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March 15, 2017

VIA: ELECTRONIC FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Fuel and Purchased Power Cost Recovery Clause with Generating
Performance Incentive Factor; FPSC Docket No. 170001-EI

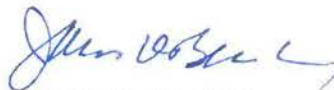
Dear Ms. Stauffer:

Attached for filing in the above docket on behalf of Tampa Electric Company are the following:

1. Petition for Approval of Generating Performance Incentive Factor Results for the Twelve Month Period Ending December 2016.
2. Prepare Direct Testimony and Exhibit (BSB-1) of Brian S. Buckley regarding Generating Performance Incentive Factor True-Up for the period January 2016 through December 2016.

Thank you for your assistance in connection with this matter.

Sincerely,



James D. Beasley

JDB/pp
Attachments

cc: All parties of record (w/attachments)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition and Testimony, filed on behalf of Tampa Electric Company, has been furnished by electronic mail on this 15th day of March 2017 to the following:

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ATTORNEY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and Purchased Power)
Cost Recovery Clause and Generating)
Performance Incentive Factor.)
_____)

DOCKET NO. 170001-EI
FILED: March 15, 2017

**TAMPA ELECTRIC COMPANY'S PETITION FOR APPROVAL OF
GENERATING PERFORMANCE INCENTIVE FACTOR RESULTS
FOR THE TWELVE MONTH PERIOD ENDING DECEMBER 2016**

Tampa Electric Company ("Tampa Electric" or "the company") hereby petitions this Commission for approval of the company's results for the twelve-month period ending December 2016. In support of this Petition, Tampa Electric states as follows:

1. By Order No. PSC-15-0586-FOF-EI, dated December 23, 2015, the Commission approved Tampa Electric's GPIF targets for the period January 2016 through December 2016. The application of the GPIF formula to the performance of the company's GPIF units during that period produces a reward of \$47,392. The calculation of the company's GPIF reward is discussed and supported in the prepared direct testimony and exhibit of Tampa Electric witness Brian S. Buckley, which are being filed together with this petition and incorporated herein by reference.

2. Tampa Electric is not aware of any disputed issues of material fact relative to the relief requested herein.

WHEREFORE, Tampa Electric respectfully requests the Commission to approve \$47,392 as its GPIF reward for the period ending December 2016 and authorize the inclusion of this amount in the calculation of Tampa Electric's fuel factors for the period beginning January 2018.

DATED this 15th day of March 2017.

Respectfully submitted,



JAMES D. BEASLEY

J. JEFFRY WAHLEN

Ausley McMullen

Post Office Box 391

Tallahassee, Florida 32302

(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing Petition, filed on behalf of Tampa Electric Company, has been served by Electronic Mail on this 15th day of March 2017 to the following:

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ATTORNEY



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 170001-EI
IN RE: FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY

GENERATING PERFORMANCE INCENTIVE FACTOR
TRUE-UP
JANUARY 2016 THROUGH DECEMBER 2016

TESTIMONY AND EXHIBIT
OF
BRIAN S. BUCKLEY

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **BRIAN S. BUCKLEY**

5
6 **Q.** Please state your name, business address, occupation and
7 employer.

8
9 **A.** My name is Brian S. Buckley. My business address is 702 North
10 Franklin Street, Tampa, Florida 33602. I am employed by Tampa
11 Electric Company ("Tampa Electric" or "company") in the
12 position of Manager, Unit Commitment.

13
14 **Q.** Please provide a brief outline of your educational background
15 and business experience.

16
17 **A.** I received a Bachelor of Science degree in Mechanical
18 Engineering in 1997 from the Georgia Institute of Technology
19 and a Master of Business Administration from the University
20 of South Florida in 2003. I am a registered Professional
21 Engineer in the state of Florida, and I have accumulated 18
22 years of electric utility work experience. I began my career
23 with Tampa Electric in 1999 as an Engineer in Plant Technical
24 Services and have held various engineering positions at Tampa
25 Electric's power generating stations and in the Operations

1 Planning Department where I was responsible for unit
2 performance analysis and reporting. In 2008, I was promoted
3 to Manager, Operations Planning, and in 2011, NERC Compliance
4 was added to my responsibilities. In January 2017, I was
5 promoted to Manager, Unit Commitment, where I am responsible
6 for commitment of Tampa Electric's generation assets.
7

8 **Q.** What is the purpose of your testimony?
9

10 **A.** The purpose of my testimony is to present Tampa Electric's
11 actual performance results from unit equivalent availability
12 and heat rate used to determine the Generating Performance
13 Incentive Factor ("GPIF") for the period January 2016 through
14 December 2016. I will also compare these results to the
15 targets established for the period.
16

17 **Q.** Have you prepared an exhibit to support your testimony?
18

19 **A.** Yes, I prepared Exhibit No. BSB-1, consisting of two
20 documents. Document No. 1, entitled "GPIF Schedules" is
21 consistent with the GPIF Implementation Manual approved by
22 the Commission. Document No. 2 provides the company's Actual
23 Unit Performance Data for the 2016 period.
24

25 **Q.** Which generating units on Tampa Electric's system are included

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in the determination of the GPIF?

A. Four of the company's coal-fired units, one integrated gasification combined cycle unit and two natural gas combined cycle units are included. These are Big Bend Units 1 through 4, Polk Unit 1 and Bayside Units 1 and 2, respectively.

Q. Have you calculated the results of Tampa Electric's performance under the GPIF during the January 2016 through December 2016 period?

A. Yes, I have. This is shown on Document No. 1, page 4 of 32. Based upon 0.050 Generating Performance Incentive Points ("GPIP"), the result is a reward amount of \$47,392 for the period.

Q. Please proceed with your review of the actual results for the January 2016 through December 2016 period.

A. On Document No. 1, page 3 of 32, the actual average common equity for the period is shown on line 14 as \$2,346,795,227. This produces the maximum penalty or reward amount of \$9,571,866 as shown on line 23.

Q. Will you please explain how you arrived at the actual

1 equivalent availability results for the seven units included
2 within the GPIF?

3
4 **A.** Yes. Operating data for each of the units is filed monthly
5 with the Commission on the Actual Unit Performance Data form.
6 Additionally, outage information is reported to the Commission
7 on a monthly basis. A summary of this data for the 12 months
8 provides the basis for the GPIF.

9
10 **Q.** Are the actual equivalent availability results shown on
11 Document No. 1, page 6 of 32, column 2, directly applicable
12 to the GPIF table?

13
14 **A.** No. Adjustments to actual equivalent availability may be
15 required as noted in Section 4.3.3 of the GPIF Manual. The
16 actual equivalent availability including the required
17 adjustment is shown on Document No. 1, page 6 of 32, column
18 4. The necessary adjustments as prescribed in the GPIF Manual
19 are further defined by a letter dated October 23, 1981, from
20 Mr. J. H. Hoffsis of the Commission's Staff. The adjustments
21 for each unit are as follows:

22
23 **Big Bend Unit No. 1**

24 On this unit, 576.0 planned outage hours were originally
25 scheduled for 2016. Actual outage activities required 518.9

1 planned outage hours. Consequently, the actual equivalent
2 availability of 79.6 percent is adjusted to 79.0 percent as
3 shown on Document No. 1, page 7 of 32.

4
5 **Big Bend Unit No. 2**

6 On this unit, 1,584.0 planned outage hours were originally
7 scheduled for 2016. Actual outage activities required 1,974.9
8 planned outage hours. Consequently, the actual equivalent
9 availability of 54.8 percent is adjusted to 58.0 percent as
10 shown on Document No. 1, page 8 of 32.

11
12 **Big Bend Unit No. 3**

13 On this unit, 1,080.0 planned outage hours were originally
14 scheduled for 2016. Actual outage activities required 1,102.4
15 planned outage hours. Consequently, the actual equivalent
16 availability of 53.9 percent is adjusted to 54.0 percent as
17 shown on Document No. 1, page 9 of 32.

18
19 **Big Bend Unit No. 4**

20 On this unit, 576.0 planned outage hours were originally
21 scheduled for 2016. Actual outage activities required 585.2
22 planned outage hours. Consequently, the actual equivalent
23 availability of 73.2 percent is adjusted to 73.2 percent as
24 shown on Document No. 1, page 10 of 32.

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Polk Unit No. 1

On this unit, 912.0 planned outage hours were originally scheduled for 2016. Actual outage activities required 1,170.0 planned outage hours. Consequently, the actual equivalent availability of 82.4 percent is adjusted to 85.2 percent, as shown on Document No. 1, page 11 of 32.

Bayside Unit No. 1

On this unit, 1,561.0 planned outage hours were originally scheduled for 2016. Actual outage activities required 1,757.4 planned outage hours. Consequently, the actual equivalent availability of 78.1 percent is adjusted to 80.2 percent, as shown on Document No. 1, page 12 of 32.

Bayside Unit No. 2

On this unit, 935.0 planned outage hours were originally scheduled for 2016. Actual outage activities required 625.6 planned outage hours. Consequently, the actual equivalent availability of 87.4 percent is adjusted to 84.2 percent, as shown on Document No. 1, page 13 of 32.

Q. How did you arrive at the applicable equivalent availability points for each unit?

A. The final adjusted equivalent availabilities for each unit

1 are shown on Document No. 1, page 6 of 32, column 4. This
2 number is entered into the respective GPIIP table for each
3 particular unit, shown on pages 24 of 32 through 30 of 32.
4 Page 4 of 32 summarizes the weighted equivalent availability
5 points to be awarded or penalized.

6
7 **Q.** Will you please explain the heat rate results relative to the
8 GPIIF?

9
10 **A.** The actual heat rate and adjusted actual heat rate for Tampa
11 Electric's seven GPIIF units are shown on Document No. 1, page
12 6 of 32. The adjustment was developed based on the guidelines
13 of Section 4.3.16 of the GPIIF Manual. This procedure is
14 further defined by a letter dated October 23, 1981, from Mr.
15 J. H. Hoffsis of the FPSC Staff. The final adjusted actual
16 heat rates are also shown on page 5 of 32, column 9. The heat
17 rate value is entered into the respective GPIIP table for the
18 particular unit, shown on pages 24 through 30 of 32. Page 4
19 of 32 summarizes the weighted heat rate points to be awarded
20 or penalized.

21
22 **Q.** What is the overall GPIIP for Tampa Electric for the January
23 2016 through December 2016 period?

24
25 **A.** This is shown on Document No. 1, page 2 of 32. Essentially,

1 the weighting factors shown on page 4 of 32, column 3, plus
2 the equivalent availability points and the heat rate points
3 shown on page 4 of 32, column 4, are substituted within the
4 equation found on page 32 of 32. The resulting value, 0.050,
5 is then located in the GPIF table on page 2 of 32, and the
6 reward amount of \$47,392 is calculated using linear
7 interpolation.

8
9 **Q.** Are there any other constraints set forth by the Commission
10 regarding the magnitude of incentive dollars?

11
12 **A.** Yes. Incentive dollars are not to exceed 50 percent of fuel
13 savings. Tampa Electric met this constraint, limiting the
14 total potential reward and penalty incentive dollars to
15 \$9,571,866, as shown in Document No. 1, pages 2 and 3.

16
17 **Q.** Does this conclude your testimony?

18
19 **A.** Yes, it does.
20
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GENERATING PERFORMANCE INCENTIVE FACTOR

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EXHIBIT NO. ____ (BSB-1)
TAMPA ELECTRIC COMPANY
DOCKET NO. 170001-EI
GPIF 2016 FINAL TRUE-UP
DOCUMENT NO. 1

EXHIBIT TO THE TESTIMONY OF
BRIAN S. BUCKLEY

DOCKET NO. 170001-EI

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
JANUARY 2016 - DECEMBER 2016
TRUE-UP

DOCUMENT NO. 1
GPIF SCHEDULES

**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
JANUARY 2016 - DECEMBER 2016
TRUE-UP
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**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
REWARD / PENALTY TABLE - ACTUAL
JANUARY 2016 - DECEMBER 2016**

GENERATING PERFORMANCE INCENTIVE POINTS (GPIP)	FUEL SAVINGS / (LOSS) (\$000)	GENERATING PERFORMANCE INCENTIVE FACTOR (\$000)
+10	20,270.0	9,571.9
+9	18,243.0	8,614.7
+8	16,216.0	7,657.5
+7	14,189.0	6,700.3
+6	12,162.0	5,743.1
+5	10,135.0	4,785.9
+4	8,108.0	3,828.7
+3	6,081.0	2,871.6
+2	4,054.0	1,914.4
+1	2,027.0	957.2
← GPI POINTS 0.050 →	0.0	REWARD DOLLARS \$47,392 →
0	0.0	0.0
-1	(2,042.1)	(957.2)
-2	(4,084.3)	(1,914.4)
-3	(6,126.4)	(2,871.6)
-4	(8,168.5)	(3,828.7)
-5	(10,210.6)	(4,785.9)
-6	(12,252.8)	(5,743.1)
-7	(14,294.9)	(6,700.3)
-8	(16,337.0)	(7,657.5)
-9	(18,379.2)	(8,614.7)
-10	(20,421.3)	(9,571.9)

**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS - ACTUAL
JANUARY 2016 - DECEMBER 2016**

Line 1	Beginning of period balance of common equity:		\$	2,270,518,569	
	End of month common equity:				
Line 2	Month of January	2016	\$	2,288,055,119	
Line 3	Month of February	2016	\$	2,272,865,450	
Line 4	Month of March	2016	\$	2,288,988,166	
Line 5	Month of April	2016	\$	2,302,264,369	
Line 6	Month of May	2016	\$	2,322,604,089	
Line 7	Month of June	2016	\$	2,324,852,708	
Line 8	Month of July	2016	\$	2,357,916,465	
Line 9	Month of August	2016	\$	2,393,969,874	
Line 10	Month of September	2016	\$	2,418,889,456	
Line 11	Month of October	2016	\$	2,440,312,316	
Line 12	Month of November	2016	\$	2,410,366,200	
Line 13	Month of December	2016	\$	2,416,735,164	
Line 14	(Summation of line 1 through line 13 divided by 13)		\$	2,346,795,227	
Line 15	25 Basis points			0.0025	
Line 16	Revenue Expansion Factor			61.27%	
Line 17	Maximum Allowed Incentive Dollars (line 14 times line 15 divided by line 16)		\$	9,576,098	
Line 18	Jurisdictional Sales			19,234,183	MWH
Line 19	Total Sales			19,242,687	MWH
Line 20	Jurisdictional Separation Factor (line 18 divided by line 19)			99.96%	
Line 21	Maximum Allowed Jurisdictional Incentive Dollars (line 17 times line 20)		\$	9,571,866	
Line 22	Incentive Cap (50% of projected fuel savings at 10 GPIF-Point level from Sheet No. 3.515)		\$	10,134,986	
Line 23	Maximum Allowed GPIF Reward (At 10 GPIF-Point Level; the lesser of line 21 and line 22)		\$	9,571,866	

**TAMPA ELECTRIC COMPANY
CALCULATION OF SYSTEM GPIF POINTS - ACTUAL
JANUARY 2016 - DECEMBER 2016**

<u>PLANT / UNIT</u>	<u>12 MONTH ADJ. ACTUAL PERFORMANCE</u>		<u>WEIGHTING FACTOR %</u>	<u>UNIT POINTS</u>	<u>WEIGHTED UNIT POINTS</u>
BIG BEND 1	79.0%	EAF	1.89%	0.895	0.017
BIG BEND 2	58.0%	EAF	4.41%	-10.000	-0.441
BIG BEND 3	54.0%	EAF	3.20%	-10.000	-0.320
BIG BEND 4	73.2%	EAF	3.32%	-5.171	-0.172
POLK 1	85.2%	EAF	0.76%	10.000	0.076
BAYSIDE 1	80.2%	EAF	4.12%	10.000	0.412
BAYSIDE 2	84.2%	EAF	8.44%	6.298	0.532
BIG BEND 1	10,627	ANOHR	6.90%	0.000	0.000
BIG BEND 2	10,318	ANOHR	12.47%	1.863	0.232
BIG BEND 3	10,258	ANOHR	6.59%	10.000	0.659
BIG BEND 4	10,241	ANOHR	13.12%	4.609	0.605
POLK 1	9,855	ANOHR	6.51%	9.342	0.608
BAYSIDE 1	7,412	ANOHR	14.36%	-5.553	-0.798
BAYSIDE 2	7,698	ANOHR	13.89%	-9.803	-1.362
			100.00%		0.050

GPIF REWARD	\$ 47,392
--------------------	------------------

**TAMPA ELECTRIC COMPANY
GPIF TARGET AND RANGE SUMMARY**

EQUIVALENT AVAILABILITY (%)

PLANT / UNIT	WEIGHTING FACTOR (%)	EAFF TARGET (%)	EAFF MAX. (%)	EAFF RANGE MIN. (%)	EAFF MAX. SAVINGS (\$000)	MAX. FUEL LOSS (\$000)	EAFF ADJUSTED ACTUAL (%)	EST. FUEL SAVINGS/LOSS (\$000)
BIG BEND 1	1.89%	78.71	82.0	72.2	382.8	(960.8)	79.0%	34.3
BIG BEND 2	4.41%	68.73	72.3	61.6	893.6	(504.8)	58.0%	(504.8)
BIG BEND 3	3.20%	76.64	79.5	71.0	648.9	(561.3)	54.0%	(561.3)
BIG BEND 4	3.32%	76.95	80.6	69.7	673.1	(1,958.4)	73.2%	(1,012.7)
POLK 1	0.76%	81.52	83.7	77.2	153.6	(511.0)	85.2%	153.6
BAYSIDE 1	4.12%	76.07	78.2	71.8	835.8	(136.0)	80.2%	835.8
BAYSIDE 2	8.44%	83.07	84.9	79.5	1,711.3	(818.2)	84.2%	1,077.8
GPIF SYSTEM	26.14%				5,299.1	(5,450.5)		

AVERAGE NET OPERATING HEAT RATE (Btu/kwh)

PLANT / UNIT	WEIGHTING FACTOR (%)	ANOHR (Btu/kwh)	TARGET NOF (%)	ANOHR TARGET RANGE MIN. MAX.	MAX. FUEL SAVINGS (\$000)	MAX. FUEL LOSS (\$000)	ACTUAL ADJUSTED ANOHR	EST. FUEL SAVINGS/LOSS (\$000)
BIG BEND 1	6.90%	10,683	91.1	10,473 10,893	1,399.4	(1,399.4)	10,627	0.0
BIG BEND 2	12.47%	10,460	92.2	10,025 10,895	2,528.1	(2,528.1)	10,318	470.9
BIG BEND 3	6.59%	10,654	89.6	10,441 10,867	1,336.8	(1,336.8)	10,258	1,336.8
BIG BEND 4	13.12%	10,458	91.0	10,075 10,842	2,659.8	(2,659.8)	10,241	1,225.8
POLK 1	6.51%	10,191	94.0	9,837 10,545	1,319.6	(1,319.6)	9,855	1,232.8
BAYSIDE 1	14.36%	7,232	71.6	6,967 7,496	2,911.6	(2,911.6)	7,412	(1,616.7)
BAYSIDE 2	13.89%	7,484	53.5	7,267 7,701	2,815.6	(2,815.6)	7,698	(2,760.1)
GPIF SYSTEM	73.86%				14,970.8	(14,970.8)		

**TAMPA ELECTRIC COMPANY
UNIT PERFORMANCE DATA - ACTUAL
JANUARY 2016 - DECEMBER 2016**

<u>PLANT / UNIT</u>	<u>ACTUAL EAF (%)</u>	<u>ADJUSTMENTS (1) TO EAF (%)</u>	<u>EAF ADJUSTED ACTUAL (%)</u>
BIG BEND 1	79.6	-0.6	79.0
BIG BEND 2	54.8	3.2	58.0
BIG BEND 3	53.9	0.1	54.0
BIG BEND 4	73.2	0.0	73.2
POLK 1	82.4	2.8	85.2
BAYSIDE 1	78.1	2.1	80.2
BAYSIDE 2	87.4	-3.2	84.2

<u>PLANT / UNIT</u>	<u>ACTUAL ANOHR (Btu/kwh)</u>	<u>ADJUSTMENTS (2) TO ANOHR (Btu/kwh)</u>	<u>ANOHR ADJUSTED ACTUAL (Btu/kwh)</u>
BIG BEND 1	10,944	-317	10,627
BIG BEND 2	10,728	-410	10,318
BIG BEND 3	10,735	-477	10,258
BIG BEND 4	10,521	-280	10,241
POLK 1	9,859	-4	9,855
BAYSIDE 1	7,502	-90	7,412
BAYSIDE 2	7,662	36	7,698

(1) Documentation of adjustments to Actual EAF on pages 7 - 13

(2) Documentation of adjustments to Actual ANOHR on pages 14 - 20

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO PERFORMANCE
BIG BEND UNIT NO. 1
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 1.89%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>	<u>ADJUSTED ACTUAL PERFORMANCE</u>
PH	8,784.0	8,784.0	8,784.0
EAF	78.7	79.6	79.0
POH	576.0	518.9	576.0
FOH + EFOH	1,098.0	1,130.1	1,122.3
MOH + EMOH	196.4	146.5	145.5
POF	6.6	5.9	6.6
EFOF	12.5	12.9	12.8
EMOF	2.2	1.7	1.7
	0.895	EQUIVALENT AVAILABILITY POINTS	

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

$$\frac{PH - POH_{TARGET}}{PH - POH_{ACTUAL}} \times (FOH + EFOH + MOH + EMOH) = EUOH_{ADJUSTED}$$

$$\frac{8784 - 576}{8784 - 518.9} \times (1130.1 + 146.5) = 1,267.8$$

$$100 - POF_{TARGET} - \frac{EUOH_{ADJUSTED}}{PH} \times 100 = EAF_{ADJUSTED}$$

$$100 - 6.6 - \frac{1,267.8}{8,784.0} \times 100 = 79.0$$

PH = PERIOD HOURS
EAF = EQUIVALENT AVAILABILITY FACTOR
POH = PLANNED OUTAGE HOURS
FOH = FORCED OUTAGE HOURS
EFOH = EQUIVALENT FORCED OUTAGE HOURS
MOH = MAINTENANCE OUTAGE HOURS
EMOH = EQUIVALENT MAINTENANCE OUTAGE HOURS
POF = PLANNED OUTAGE FACTOR
EFOF = EQUIVALENT FORCED OUTAGE FACTOR
EMOF = EQUIVALENT MAINTENANCE OUTAGE FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO PERFORMANCE
BIG BEND UNIT NO. 2
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 4.41%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>	<u>ADJUSTED ACTUAL PERFORMANCE</u>
PH	8,784.0	8,784.0	8,784.0
EAF	68.7	54.8	58.0
POH	1,584.0	1,974.9	1,584.0
FOH + EFOH	870.5	1,942.1	2,053.6
MOH + EMOH	291.9	53.0	56.0
POF	18.0	22.5	18.0
EFOF	9.9	22.1	23.4
EMOF	3.3	0.6	0.6
	-10.000	EQUIVALENT AVAILABILITY POINTS	

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

$$\frac{PH - POH_{TARGET}}{PH - POH_{ACTUAL}} \times (FOH + EFOH + MOH + EMOH) = EUOH_{ADJUSTED}$$

$$\frac{8784 - 1584}{8784 - 1974.9} \times (1942.1 + 53) = 2,109.6$$

$$100 - POF_{TARGET} - \frac{EUOH_{ADJUSTED}}{PH} \times 100 = EAF_{ADJUSTED}$$

$$100 - 18 - \frac{2,109.6}{8,784.0} \times 100 = 58.0$$

PH = PERIOD HOURS
EAF = EQUIVALENT AVAILABILITY FACTOR
POH = PLANNED OUTAGE HOURS
FOH = FORCED OUTAGE HOURS
EFOH = EQUIVALENT FORCED OUTAGE HOURS
MOH = MAINTENANCE OUTAGE HOURS
EMOH = EQUIVALENT MAINTENANCE OUTAGE HOURS
POF = PLANNED OUTAGE FACTOR
EFOF = EQUIVALENT FORCED OUTAGE FACTOR
EMOF = EQUIVALENT MAINTENANCE OUTAGE FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO PERFORMANCE
BIG BEND UNIT NO. 3
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 3.20%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>	<u>ADJUSTED ACTUAL PERFORMANCE</u>
PH	8,784.0	8,784.0	8,784.0
EAF	76.6	53.9	54.0
POH	1,080.0	1,102.4	1,080.0
FOH + EFOH	708.8	2,858.0	2,866.3
MOH + EMOH	263.0	92.8	93.1
POF	12.3	12.6	12.3
EFOF	8.1	32.5	32.6
EMOF	3.0	1.1	1.1
	-10.000	EQUIVALENT AVAILABILITY POINTS	

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

$$\frac{PH - POH_{TARGET}}{PH - POH_{ACTUAL}} \times (FOH + EFOH + MOH + EMOH) = EUOH_{ADJUSTED}$$

$$\frac{8784 - 1080}{8784 - 1102.4} \times (2858 + 92.8) = 2,959.4$$

$$100 - POF_{TARGET} - \frac{EUOH_{ADJUSTED}}{PH} \times 100 = EAF_{ADJUSTED}$$

$$100 - 12.3 - \frac{2,959.4}{8,784.0} \times 100 = 54.0$$

PH = PERIOD HOURS
EAF = EQUIVALENT AVAILABILITY FACTOR
POH = PLANNED OUTAGE HOURS
FOH = FORCED OUTAGE HOURS
EFOH = EQUIVALENT FORCED OUTAGE HOURS
MOH = MAINTENANCE OUTAGE HOURS
EMOH = EQUIVALENT MAINTENANCE OUTAGE HOURS
POF = PLANNED OUTAGE FACTOR
EFOF = EQUIVALENT FORCED OUTAGE FACTOR
EMOF = EQUIVALENT MAINTENANCE OUTAGE FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO PERFORMANCE
BIG BEND UNIT NO. 4
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 3.32%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>	<u>ADJUSTED ACTUAL PERFORMANCE</u>
PH	8,784.0	8,784.0	8,784.0
EAF	76.9	73.2	73.2
POH	576.0	585.2	576.0
FOH + EFOH	1,145.8	1,199.3	1,200.6
MOH + EMOH	303.0	569.8	570.4
POF	6.6	6.7	6.6
EFOF	13.0	13.7	13.7
EMOF	3.4	6.5	6.5
	-5.171	EQUIVALENT AVAILABILITY POINTS	

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

$$\frac{PH - POH_{TARGET}}{PH - POH_{ACTUAL}} \times (FOH + EFOH + MOH + EMOH) = EUOH_{ADJUSTED}$$

$$\frac{8784 - 576}{8784 - 585.2} \times (1199.3 + 569.8) = 1,771.1$$

$$100 - POF_{TARGET} - \frac{EUOH_{ADJUSTED}}{PH} \times 100 = EAF_{ADJUSTED}$$

$$100 - 6.6 - \frac{1,771.1}{8,784.0} \times 100 = 73.2$$

PH = PERIOD HOURS
EAF = EQUIVALENT AVAILABILITY FACTOR
POH = PLANNED OUTAGE HOURS
FOH = FORCED OUTAGE HOURS
EFOH = EQUIVALENT FORCED OUTAGE HOURS
MOH = MAINTENANCE OUTAGE HOURS
EMOH = EQUIVALENT MAINTENANCE OUTAGE HOURS
POF = PLANNED OUTAGE FACTOR
EFOF = EQUIVALENT FORCED OUTAGE FACTOR
EMOF = EQUIVALENT MAINTENANCE OUTAGE FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO PERFORMANCE
POLK UNIT NO. 1
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 0.76%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>	<u>ADJUSTED ACTUAL PERFORMANCE</u>
PH	8,784.0	8,784.0	8,784.0
EAF	81.5	82.4	85.2
POH	912.0	1,170.0	912.0
FOH + EFOH	362.4	240.8	249.0
MOH + EMOH	349.3	131.4	135.9
POF	10.4	13.3	10.4
EFOF	4.1	2.7	2.8
EMOF	4.0	1.5	1.5
	10.000	EQUIVALENT AVAILABILITY POINTS	

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

$$\frac{PH - POH_{TARGET}}{PH - POH_{ACTUAL}} \times (FOH + EFOH + MOH + EMOH) = EUOH_{ADJUSTED}$$

$$\frac{8784 - 912}{8784 - 1170} \times (240.8 + 131.4) = 384.8$$

$$100 - POF_{TARGET} - \frac{EUOH_{ADJUSTED}}{PH} \times 100 = EAF_{ADJUSTED}$$

$$100 - 10.4 - \frac{384.8}{8,784.0} \times 100 = 85.2$$

PH = PERIOD HOURS
EAF = EQUIVALENT AVAILABILITY FACTOR
POH = PLANNED OUTAGE HOURS
FOH = FORCED OUTAGE HOURS
EFOH = EQUIVALENT FORCED OUTAGE HOURS
MOH = MAINTENANCE OUTAGE HOURS
EMOH = EQUIVALENT MAINTENANCE OUTAGE HOURS
POF = PLANNED OUTAGE FACTOR
EFOF = EQUIVALENT FORCED OUTAGE FACTOR
EMOF = EQUIVALENT MAINTENANCE OUTAGE FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO PERFORMANCE
BAYSIDE UNIT NO. 1
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 4.12%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>	<u>ADJUSTED ACTUAL PERFORMANCE</u>
PH	8,784.0	8,784.0	8,784.0
EAF	76.1	78.1	80.2
POH	1,561.0	1,757.4	1,561.0
FOH + EFOH	219.4	74.1	76.2
MOH + EMOH	322.0	92.8	95.4
POF	17.8	20.0	17.8
EFOF	2.5	0.8	0.9
EMOF	3.7	1.1	1.1
	10.000	EQUIVALENT AVAILABILITY POINTS	

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

$$\frac{PH - POH_{TARGET}}{PH - POH_{ACTUAL}} \times (FOH + EFOH + MOH + EMOH) = EUOH_{ADJUSTED}$$

$$\frac{8784 - 1561}{8784 - 1757.4} \times (74.1 + 92.8) = 171.6$$

$$100 - POF_{TARGET} - \frac{EUOH_{ADJUSTED}}{PH} \times 100 = EAF_{ADJUSTED}$$

$$100 - 17.8 - \frac{171.6}{8,784.0} \times 100 = 80.2$$

PH = PERIOD HOURS
EAF = EQUIVALENT AVAILABILITY FACTOR
POH = PLANNED OUTAGE HOURS
FOH = FORCED OUTAGE HOURS
EFOH = EQUIVALENT FORCED OUTAGE HOURS
MOH = MAINTENANCE OUTAGE HOURS
EMOH = EQUIVALENT MAINTENANCE OUTAGE HOURS
POF = PLANNED OUTAGE FACTOR
EFOF = EQUIVALENT FORCED OUTAGE FACTOR
EMOF = EQUIVALENT MAINTENANCE OUTAGE FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO PERFORMANCE
BAYSIDE UNIT NO. 2
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 8.44%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>	<u>ADJUSTED ACTUAL PERFORMANCE</u>
PH	8,784.0	8,784.0	8,784.0
EAF	83.1	87.4	84.2
POH	935.0	625.6	935.0
FOH + EFOH	307.6	135.6	130.5
MOH + EMOH	244.2	342.0	329.0
POF	10.6	7.1	10.6
EFOF	3.5	1.5	1.5
EMOF	2.8	3.9	3.7
	6,298	EQUIVALENT AVAILABILITY POINTS	

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

$$\frac{PH - POH_{TARGET}}{PH - POH_{ACTUAL}} \times (FOH + EFOH + MOH + EMOH) = EUOH_{ADJUSTED}$$

$$\frac{8784 - 935}{8784 - 625.6} \times (135.6 + 342) = 459.5$$

$$100 - POF_{TARGET} - \frac{EUOH_{ADJUSTED}}{PH} \times 100 = EAF_{ADJUSTED}$$

$$100 - 10.6 - \frac{459.5}{8,784.0} \times 100 = 84.2$$

PH = PERIOD HOURS
EAF = EQUIVALENT AVAILABILITY FACTOR
POH = PLANNED OUTAGE HOURS
FOH = FORCED OUTAGE HOURS
EFOH = EQUIVALENT FORCED OUTAGE HOURS
MOH = MAINTENANCE OUTAGE HOURS
EMOH = EQUIVALENT MAINTENANCE OUTAGE HOURS
POF = PLANNED OUTAGE FACTOR
EFOF = EQUIVALENT FORCED OUTAGE FACTOR
EMOF = EQUIVALENT MAINTENANCE OUTAGE FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
BIG BEND UNIT NO. 1
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 6.90%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,683	10,944
NET GENERATION (GWH)	2,630.7	1,996.6
OPERATING BTU (10 ⁹)	27,366.7	21,851.3
NET OUTPUT FACTOR	91.1	72.3

0.000 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $\text{NOF} * (-16.86) + 12219.15 = \text{ANOHR}$

$$72.3 * (-16.86) + 12219.15 = 11,000$$

$$10,944 - 11,000 = -56$$

$$10,683 + (-56) = 10,627 \leftarrow \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

ANOHR = AVERAGE NET OPERATING HEAT RATE
NOF = NET OPERATING FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
BIG BEND UNIT NO. 2
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 12.47%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,460	10,728
NET GENERATION (GWH)	2,296.0	1,467.6
OPERATING BTU (10 ⁹)	23,980.4	15,744.9
NET OUTPUT FACTOR	92.2	73.3

1.863 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $\text{NOF} * (-21.73) + 12462.31 = \text{ANOHR}$

$$73.3 * (-21.73) + 12462.31 = 10,870$$

$$10,728 - 10,870 = -142$$

$$10,460 + (-142) = 10,318 \quad \leftarrow \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

ANOHR = AVERAGE NET OPERATING HEAT RATE
NOF = NET OPERATING FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
BIG BEND UNIT NO. 3
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 6.59%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,654	10,735
NET GENERATION (GWH)	2,596.7	1,543.4
OPERATING BTU (10 ⁹)	27,069.9	16,568.7
NET OUTPUT FACTOR	89.6	61.7

10.000 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $\text{NOF} * (-17.14) + 12188.87 = \text{ANOHR}$

$$61.7 * (-17.14) + 12188.87 = 11,131$$

$$10,735 - 11,131 = -396$$

$$10,654 + (-396) = 10,258 \quad \leftarrow \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

ANOHR = AVERAGE NET OPERATING HEAT RATE
NOF = NET OPERATING FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
BIG BEND UNIT NO. 4
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 13.12%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,458	10,521
NET GENERATION (GWH)	2,908.8	2,275.9
OPERATING BTU (10 ⁹)	30,261.4	23,944.1
NET OUTPUT FACTOR	91.0	70.9

4.609 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $\text{NOF} * (-13.92) + 11725.49 = \text{ANOHR}$

$$70.9 * (-13.92) + 11725.49 = 10,739$$

$$10,521 - 10,739 = -218$$

$$10,458 + -218 = 10,241 \leftarrow \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

ANOHR = AVERAGE NET OPERATING HEAT RATE
NOF = NET OPERATING FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
POLK UNIT NO. 1
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 6.51%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,191	9,859
NET GENERATION (GWH)	1,597.2	1,476.2
OPERATING BTU (10 ⁹)	16,729.2	14,553.8
NET OUTPUT FACTOR	94.0	93.8

9.342 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $\text{NOF} * (-22.73) + 12326.95 = \text{ANOHR}$

$$93.8 * (-22.73) + 12326.95 = 10,195$$

$$9,859 - 10,195 = -336$$

$$10,191 + (-336) = 9,855 \quad \leftarrow \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

ANOHR = AVERAGE NET OPERATING HEAT RATE
NOF = NET OPERATING FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
BAYSIDE UNIT NO. 1
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 14.36%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	7,232	7,502
NET GENERATION (GWH)	3,178.1	3,281.7
OPERATING BTU (10 ⁹)	23,354.0	24,617.8
NET OUTPUT FACTOR	71.6	64.2

-5.553 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: NOF *(-12.11) + 8098.65 = ANOHR

$$64.2 * (-12.11) + 8098.65 = 7,322$$

$$7,502 - 7,322 = 180$$

$$7,232 + 180 = 7,412 \quad \leftarrow \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

ANOHR = AVERAGE NET OPERATING HEAT RATE
NOF = NET OPERATING FACTOR

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
BAYSIDE UNIT NO. 2
JANUARY 2016 - DECEMBER 2016**

WEIGHTING FACTOR = 13.89%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	7,484	7,662
NET GENERATION (GWH)	3,779.9	4,534.4
OPERATING BTU (10 ⁹)	28,243.6	34,740.9
NET OUTPUT FACTOR	53.5	57.6

-9.803 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $NOF * (-8.68) + 7948.71 = ANOHR$

$$57.6 * (-8.68) + 7948.71 = 7,448$$

$$7,662 - 7,448 = 214$$

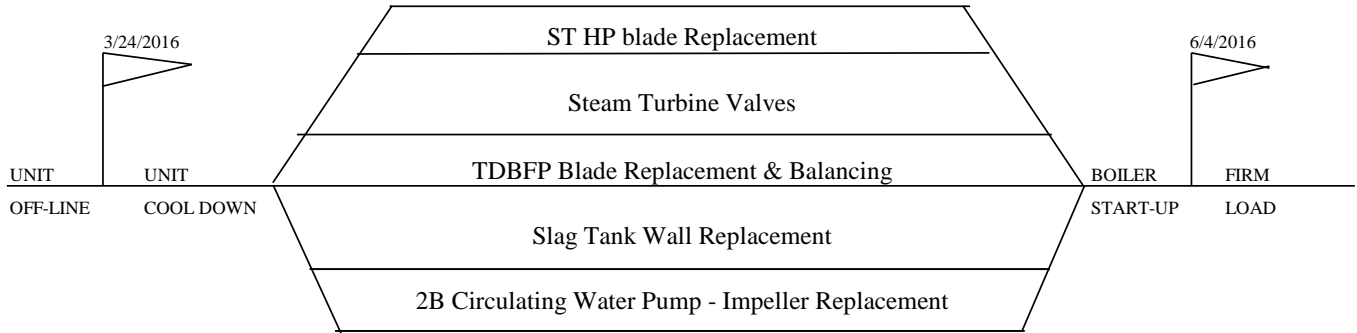
$$7,484 + 214 = 7,698 \leftarrow \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

ANOHR = AVERAGE NET OPERATING HEAT RATE
NOF = NET OPERATING FACTOR

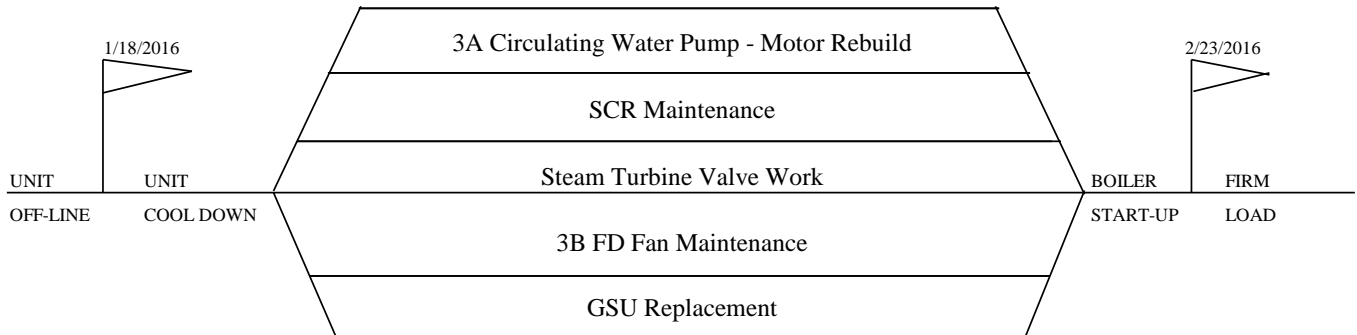
**TAMPA ELECTRIC COMPANY
PLANNED OUTAGE SCHEDULE (ACTUAL)
GPIF UNITS
JANUARY 2016 - DECEMBER 2016**

<u>PLANT / UNIT</u>	<u>PLANNED OUTAGE DATES</u>	<u>OUTAGE DESCRIPTION</u>
BIG BEND 1	Apr 09 - Apr 20 Dec 13 - Dec 23	Fuel System Cleanup and FGD/SCR work Fuel System Cleanup and FGD/SCR work
+ BIG BEND 2	Mar 24 - Jun 04 Dec 11 - Dec 22	Steam Turbine HP Blade replacement, Steam Turbine Valves, TDBFP Blade replacement & Balancing, Slag Tank wall replacement, 2B Circulating Water Pump - Impeller Replacement Fuel System Cleanup and FGD/SCR work
+ BIG BEND 3	Jan 18 - Feb 23 Aug 24 - Sep 04	GSU Replacement, 3A Circulating Water Pump Motor rebuild Fuel System Cleanup and FGD/SCR work
BIG BEND 4	Feb 28 - Mar 12 Nov 10 - Nov 21	Fuel System Cleanup and FGD/SCR work Fuel System Cleanup and FGD/SCR work
+ POLK 1	Apr 23 - May 27 Nov 27 - Dec 12	HRSB Module 1 casing & seal replacement, HRSB basement improvement, CT CI, 1st stage nozzle replacement, ASU lube oil cooler replacement, SAP pump tank cooler replacement, Aux Boiler evap. Turbine replacement Fuel System Cleanup
+ BAYSIDE 1	Feb 12 - Feb 23 Oct 09 - Dec 11	Fuel System Cleanup GSU Replacement, Turbine Valve Rebuilds, Turbine Center Line Inspection/Refurbishment, Intake Dredging, Tunnel Refurbishment, HRSB Control Valve Replacement
BAYSIDE 2	Feb 27 - Mar 11 Sep 15 - Sep 29	Fuel System Cleanup Fuel System Cleanup
+ Critical Path Method ("CPM") for units with outages greater than 4 weeks are included.		

**TAMPA ELECTRIC COMPANY
 CRITICAL PATH METHOD DIAGRAMS
 GPIF UNITS > FOUR WEEKS
 JANUARY 2016 - DECEMBER 2016**

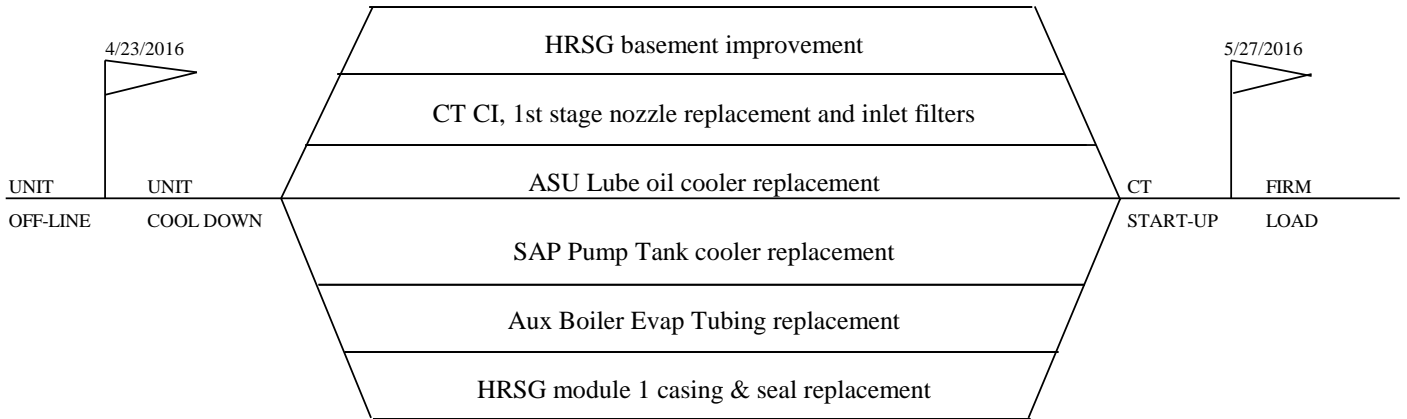


TAMPA ELECTRIC COMPANY
 BIG BEND UNIT 2
 PLANNED OUTAGE 2016
 ACTUAL CPM

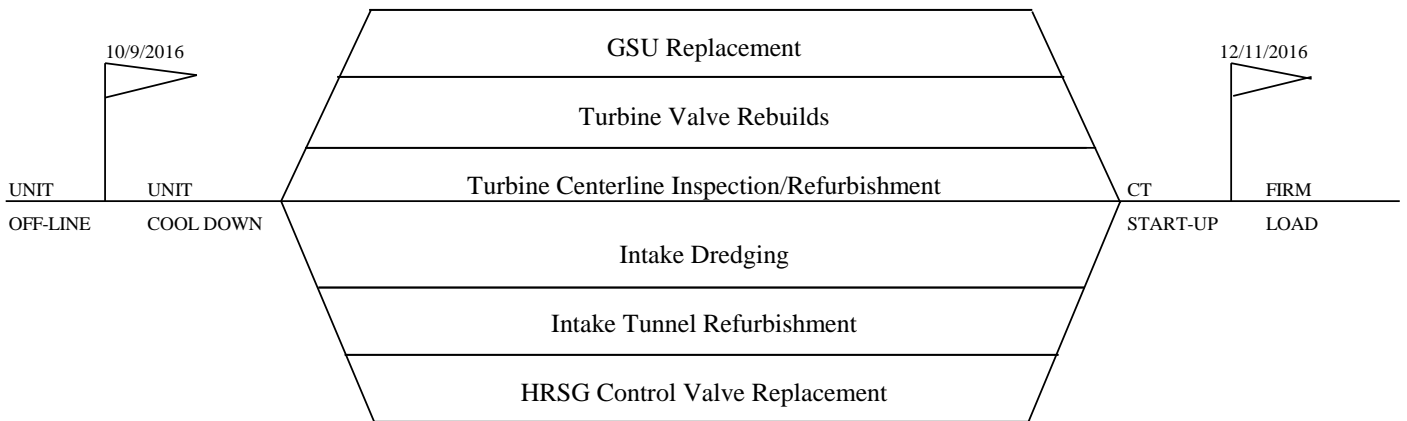


TAMPA ELECTRIC COMPANY
 BIG BEND UNIT 3
 PLANNED OUTAGE 2016
 ACTUAL CPM

**TAMPA ELECTRIC COMPANY
 CRITICAL PATH METHOD DIAGRAMS
 GPIF UNITS > FOUR WEEKS
 JANUARY 2016 - DECEMBER 2016**



TAMPA ELECTRIC COMPANY
 POLK UNIT 1
 PLANNED OUTAGE 2016
 ACTUAL CPM



TAMPA ELECTRIC COMPANY
 BAYSIDE UNIT 1
 PLANNED OUTAGE 2016
 ACTUAL CPM

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2016 - DECEMBER 2016

BIG BEND 1

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	382.8	82.0	+10	1,399.4	10,473
+9	344.5	81.7	+9	1,259.5	10,486
+8	306.2	81.3	+8	1,119.5	10,500
+7	267.9	81.0	+7	979.6	10,513
+6	229.7	80.7	+6	839.7	10,527
+5	191.4	80.3	+5	699.7	10,540
+4	153.1	80.0	+4	559.8	10,554
+3	114.8	79.7	+3	419.8	10,567
+2	76.6	79.4	+2	279.9	10,581
+1	38.3	79.0	+1	139.9	10,594
					10,608
0	0.0	78.7	0	0.0	10,683
					10,758
-1	(96.1)	78.1	-1	(139.9)	10,772
-2	(192.2)	77.4	-2	(279.9)	10,785
-3	(288.2)	76.7	-3	(419.8)	10,799
-4	(384.3)	76.1	-4	(559.8)	10,812
-5	(480.4)	75.4	-5	(699.7)	10,826
-6	(576.5)	74.8	-6	(839.7)	10,839
-7	(672.5)	74.1	-7	(979.6)	10,853
-8	(768.6)	73.5	-8	(1,119.5)	10,866
-9	(864.7)	72.8	-9	(1,259.5)	10,880
-10	(960.8)	72.2	-10	(1,399.4)	10,893

Weighting Factor =

1.89%

Weighting Factor =

6.90%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2016 - DECEMBER 2016

BIG BEND 2

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	893.6	72.3	+10	2,528.1	10,025
+9	804.2	71.9	+9	2,275.3	10,061
+8	714.9	71.6	+8	2,022.5	10,097
+7	625.5	71.2	+7	1,769.7	10,133
+6	536.2	70.9	+6	1,516.8	10,169
+5	446.8	70.5	+5	1,264.0	10,205
+4	357.4	70.2	+4	1,011.2	10,241
+3	268.1	69.8	+3	758.4	10,277
+2	178.7	69.4	+2	505.6	10,313
+1	89.4	69.1	+1	252.8	10,349
0	0.0	68.7	0	0.0	10,385
-1	(50.5)	68.0	-1	(252.8)	10,460
-2	(101.0)	67.3	-2	(505.6)	10,535
-3	(151.4)	66.6	-3	(758.4)	10,571
-4	(201.9)	65.9	-4	(1,011.2)	10,607
-5	(252.4)	65.2	-5	(1,264.0)	10,643
-6	(302.9)	64.5	-6	(1,516.8)	10,679
-7	(353.4)	63.8	-7	(1,769.7)	10,715
-8	(403.9)	63.1	-8	(2,022.5)	10,751
-9	(454.3)	62.3	-9	(2,275.3)	10,787
-10	(504.8)	61.6	-10	(2,528.1)	10,823

AHR POINTS
1.863

Adjusted ANOHR
10,318

EAFF POINTS
-10.000

Adjusted EAF
58.0

Weighting Factor =

4.41%

Weighting Factor =

12.47%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2016 - DECEMBER 2016

BIG BEND 3

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	648.9	79.5	+10	1,336.8	10,441
+9	584.0	79.2	+9	1,203.1	10,455
+8	519.1	78.9	+8	1,069.4	10,469
+7	454.2	78.6	+7	935.7	10,483
+6	389.4	78.3	+6	802.1	10,496
+5	324.5	78.1	+5	668.4	10,510
+4	259.6	77.8	+4	534.7	10,524
+3	194.7	77.5	+3	401.0	10,538
+2	129.8	77.2	+2	267.4	10,551
+1	64.9	76.9	+1	133.7	10,565
0	0.0	76.6	0	0.0	10,654
-1	(56.1)	76.1	-1	(133.7)	10,743
-2	(112.3)	75.5	-2	(267.4)	10,757
-3	(168.4)	74.9	-3	(401.0)	10,770
-4	(224.5)	74.4	-4	(534.7)	10,784
-5	(280.6)	73.8	-5	(668.4)	10,798
-6	(336.8)	73.3	-6	(802.1)	10,812
-7	(392.9)	72.7	-7	(935.7)	10,825
-8	(449.0)	72.1	-8	(1,069.4)	10,839
-9	(505.1)	71.6	-9	(1,203.1)	10,853
-10	(561.3)	71.0	-10	(1,336.8)	10,867

Weighting Factor =

3.20%

Weighting Factor =

6.59%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2016 - DECEMBER 2016

BIG BEND 4

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	673.1	80.6	+10	2,659.8	10,075
+9	605.8	80.2	+9	2,393.8	10,106
+8	538.5	79.8	+8	2,127.8	10,136
+7	471.2	79.5	+7	1,861.8	10,167
+6	403.8	79.1	+6	1,595.9	10,198
+5	336.5	78.8	+5	1,329.9	10,229
+4	269.2	78.4	+4	1,063.9	10,260
+3	201.9	78.0	+3	797.9	10,291
+2	134.6	77.7	+2	532.0	10,321
+1	67.3	77.3	+1	266.0	10,352
0	0.0	76.9	0	0.0	10,383
-1	(195.8)	76.2	-1	(266.0)	10,458
-2	(391.7)	75.5	-2	(532.0)	10,533
-3	(587.5)	74.8	-3	(797.9)	10,564
-4	(783.4)	74.0	-4	(1,063.9)	10,595
-5	(979.2)	73.3	-5	(1,329.9)	10,626
-6	(1,175.1)	72.6	-6	(1,595.9)	10,657
-7	(1,370.9)	71.9	-7	(1,861.8)	10,687
-8	(1,566.7)	71.1	-8	(2,127.8)	10,718
-9	(1,762.6)	70.4	-9	(2,393.8)	10,749
-10	(1,958.4)	69.7	-10	(2,659.8)	10,780

AHR POINTS
4.609

Adjusted ANOHR
10,241

EF POINTS
-5.171

Adjusted EAF
73.2

Weighting Factor =

3.32%

Weighting Factor =

13.12%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2016 - DECEMBER 2016

POLK 1

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	153.6	83.7	+10	1,319.6	9,837
+9	138.2	83.4	+9	1,187.6	9,865
+8	122.9	83.2	+8	1,055.7	9,892
+7	107.5	83.0	+7	923.7	9,920
+6	92.2	82.8	+6	791.8	9,948
+5	76.8	82.6	+5	659.8	9,976
+4	61.4	82.4	+4	527.8	10,004
+3	46.1	82.2	+3	395.9	10,032
+2	30.7	81.9	+2	263.9	10,060
+1	15.4	81.7	+1	132.0	10,088
0	0.0	81.5	0	0.0	10,116
-1	(51.1)	81.1	-1	(132.0)	10,191
-2	(102.2)	80.7	-2	(263.9)	10,266
-3	(153.3)	80.2	-3	(395.9)	10,294
-4	(204.4)	79.8	-4	(527.8)	10,322
-5	(255.5)	79.4	-5	(659.8)	10,350
-6	(306.6)	79.0	-6	(791.8)	10,377
-7	(357.7)	78.5	-7	(923.7)	10,405
-8	(408.8)	78.1	-8	(1,055.7)	10,433
-9	(459.9)	77.7	-9	(1,187.6)	10,461
-10	(511.0)	77.2	-10	(1,319.6)	10,489

Weighting Factor =

0.76%

Weighting Factor =

6.51%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2016 - DECEMBER 2016

BAYSIDE 1

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	835.8	78.2	+10	2,911.6	6,967
+9	752.2	78.0	+9	2,620.4	6,986
+8	668.6	77.8	+8	2,329.3	7,005
+7	585.0	77.6	+7	2,038.1	7,024
+6	501.5	77.3	+6	1,746.9	7,043
+5	417.9	77.1	+5	1,455.8	7,062
+4	334.3	76.9	+4	1,164.6	7,081
+3	250.7	76.7	+3	873.5	7,100
+2	167.2	76.5	+2	582.3	7,119
+1	83.6	76.3	+1	291.2	7,138
0	0.0	76.1	0	0.0	7,232
-1	(13.6)	75.6	-1	(291.2)	7,326
-2	(27.2)	75.2	-2	(582.3)	7,345
-3	(40.8)	74.8	-3	(873.5)	7,364
-4	(54.4)	74.4	-4	(1,164.6)	7,383
-5	(68.0)	73.9	-5	(1,455.8)	7,402
-6	(81.6)	73.5	-6	(1,746.9)	7,420
-7	(95.2)	73.1	-7	(2,038.1)	7,439
-8	(108.8)	72.7	-8	(2,329.3)	7,458
-9	(122.4)	72.2	-9	(2,620.4)	7,477
-10	(136.0)	71.8	-10	(2,911.6)	7,496

Weighting Factor =

4.12%

Weighting Factor =

14.36%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2016 - DECEMBER 2016

BAYSIDE 2

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	1,711.3	84.9	+10	2,815.6	7,267
+9	1,540.2	84.7	+9	2,534.1	7,282
+8	1,369.1	84.5	+8	2,252.5	7,296
+7	1,197.9	84.3	+7	1,970.9	7,310
+6	1,026.8	84.1	+6	1,689.4	7,324
+5	855.7	84.0	+5	1,407.8	7,338
+4	684.5	83.8	+4	1,126.3	7,352
+3	513.4	83.6	+3	844.7	7,367
+2	342.3	83.4	+2	563.1	7,381
+1	171.1	83.3	+1	281.6	7,395
0	0.0	83.1	0	0.0	7,409
-1	(81.8)	82.7	-1	(281.6)	7,484
-2	(163.6)	82.4	-2	(563.1)	7,559
-3	(245.4)	82.0	-3	(844.7)	7,573
-4	(327.3)	81.6	-4	(1,126.3)	7,587
-5	(409.1)	81.3	-5	(1,407.8)	7,602
-6	(490.9)	80.9	-6	(1,689.4)	7,616
-7	(572.7)	80.6	-7	(1,970.9)	7,630
-8	(654.5)	80.2	-8	(2,252.5)	7,644
-9	(736.3)	79.9	-9	(2,534.1)	7,658
-10	(818.2)	79.5	-10	(2,815.6)	7,672

← **EA
POINTS
6.298**

**Adjusted
EAF
84.2** →

← **AHR
POINTS
-9.803**

**Adjusted
ANOHR
7,698** →

Weighting Factor =

8.44%

Weighting Factor =

13.89%

**TAMPA ELECTRIC COMPANY
COMPARISON OF GPIF TARGETS VS ACTUAL PERFORMANCE**

EQUIVALENT AVAILABILITY (%)

<u>PLANT / UNIT</u>	<u>TARGET WEIGHTING FACTOR (%)</u>	<u>NORMALIZED WEIGHTING FACTOR</u>	<u>TARGET PERIOD JAN 16 - DEC 16</u>			<u>ACTUAL PERFORMANCE JAN 16 - DEC 16</u>		
			<u>POF</u>	<u>EUOF</u>	<u>EUOR</u>	<u>POF</u>	<u>EUOF</u>	<u>EUOR</u>
BIG BEND 1	1.89%	7.2%	6.6	14.7	15.8	5.9	14.5	15.4
BIG BEND 2	4.41%	16.9%	18.0	13.2	16.1	22.5	22.7	29.3
BIG BEND 3	3.20%	12.2%	12.3	11.1	12.6	12.6	33.6	38.4
BIG BEND 4	3.32%	12.7%	6.6	16.5	17.7	6.7	20.1	21.6
POLK 1	0.76%	2.9%	10.4	8.1	9.0	13.3	4.2	4.9
BAYSIDE 1	4.12%	15.8%	17.8	8.1	9.9	13.3	4.2	4.9
BAYSIDE 2	8.44%	32.3%	10.6	8.1	9.1	13.3	4.2	4.9
GPIF SYSTEM	26.1%	100.0%	12.4	10.9	12.4	13.4	13.7	16.0
GPIF SYSTEM WEIGHTED EQUIVALENT AVAILABILITY (%)			<u>76.7</u>			<u>72.9</u>		
			3 PERIOD AVERAGE			3 PERIOD AVERAGE		
			<u>POF EUOF EUOR</u>			<u>EAF</u>		
			10.9 11.9 13.6			77.2		

AVERAGE NET OPERATING HEAT RATE (Btu/kwh)

<u>PLANT / UNIT</u>	<u>TARGET WEIGHTING FACTOR (%)</u>	<u>NORMALIZED WEIGHTING FACTOR</u>	<u>TARGET HEAT RATE</u>	<u>ADJUSTED ACTUAL HEAT RATE</u>
			<u>JAN 16 - DEC 16</u>	<u>JAN 16 - DEC 16</u>
BIG BEND 1	6.90%	9.3%	10,683	10,627
BIG BEND 2	12.47%	16.9%	10,460	10,318
BIG BEND 3	6.59%	8.9%	10,654	10,258
BIG BEND 4	13.12%	17.8%	10,458	10,241
POLK 1	6.51%	8.8%	10,191	9,855
BAYSIDE 1	14.36%	19.4%	7,232	7,412
BAYSIDE 2	13.89%	18.8%	7,484	7,698
GPIF SYSTEM	73.9%	100.0%		
GPIF SYSTEM WEIGHTED AVERAGE HEAT RATE (Btu/kwh)			<u>9,287</u>	<u>9,229</u>

**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS CALCULATION
JANUARY 2016 - DECEMBER 2016**

Points are calculated according to the formula:

$$GPIP = \sum_{i=1}^n [a_i(EAP_i) + e_i(AHRP_i)]$$

Where:

GPIP = Generating performance incentive points

a_i = Percentage of total system fuel cost reduction attributed to maximum reasonably attainable equivalent availability of unit *i* during the period

e_i = Percentage of total system fuel cost reduction attributed to minimum reasonably attainable average heat rate of unit *i* during the period

EAP_i = Equivalent availability points awarded/deducted for unit *i*

AHRP_i = Average heat rate points awarded/deducted for unit *i*

Weighting factors and point values are listed on page 4.

<i>GPIP</i> =	1.89%	*	(BB 1 EAP)	+	4.41%	*	(BB 2 EAP)	+	3.20%	*	(BB 3 EAP)	
	+	3.32%	*	(BB 4 EAP)	+	0.76%	*	(PK 1 EAP)	+	4.12%	*	(BAY 1 EAP)
	+	8.44%	*	(BAY 2 EAP)	+	6.90%	*	(BB 1 AHRP)	+	12.47%	*	(BB 2 AHRP)
	+	6.59%	*	(BB 3 AHRP)	+	13.12%	*	(BB 4 AHRP)	+	6.51%	*	(PK 1 AHRP)
	+	14.36%	*	(BAY 1 AHRP)	+	13.89%	*	(BAY 2 AHRP)				

<i>GPIP</i> =	1.89%	*	0.895	+	4.41%	*	-10.000	+	3.20%	*	-10.000	
	+	3.32%	*	-5.171	+	0.76%	*	10.000	+	4.12%	*	10.000
	+	8.44%	*	6.298	+	6.90%	*	0.000	+	12.47%	*	1.863
	+	6.59%	*	10.000	+	13.12%	*	4.609	+	6.51%	*	9.342
	+	14.36%	*	-5.553	+	13.89%	*	-9.803				

<i>GPIP</i> =			0.017	+			-0.441	+			-0.320
	+		-0.172	+			0.076	+			0.412
	+		0.532	+			0.000	+			0.232
	+		0.659	+			0.605	+			0.608
	+		-0.798	+			-1.362				

GPIP = 0.050 POINTS

REWARD/PENALTY dollar amounts of the Generating Performance Incentive Factor (GPIF) are determined directly from the table for the corresponding Generating Performance Points (GPIP) on page 2.

GPIF REWARD = \$47,392

EXHIBIT NO. ____ (BSB-1)
TAMPA ELECTRIC COMPANY
DOCKET NO. 170001-EI
GPIF 2016 FINAL TRUE-UP
DOCUMENT NO. 2

EXHIBIT TO THE TESTIMONY OF
BRIAN S. BUCKLEY

DOCKET NO. 170001-EI

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
JANUARY 2016 - DECEMBER 2016
TRUE-UP

DOCUMENT NO. 2
ACTUAL UNIT PERFORMANCE DATA

ORIGINAL SHEET NO. 8.401.16A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2016 - DECEMBER 2016

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BIG BEND 1	JAN 16	FEB 16	MAR 16	APR 16	MAY 16	JUN 16	JUL 16	AUG 16	SEP 16	OCT 16	NOV 16	DEC 16	2016
1. EAF (%)	48.0	77.4	91.8	61.7	68.4	88.4	93.3	98.1	94.9	75.7	94.1	63.5	79.6
2. PH	744	696	743	720	744	720	744	744	720	744	721	744	8,784
3. SH	364.7	569.8	683.5	445.7	516.4	720.0	744.0	744.0	702.8	587.0	532.4	499.4	7,109.7
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	146.3	0.0	146.3
5. UH	379.3	126.2	59.5	274.3	227.6	0.0	0.0	0.0	17.2	157.0	42.3	244.6	1,528.1
6. POH	0.0	0.0	0.0	274.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	244.6	518.9
7. FOH	379.3	126.2	59.5	0.0	227.6	0.0	0.0	0.0	17.2	157.0	0.0	0.0	966.9
8. MOH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.3	0.0	42.3
9. PFOH	30.9	94.0	15.9	9.8	10.9	108.4	507.8	0.0	34.0	50.1	0.0	56.9	918.6
10. LR PF (MW)	94.0	131.7	23.5	18.8	161.5	28.8	30.4	0.0	217.3	180.0	0.0	189.9	69.0
11. PMOH	0.0	0.3	1.0	1.4	6.7	408.4	133.3	21.9	1.0	1.0	0.3	0.0	575.3
12. LR PM (MW)	0.0	206.9	214.4	195.0	169.0	70.9	28.7	249.8	216.4	216.9	216.0	0.0	70.3
13. NSC (MW)	395.0	395.0	395.0	385.0	385.0	385.0	385.0	385.0	385.0	385.0	385.0	395.0	388.0
14. OPR BTU(GBTU)	894.3	1,684.9	1,958.1	1,221.2	1,991.4	2,459.8	2,435.2	2,421.1	2,180.5	1,704.3	1,427.7	1,473.0	21,851.3
15. NET GEN (MWH)	82,135	157,430	181,868	113,374	184,974	230,382	223,155	217,261	195,902	151,866	124,952	133,340	1,996,639
16. ANOHR (BTU/KWH)	10,888.1	10,702.4	10,766.4	10,771.3	10,765.8	10,676.9	10,912.4	11,143.7	11,130.5	11,222.7	11,425.7	11,046.9	10,944.0
17. NOF (%)	57.0	69.9	67.4	66.1	93.0	83.1	77.9	75.8	72.4	67.2	61.0	67.6	72.4
18. NPC (MW)	395.0	395.0	395.0	385.0	385.0	385.0	385.0	385.0	385.0	385.0	385.0	395.0	388.3
19. ANOHR EQUATION	ANOHR = NOF (-16.86) + (12,219)												

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ORIGINAL SHEET NO. 8.401.16A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2016 - DECEMBER 2016

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BIG BEND 2	JAN 16	FEB 16	MAR 16	APR 16	MAY 16	JUN 16	JUL 16	AUG 16	SEP 16	OCT 16	NOV 16	DEC 16	2016
1. EAF (%)	76.7	8.4	68.3	0.0	0.0	36.8	95.6	86.2	62.4	67.8	91.9	59.6	54.8
2. PH	744	696	743	720	744	720	744	744	720	744	721	744	8,784
3. SH	595.3	59.5	570.0	0.0	0.0	353.5	717.0	674.6	489.2	585.8	613.7	496.1	5,154.7
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.5	0.0	79.5
5. UH	148.7	636.5	173.0	720.0	744.0	366.5	27.0	69.4	230.8	158.2	27.8	247.9	3,549.8
6. POH	0.0	0.0	173.0	720.0	744.0	90.0	0.0	0.0	0.0	0.0	0.0	247.9	1,974.9
7. FOH	148.7	636.5	0.0	0.0	0.0	276.5	27.0	69.4	230.8	158.2	0.0	0.0	1,547.1
8. MOH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	0.0	27.8
9. PFOH	220.2	20.0	519.3	0.0	0.0	137.8	22.3	274.0	450.3	462.0	234.0	468.6	2,808.5
10. LR PF (MW)	31.3	21.9	43.0	0.0	0.0	246.9	15.1	37.5	34.2	67.9	49.7	44.3	54.6
11. PMOH	144.3	0.0	50.7	0.0	0.0	0.0	8.4	11.7	0.0	0.2	0.7	0.0	215.8
12. LR PM (MW)	19.5	0.0	45.9	0.0	0.0	0.0	230.1	216.0	0.0	178.4	216.0	0.0	45.2
13. NSC (MW)	395.0	395.0	395.0	385.0	385.0	385.0	385.0	385.0	385.0	385.0	385.0	395.0	388.3
14. OPR BTU(GBTU)	1,571.3	211.3	1,598.4	0.0	0.0	872.0	2,560.0	2,292.2	1,484.7	1,772.6	1,690.4	1,692.0	15,744.9
15. NET GEN (MWH)	138,943	18,535	144,508	0	0	83,401	253,184	221,287	139,783	159,715	148,516	159,739	1,467,611
16. ANOHR (BTU/KWH)	11,308.6	11,401.7	11,060.9	0.0	0.0	10,455.5	10,111.1	10,358.3	10,621.5	11,098.8	11,382.1	10,592.3	10,728.0
17. NOF (%)	59.1	78.9	64.2	0.0	0.0	61.3	91.7	85.2	74.2	70.8	62.9	81.5	73.3
18. NPC (MW)	395.0	395.0	395.0	385.0	385.0	385.0	385.0	385.0	385.0	385.0	385.0	395.0	388.3
19. ANOHR EQUATION	ANOHR = NOF (-21.73) + (12,462)												

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EXHIBIT NO. _____ (BSB-1)
TAMPA ELECTRIC COMPANY
DOCKET NO. 170001-EI
DOCUMENT NO. 2
PAGE 2 OF 7

ORIGINAL SHEET NO. 8.401.16A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2016 - DECEMBER 2016

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BIG BEND 3	JAN 16	FEB 16	MAR 16	APR 16	MAY 16	JUN 16	JUL 16	AUG 16	SEP 16	OCT 16	NOV 16	DEC 16	2016
1. EAF (%)	37.8	11.3	53.5	59.3	74.2	52.7	44.6	53.0	49.6	85.4	56.7	65.7	53.9
2. PH	744	696	743	720	744	720	744	744	720	744	721	744	8,784
3. SH	201.7	158.5	660.2	675.6	556.3	622.7	476.6	572.3	516.7	743.1	455.8	664.1	6,303.7
4. RSH	176.3	0.0	71.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	247.8
5. UH	366.0	537.5	11.3	44.4	187.8	97.3	267.4	171.7	203.3	0.9	265.2	79.9	2,232.5
6. POH	313.0	537.5	0.0	0.0	0.0	0.0	0.0	169.0	82.9	0.0	0.0	0.0	1,102.4
7. FOH	53.0	0.0	0.0	44.4	187.8	97.3	267.4	2.7	120.4	0.9	188.4	79.9	1,042.0
8. MOH	0.0	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.8	0.0	88.1
9. PFOH	145.2	158.5	660.2	561.0	91.1	587.6	476.6	572.3	516.7	729.8	452.0	575.1	5,525.9
10. LR PF (MW)	266.6	202.4	202.4	175.1	9.4	163.2	120.1	122.9	122.3	58.3	40.9	120.4	130.4
11. PMOH	0.0	0.0	0.0	0.0	9.2	0.4	0.0	0.0	0.0	0.7	0.0	4.8	15.0
12. LR PM (MW)	0.0	0.0	0.0	0.0	84.0	164.7	0.0	0.0	0.0	112.9	0.0	197.6	123.3
13. NSC (MW)	400.0	400.0	400.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	400.0	396.3
14. OPR BTU(GBTU)	405.2	234.4	1,060.7	1,369.2	2,157.6	1,497.2	1,349.8	1,617.1	1,423.2	2,409.5	1,176.2	1,868.7	16,568.7
15. NET GEN (MWH)	34,135	21,494	100,847	131,589	204,773	139,051	122,309	148,589	129,000	228,928	111,580	171,065	1,543,360
16. ANOHR BTU/KWH	11,871.9	10,904.0	10,518.1	10,404.8	10,536.7	10,767.1	11,035.9	10,882.8	11,032.3	10,525.2	10,541.4	10,923.7	10,735.0
17. NOF (%)	42.3	33.9	38.2	49.3	93.2	56.5	65.0	65.7	63.2	78.0	62.0	64.4	61.8
18. NPC (MW)	400.0	400.0	400.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	395.0	400.0	396.7
19. ANOHR EQUATION	ANOHR = NOF (-21.73) + (12,462)												

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EXHIBIT NO. _____ (BSB-1)
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ORIGINAL SHEET NO. 8.401.16A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2016 - DECEMBER 2016

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BIG BEND 4	JAN 16	FEB 16	MAR 16	APR 16	MAY 16	JUN 16	JUL 16	AUG 16	SEP 16	OCT 16	NOV 16	DEC 16	2016
1. EAF (%)	92.7	73.4	63.1	68.1	92.3	63.4	74.2	69.6	89.7	84.2	44.8	62.2	73.2
2. PH	744	696	743	720	744	720	744	744	720	744	721	744	8,784
3. SH	744.0	648.9	469.6	551.0	691.5	600.3	640.3	536.7	720.0	737.2	268.1	709.4	7,317.0
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	153.0	0.0	153.0
5. UH	0.0	47.1	273.4	169.0	52.5	119.7	103.8	207.3	0.0	6.8	299.9	34.6	1,314.0
6. POH	0.0	47.1	273.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	264.7	0.0	585.2
7. FOH	0.0	0.0	0.0	0.0	1.6	0.0	20.7	207.3	0.0	6.8	9.5	34.6	280.5
8. MOH	0.0	0.0	0.0	169.0	50.9	119.7	83.0	0.0	0.0	0.0	25.7	0.0	448.3
9. PFOH	379.2	627.7	0.0	279.5	35.2	474.0	617.2	281.8	562.4	711.9	24.2	701.6	4,694.9
10. LR PF (MW)	61.5	93.0	0.0	83.3	47.4	132.8	62.4	29.2	52.4	62.5	232.6	152.6	85.8
11. PMOH	4.5	10.9	1.4	12.6	1.5	0.0	0.0	0.0	12.1	25.3	243.9	7.3	319.4
12. LR PM (MW)	138.8	241.0	228.0	255.9	220.0	0.0	0.0	0.0	254.2	154.9	153.2	250.8	166.8
13. NSC (MW)	442.0	442.0	442.0	437.0	437.0	437.0	437.0	437.0	437.0	437.0	437.0	442.0	438.8
14. OPR BTU(GBTU)	2,255.9	1,823.9	1,126.6	1,536.5	2,677.9	1,911.2	2,403.1	2,274.3	2,775.6	2,558.5	590.6	2,010.0	23,944.1
15. NET GEN (MWH)	215,861	178,896	102,685	149,165	255,872	184,528	230,994	214,424	257,688	246,498	52,412	186,896	2,275,919
16. ANOHR BTU/KWH	10,450.6	10,195.3	10,971.8	10,300.7	10,465.7	10,357.4	10,403.3	10,606.3	10,771.0	10,379.4	11,268.4	10,754.8	10,521.0
17. NOF (%)	65.6	62.4	49.5	61.9	84.7	70.3	82.6	91.4	81.9	76.5	44.7	59.6	70.9
18. NPC (MW)	442.0	442.0	442.0	437.0	437.0	437.0	437.0	437.0	437.0	437.0	437.0	442.0	438.7
19. ANOHR EQUATION	ANOHR = NOF (-13.92) + (11,725)												

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ORIGINAL SHEET NO. 8.401.16A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2016 - DECEMBER 2016

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
POLK 1	JAN 16	FEB 16	MAR 16	APR 16	MAY 16	JUN 16	JUL 16	AUG 16	SEP 16	OCT 16	NOV 16	DEC 16	2016
1. EAF (%)	100.0	92.3	84.0	74.2	10.2	98.1	97.2	99.4	99.9	83.9	88.4	63.4	82.4
2. PH	744	696	743	720	744	720	744	744	720	744	721	744	8,784
3. SH	744.0	599.4	624.2	534.2	75.7	657.2	723.4	739.6	719.1	624.1	637.3	471.4	7,149.6
4. RSH	0.0	42.8	0.0	0.0	0.0	49.4	0.0	0.0	0.0	0.0	0.0	0.0	92.2
5. UH	0.0	53.8	118.8	185.8	668.3	13.4	20.6	4.4	0.9	119.9	83.7	272.6	1,542.2
6. POH	0.0	0.0	0.0	178.8	635.0	0.0	0.0	0.0	0.0	0.0	83.7	272.6	1,170.0
7. FOH	0.0	38.0	118.8	7.1	33.4	13.4	20.6	4.4	0.9	4.3	0.0	0.0	240.8
8. MOH	0.0	15.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	115.6	0.0	0.0	131.4
9. PFOH	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
10. LR PF (MW)	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
11. PMOH	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
12. LR PM (MW)	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
13. NSC (MW)	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0
14. OPR BTU(GBTU)	1,618.4	1,270.0	1,400.2	1,131.8	94.1	1,249.0	1,550.3	1,518.9	1,542.0	1,144.8	1,070.1	964.1	14,553.8
15. NET GEN (MWH)	164,199	127,694	137,804	118,079	2,883	131,352	158,410	151,850	151,392	120,540	114,322	97,650	1,476,175
16. ANOHR BTU/KWH	9,856.5	9,945.4	10,160.7	9,585.3	32,651.4	9,509.1	9,786.9	10,002.8	10,185.4	9,496.9	9,360.1	9,873.3	9,859.0
17. NOF (%)	100.3	96.8	100.3	100.5	17.3	90.9	99.5	93.3	95.7	87.8	81.5	94.2	93.8
18. NPC (MW)	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0	220.0
19. ANOHR EQUATION	ANOHR = NOF (-22.73) + (12,327)												

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EXHIBIT NO. _____ (BSB-1)
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ORIGINAL SHEET NO. 8.401.16A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2016 - DECEMBER 2016

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BAYSIDE UNIT 1	JAN 16	FEB 16	MAR 16	APR 16	MAY 16	JUN 16	JUL 16	AUG 16	SEP 16	OCT 16	NOV 16	DEC 16	2016
1. EAF (%)	100.0	61.5	99.7	99.3	98.4	96.6	100.0	99.8	97.7	25.3	0.0	57.5	78.1
2. PH	744	696	743	720	744	720	744	744	720	744	721	744	8,784
3. SH	744.0	444.6	743.0	718.4	744.0	720.0	744.0	744.0	720.0	210.6	0.0	454.0	6,986.6
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.5
5. UH	0.0	251.4	0.0	1.6	0.0	0.0	0.0	0.0	0.0	533.4	721.0	285.5	1,792.9
6. POH	0.0	251.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	533.4	721.0	251.6	1,757.4
7. FOH	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.7	34.2
8. MOH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3
9. PFOH	0.2	0.1	7.1	2.1	36.7	0.0	0.0	6.5	1.8	0.0	0.0	152.9	207.3
10. LR PF (MW)	0.0	264.0	264.0	233.7	233.7	0.0	0.0	190.0	233.7	0.0	0.0	108.2	140.6
11. PMOH	0.0	49.3	0.0	9.2	0.0	74.3	0.0	0.0	46.9	67.0	0.0	666.8	913.5
12. LR PM (MW)	0.0	264.0	0.0	233.7	0.0	233.7	0.0	0.0	233.7	233.7	0.0	11.7	73.3
13. NSC (MW)	792.0	792.0	792.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	792.0	732.1
14. OPR BTU(GBTU)	2,779.5	1,731.3	2,788.1	2,819.1	2,446.0	2,617.3	2,738.8	2,565.4	2,592.9	630.6	0.0	908.9	24,617.8
15. NET GEN (MWH)	377,266	231,967	368,785	376,751	332,398	351,323	366,732	342,562	334,034	82,689	0	117,179	3,281,686
16. ANOHR (BTU/KWH)	7,367.4	7,463.4	7,560.2	7,482.7	7,358.5	7,449.8	7,468.0	7,488.8	7,762.4	7,626.4	0.0	7,756.8	7,502.0
17. NOF (%)	64.0	65.9	62.7	74.8	63.7	69.6	70.3	65.7	66.2	56.0	0.0	32.6	64.2
18. NPC (MW)	792.0	792.0	792.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	701.0	792.0	731.3
19. ANOHR EQUATION	ANOHR = NOF (-12.11) + (8,099)												

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ORIGINAL SHEET NO. 8.401.16A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2016 - DECEMBER 2016

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BAYSIDE UNIT 2	JAN 16	FEB 16	MAR 16	APR 16	MAY 16	JUN 16	JUL 16	AUG 16	SEP 16	OCT 16	NOV 16	DEC 16	2016
1. EAF (%)	98.0	84.6	49.8	94.5	99.0	91.4	99.7	99.5	46.8	93.5	98.7	94.4	87.4
2. PH	744	696	743	720	744	720	744	744	720	744	721	744	8,784
3. SH	744.0	647.6	487.8	711.3	744.0	714.0	744.0	744.0	398.0	731.3	721.0	744.0	8,131.1
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	0.0	0.0	2.2
5. UH	0.0	48.4	255.2	8.7	0.0	6.0	0.0	0.0	322.0	10.5	0.0	0.0	650.8
6. POH	0.0	48.4	255.2	0.0	0.0	0.0	0.0	0.0	322.0	0.0	0.0	0.0	625.6
7. FOH	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
8. MOH	0.0	0.0	0.0	8.7	0.0	6.0	0.0	0.0	0.0	10.5	0.0	0.0	25.2
9. PFOH	0.3	10.3	52.3	0.0	42.0	151.9	0.0	23.1	2.1	124.0	12.3	168.0	586.2
10. LR PF (MW)	261.8	261.8	261.8	0.0	2.5	232.3	0.0	145.2	232.3	232.3	232.3	261.8	224.0
11. PMOH	58.6	224.5	478.0	123.3	29.1	72.8	8.8	0.0	61.9	28.8	24.8	0.0	1,110.6
12. LR PM (MW)	261.8	261.8	229.5	232.3	232.3	232.3	232.3	0.0	907.8	232.3	232.3	0.0	276.2
13. NSC (MW)	1,047.0	1,047.0	1,047.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	1,047.0	967.1
14. OPR BTU(GBTU)	3,309.0	3,268.2	1,691.6	3,466.5	3,112.4	3,215.3	3,033.8	3,040.1	1,276.0	2,886.3	3,714.0	2,727.5	34,740.9
15. NET GEN (MWH)	448,880	437,523	218,662	459,495	420,466	430,613	402,670	403,380	163,358	362,913	436,801	349,652	4,534,413
16. ANOHR (BTU/KWH)	7,371.7	7,469.7	7,736.1	7,544.1	7,402.3	7,466.9	7,534.2	7,536.6	7,811.1	7,953.2	8,502.8	7,800.7	7,662.0
17. NOF (%)	57.6	64.5	42.8	69.5	60.8	64.9	58.3	58.4	44.2	53.4	65.2	44.9	57.7
18. NPC (MW)	1,047.0	1,047.0	1,047.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	929.0	1,047.0	968.3
19. ANOHR EQUATION	ANOHR = NOF (-8.68) + (7,949)												

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