,893	91	19	1
LAKE PLACID	42,589	45	10	0
TRENTON	83,597	90	19	1
COLUMBIA	86,154	93	20	1
DEBARY	65,689	67	14	1
SANTA FE	85,054	91	19	1
TWIN RIVERS	90,244	96	20	1
DUETTE	89,364	97	21	1
SANDY CREEK	91,389	98	21	1
CHARLIE CREEK	86,043	93	20	1
Total:	806,015	860	183	7

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$1,472,597	\$6,665,062	\$3,451,082	\$180,268	\$0	\$11,769,009
LAKE PLACID	\$1,232,026	\$3,759,549	\$1,889,492	\$95,513	\$0	\$6,976,580
TRENTON	\$1,260,224	\$6,126,898	\$3,086,215	\$193,050	\$0	\$10,666,387
COLUMBIA	\$929,054	\$6,747,529	\$3,268,617	\$194,095	\$0	\$11,139,294
DEBARY	\$585,439	\$5,599,617	\$2,704,185	\$157,146	\$0	\$9,046,387
SANTA FE	\$545,543	\$6,876,852	\$3,187,623	\$191,224	\$0	\$10,801,242
TWIN RIVERS	\$856,300	\$6,316,336	\$2,897,068	\$171,292	\$0	\$10,240,996
DUETTE	\$654,143	\$6,389,928	\$4,398,983	\$224,620	\$0	\$11,667,673
SANDY CREEK	\$1,412,449	\$6,343,116	\$2,781,262	\$176,913	\$0	\$10,713,739
CHARLIE CREEK	\$1,144,720	\$6,674,598	\$2,927,694	\$231,517	\$0	\$10,978,528
Total:	\$10,092,495	\$61,499,484	\$30,592,220	\$1,815,638	\$0	\$103,999,837

Notes: