



**Matthew R. Bernier**  
Associate General Counsel  
Duke Energy Florida, LLC.

March 15, 2019

**VIA ELECTRONIC FILING**

Mr. Adam Teitzman, Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

Re: *Fuel and purchased power cost recovery clause with generating performance incentive factor; Docket No. 20190001-EI*

Dear Mr. Teitzman:

On behalf of Duke Energy Florida, LLC (“DEF”), please find enclosed for electronic filing in the above referenced docket”

- DEF’s Generating Performance Incentive Factor (“GPIF”) True-Up Petition for the period ending December 2018; and
- Direct Testimony of J. Bradley Daniel with Exhibit No. (JBD-1T).

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Respectfully,

*s/Matthew R. Bernier*

Matthew R. Bernier

MRB/mw  
Enclosures

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

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In Re: Fuel and Purchased Power Cost  
Recovery Clause with Generating  
Performance Incentive Factor

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Docket No. 20190001-EI

Filed: March 15, 2019

**PETITION FOR APPROVAL OF GPIF RESULTS  
FOR THE PERIOD ENDING DECEMBER 2018**

Duke Energy Florida, LLC (“DEF”) hereby petitions this Commission for approval of its Generating Performance Incentive Factor (“GPIF”) results for the period ending December 2018. In support of this Petition, DEF states as follows:

1. DEF is a public utility subject to the jurisdiction of the Commission under Chapter 366, Florida Statutes. DEF's General Offices are located at 299 First Avenue North, St. Petersburg, FL 33701.

2. All notices, pleadings and other communications required to be served on the petitioner should be directed to:

Dianne M. Triplett  
299 First Avenue North  
St. Petersburg, FL, 33701  
[Dianne.triplett@duke-energy.com](mailto:Dianne.triplett@duke-energy.com)

Matthew R. Bernier  
106 East College Avenue  
Suite 800  
Tallahassee, FL 32301  
[Matthew.bernier@duke-energy.com](mailto:Matthew.bernier@duke-energy.com)

3. By Order No. PSC-2018-0028-FOF-EI, dated January 08, 2018, the Commission approved DEF’s GPIF Targets for the period January 2018 through December 2018. The application of the GPIF formula to DEF’s performance during that period produces a reward of \$2,591,697. Matters relating to the GPIF are contained in

the prepared direct testimony of DEF witness J. Bradley Daniel which is being filed with and incorporated in this Petition.

WHEREFORE, DEF respectfully requests the Commission to approve this Petition and include the aforementioned amount in the calculation of the Fuel and Purchased Power Cost Recovery (“FCR”) Factor for the period beginning January 2019.

Respectfully submitted,

*s/Matthew R. Bernier*

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**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 15<sup>th</sup> day of March, 2019.

*s/Matthew R. Bernier*

Attorney

<p>Suzanne Brownless / Johana Nieves Office of General Counsel FL Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 <a href="mailto:sbrownle@psc.state.fl.us">sbrownle@psc.state.fl.us</a> <a href="mailto:jnieves@psc.state.fl.us">jnieves@psc.state.fl.us</a></p> <p>James Beasley / J. Jeffrey Wahlen Ausley McMullen P.O. Box 391 Tallahassee, FL 32302 <a href="mailto:jbeasley@ausley.com">jbeasley@ausley.com</a> <a href="mailto:jwahlen@ausley.com">jwahlen@ausley.com</a></p> <p>Steven Griffin Beggs &amp; Lane P.O. Box 12950 Pensacola, FL 32591 <a href="mailto:srg@beggslane.com">srg@beggslane.com</a></p> <p>Russell A. Badders Gulf Power Company One Energy Place Pensacola, FL 32520 <a href="mailto:russell.badders@nexteraenergy.com">russell.badders@nexteraenergy.com</a></p> <p>Holly Henderson Gulf Power Company 215 S. Monroe St., Ste. 618 Tallahassee, FL 32301 <a href="mailto:holly_henderson@nexteraenergy.com">holly_henderson@nexteraenergy.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>Jon C. Moyle, Jr. Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, FL 32301 <a href="mailto:jmoyle@moylelaw.com">jmoyle@moylelaw.com</a>; <a href="mailto:mqualls@moylelaw.com">mqualls@moylelaw.com</a></p> <p>Beth Keating Gunster, Yoakley &amp; Stewart, P.A. 215 South Monroe Street, Suite 601 Tallahassee, FL 32301 <a href="mailto:bkeating@gunster.com">bkeating@gunster.com</a></p>	<p>J.R. Kelly / P. Christensen / T. David / S. Morse Office of Public Counsel 111 W. Madison St., Room 812 Tallahassee, FL 32399-1400 <a href="mailto:kelly.jr@leg.state.fl.us">kelly.jr@leg.state.fl.us</a> <a href="mailto:christensen.patty@leg.state.fl.us">christensen.patty@leg.state.fl.us</a> <a href="mailto:david.tad@leg.state.fl.us">david.tad@leg.state.fl.us</a> <a href="mailto:morse.stephanie@leg.state.fl.us">morse.stephanie@leg.state.fl.us</a></p> <p>Ms. Paula K. Brown Regulatory Affairs Tampa Electric Company P.O. Box 111 Tampa, FL 33601-0111 <a href="mailto:regdept@tecoenergy.com">regdept@tecoenergy.com</a></p> <p>Maria Moncada / Joel Baker Florida Power &amp; Light Company 700 Universe Blvd. (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>James Brew / Laura Wynn Stone Law Firm 1025 Thomas Jefferson St., N.W. Suite 800 West Washington, DC 20007 <a href="mailto:jbrew@smxblaw.com">jbrew@smxblaw.com</a> <a href="mailto:law@smxblaw.com">law@smxblaw.com</a></p> <p>Robert Scheffel Wright / John T. LaVia, III c/o Gardner Law Firm 1300 Thomaswood Drive Tallahassee, FL 32308 <a href="mailto:schef@gbwlegal.com">schef@gbwlegal.com</a> <a href="mailto:jlavia@gbwlegal.com">jlavia@gbwlegal.com</a></p> <p><u>Mike Cassel</u> Florida Public Utilities Company 1750 S. 14<sup>th</sup> Street, Suite 200 Fernandina Beach, FL 32034 <a href="mailto:mcassel@fpuc.com">mcassel@fpuc.com</a></p>
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**DUKE ENERGY FLORIDA, LLC**

**DOCKET No. 20190001-EI**

**GPIF Schedules for  
January through December 2018**

**DIRECT TESTIMONY OF  
JAMES BRADLEY DANIEL**

**March 15, 2019**

1 **Q. Please state your name and business address.**

2 A. My name is J. Bradley Daniel. My business address is 526 South Church  
3 Street, Charlotte, North Carolina 28202.

4

5 **Q. By whom are you employed and in what capacity?**

6 A. I am employed by Duke Energy Carolinas, LLC (“DEC”) as Manager of  
7 Fuels and Fleet Analytics for Fuels and Systems Optimization.

8

9 **Q. Describe your responsibilities as Manager of Fuels and Fleet Analytics.**

10 A. As Manager of Fuels and Fleet Analytics for Fuels and Systems  
11 Optimization, I oversee the analysis and modeling of energy portfolios for  
12 Duke Energy Corporation’s regulated utility subsidiaries, including Duke  
13 Energy Florida, LLC (“DEF” or “Company”), as well as DEC, Duke Energy  
14 Progress, LLC, Duke Energy Indiana LLC, and Duke Energy Kentucky, Inc.

1 My responsibilities include oversight of planning and coordination associated  
2 with economic system operations, including production cost modeling,  
3 outage coordination, dispatch pricing, fuel burn forecasting, position  
4 analysis, and commodities analytics.

5  
6 **Q. What is the purpose of your testimony?**

7 A. The purpose of my testimony is to describe the calculation of DEF's  
8 Generating Performance Incentive Factor ("GPIF") reward/(penalty) amount  
9 for the period of January through December 2018. This calculation was  
10 based on a comparison of the actual performance of DEF's Seven (7) GPIF  
11 generating units for this period against the approved targets set for these  
12 units prior to the actual performance period.

13  
14 **Q. Do you have an exhibit to your testimony in this proceeding?**

15 A. Yes, I am sponsoring Exhibit No. \_\_\_\_\_ (JBD-1T), which consists of the  
16 schedules required by the GPIF Implementation Manual to support the  
17 development of the incentive amount. This 24-page exhibit is attached to  
18 my prepared testimony and includes as its first page an index to the contents  
19 of the exhibit.

20  
21 **Q. What GPIF incentive amount has been calculated for this period?**

22 A. DEF's calculated GPIF incentive amount is a reward of \$2,591,697. This  
23 amount was developed in a manner consistent with the GPIF  
24 Implementation Manual. Page 2 of my exhibit shows the system GPIF points  
25 and the corresponding reward/(penalty). The summary of weighted

1 incentive points earned by each individual unit can be found on page 4 of  
2 my exhibit.

3

4 **Q. How were the incentive points for equivalent availability and heat rate**  
5 **calculated for the individual GPIF units?**

6 A. The calculation of incentive points was made by comparing the adjusted  
7 actual performance data for equivalent availability and heat rate to the target  
8 performance indicators for each unit. This comparison is shown on each  
9 unit's Generating Performance Incentive Points Table found on pages 9  
10 through 15 of my exhibit.

11

12 **Q. Why is it necessary to make adjustments to the actual performance**  
13 **data for comparison with the targets?**

14 A. Adjustments to the actual equivalent availability and heat rate data are  
15 necessary to allow their comparison with the "target" Point Tables exactly as  
16 approved by the Commission prior to the period. These adjustments are  
17 described in the Implementation Manual and are further explained by a Staff  
18 memorandum, dated October 23, 1981, directed to the GPIF utilities. The  
19 adjustments to actual equivalent availability primarily concern the  
20 differences between target and actual planned outage hours, and are shown  
21 on page 7 of my exhibit. The heat rate adjustments concern the differences  
22 between the target and actual Net Output Factor (NOF), and are shown on  
23 page 8. The methodology for both the equivalent availability and heat rate  
24 adjustments are explained in the Staff memorandum.

25

1

2 **Q. Have you provided the as-worked planned outage schedules for DEF's**  
3 **GPIF units to support your adjustments to actual equivalent**  
4 **availability?**

5 A. Yes. Page 23 of my exhibit summarizes the planned outages experienced  
6 by DEF's GPIF units during the period. Page 24 presents an as-worked  
7 schedule for each individual planned outage.

8

9 **Q. Does this conclude your testimony?**

10 A. Yes.



**GPIF REWARD/PENALTY SCHEDULES**

<b><u>Description</u></b>	<b><u>Sheet</u></b>
Index	1
Reward/Penalty Table (Actual)	2
Calculation of Maximum Incentive Dollars (Actual)	3
Calculation of System Actual GPIF Points	4
GPIF Unit Performance Summary	5
Actual Unit Performance Data	6
Adjustments to EAF Actual	7
Adjustments to ANOHR Actual	8
Generating Performance Incentive Points Table	9-15
Actual Unit Performance Data	16-22
Planned Outage Schedules (Actual)	23-24

GENERATING PERFORMANCE INCENTIVE FACTOR

REWARD/PENALTY TABLE

ACTUAL

Duke Energy Florida  
 January 2018 - December 2018

Generating Performance Incentive Points (GPIF)	Fuel Savings/Loss (\$)	Generating Performance Incentive Factor (\$)
10	\$ 52,390,839	\$ 19,678,791
9	\$ 47,151,755	\$ 17,710,912
8	\$ 41,912,671	\$ 15,743,033
7	\$ 36,673,587	\$ 13,775,154
6	\$ 31,434,503	\$ 11,807,275
5	\$ 26,195,420	\$ 9,839,395
4	\$ 20,956,336	\$ 7,871,516
3	\$ 15,717,252	\$ 5,903,637
2	\$ 10,478,168	\$ 3,935,758
**** 1.317	\$ 6,899,874	\$ 2,591,697
1	\$ 5,239,084	\$ 1,967,879
0	\$ -	\$ -
-1	\$ (6,858,577)	\$ (1,967,879)
-2	\$ (13,717,155)	\$ (3,935,758)
-3	\$ (20,575,732)	\$ (5,903,637)
-4	\$ (27,434,309)	\$ (7,871,516)
-5	\$ (34,292,887)	\$ (9,839,395)
-6	\$ (41,151,464)	\$ (11,807,275)
-7	\$ (48,010,041)	\$ (13,775,154)
-8	\$ (54,868,619)	\$ (15,743,033)
-9	\$ (61,727,196)	\$ (17,710,912)
-10	\$ (68,585,773)	\$ (19,678,791)

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## GENERATION PERFORMANCE INCENTIVE FACTOR

## CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS

Duke Energy Florida  
January 2018 - December 2018

1	Beginning of period balance of common equity	\$ 5,617,924,574	
	END OF MONTH BALANCE OF COMMON EQUITY:		
2	Month of JANUARY 2018	\$ 5,693,033,966	
3	Month of FEBRUARY 2018	\$ 5,706,953,234	
4	Month of MARCH 2018	\$ 5,722,953,578	
5	Month of APRIL 2018	\$ 5,753,601,801	
6	Month of MAY 2018	\$ 5,808,897,323	
7	Month of JUNE 2018	\$ 5,895,295,848	
8	Month of JULY 2018	\$ 5,974,359,096	
9	Month of AUGUST 2018	\$ 6,053,238,869	
10	Month of SEPTEMBER 2018	\$ 6,054,203,361	
11	Month of OCTOBER 2018	\$ 6,106,472,902	
12	Month of NOVEMBER 2018	\$ 6,135,962,175	
13	Month of DECEMBER 2018	\$ 6,098,448,855	
14	Average common equity for the period	\$ 5,893,949,660	
15	25 Basis Points	0.0025	
16	Revenue Expansion Factor	74.3902%	
17	Maximum allowed incentive dollars	\$ 19,807,540	
18	Jurisdictional Sales *	39,144,651 MWH	
19	Total Sales *	39,398,824 MWH	
20	Jurisdictional Separation Factor	99.3500%	
21	Maximum allowed jurisdictional incentive dollars	\$ 19,678,791	
22	Incentive Cap (50% of Projected Fuel Savings at 10 GPIF Point Level) From Sheet No. 6.101.1	\$ 26,195,420	
23	Maximum Allowed GPIF Reward (Lesser of Line 21 and Line 22)	\$ 19,678,791	
*	Net sales (Sales - Interruptible)		

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## GENERATION PERFORMANCE INCENTIVE FACTOR

## CALCULATION OF SYSTEM ACTUAL GPIF POINTS

Duke Energy Florida  
January 2018 - December 2018

<u>Plant/Unit</u>	<u>Performance Indicator EAF or ANOHR</u>	<u>Weighting Factor %</u>	<u>Unit Points</u>	<u>Weighted Unit Points</u>
Bartow CC	EAF	3.87	4.822	0.186
	ANOHR	24.53	-2.553	-0.626
Crystal River 4	EAF	2.86	-2.561	-0.073
	ANOHR	10.38	3.718	0.386
Crystal River 5	EAF	2.91	-7.758	-0.226
	ANOHR	12.72	0.000	0.000
Hines 1	EAF	0.48	-9.231	-0.044
	ANOHR	9.08	0.000	0.000
Hines 2	EAF	10.41	10.000	1.041
	ANOHR	3.72	0.000	0.000
Hines 3	EAF	0.98	10.000	0.098
	ANOHR	7.78	0.000	0.000
Hines 4	EAF	5.17	10.000	0.517
	ANOHR	5.11	1.127	0.058
GPIF System		100.00		1.317

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GENERATION PERFORMANCE INCENTIVE FACTOR  
 GPIF UNIT PERFORMANCE SUMMARY

Duke Energy Florida  
 January 2018 - December 2018

Plant/Unit	Weighting Factor (%)	EAF Target (%)	EAF RANGE		Max. Fuel Savings (\$000)	Max. Fuel Loss (\$000)	EAF Adjusted Actual (%)	Estimated
			Max. (%)	Min. (%)				Fuel Savings/ Loss (\$000)
Bartow CC	3.87	90.20	93.82	82.91	\$2,025	(\$4,591)	91.95	\$977
Crystal River 4	2.86	87.06	89.54	82.03	\$1,497	(\$3,877)	85.78	(\$993)
Crystal River 5	2.91	92.30	94.76	87.26	\$1,524	(\$3,877)	88.39	(\$3,008)
Hines 1	0.48	92.36	93.25	90.51	\$252	(\$528)	90.65	(\$487)
Hines 2	10.41	68.97	80.88	44.26	\$5,452	(\$11,127)	92.73	\$5,452
Hines 3	0.98	87.04	88.43	84.18	\$515	(\$879)	89.11	\$515
Hines 4	5.17	83.25	87.98	73.52	\$2,711	(\$5,292)	92.00	\$2,711

GPIF System 26.68 \$13,976.3 (\$30,171.3) \$5,166.6

Plant/Unit	Weighting Factor (%)	ANOHR Target		ANOHR RANGE		Max. Fuel Savings (\$000)	Max. Fuel Loss (\$000)	ANOHR Adjusted Actual (Btu/kwh)	Estimated
		(BTU/KWH)	NOF	Min. (Btu/kwh)	Max. (Btu/kwh)				Fuel Savings/ Loss (\$000)
Bartow CC	24.53	7,916	71.7	7,231	8,600	\$12,851	(\$12,851)	8,146	(\$3,281)
Crystal River 4	10.38	10,112	80.0	9,688	10,537	\$5,439	(\$5,439)	9,907	\$2,022
Crystal River 5	12.72	9,905	80.2	9,427	10,383	\$6,665	(\$6,665)	9,834	\$0
Hines 1	9.08	7,314	89.3	6,830	7,797	\$4,759	(\$4,759)	7,318	\$0
Hines 2	3.72	7,357	84.5	7,007	7,706	\$1,948	(\$1,948)	7,375	\$0
Hines 3	7.78	7,285	83.8	6,861	7,708	\$4,074	(\$4,074)	7,224	\$0
Hines 4	5.11	7,066	91.1	6,786	7,346	\$2,679	(\$2,679)	6,968	\$302

GPIF System 73.32 \$38,414.5 (\$38,414.5) (\$956.7)

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Original Sheet No. 6.101.5

GENERATION PERFORMANCE INCENTIVE FACTOR  
ACTUAL UNIT PERFORMANCE DATADuke Energy Florida  
January 2018 - December 2018

Plant/Unit	ACTUAL EAF %	ADJUSTMENTS (1) TO EAF %	ADJUSTED ACTUAL EAF %
Bartow CC	91.99	-0.04	91.95
Crystal River 4	81.21	4.57	85.78
Crystal River 5	86.24	2.15	88.39
Hines 1	89.66	0.99	90.65
Hines 2	93.42	-0.68	92.73
Hines 3	90.45	-1.34	89.11
Hines 4	91.92	0.08	92.00

Plant/Unit	ACTUAL ANOHR BTU/KWH	ADJUSTMENTS (2) TO ANOHR BTU/KWH	ADJUSTED ACTUAL ANOHR BTU/KWH
Bartow CC	7,664.2	482.0	8,146.2
Crystal River 4	9,985.8	-78.5	9,907.3
Crystal River 5	10,023.1	-189.4	9,833.7
Hines 1	7,314.6	3.0	7,317.6
Hines 2	7,360.2	15.2	7,375.4
Hines 3	7,178.5	45.3	7,223.8
Hines 4	6,955.3	12.6	6,967.9

(1) For documentation of adjustments to actual EAF, see sheet 6.

(2) For documentation of adjustments to actual ANOHR, see sheet 7.

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GENERATION PERFORMANCE INCENTIVE FACTOR  
ADJUSTMENTS TO EAF ACTUALDuke Energy Florida  
January 2018 - December 2018

EAF adjustments for <u>Planned Outage Hours</u>			Bartow CC	Crystal River 4	Crystal River 5	Hines 1	Hines 2	Hines 3	Hines 4
			<u>BA4</u>	<u>CR4</u>	<u>CR5</u>	<u>HN1</u>	<u>HN2</u>	<u>HN3</u>	<u>HN4</u>
1	Actual POH	Hrs.	176.34	1,102.47	423.81	594.13	443.29	757.26	595.43
2	Target POH	Hrs.	180.00	672.00	216.00	504.00	504.00	876.00	588.00
3	Adj. Factor (PH-POHT/PH-POHA)		1.00	1.06	1.02	1.01	0.99	0.99	1.00
4	Actual EUOH	Hrs.	525.74	543.47	781.74	311.81	133.52	78.93	112.28
5	Adj. EUOH (3*4)	Hrs.	525.51	574.02	801.23	315.26	132.54	77.76	112.38
6	Actual EAF	%	91.99	81.21	86.24	89.66	93.42	90.45	91.92
7	Adjusted EAF (using 2 & 5)	%	91.95	85.78	88.39	90.65	92.73	89.11	92.00
8	Difference (7-6)	%	-0.04	4.57	2.15	0.99	-0.68	-1.34	0.08
9	Total adj. to EAF	%	-0.04	4.57	2.15	0.99	-0.68	-1.34	0.08

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GENERATION PERFORMANCE INCENTIVE FACTOR  
ADJUSTMENTS TO ANOHR ACTUALDuke Energy Florida  
January 2018 - December 2018

ANOHR adjustments for			Bartow CC	Crystal River 4	Crystal River 5	Hines 1	Hines 2	Hines 3	Hines 4
<u>Target NOF</u>			<u>BA4</u>	<u>CR4</u>	<u>CR5</u>	<u>HN1</u>	<u>HN2</u>	<u>HN3</u>	<u>HN4</u>
1	Target NOF	%	71.7	80.0	80.2	89.3	84.5	83.8	91.1
2	Target ANOHR	Btu/kwh	7915.6	10112.3	9904.9	7313.9	7356.5	7284.6	7065.9
3	Actual NOF	%	85.6	77.1	73.8	90.2	88.3	88.6	94.0
4	Calc. ANOHR (using 3)	Btu/kwh	7,433.5	10190.8	10,094.3	7,310.9	7,341.3	7,239.3	7,053.4
5	Total adj. to ANOHR (2-4)	Btu/kwh	482.0	-78.5	-189.4	3.0	15.2	45.3	12.6

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GENERATING PERFORMANCE INCENTIVE POINTS TABLE

Duke Energy Florida  
 January 2018 - December 2018

Unit: Bartow CC

Equivalent Availability (Points)	Fuel Savings/Loss (\$)	Equivalent Availability (%)	Average Heat Rate (Points)	Fuel Savings/Loss (\$)	Average Heat Rate (BTU/KWH)
10	\$2,025,248	93.82	10	\$12,850,566	7,230.8
9	\$1,822,724	93.46	9	\$11,565,509	7,291.8
8	\$1,620,199	93.10	8	\$10,280,453	7,352.8
7	\$1,417,674	92.73	7	\$8,995,396	7,413.8
6	\$1,215,149	92.37	6	\$7,710,339	7,474.7
5	\$1,012,624	92.01	5	\$6,425,283	7,535.7
**** 4.822	\$976,575	91.95	4	\$5,140,226	7,596.7
4	\$810,099	91.65	3	\$3,855,170	7,657.6
3	\$607,575	91.29	2	\$2,570,113	7,718.6
2	\$405,050	90.92	1	\$1,285,057	7,779.6
1	\$202,525	90.56	0	\$0	7,840.6
	\$0	90.20	0	\$0	7,915.6
0	\$0	90.20	0	\$0	7,990.6
	\$0	90.20	-1	(\$1,285,057)	8,051.5
-1	(\$459,132)	89.47	-2	(\$2,570,113)	8,112.5
-2	(\$918,265)	88.74	-2.553	(\$3,280,749)	8,146.2 ****
-3	(\$1,377,397)	88.01	-3	(\$3,855,170)	8,173.5
-4	(\$1,836,530)	87.28	-4	(\$5,140,226)	8,234.4
-5	(\$2,295,662)	86.55	-5	(\$6,425,283)	8,295.4
-6	(\$2,754,795)	85.82	-6	(\$7,710,339)	8,356.4
-7	(\$3,213,927)	85.09	-7	(\$8,995,396)	8,417.3
-8	(\$3,673,059)	84.37	-8	(\$10,280,453)	8,478.3
-9	(\$4,132,192)	83.64	-9	(\$11,565,509)	8,539.3
-10	(\$4,591,324)	82.91	-10	(\$12,850,566)	8,600.3

Equivalent Availability  
 Weighting Factor:  
 -----  
 3.87%

Heat Rate  
 Weighting Factor:  
 -----  
 24.53%

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 Order No.:

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

Duke Energy Florida  
 January 2018 - December 2018

Unit: Crystal River 4

Equivalent Availability (Points)	Fuel Savings/Loss (\$)	Equivalent Availability (%)	Average Heat Rate (Points)	Fuel Savings/Loss (\$)	Average Heat Rate (BTU/KWH)
10	\$1,497,303	89.54	10	\$5,438,836	9,687.6
9	\$1,347,573	89.29	9	\$4,894,952	9,722.6
8	\$1,197,843	89.04	8	\$4,351,069	9,757.6
7	\$1,048,112	88.79	7	\$3,807,185	9,792.5
6	\$898,382	88.55	6	\$3,263,302	9,827.5
5	\$748,652	88.30	5	\$2,719,418	9,862.5
4	\$598,921	88.05	4	\$2,175,534	9,897.4
3	\$449,191	87.81	3.718	\$2,022,159	9,907.3 ****
2	\$299,461	87.56	3	\$1,631,651	9,932.4
1	\$149,730	87.31	2	\$1,087,767	9,967.4
	\$0	87.06	1	\$543,884	10,002.3
0	\$0	87.06	0	\$0	10,037.3
	\$0	87.06	0	\$0	10,112.3
-1	(\$387,693)	86.56	0	\$0	10,187.3
-2	(\$775,386)	86.06	-1	(\$543,884)	10,222.3
****	-2.561	(\$992,882)	85.78	(\$1,087,767)	10,257.2
	-3	(\$1,163,080)	85.56	(\$1,631,651)	10,292.2
	-4	(\$1,550,773)	85.05	(\$2,175,534)	10,327.2
	-5	(\$1,938,466)	84.55	(\$2,719,418)	10,362.1
	-6	(\$2,326,159)	84.05	(\$3,263,302)	10,397.1
	-7	(\$2,713,852)	83.54	(\$3,807,185)	10,432.1
	-8	(\$3,101,545)	83.04	(\$4,351,069)	10,467.0
	-9	(\$3,489,239)	82.54	(\$4,894,952)	10,502.0
	-10	(\$3,876,932)	82.03	(\$5,438,836)	10,537.0

Equivalent Availability  
 Weighting Factor:  
 -----  
 2.86%

Heat Rate  
 Weighting Factor:  
 -----  
 10.38%

Issued by: Duke Energy Florida

Filed:  
 Suspended:  
 Effective:  
 Docket No.:  
 Order No.:

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

Duke Energy Florida  
 January 2018 - December 2018

Unit: Crystal River 5

Equivalent Availability (Points)	Fuel Savings/Loss (\$)	Equivalent Availability (%)	Average Heat Rate (Points)	Fuel Savings/Loss (\$)	Average Heat Rate (BTU/KWH)
10	\$1,523,660	94.76	10	\$6,665,454	9,426.8
9	\$1,371,294	94.51	9	\$5,998,908	9,467.1
8	\$1,218,928	94.27	8	\$5,332,363	9,507.4
7	\$1,066,562	94.02	7	\$4,665,818	9,547.8
6	\$914,196	93.77	6	\$3,999,272	9,588.1
5	\$761,830	93.53	5	\$3,332,727	9,628.4
4	\$609,464	93.28	4	\$2,666,181	9,668.7
3	\$457,098	93.03	3	\$1,999,636	9,709.0
2	\$304,732	92.79	2	\$1,333,091	9,749.3
1	\$152,366	92.54	1	\$666,545	9,789.6
	\$0	92.30	0	\$0	9,829.9
0	\$0	92.30	0.000	\$0	9,833.7 ****
	\$0	92.30	0	\$0	9,904.9
-1	(\$387,740)	91.79	0	\$0	9,979.9
-2	(\$775,480)	91.29	-1	(\$666,545)	10,020.2
-3	(\$1,163,220)	90.78	-2	(\$1,333,091)	10,060.5
-4	(\$1,550,960)	90.28	-3	(\$1,999,636)	10,100.8
-5	(\$1,938,700)	89.78	-4	(\$2,666,181)	10,141.2
-6	(\$2,326,440)	89.27	-5	(\$3,332,727)	10,181.5
-7	(\$2,714,180)	88.77	-6	(\$3,999,272)	10,221.8
****	-7.758 (\$3,008,087)	88.39	-7	(\$4,665,818)	10,262.1
	-8 (\$3,101,920)	88.27	-8	(\$5,332,363)	10,302.4
	-9 (\$3,489,660)	87.76	-9	(\$5,998,908)	10,342.7
	-10 (\$3,877,400)	87.26	-10	(\$6,665,454)	10,383.0

Equivalent Availability  
 Weighting Factor:  
 -----  
 2.91%

Heat Rate  
 Weighting Factor:  
 -----  
 12.72%

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GENERATING PERFORMANCE INCENTIVE POINTS TABLE

Duke Energy Florida  
 January 2018 - December 2018

Unit: Hines 1

Equivalent Availability (Points)	Fuel Savings/Loss (\$)	Equivalent Availability (%)	Average Heat Rate (Points)	Fuel Savings/Loss (\$)	Average Heat Rate (BTU/KWH)	
10	\$252,197	93.25	10	\$4,758,674	6,830.2	
9	\$226,977	93.16	9	\$4,282,807	6,871.1	
8	\$201,758	93.07	8	\$3,806,939	6,912.0	
7	\$176,538	92.99	7	\$3,331,072	6,952.8	
6	\$151,318	92.90	6	\$2,855,205	6,993.7	
5	\$126,098	92.81	5	\$2,379,337	7,034.5	
4	\$100,879	92.72	4	\$1,903,470	7,075.4	
3	\$75,659	92.63	3	\$1,427,602	7,116.3	
2	\$50,439	92.54	2	\$951,735	7,157.1	
1	\$25,220	92.45	1	\$475,867	7,198.0	
	\$0	92.36	0	\$0	7,238.9	
0	\$0	92.36	0.000	\$0	7,317.6 ****	
	\$0	92.36	0	\$0	7,313.9	
-1	(\$52,755)	92.18	0	\$0	7,388.9	
-2	(\$105,510)	91.99	-1	(\$475,867)	7,429.7	
-3	(\$158,265)	91.80	-2	(\$951,735)	7,470.6	
-4	(\$211,021)	91.62	-3	(\$1,427,602)	7,511.4	
-5	(\$263,776)	91.43	-4	(\$1,903,470)	7,552.3	
-6	(\$316,531)	91.25	-5	(\$2,379,337)	7,593.2	
-7	(\$369,286)	91.06	-6	(\$2,855,205)	7,634.0	
-8	(\$422,041)	90.88	-7	(\$3,331,072)	7,674.9	
-9	(\$474,796)	90.69	-8	(\$3,806,939)	7,715.8	
****	-9.231	(\$486,983)	90.65	-9	(\$4,282,807)	7,756.6
	-10	(\$527,551)	90.51	-10	(\$4,758,674)	7,797.5

Equivalent Availability  
 Weighting Factor:  
 -----  
 0.48%

Heat Rate  
 Weighting Factor:  
 -----  
 9.08%

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 Docket No.:  
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GENERATING PERFORMANCE INCENTIVE POINTS TABLE

Duke Energy Florida  
 January 2018 - December 2018

Unit: Hines 2

Equivalent Availability (Points)	Fuel Savings/Loss (\$)	Equivalent Availability (%)	Average Heat Rate (Points)	Fuel Savings/Loss (\$)	Average Heat Rate (BTU/KWH)
****					
10	\$5,452,135	80.88	10	\$1,948,151	7,006.8
10	\$5,452,135	80.88	9	\$1,753,336	7,034.2
9	\$4,906,922	79.69	8	\$1,558,521	7,061.7
8	\$4,361,708	78.50	7	\$1,363,706	7,089.2
7	\$3,816,495	77.31	6	\$1,168,891	7,116.7
6	\$3,271,281	76.12	5	\$974,075	7,144.1
5	\$2,726,068	74.93	4	\$779,260	7,171.6
4	\$2,180,854	73.74	3	\$584,445	7,199.1
3	\$1,635,641	72.54	2	\$389,630	7,226.6
2	\$1,090,427	71.35	1	\$194,815	7,254.1
1	\$545,214	70.16	0	\$0	7,281.5
	\$0	68.97	0.000	\$0	7,375.4 ****
0	\$0	68.97	0	\$0	7,356.5
	\$0	68.97	0	\$0	7,431.5
-1	(\$1,112,693)	66.50	-1	(\$194,815)	7,459.0
-2	(\$2,225,386)	64.03	-2	(\$389,630)	7,486.5
-3	(\$3,338,080)	61.56	-3	(\$584,445)	7,514.0
-4	(\$4,450,773)	59.09	-4	(\$779,260)	7,541.4
-5	(\$5,563,466)	56.62	-5	(\$974,075)	7,568.9
-6	(\$6,676,159)	54.15	-6	(\$1,168,891)	7,596.4
-7	(\$7,788,853)	51.67	-7	(\$1,363,706)	7,623.9
-8	(\$8,901,546)	49.20	-8	(\$1,558,521)	7,651.4
-9	(\$10,014,239)	46.73	-9	(\$1,753,336)	7,678.8
-10	(\$11,126,932)	44.26	-10	(\$1,948,151)	7,706.3

Equivalent Availability  
 Weighting Factor:  
 -----  
 10.41%

Heat Rate  
 Weighting Factor:  
 -----  
 3.72%

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 Docket No.:  
 Order No.:

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

Duke Energy Florida  
 January 2018 - December 2018

Unit: Hines 3

Equivalent Availability (Points)	Fuel Savings/Loss (\$)	Equivalent Availability (%)	Average Heat Rate (Points)	Fuel Savings/Loss (\$)	Average Heat Rate (BTU/KWH)
****					
10	\$515,116	88.43	10	\$4,073,706	6,861.3
10	\$515,116	88.43	9	\$3,666,335	6,896.1
9	\$463,605	88.29	8	\$3,258,965	6,930.9
8	\$412,093	88.15	7	\$2,851,594	6,965.7
7	\$360,581	88.02	6	\$2,444,224	7,000.6
6	\$309,070	87.88	5	\$2,036,853	7,035.4
5	\$257,558	87.74	4	\$1,629,482	7,070.2
4	\$206,046	87.60	3	\$1,222,112	7,105.1
3	\$154,535	87.46	2	\$814,741	7,139.9
2	\$103,023	87.32	1	\$407,371	7,174.7
1	\$51,512	87.18	0	\$0	7,209.6
	\$0	87.04	0.000	\$0	7,223.8 ****
0	\$0	87.04	0	\$0	7,284.6
	\$0	87.04	0	\$0	7,359.6
-1	(\$87,929)	86.75	-1	(\$407,371)	7,394.4
-2	(\$175,858)	86.47	-2	(\$814,741)	7,429.2
-3	(\$263,787)	86.18	-3	(\$1,222,112)	7,464.0
-4	(\$351,716)	85.89	-4	(\$1,629,482)	7,498.9
-5	(\$439,645)	85.61	-5	(\$2,036,853)	7,533.7
-6	(\$527,574)	85.32	-6	(\$2,444,224)	7,568.5
-7	(\$615,502)	85.03	-7	(\$2,851,594)	7,603.4
-8	(\$703,431)	84.75	-8	(\$3,258,965)	7,638.2
-9	(\$791,360)	84.46	-9	(\$3,666,335)	7,673.0
-10	(\$879,289)	84.18	-10	(\$4,073,706)	7,707.9

Equivalent Availability  
 Weighting Factor:  
 -----  
 0.98%

Heat Rate  
 Weighting Factor:  
 -----  
 7.78%

Issued by: Duke Energy Florida

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 Suspended:  
 Effective:  
 Docket No.:  
 Order No.:

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

Duke Energy Florida  
 January 2018 - December 2018

Unit: Hines 4

Equivalent Availability (Points)	Fuel Savings/Loss (\$)	Equivalent Availability (%)	Average Heat Rate (Points)	Fuel Savings/Loss (\$)	Average Heat Rate (BTU/KWH)
****					
10	\$2,710,687	87.98	10	\$2,679,106	6,786.4
10	\$2,710,687	87.98	9	\$2,411,195	6,806.8
9	\$2,439,619	87.50	8	\$2,143,285	6,827.3
8	\$2,168,550	87.03	7	\$1,875,374	6,847.8
7	\$1,897,481	86.56	6	\$1,607,463	6,868.2
6	\$1,626,412	86.09	5	\$1,339,553	6,888.7
5	\$1,355,344	85.61	4	\$1,071,642	6,909.1
4	\$1,084,275	85.14	3	\$803,732	6,929.6
3	\$813,206	84.67	2	\$535,821	6,950.0
2	\$542,137	84.19	1.127	\$301,935	6,967.9 ****
1	\$271,069	83.72	1	\$267,911	6,970.5
	\$0	83.25	0	\$0	6,990.9
0	\$0	83.25	0	\$0	7,065.9
	\$0	83.25	0	\$0	7,140.9
-1	(\$529,185)	82.28	-1	(\$267,911)	7,161.4
-2	(\$1,058,370)	81.30	-2	(\$535,821)	7,181.9
-3	(\$1,587,556)	80.33	-3	(\$803,732)	7,202.3
-4	(\$2,116,741)	79.36	-4	(\$1,071,642)	7,222.8
-5	(\$2,645,926)	78.38	-5	(\$1,339,553)	7,243.2
-6	(\$3,175,111)	77.41	-6	(\$1,607,463)	7,263.7
-7	(\$3,704,297)	76.44	-7	(\$1,875,374)	7,284.1
-8	(\$4,233,482)	75.46	-8	(\$2,143,285)	7,304.6
-9	(\$4,762,667)	74.49	-9	(\$2,411,195)	7,325.0
-10	(\$5,291,852)	73.52	-10	(\$2,679,106)	7,345.5

Equivalent Availability  
 Weighting Factor:  
 -----  
 5.17%

Heat Rate  
 Weighting Factor:  
 -----  
 5.11%

Issued by: Duke Energy Florida

Filed:  
 Suspended:  
 Effective:  
 Docket No.:  
 Order No.:

Original Sheet No. 6.101.15

ACTUAL UNIT PERFORMANCE DATA

Duke Energy Florida

Bartow CC	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-Dec Period
1. EAF	100.00	99.71	83.44	99.07	90.94	81.24	80.39	90.71	97.50	100.00	93.43	88.22	91.99
2. PH	744	672	743	720	744	720	744	744	720	744	721	744	8,760
3. SH	723.1	576.0	617.3	699.2	660.7	586.4	601.2	675.8	702.7	708.6	654.3	605.9	7,811.2
4. RSH	20.9	95.7	13.3	14.1	16.0	7.1	7.6	5.2	0.5	35.4	23.9	55.2	294.9
5. UH	0.0	0.3	112.4	6.7	67.4	126.4	135.2	63.0	16.8	0.0	42.7	82.9	653.9
6. POH	0.0	0.0	111.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	23.4	162.8
7. FOH	0.0	0.3	0.8	6.7	67.4	126.4	135.2	63.0	6.6	0.0	3.4	41.0	450.8
8. MOH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2	0.0	11.6	18.5	40.3
9. PPOH	0.0	0.0	64.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.4	0.0	111.5
10. LR PP (MW)	0.0	0.0	178.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	0.0	131.1
11. PFOH	0.0	15.1	0.0	0.0	0.0	229.2	247.9	139.5	19.3	0.0	6.1	75.7	732.7
12. LR PF (MW)	0.0	120.0	0.0	0.0	0.0	40.8	46.4	47.2	67.0	0.0	67.0	67.0	49.1
13. PMOH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3	0.0	21.3
14. LR PM (MW)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	0.0	67.0
15. NSC (MW)	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080
16. OPER MBTU	4,808,629	3,821,765	2,964,776	5,087,891	4,578,391	4,024,793	4,218,831	4,702,160	5,000,877	5,101,315	4,571,596	3,942,161	52,823,185
17. NET GEN (MWH)	627,889	499,274	384,312	670,047	575,313	532,174	548,354	612,491	654,739	674,976	597,846	514,812	6,892,227
18. ANOHR (BTU/KWH)	7,658.4	7,654.6	7,714.5	7,593.3	7,958.1	7,562.9	7,693.6	7,677.1	7,638.0	7,557.8	7,646.8	7,657.5	7,664.2
19. NOF (%)	80.40	80.26	80.30	88.73	80.63	84.03	84.46	83.92	86.27	88.20	84.60	78.68	85.55
20. NPC (MW)	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080
ANOHR EQUATION:	ANOHR=	-34.745	x NOF +	10,406.07									

Issued by: Duke Energy Florida

Filed:  
 Suspended:  
 Effective:  
 Docket No.:  
 Order No.:



Original Sheet No. 6.101.16

ACTUAL UNIT PERFORMANCE DATA

Duke Energy Florida

Crystal River 4	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-Dec Period
1. EAF	95.73	99.52	6.43	65.82	81.03	90.51	88.76	99.77	86.97	97.83	65.93	97.43	81.21
2. PH	744	672	743	720	744	720	744	744	720	744	721	744	8,760
3. SH	744.0	672.0	47.8	482.3	615.0	654.3	665.6	744.0	637.7	744.0	236.7	313.8	6,557.1
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	248.0	414.5	662.5
5. UH	0.0	0.0	695.2	237.7	129.0	65.8	78.5	0.0	82.3	0.0	236.4	15.7	1,540.4
6. POH	0.0	0.0	695.2	211.0	0.0	0.0	0.0	0.0	0.0	0.0	149.0	15.7	1,070.9
7. FOH	0.0	0.0	0.0	24.6	129.0	65.8	78.5	0.0	0.0	0.0	87.4	0.0	385.2
8. MOH	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	82.3	0.0	0.0	0.0	84.3
9. PPOH	0.6	4.0	0.0	0.0	0.0	5.3	4.1	4.3	0.0	111.4	62.9	0.0	192.6
10. LR PP (MW)	555.0	426.0	0.0	0.0	0.0	350.2	93.1	93.0	0.0	100.2	105.5	0.0	116.7
11. PFOH	65.7	6.5	0.0	6.0	39.7	0.0	20.4	8.1	125.7	2.0	0.0	11.7	285.8
12. LR PF (MW)	339.0	93.0	0.0	93.0	106.8	0.0	161.4	99.5	63.1	93.0	0.0	209.9	148.2
13. PMOH	0.0	0.0	0.0	34.1	13.4	0.0	0.0	0.0	3.0	0.5	0.0	0.0	50.9
14. LR PM (MW)	0.0	0.0	0.0	160.0	331.0	0.0	0.0	0.0	93.0	284.0	0.0	0.0	202.1
15. NSC (MW)	712	712	712	712	712	712	712	712	712	712	712	712	712
16. OPER MBTU	4,015,993	3,240,899	222,277	2,320,777	3,054,194	3,469,320	3,871,499	4,473,772	3,639,986	4,299,907	1,374,567	1,980,857	35,964,047
17. NET GEN (MWH)	413,001	321,886	22,657	218,186	299,484	342,469	391,864	450,913	359,989	440,456	136,228	204,395	3,601,528
18. ANOHR (BTU/KWH)	9,723.9	10,068.5	9,810.5	10,636.7	10,198.2	10,130.3	9,879.7	9,921.6	10,111.4	9,762.4	10,090.2	9,691.3	9,985.8
19. NOF (%)	77.96	67.27	66.60	63.53	68.39	73.52	82.69	85.12	79.29	83.15	80.84	91.48	77.14
20. NPC (MW)	712	712	712	712	712	712	712	712	712	712	712	712	712
ANOHR EQUATION:	ANOHR=	-27.878	x NOF +	12,341.34									

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 Effective:  
 Docket No.:  
 Order No.:

Original Sheet No. 6.101.17

ACTUAL UNIT PERFORMANCE DATA

Duke Energy Florida

Crystal River 5	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-Dec Period
1. EAF	97.92	97.07	97.93	49.56	79.30	99.11	38.70	99.53	100.00	97.60	95.88	83.29	86.24
2. PH	744	672	743	720	744	720	744	744	720	744	721	744	8,760
3. SH	744.0	668.0	730.3	368.4	627.7	718.3	293.5	744.0	720.0	744.0	700.1	636.3	7,694.5
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. UH	0.0	4.0	12.7	351.6	116.3	1.8	450.5	0.0	0.0	0.0	21.0	107.7	1,065.5
6. POH	0.0	0.0	0.0	351.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	351.6
7. FOH	0.0	0.0	12.7	0.0	116.3	0.0	450.5	0.0	0.0	0.0	21.0	0.0	600.4
8. MOH	0.0	4.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	107.7	113.5
9. PPOH	2.0	0.0	0.0	90.1	279.5	9.9	0.0	12.9	0.0	124.7	16.8	1.3	537.0
10. LR PP (MW)	91.0	0.0	0.0	91.0	90.5	91.0	0.0	156.9	0.0	101.6	91.0	388.0	95.5
11. PFOH	36.5	0.0	5.0	0.0	3.0	2.8	16.8	1.5	0.0	0.0	19.5	59.4	144.4
12. LR PF (MW)	296.0	0.0	377.0	0.0	496.0	90.8	236.2	53.0	0.0	0.0	240.5	187.8	237.5
13. PMOH	0.0	22.5	0.0	0.0	0.0	23.8	0.0	4.5	0.0	0.0	0.0	1.8	52.7
14. LR PM (MW)	0.0	496.0	0.0	0.0	0.0	91.0	0.0	90.9	0.0	0.0	0.0	91.2	264.0
15. NSC (MW)	710	710	710	710	710	710	710	710	710	710	710	710	710
16. OPER MBTU	4,144,476	3,158,789	3,800,740	1,868,760	2,793,588	3,835,936	1,665,160	3,991,755	3,924,950	3,924,692	3,962,015	3,354,162	40,425,021
17. NET GEN (MWH)	429,919	314,067	386,624	173,240	262,152	378,749	162,511	406,473	390,915	394,687	389,819	344,040	4,033,196
18. ANOHR (BTU/KWH)	9,640.1	10,057.7	9,830.6	10,787.1	10,656.4	10,127.9	10,246.4	9,820.5	10,040.4	9,943.8	10,163.7	9,749.3	10,023.1
19. NOF (%)	81.39	66.22	74.56	66.23	58.82	74.27	77.98	76.95	76.47	74.72	78.43	76.15	73.83
20. NPC (MW)	710	710	710	710	710	710	710	710	710	710	710	710	710
ANOHR EQUATION:	ANOHR=	-29.847	x NOF +	12,297.79									

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Filed:  
 Suspended:  
 Effective:  
 Docket No.:  
 Order No.:

Original Sheet No. 6.101.18

ACTUAL UNIT PERFORMANCE DATA

Duke Energy Florida

Hines 1	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-Dec Period
1. EAF	98.04	99.99	48.88	68.76	96.33	95.08	97.93	95.56	99.77	88.59	94.98	92.93	89.66
2. PH	744	672	743	720	744	720	744	744	720	744	721	744	8,760
3. SH	714.5	672.0	363.7	495.0	704.7	685.2	732.3	715.1	720.0	580.8	621.7	61.6	7,066.6
4. RSH	16.7	0.0	0.1	0.0	16.0	0.0	0.0	2.8	0.0	78.3	63.1	632.4	809.3
5. UH	12.9	0.0	379.3	224.9	23.3	34.8	11.7	26.2	0.0	84.9	36.2	49.9	884.1
6. POH	0.0	0.0	359.9	224.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	584.8
7. FOH	12.9	0.0	19.4	0.0	10.8	34.8	0.0	7.4	0.0	3.5	36.2	0.0	124.9
8. MOH	0.0	0.0	0.0	0.0	12.5	0.0	11.7	18.8	0.0	81.4	0.0	49.9	174.4
9. PPOH	0.0	0.8	0.0	0.0	6.0	0.0	19.3	25.5	12.1	0.0	0.0	0.0	63.6
10. LR PP (MW)	0.0	50.6	0.0	0.0	77.9	0.0	66.7	79.2	66.2	0.0	0.0	0.0	72.5
11. PFOH	12.4	0.0	3.6	0.0	10.4	4.3	10.9	22.5	0.0	0.0	0.0	18.1	82.2
12. LR PF (MW)	69.8	0.0	76.6	0.0	67.6	69.1	51.6	61.4	0.0	0.0	0.0	73.6	65.9
13. PMOH	0.0	0.0	0.0	0.0	11.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
14. LR PM (MW)	0.0	0.0	0.0	0.0	67.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.6
15. NSC (MW)	495	495	495	495	495	495	495	495	495	495	495	495	495
16. OPER MBTU	2,318,447	2,219,815	1,223,092	1,644,308	2,242,655	2,321,872	2,490,175	2,347,965	2,433,049	1,834,526	1,852,459	152,454	23,080,816
17. NET GEN (MWH)	321,975	304,049	166,322	225,245	306,258	314,667	339,141	320,728	332,410	250,688	254,813	19,132	3,155,428
18. ANOHR (BTU/KWH)	7,200.7	7,300.8	7,353.8	7,300.1	7,322.8	7,378.8	7,342.6	7,320.7	7,319.4	7,318.0	7,269.9	7,968.5	7,314.6
19. NOF (%)	91.04	91.40	92.39	91.92	87.80	92.78	93.56	90.61	93.27	87.20	82.80	62.71	90.21
20. NPC (MW)	495	495	495	495	495	495	495	495	495	495	495	495	495
ANOHR EQUATION:	ANOHR=	-3.146	x NOF +	7,594.62									

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Filed:  
 Suspended:  
 Effective:  
 Docket No.:  
 Order No.:

Original Sheet No. 6.101.19

ACTUAL UNIT PERFORMANCE DATA

Duke Energy Florida

Hines 2	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-Dec Period
1. EAF	100.00	99.39	90.43	43.47	94.38	99.97	99.66	99.42	100.00	100.00	96.46	97.28	93.42
2. PH	744	672	743	720	744	720	744	744	720	744	721	744	8,760
3. SH	693.3	464.5	669.7	313.0	703.7	720.0	742.2	741.0	720.0	712.9	625.3	285.0	7,390.7
4. RSH	50.7	204.0	2.2	0.0	0.6	0.0	0.0	0.0	0.0	31.1	73.6	438.8	801.1
5. UH	0.0	3.5	71.1	407.0	39.7	0.0	1.8	3.0	0.0	0.0	22.1	20.1	568.2
6. POH	0.0	0.0	0.0	407.0	33.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	440.7
7. FOH	0.0	3.5	71.1	0.0	6.0	0.0	1.8	0.0	0.0	0.0	0.0	20.1	102.5
8. MOH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	22.1	0.0	25.1
9. PPOH	0.0	0.0	0.0	0.0	8.5	1.8	3.9	7.8	0.0	0.0	0.0	1.0	22.8
10. LR PP (MW)	0.0	0.0	0.0	0.0	63.9	65.4	58.9	57.7	0.0	0.0	0.0	61.7	61.0
11. PFOH	0.0	3.4	0.0	0.0	6.2	0.0	1.8	0.0	0.0	0.0	0.0	0.0	11.4
12. LR PF (MW)	0.0	92.3	0.0	0.0	91.0	0.0	86.2	0.0	0.0	0.0	0.0	0.0	90.6
13. PMOH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	22.8	0.0	25.7
14. LR PM (MW)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	94.4	0.0	0.0	80.3	0.0	81.9
15. NSC (MW)	527	527	527	527	527	527	527	527	527	527	527	527	527
16. OPER MBTU	2,282,848	1,421,231	2,365,022	1,097,825	2,362,778	2,544,480	2,712,733	2,660,024	2,585,795	2,491,923	1,927,826	862,539	25,315,023
17. NET GEN (MWH)	314,763	201,941	323,728	148,433	318,884	340,617	364,250	362,461	348,781	341,025	259,988	114,555	3,439,426
18. ANOHR (BTU/KWH)	7,252.6	7,037.9	7,305.6	7,396.1	7,409.5	7,470.2	7,447.4	7,338.8	7,413.8	7,307.2	7,415.1	7,529.5	7,360.2
19. NOF (%)	86.15	82.49	91.73	89.99	85.98	89.77	93.12	92.81	91.92	90.77	78.90	76.26	88.31
20. NPC (MW)	527	527	527	527	527	527	527	527	527	527	527	527	527
ANOHR EQUATION:	ANOHR=	-4.024	x NOF +	7,696.67									

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Filed:  
 Suspended:  
 Effective:  
 Docket No.:  
 Order No.:

Original Sheet No. 6.101.20

ACTUAL UNIT PERFORMANCE DATA

Duke Energy Florida

Jan-Dec

Hines 3	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Period
1. EAF	99.51	99.62	98.60	97.89	96.11	99.90	97.99	99.11	93.49	5.24	99.80	100.00	90.45
2. PH	744	672	743	720	744	720	744	744	720	744	721	744	8,760
3. SH	478.3	413.2	598.2	705.8	710.6	720.0	732.0	739.5	673.5	39.0	606.0	706.7	7,122.7
4. RSH	262.5	256.5	135.9	1.4	11.6	0.0	0.0	0.0	0.0	0.0	113.6	37.3	818.7
5. UH	3.2	2.3	9.0	12.8	21.9	0.0	12.1	4.5	46.5	705.0	1.4	0.0	818.6
6. POH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.5	704.8	1.4	0.0	752.7
7. FOH	3.2	2.3	0.8	0.0	0.0	0.0	0.0	4.5	0.0	0.2	0.0	0.0	11.0
8. MOH	0.0	0.0	8.1	12.8	21.9	0.0	12.1	0.0	0.0	0.0	0.0	0.0	54.9
9. PPOH	0.0	1.0	0.0	5.0	8.4	8.0	10.7	14.5	6.2	0.0	0.0	0.0	53.8
10. LR PP (MW)	0.0	59.1	0.0	41.8	42.1	47.8	45.3	48.6	30.6	0.0	0.0	0.0	44.3
11. PFOH	2.9	1.1	1.0	0.0	39.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	48.8
12. LR PF (MW)	81.0	81.0	81.3	0.0	64.7	0.0	0.0	86.0	0.0	0.0	0.0	0.0	68.3
13. PMOH	0.0	0.0	7.9	12.5	9.1	0.0	11.8	0.0	0.0	0.0	0.0	0.0	41.3
14. LR PM (MW)	0.0	0.0	83.0	81.7	84.0	0.0	87.0	0.0	0.0	0.0	0.0	0.0	83.9
15. NSC (MW)	521	521	521	521	521	521	521	521	521	521	521	521	521
16. OPER MBTU	1,547,605	1,321,596	1,931,761	2,329,506	2,328,108	2,402,780	2,486,811	2,579,596	2,340,526	101,869	1,932,659	2,310,749	23,613,567
17. NET GEN (MWH)	207,822	179,431	273,608	325,098	327,585	341,385	354,820	357,834	326,866	12,658	269,105	313,285	3,289,497
18. ANOHR (BTU/KWH)	7,446.8	7,365.5	7,060.3	7,165.6	7,106.9	7,038.3	7,008.7	7,208.9	7,160.5	8,047.8	7,181.8	7,375.9	7,178.5
19. NOF (%)	83.40	83.34	87.79	88.41	88.49	91.01	93.04	92.88	93.15	62.28	85.24	85.09	88.64
20. NPC (MW)	521	521	521	521	521	521	521	521	521	521	521	521	521
ANOHR EQUATION:	ANOHR=	-9.438	x NOF +	8,075.83									

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Filed:  
 Suspended:  
 Effective:  
 Docket No.:  
 Order No.:

Original Sheet No. 6.101.21

ACTUAL UNIT PERFORMANCE DATA

Duke Energy Florida

Hines 4	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-Dec Period
1. EAF	98.03	99.97	99.99	97.21	99.74	99.51	98.46	96.04	99.99	100.00	45.50	68.65	91.92
2. PH	744	672	743	720	744	720	744	744	720	744	721	744	8,760
3. SH	574.2	630.0	743.0	697.7	744.0	719.0	734.9	715.3	720.0	640.2	0.0	436.6	7,355.0
4. RSH	156.8	42.0	0.0	4.8	0.0	0.0	0.0	5.4	0.0	103.8	328.0	76.7	717.5
5. UH	13.0	0.0	0.0	17.5	0.0	1.0	9.1	23.3	0.0	0.0	393.0	230.7	687.5
6. POH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	393.0	194.5	587.4
7. FOH	13.0	0.0	0.0	0.0	0.0	1.0	5.0	22.3	0.0	0.0	0.0	36.2	77.5
8. MOH	0.0	0.0	0.0	17.5	0.0	0.0	4.1	1.0	0.0	0.0	0.0	0.0	22.6
9. PPOH	0.5	2.1	1.0	0.0	16.1	21.0	10.3	20.9	1.0	0.0	0.0	0.0	72.8
10. LR PP (MW)	50.1	50.9	47.7	0.0	58.1	55.8	54.5	54.4	45.7	0.0	0.0	0.0	55.3
11. PFOH	12.0	0.0	0.0	0.0	0.6	1.0	4.7	57.3	0.0	0.0	0.0	19.4	95.0
12. LR PF (MW)	69.2	0.0	0.0	0.0	54.3	76.2	71.1	34.8	0.0	0.0	0.0	67.2	48.1
13. PMOH	0.0	0.0	0.0	16.5	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	20.4
14. LR PM (MW)	0.0	0.0	0.0	78.1	0.0	0.0	79.1	0.0	0.0	0.0	0.0	0.0	78.3
15. NSC (MW)	504	504	504	504	504	504	504	504	504	504	504	504	504
16. OPER MBTU	1,859,462	1,997,841	2,490,044	2,248,954	2,465,014	2,421,836	2,497,460	2,367,658	2,446,225	2,157,252	0	1,279,382	24,231,126
17. NET GEN (MWH)	268,522	289,609	367,086	320,318	349,474	344,155	354,748	336,121	353,302	313,343	0	187,156	3,483,834
18. ANOHR (BTU/KWH)	6,924.8	6,898.4	6,783.3	7,021.0	7,053.5	7,037.1	7,040.1	7,044.1	6,923.9	6,884.6	0.0	6,835.9	6,955.3
19. NOF (%)	92.78	91.21	98.03	91.09	93.20	94.98	95.77	93.24	97.36	97.12	0.00	85.05	93.98
20. NPC (MW)	504	504	504	504	504	504	504	504	504	504	504	504	504
ANOHR EQUATION:	ANOHR=	-4.435	x NOF +	7,470.17									

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 Docket No.:  
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PLANNED OUTAGE SCHEDULES  
ACTUAL

Duke Energy Florida  
January 2018 - December 2018

Plant/Unit	Planned Outage Dates	Reason for Outage
Bartow CC	03/10 (0055) - 03/28 (0828)	Gas Turbine - Boroscope Inspection; Circulating Water Chemistry
Bartow CC	11/16 (0511) - 11/22 (1209)	Gas Turbine - Boroscope Inspection
Bartow CC	12/02 (2323) - 12/8 (1721)	Gas Turbine - Boroscope Inspection
Crystal River 4	03/02 (2347) - 04/09 (1902)	Minor Boiler Overhaul (less than 720 Hours)
Crystal River 4	11/24 (1901) - 12/01 (1541)	Main Transformer
Crystal River 5	04/12 (1417) - 04/27 (0553)	Boiler; Miscellaneous
Hines 1	03/17 (0007) - 04/10 (1106)	General Gas Turbine Unit Inspection
Hines 2	04/14 (0017) - 05/03 (0235)	General Gas Turbine Unit Inspection
Hines 3	09/29 (0054) - 11/01 (0828)	General Gas Turbine Unit Inspection
Hines 4	11/10 (0000) - 12/09 (1400)	General Gas Turbine Unit Inspection

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Filed:  
Suspended:  
Effective:  
Docket No.:  
Order No.:

Original Sheet No. 6.101.23

Planned Outage Schedule - Actual												
January 2018 - December 2018												Duke Energy Florida
	January	February	March	April	May	June	July	August	September	October	November	December
<b>Bartow CC</b>			Gas Fuel System with controls and instruments 3/4 [redacted] 3/15 11 days							Gas Turbine - Boroscope Inspection, Gas Fuel System with controls 11/4 [redacted] 12/9 35 days		
<b>Crystal River 4</b>	— —	Minor Boiler Overhaul 2/26 [redacted] 3/28 32 days										
<b>Crystal River 5</b>										Major Boiler Overhaul (720 Hours or Longer) 10/20 [redacted] 12/7 71 days		
<b>Hines 1</b>			General Gas Turbine Unit Inspection 3/31 [redacted] 5/8 39 days									
<b>Hines 2</b>									Distributive Control System Upgrades 9/22 [redacted] 10/25 33 days			
<b>Hines 3</b>		General Gas Turbine Unit Inspection 3/3 [redacted] 3/30 27 days										
<b>Hines 4</b>			Turbine Hydraulic System Pipes And Valves 4/8 [redacted] 4/9 1 day							Distributive Control System Upgrades 11/9 [redacted] 12/16 37 days		

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Filed:  
 Suspended:  
 Effective:  
 Docket No.:  
 Order No.: