



Stephanie A. Cuello
SENIOR COUNSEL

February 29, 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 January 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 29th day of February, 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. 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 c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 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
January, 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	3,667.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	2	3,542.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	3	3,486.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	4	3,492.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	5	3,590.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	6	3,893.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	7	4,380.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	8	4,783.6	0.3	0.3	0.2	0.4	0.5	0.3	0.2	0.5	0.1
9	9	4,882.8	7.4	2.9	4.1	7.0	4.6	5.3	6.3	5.5	5.4
10	10	4,752.0	16.5	5.5	8.1	14.6	10.9	12.3	14.2	11.9	15.2
11	11	4,568.7	19.7	7.0	9.3	16.8	16.2	13.6	16.7	14.2	18.6
12	12	4,406.4	19.7	7.7	9.3	17.4	18.5	13.7	17.0	17.4	19.4
13	13	4,297.5	18.8	8.2	9.3	17.0	20.3	13.6	16.2	18.0	19.1
14	14	4,236.9	18.3	8.3	9.4	16.8	19.6	13.6	15.6	17.2	18.6
15	15	4,244.4	18.4	7.5	9.6	16.0	15.6	13.2	15.6	16.2	18.9
16	16	4,309.9	16.9	6.4	8.7	14.0	11.8	12.0	14.5	13.8	17.5
17	17	4,445.2	11.7	3.4	6.1	9.3	6.1	8.0	10.4	9.0	13.2
18	18	4,712.5	2.1	0.6	1.1	2.0	1.0	1.7	1.9	1.7	3.5
19	19	5,023.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	20	4,989.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	21	4,838.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	22	4,591.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	23	4,262.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	24	3,911.7	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:
January, 2024

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	9,133	16.4%	0.3%	3,131,665
LAKE PLACID	45.0	3,527	10.5%	0.1%	
TRENTON	74.9	4,593	8.2%	0.1%	
COLUMBIA	74.9	8,010	14.4%	0.3%	
DEBARY	74.5	7,628	13.8%	0.2%	
SANTA FE	74.9	6,541	11.7%	0.2%	
TWIN RIVERS	74.9	7,835	14.1%	0.3%	
DUETTE	74.5	7,657	13.8%	0.2%	
SANDY CREEK	74.9	9,111	16.3%	0.3%	
CHARLIE CREEK	74.9	7,245	13.0%	0.2%	
Total:	718.3	71,280.0	13.3%	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	54,042	\$4.36	0	\$119.19	627	\$45.69
LAKE PLACID	20,870	\$4.36	0	\$119.19	242	\$45.69
TRENTON	27,178	\$4.36	0	\$119.19	315	\$45.69
COLUMBIA	47,397	\$4.36	0	\$119.19	550	\$45.69
DEBARY	45,136	\$4.36	0	\$119.19	524	\$45.69
SANTA FE	38,704	\$4.36	0	\$119.19	449	\$45.69
TWIN RIVERS	46,361	\$4.36	0	\$119.19	538	\$45.69
DUETTE	45,308	\$4.36	0	\$119.19	526	\$45.69
SANDY CREEK	53,912	\$4.36	0	\$119.19	626	\$45.69
CHARLIE CREEK	42,870	\$4.36	0	\$119.19	498	\$45.69
Total:	421,778	\$1,837,012	0	\$0	4,895	\$223,667

Facility	CO2 Reductions (Tons)	NOx Reduction (Tons)	SO2 Reduction (Tons)	Hg Reduction (lbs)
HAMILTON	4,551	1	1	0
LAKE PLACID	1,758	0	0	0
TRENTON	2,289	1	0	0
COLUMBIA	3,992	1	1	0
DEBARY	3,801	1	1	0
SANTA FE	3,260	1	1	0
TWIN RIVERS	3,904	1	1	0
DUETTE	3,816	1	1	0
SANDY CREEK	4,540	1	1	0
CHARLIE CREEK	3,610	1	1	0
Total:	35,521	8	7	0

Facility	O&M (\$)	Carrying Costs (\$)	Capital (\$)	Other (\$)	Fuel Costs (\$)	Total Cost of Generation (\$)
HAMILTON	\$113,519	\$620,628	\$313,656	\$16,388	\$0	\$1,064,191
LAKE PLACID	\$100,791	\$338,722	\$171,436	\$8,683	\$0	\$619,632
TRENTON	\$141,411	\$552,816	\$280,514	\$17,550	\$0	\$992,291
COLUMBIA	\$77,064	\$627,772	\$297,137	\$17,645	\$0	\$1,019,618
DEBARY	\$24,347	\$504,894	\$245,835	\$14,286	\$0	\$789,362
SANTA FE	\$73,478	\$630,772	\$289,784	\$17,384	\$0	\$1,011,418
TWIN RIVERS	\$95,898	\$579,230	\$263,364	\$15,572	\$0	\$954,065
DUETTE	\$49,442	\$545,894	\$211,274	\$20,420	\$0	\$827,030
SANDY CREEK	\$126,765	\$471,079	\$253,046	\$16,083	\$0	\$866,973
CHARLIE CREEK	\$381,958	\$494,077	\$266,154	\$21,047	\$0	\$1,163,236
Total:	\$1,184,673	\$5,365,884	\$2,592,200	\$165,058	\$0	\$9,307,815

Notes:

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

Facility	Net Capability (MW)	Net Generation (MWh)	Capacity Factor (%)	Percent of Total Generation (%)	Total System Net Generation (MWh)
HAMILTON	74.9	9,133	16.4%	0.3%	3,131,665
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