



Stephanie A. Cuello  
SENIOR COUNSEL

January 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 December 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. 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 January, 2025.

/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 <a href="mailto:aharper@psc.state.fl.us">aharper@psc.state.fl.us</a> <a href="mailto:jimig@psc.state.fl.us">jimig@psc.state.fl.us</a> <a href="mailto:sfarooqi@psc.state.fl.us">sfarooqi@psc.state.fl.us</a></p> <p>J. Wahlen / M. Means / V. Ponder Ausley McMullen Tampa Electric Company P.O. Box 391 Tallahassee, FL 32302 <a href="mailto:jwahlen@ausley.com">jwahlen@ausley.com</a> <a href="mailto:mmeans@ausley.com">mmeans@ausley.com</a> <a href="mailto:vponder@ausley.com">vponder@ausley.com</a></p> <p>Jon C. Moyle, Jr. Moyle Law Firm, P.A. FIPUG 118 North Gadsden Street Tallahassee, FL 32301 <a href="mailto:jmoyle@moylelaw.com">jmoyle@moylelaw.com</a></p> <p>Maria Jose Moncada / Joel T. Baker Florida Power &amp; Light Company 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 <a href="mailto:maria.moncada@fpl.com">maria.moncada@fpl.com</a> <a href="mailto:joel.baker@fpl.com">joel.baker@fpl.com</a></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 <a href="mailto:Trierweiler.walt@leg.state.fl.us">Trierweiler.walt@leg.state.fl.us</a> <a href="mailto:christensen.patty@leg.state.fl.us">christensen.patty@leg.state.fl.us</a> <a href="mailto:rehwinkel.charles@leg.state.fl.us">rehwinkel.charles@leg.state.fl.us</a> <a href="mailto:wessling.mary@leg.state.fl.us">wessling.mary@leg.state.fl.us</a> <a href="mailto:ponce.octavio@leg.state.fl.us">ponce.octavio@leg.state.fl.us</a> <a href="mailto:watrous.austin@leg.state.fl.us">watrous.austin@leg.state.fl.us</a></p> <p>Paula K. Brown Tampa Electric Company Regulatory Affairs P.O. Box 111 Tampa, FL 33601 <a href="mailto:regdept@tecoenergy.com">regdept@tecoenergy.com</a></p> <p>Kenneth A. Hoffman Florida Power &amp; Light Company 134 W. Jefferson Street Tallahassee, FL 32301-1713 <a href="mailto:ken.hoffman@fpl.com">ken.hoffman@fpl.com</a></p> <p>James W. Brew / Laura Wynn Baker / Sarah B. Newman Stone Mattheis Xenopoulos &amp; Brew, P.C. PCS Phosphate – White Springs 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, DC 20007 <a href="mailto:jbrew@smxblaw.com">jbrew@smxblaw.com</a> <a href="mailto:lwb@smxblaw.com">lwb@smxblaw.com</a> <a href="mailto:sbn@smxblaw.com">sbn@smxblaw.com</a></p> <p>Peter J. Mattheis / Michael K. Lavanga / Joseph R. Briscar Stone Mattheis Xenopoulos &amp; Brew, PC NUCOR 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, DC 20007 <a href="mailto:pjm@smxblaw.com">pjm@smxblaw.com</a> <a href="mailto:mkl@smxblaw.com">mkl@smxblaw.com</a> <a href="mailto:jrb@smxblaw.com">jrb@smxblaw.com</a></p>
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Duke Energy Florida, LLC  
 Actual Data for Solar Generation Facilities  
 Solar Base Rate Adjustment (SoBRA) Reporting  
December, 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	3,547.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
2	2	3,376.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
3	3	3,297.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4	4	3,293.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	5	3,402.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
6	6	3,654.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7	7	4,062.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
8	8	4,398.4	1.6	0.5	1.9	2.2	1.9	1.6	1.4	2.7	0.4	3.4
9	9	4,417.2	21.0	4.3	17.1	16.6	12.6	15.4	19.4	25.3	8.3	25.1
10	10	4,299.0	36.1	7.2	29.7	28.8	27.9	28.7	33.3	41.0	17.5	36.9
11	11	4,159.9	40.4	7.5	35.9	34.3	38.4	33.5	37.5	42.6	21.7	39.6
12	12	4,078.3	41.9	8.4	38.9	37.4	43.0	36.1	38.9	40.8	24.4	40.0
13	13	4,067.3	43.5	8.3	39.3	35.6	46.1	34.4	39.6	40.1	24.2	38.4
14	14	4,078.2	44.0	8.6	37.8	33.2	43.0	32.6	40.6	40.7	24.0	36.6
15	15	4,132.1	41.1	9.0	37.4	32.9	34.6	33.7	38.1	41.7	22.8	35.6
16	16	4,268.9	36.1	8.2	35.5	30.2	23.0	31.9	33.2	38.9	21.2	29.5
17	17	4,453.4	20.7	3.9	20.2	17.9	9.4	17.5	19.6	20.1	16.0	16.2
18	18	4,765.7	1.3	0.2	1.2	1.4	0.6	1.1	1.3	1.4	2.2	1.0
19	19	4,956.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	20	4,864.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	4,693.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	4,455.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	4,153.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	3,780.8	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:  
**December, 2024**

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	10,162	18.2%	0.3%	3,077,697
LAKE PLACID	45.0	2,048	6.1%	0.1%	
TRENTON	74.9	9,141	16.4%	0.3%	
COLUMBIA	74.9	8,385	15.0%	0.3%	
DEBARY	74.5	8,699	15.7%	0.3%	
SANTA FE	74.9	8,261	14.8%	0.3%	
TWIN RIVERS	74.9	9,391	16.9%	0.3%	
DUETTE	74.5	10,399	18.8%	0.3%	
SANDY CREEK	74.9	5,661	10.2%	0.2%	
CHARLIE CREEK	74.9	9,366	16.8%	0.3%	
<b>Total:</b>	<b>718.3</b>	<b>81,513.0</b>	<b>15.3%</b>	<b>2.6%</b>	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	72,079	\$3.31	0	\$100.54	492	\$56.18
LAKE PLACID	14,526	\$3.31	0	\$100.54	99	\$56.18
TRENTON	64,837	\$3.31	0	\$100.54	442	\$56.18
COLUMBIA	59,474	\$3.31	0	\$100.54	406	\$56.18
DEBARY	61,702	\$3.31	0	\$100.54	421	\$56.18
SANTA FE	58,595	\$3.31	0	\$100.54	400	\$56.18
TWIN RIVERS	66,610	\$3.31	0	\$100.54	455	\$56.18
DUETTE	73,760	\$3.31	0	\$100.54	503	\$56.18
SANDY CREEK	40,153	\$3.31	0	\$100.54	274	\$56.18
CHARLIE CREEK	66,433	\$3.31	0	\$100.54	453	\$56.18
<b>Total:</b>	<b>578,168</b>	<b>\$1,912,596</b>	<b>0</b>	<b>\$0</b>	<b>3,945</b>	<b>\$221,633</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	5,367	1	0	0
LAKE PLACID	1,082	0	0	0
TRENTON	4,828	1	0	0
COLUMBIA	4,429	1	0	0
DEBARY	4,595	1	0	0
SANTA FE	4,363	1	0	0
TWIN RIVERS	4,960	1	0	0
DUETTE	5,492	1	0	0
SANDY CREEK	2,990	1	0	0
CHARLIE CREEK	4,947	1	0	0
<b>Total:</b>	<b>43,053</b>	<b>11</b>	<b>4</b>	<b>0</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$81,172	\$593,209	\$314,207	\$16,388	\$0	\$1,004,976
LAKE PLACID	\$128,744	\$303,969	\$171,869	\$8,683	\$0	\$613,265
TRENTON	(\$38,929)	\$546,290	\$280,971	\$17,550	\$0	\$805,883
COLUMBIA	\$74,827	\$600,769	\$297,163	\$17,645	\$0	\$990,403
DEBARY	\$38,079	\$498,850	\$246,298	\$14,286	\$0	\$797,514
SANTA FE	\$23,198	\$612,771	\$289,784	\$17,384	\$0	\$943,137
TWIN RIVERS	\$66,930	\$563,118	\$263,446	\$15,572	\$0	\$909,066
DUETTE	\$42,202	\$563,982	\$406,673	\$20,420	\$0	\$1,033,277
SANDY CREEK	\$144,163	\$565,767	\$252,823	\$16,083	\$0	\$978,836
CHARLIE CREEK	\$104,521	\$595,180	\$266,154	\$21,047	\$0	\$986,902
<b>Total:</b>	<b>\$664,907</b>	<b>\$5,443,905</b>	<b>\$2,789,388</b>	<b>\$165,058</b>	<b>\$0</b>	<b>\$9,063,259</b>

Notes: Trenton Lease Adjustment

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	151,647	23.0%	0.3%	44,797,859
LAKE PLACID	45.0	70,918	17.9%	0.2%	
TRENTON	74.9	145,077	22.1%	0.3%	
COLUMBIA	74.9	149,305	22.7%	0.3%	
DEBARY	74.5	117,531	18.0%	0.3%	
SANTA FE	74.9	146,638	22.3%	0.3%	
TWIN RIVERS	74.9	156,560	23.8%	0.3%	
DUETTE	74.5	155,765	23.8%	0.3%	
SANDY CREEK	74.9	153,716	23.4%	0.3%	
CHARLIE CREEK	74.9	149,224	22.7%	0.3%	
<b>Total:</b>	<b>718.3</b>	<b>1,396,381</b>	<b>22.1%</b>	<b>3.1%</b>	

Facility	Natural Gas Displaced (MCF)	Cost of NG (\$/MCF)	Oil Displaced (Bbls)	Cost of Oil (\$/Bbl)	Coal Displaced (Tons)	Cost of Coal (\$/Ton)
HAMILTON	1,123,256	\$2.64	15,435	\$107.10	7,853	\$46.63
LAKE PLACID	520,456	\$2.63	7,631	\$107.62	4,212	\$46.64
TRENTON	1,076,520	\$2.66	15,523	\$107.54	7,834	\$47.52
COLUMBIA	1,097,660	\$2.69	15,928	\$107.50	8,173	\$47.54
DEBARY	867,271	\$2.65	11,259	\$107.15	6,125	\$46.80
SANTA FE	1,083,529	\$2.67	15,615	\$107.35	8,092	\$47.29
TWIN RIVERS	1,157,538	\$2.68	16,260	\$107.27	8,583	\$47.34
DUETTE	1,147,237	\$2.70	16,646	\$107.18	8,632	\$47.34
SANDY CREEK	1,129,750	\$2.68	16,782	\$107.60	8,889	\$47.14
CHARLIE CREEK	1,099,597	\$2.68	15,931	\$107.57	8,315	\$47.32
<b>Total:</b>	<b>10,302,813</b>	<b>\$27,482,858</b>	<b>147,010</b>	<b>\$15,787,183</b>	<b>76,707</b>	<b>\$3,617,301</b>

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	91,260	92	19	1
LAKE PLACID	43,671	45	10	0
TRENTON	88,425	91	19	1
COLUMBIA	90,583	94	20	1
DEBARY	70,284	68	15	1
SANTA FE	89,417	92	20	1
TWIN RIVERS	95,204	97	21	1
DUETTE	94,856	98	21	1
SANDY CREEK	94,379	99	22	1
CHARLIE CREEK	90,990	94	20	1
<b>Total:</b>	<b>849,069</b>	<b>870</b>	<b>187</b>	<b>7</b>

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$1,553,769	\$7,258,271	\$3,765,289	\$196,656	\$0	\$12,773,985
LAKE PLACID	\$1,360,769	\$4,063,518	\$2,061,361	\$104,196	\$0	\$7,589,844
TRENTON	\$1,221,296	\$6,673,188	\$3,367,187	\$210,600	\$0	\$11,472,271
COLUMBIA	\$1,003,881	\$7,348,297	\$3,565,779	\$211,740	\$0	\$12,129,698
DEBARY	\$623,518	\$6,098,467	\$2,950,483	\$171,432	\$0	\$9,843,900
SANTA FE	\$568,741	\$7,489,623	\$3,477,407	\$208,608	\$0	\$11,744,379
TWIN RIVERS	\$923,230	\$6,879,454	\$3,160,514	\$186,864	\$0	\$11,150,063
DUETTE	\$696,345	\$6,953,910	\$4,805,656	\$245,040	\$0	\$12,700,951
SANDY CREEK	\$1,556,612	\$6,908,883	\$3,034,084	\$192,996	\$0	\$11,692,575
CHARLIE CREEK	\$1,249,241	\$7,269,778	\$3,193,848	\$252,564	\$0	\$11,965,431
<b>Total:</b>	<b>\$10,757,402</b>	<b>\$66,943,389</b>	<b>\$33,381,609</b>	<b>\$1,980,696</b>	<b>\$0</b>	<b>\$113,063,096</b>

Notes: Trenton Lease Adjustment