



Stephanie A. Cuello
SENIOR COUNSEL

June 30, 2025

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. 20250007-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 May 2025, 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. 20250007-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 June, 2025.

/s/ Stephanie A. Cuello

Attorney

Adria Harper / Jacob Imig / Carlos Marquez 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 cmarquez@psc.state.fl.us 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 Jon C. Moyle, Jr. Moyle Law Firm, P.A. FIPUG 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com Maria Jose Moncada / Joel T. Baker Florida Power & Light Company 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 maria.moncada@fpl.com joel.baker@fpl.com Kenneth A. Hoffman Florida Power & Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 ken.hoffman@fpl.com	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 Paula K. Brown Tampa Electric Company Regulatory Affairs P.O. Box 111 Tampa, FL 33601 regdept@tecoenergy.com 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 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
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Duke Energy Florida, LLC
Actual Data for Solar Generation Facilities
Solar Base Rate Adjustment (SoBRA) Reporting
May, 2025

		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	4,567.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	4,185.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,921.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,752.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,695.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,788.1	0.2	0.1	0.2	0.3	0.1	0.0	0.1	0.0	0.1
7	7	4,000.6	12.1	3.2	11.9	11.9	3.4	10.7	10.2	11.1	7.0
8	8	4,180.5	37.2	11.4	37.4	31.6	12.9	34.8	31.4	35.5	29.0
9	9	4,564.5	51.9	15.3	52.4	40.8	25.1	49.3	45.7	47.2	41.2
10	10	5,008.8	56.6	17.2	57.6	45.5	36.4	56.5	52.2	51.8	48.9
11	11	5,432.8	60.7	18.4	60.7	48.8	45.1	59.5	57.0	54.3	51.9
12	12	6,009.5	60.6	19.0	59.8	45.4	47.7	55.1	58.1	55.4	56.5
13	13	6,548.8	61.2	18.7	57.5	46.9	45.1	55.3	59.1	56.0	54.6
14	14	7,016.9	57.6	18.0	56.7	44.8	42.3	51.1	54.3	53.9	55.4
15	15	7,374.7	52.0	16.1	55.9	45.2	37.5	51.9	48.8	49.4	56.4
16	16	7,647.6	49.9	14.2	55.6	42.1	31.0	47.8	46.7	47.0	50.9
17	17	7,818.2	42.5	11.8	47.6	37.0	19.9	41.0	39.1	42.3	45.5
18	18	7,869.4	33.3	7.0	34.6	26.5	8.2	27.9	30.0	30.7	38.5
19	19	7,674.4	12.6	1.6	11.4	10.6	1.6	9.8	11.5	7.5	15.6
20	20	7,298.3	0.3	0.0	0.1	0.1	0.0	0.2	0.3	0.1	0.6
21	21	6,951.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	6,521.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	5,881.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	5,170.0	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:
May, 2025

	Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
1	HAMILTON	74.9	18,256	32.8%	0.4%	4,270,335
1	LAKE PLACID	45.0	5,330	15.9%	0.1%	
1	TRENTON	74.9	18,584	33.3%	0.4%	
1	COLUMBIA	74.9	14,801	26.6%	0.3%	
1	DEBARY	74.5	11,050	19.9%	0.3%	
1	SANTA FE	74.9	17,083	30.7%	0.4%	
1	TWIN RIVERS	74.9	16,868	30.3%	0.4%	
1	DUETTE	74.5	16,812	30.3%	0.4%	
1	SANDY CREEK	74.9	17,112	30.7%	0.4%	
1	CHARLIE CREEK	74.9	17,987	32.3%	0.4%	
2	Total:	718.3	153,883.0	28.8%	3.6%	

	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	140,177	\$3.45	3,281	\$95.44	928	\$63.69
3	LAKE PLACID	40,926	\$3.45	958	\$95.44	271	\$63.69
3	TRENTON	142,696	\$3.45	3,340	\$95.44	945	\$63.69
3	COLUMBIA	113,648	\$3.45	2,660	\$95.44	752	\$63.69
3	DEBARY	84,846	\$3.45	1,986	\$95.44	562	\$63.69
3	SANTA FE	131,170	\$3.45	3,070	\$95.44	868	\$63.69
3	TWIN RIVERS	129,519	\$3.45	3,032	\$95.44	857	\$63.69
3	DUETTE	129,089	\$3.45	3,021	\$95.44	855	\$63.69
3	SANDY CREEK	131,393	\$3.45	3,075	\$95.44	870	\$63.69
3	CHARLIE CREEK	138,112	\$3.45	3,233	\$95.44	914	\$63.69
4	Total:	1,181,577	\$4,080,235	27,656	\$2,639,571	7,823	\$498,231

	Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
5	HAMILTON	11,909	16	3	0
5	LAKE PLACID	3,477	5	1	0
5	TRENTON	12,123	16	3	0
5	COLUMBIA	9,655	13	2	0
5	DEBARY	7,208	10	2	0
5	SANTA FE	11,144	15	3	0
5	TWIN RIVERS	11,003	15	3	0
5	DUETTE	10,967	15	3	0
5	SANDY CREEK	11,163	15	3	0
5	CHARLIE CREEK	11,733	16	3	0
6	Total:	100,381	133	24	1

	Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
7	HAMILTON	121,390	\$591,280	\$262,650	\$16,388	\$0	\$870,318
7	LAKE PLACID	87,709	\$270,039	\$120,477	\$8,683	\$0	\$399,199
7	TRENTON	(224,708)	\$544,527	\$233,039	\$17,550	\$0	\$795,117
7	COLUMBIA	76,252	\$600,063	\$248,293	\$17,645	\$0	\$866,001
7	DEBARY	(24,134)	\$495,570	\$205,075	\$14,286	\$0	\$714,931
7	SANTA FE	37,155	\$612,703	\$244,502	\$17,384	\$0	\$874,589
7	TWIN RIVERS	95,837	\$563,008	\$224,830	\$15,572	\$0	\$803,410
7	DUETTE	52,559	\$558,906	\$340,874	\$20,420	\$0	\$920,200
7	SANDY CREEK	647,302	\$556,765	\$362,181	\$16,083	\$0	\$935,029
7	CHARLIE CREEK	130,456	\$588,620	\$226,402	\$21,047	\$0	\$836,069
8	Total:	\$999,818	\$5,381,483	\$2,468,322	\$165,058	\$0	\$8,014,863

Notes: Debary material correction, Trenton lease journal entry

Duke Energy Florida, LLC
Actual Data for Solar Generation Facilities
Solar Base Rate Adjustment (SoBRA) Reporting
YEAR-TO-DATE THROUGH:
May, 2025

	Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
1	HAMILTON	74.9	77,770	28.7%	0.5%	17,056,008
1	LAKE PLACID	45.0	26,543	16.3%	0.2%	
1	TRENTON	74.9	74,978	27.6%	0.4%	
1	COLUMBIA	74.9	68,199	25.1%	0.4%	
1	DEBARY	74.5	53,257	19.7%	0.3%	
1	SANTA FE	74.9	68,906	25.4%	0.4%	
1	TWIN RIVERS	74.9	70,984	26.2%	0.4%	
1	DUETTE	74.5	73,952	27.4%	0.4%	
1	SANDY CREEK	74.9	69,511	25.6%	0.4%	
1	CHARLIE CREEK	74.9	75,763	27.9%	0.4%	
2	Total:	718.3	659,863	25.3%	3.9%	

	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	560,739	\$4.13	5,449	\$97.74	2,905	\$61.60
3	LAKE PLACID	191,935	\$4.13	1,718	\$97.78	958	\$61.36
3	TRENTON	544,124	\$4.08	5,421	\$97.44	2,829	\$61.50
3	COLUMBIA	492,088	\$4.13	4,621	\$97.79	2,533	\$61.47
3	DEBARY	381,636	\$4.20	3,390	\$98.12	1,866	\$61.79
3	SANTA FE	498,673	\$4.10	5,002	\$97.54	2,620	\$61.55
3	TWIN RIVERS	512,549	\$4.11	5,082	\$97.68	2,703	\$61.50
3	DUETTE	534,855	\$4.12	5,047	\$97.65	2,699	\$61.54
3	SANDY CREEK	502,803	\$4.11	4,980	\$97.57	2,602	\$61.60
3	CHARLIE CREEK	549,518	\$4.11	5,235	\$97.49	2,737	\$61.57
4	Total:	4,768,921	\$19,653,915	45,943	\$4,487,688	24,453	\$1,504,994

	Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
5	HAMILTON	42,455	32	6	0
5	LAKE PLACID	14,391	11	2	0
5	TRENTON	41,278	32	6	0
5	COLUMBIA	37,149	28	5	0
5	DEBARY	28,522	21	4	0
5	SANTA FE	37,901	30	5	0
5	TWIN RIVERS	38,950	30	5	0
5	DUETTE	40,278	30	5	0
5	SANDY CREEK	38,107	30	5	0
5	CHARLIE CREEK	41,333	31	6	0
6	Total:	360,364	275	50	2

	Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
7	HAMILTON	679,472	\$2,977,398	\$1,304,287	\$81,940	\$0	\$4,363,625
7	LAKE PLACID	442,968	\$1,365,614	\$630,692	\$43,415	\$0	\$2,039,721
7	TRENTON	772,673	\$2,744,084	\$1,169,288	\$87,750	\$0	\$4,001,123
7	COLUMBIA	440,968	\$3,018,427	\$1,230,718	\$88,225	\$0	\$4,337,370
7	DEBARY	282,047	\$2,472,338	\$1,012,977	\$71,430	\$0	\$3,556,746
7	SANTA FE	178,076	\$3,081,018	\$1,212,497	\$86,920	\$0	\$4,380,435
7	TWIN RIVERS	537,512	\$2,831,337	\$1,115,535	\$77,860	\$0	\$4,024,732
7	DUETTE	253,498	\$2,820,598	\$1,808,333	\$102,100	\$0	\$4,731,031
7	SANDY CREEK	1,383,317	\$2,836,563	\$1,228,088	\$80,415	\$0	\$4,145,066
7	CHARLIE CREEK	582,730	\$2,986,373	\$1,137,787	\$105,235	\$0	\$4,229,394
8		\$5,553,261.00	\$27,133,750	\$11,850,202	\$825,290	\$0	\$39,809,243

Notes: