



Stephanie A. Cuello
SENIOR COUNSEL

November 27, 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 October 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 27th day of November, 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
October, 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	4,759.6	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
3	3	4,221.2	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
5	5	4,044.7	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
7	7	4,374.1	0.4	0.1	0.3	0.6	0.5	0.4	0.1	0.5	0.1
8	8	4,516.3	15.7	3.4	14.6	17.5	8.4	13.2	14.3	14.9	9.7
9	9	4,812.0	43.5	8.9	40.4	39.3	22.3	33.2	39.9	35.4	28.1
10	10	5,283.6	50.0	9.5	45.0	45.4	33.2	39.9	47.6	41.4	34.0
11	11	5,781.1	52.3	8.9	46.7	47.9	38.2	44.3	50.2	41.1	36.9
12	12	6,407.5	52.2	8.6	47.4	48.7	37.5	46.9	50.8	41.1	39.3
13	13	7,071.3	53.2	8.7	47.1	47.2	38.4	46.8	51.7	42.3	40.0
14	14	7,574.4	51.7	8.4	44.4	44.5	36.6	45.0	49.5	40.3	40.7
15	15	7,841.9	54.1	8.7	40.7	42.8	32.7	40.5	49.4	35.7	40.1
16	16	8,059.3	51.3	7.0	38.1	39.3	23.1	36.2	48.4	34.5	38.3
17	17	8,124.7	34.2	4.2	25.7	25.4	11.6	22.7	31.9	19.2	31.2
18	18	8,054.8	6.0	0.9	4.7	5.0	2.1	4.3	6.3	3.2	8.4
19	19	7,787.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20	20	7,430.4	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
22	22	6,523.0	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
24	24	5,242.1	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:
October, 2024

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	14,404	25.8%	0.3%	4,317,786
LAKE PLACID	45.0	2,399	7.2%	0.1%	
TRENTON	74.9	12,250	22.0%	0.3%	
COLUMBIA	74.9	12,508	22.4%	0.3%	
DEBARY	74.5	8,819	15.9%	0.2%	
SANTA FE	74.9	11,574	20.8%	0.3%	
TWIN RIVERS	74.9	13,643	24.5%	0.3%	
DUETTE	74.5	10,831	19.5%	0.3%	
SANDY CREEK	74.9	10,752	19.3%	0.2%	
CHARLIE CREEK	74.9	8,620	15.5%	0.2%	
Total:	718.3	105,800.0	19.8%	2.5%	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	118,994	\$2.58	2,131	\$101.57	0	\$57.16
LAKE PLACID	19,819	\$2.58	355	\$101.57	0	\$57.16
TRENTON	101,200	\$2.58	1,813	\$101.57	0	\$57.16
COLUMBIA	103,331	\$2.58	1,851	\$101.57	0	\$57.16
DEBARY	72,856	\$2.58	1,305	\$101.57	0	\$57.16
SANTA FE	95,615	\$2.58	1,713	\$101.57	0	\$57.16
TWIN RIVERS	112,708	\$2.58	2,019	\$101.57	0	\$57.16
DUETTE	89,477	\$2.58	1,603	\$101.57	0	\$57.16
SANDY CREEK	88,825	\$2.58	1,591	\$101.57	0	\$57.16
CHARLIE CREEK	71,212	\$2.58	1,275	\$101.57	0	\$57.16
Total:	874,036	\$2,256,875	15,655	\$1,590,029	0	\$0

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	8,208	11	1	0
LAKE PLACID	1,367	2	0	0
TRENTON	6,980	9	1	0
COLUMBIA	7,127	10	1	0
DEBARY	5,025	7	1	0
SANTA FE	6,595	9	1	0
TWIN RIVERS	7,774	11	1	0
DUETTE	6,172	8	1	0
SANDY CREEK	6,127	8	1	0
CHARLIE CREEK	4,912	7	1	0
Total:	60,288	82	9	0

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$117,218	\$597,287	\$313,810	\$16,388	\$0	\$1,044,703
LAKE PLACID	\$127,296	\$337,128	\$171,986	\$8,683	\$0	\$645,093
TRENTON	\$145,416	\$548,946	\$280,513	\$17,550	\$0	\$992,425
COLUMBIA	\$130,706	\$605,071	\$297,224	\$17,645	\$0	\$1,050,646
DEBARY	\$42,024	\$502,017	\$245,835	\$14,286	\$0	\$804,162
SANTA FE	\$47,463	\$616,901	\$289,784	\$17,384	\$0	\$971,532
TWIN RIVERS	\$70,589	\$566,812	\$263,396	\$15,572	\$0	\$916,369
DUETTE	\$42,452	\$569,620	\$404,335	\$20,420	\$0	\$1,036,827
SANDY CREEK	\$153,011	\$569,386	\$252,823	\$16,083	\$0	\$991,303
CHARLIE CREEK	\$82,369	\$599,047	\$266,154	\$21,047	\$0	\$968,617
Total:	\$958,544	\$5,512,216	\$2,785,860	\$165,058	\$0	\$9,421,678

Notes: No Coal Displacement due to outage of Crystal River 4/5 from Hurricane

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

	Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
1	HAMILTON	74.9	130,785	23.9%	0.3%	38,310,096
1	LAKE PLACID	45.0	66,653	20.2%	0.2%	
1	TRENTON	74.9	125,388	22.9%	0.3%	
1	COLUMBIA	74.9	130,927	23.9%	0.3%	
1	DEBARY	74.5	99,630	18.3%	0.3%	
1	SANTA FE	74.9	128,802	23.5%	0.3%	
1	TWIN RIVERS	74.9	137,250	25.0%	0.4%	
1	DUETTE	74.5	133,800	24.5%	0.3%	
1	SANDY CREEK	74.9	141,853	25.9%	0.4%	
1	CHARLIE CREEK	74.9	129,929	23.7%	0.3%	
2	Total:	718.3	1,225,017	23.3%	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)
3	HAMILTON	965,255	\$2.62	14,996	\$107.25	7,313	\$45.99
3	LAKE PLACID	488,127	\$2.62	7,540	\$107.69	4,103	\$46.41
3	TRENTON	926,981	\$2.64	15,089	\$107.70	7,344	\$47.01
3	COLUMBIA	957,941	\$2.68	15,517	\$107.65	7,722	\$47.10
3	DEBARY	731,676	\$2.62	10,882	\$107.33	5,663	\$46.12
3	SANTA FE	948,045	\$2.65	15,221	\$107.49	7,649	\$46.84
3	TWIN RIVERS	1,011,277	\$2.66	15,853	\$107.41	8,084	\$46.86
3	DUETTE	980,600	\$2.68	16,171	\$107.33	8,076	\$46.80
3	SANDY CREEK	1,039,794	\$2.68	16,527	\$107.69	8,586	\$46.86
3	CHARLIE CREEK	953,433	\$2.66	15,524	\$107.72	7,817	\$46.82
4	Total:	9,003,129	\$23,860,732	143,320	\$15,410,772	72,356	\$3,377,693

	Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
5	HAMILTON	80,369	87	19	1
5	LAKE PLACID	41,444	44	10	0
5	TRENTON	78,151	87	19	1
5	COLUMBIA	80,995	89	20	1
5	DEBARY	60,939	64	14	1
5	SANTA FE	80,111	88	19	1
5	TWIN RIVERS	85,123	92	20	1
5	DUETTE	83,393	93	20	1
5	SANDY CREEK	88,187	96	21	1
5	CHARLIE CREEK	80,918	89	20	1
6	Total:	759,631	829	181	7

	Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
7	HAMILTON	\$1,350,460	\$6,069,740	\$3,137,065	\$163,880	\$0	\$10,721,144
7	LAKE PLACID	\$1,098,941	\$3,423,635	\$1,717,506	\$86,830	\$0	\$6,326,912
7	TRENTON	\$1,148,213	\$5,579,271	\$2,805,683	\$175,500	\$0	\$9,708,667
7	COLUMBIA	\$864,614	\$6,144,646	\$2,971,454	\$176,450	\$0	\$10,157,164
7	DEBARY	\$494,244	\$5,098,791	\$2,458,350	\$142,860	\$0	\$8,194,245
7	SANTA FE	\$507,854	\$6,262,018	\$2,897,839	\$173,840	\$0	\$9,841,551
7	TWIN RIVERS	\$776,868	\$5,751,341	\$2,633,629	\$155,720	\$0	\$9,317,558
7	DUETTE	\$597,704	\$5,823,074	\$3,992,363	\$204,200	\$0	\$10,617,341
7	SANDY CREEK	\$1,297,098	\$5,775,539	\$2,528,439	\$160,830	\$0	\$9,761,906
7	CHARLIE CREEK	\$1,073,899	\$6,077,484	\$2,661,540	\$210,470	\$0	\$10,023,393
8	Total:	\$9,209,895	\$56,005,539	\$27,803,867	\$1,650,580	\$0	\$94,669,881

Notes: