



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 050001-EI
IN RE: FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY

GENERATING PERFORMANCE INCENTIVE FACTOR
TRUE-UP
JANUARY 2004 THROUGH DECEMBER 2004

TESTIMONY AND EXHIBIT
OF
DAVID R. KNAPP

DOCUMENT NUMBER-DAT

03193 APR-1 18

FLORIDA PUBLIC SERVICE COMMISSION CLERK

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **DAVID R. KNAPP**

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

8
9 **A.** My name is David R. Knapp. My business address is 702 N.
10 Franklin Street, Tampa, Florida 33602. I am employed by
11 Tampa Electric Company ("Tampa Electric" or "company") as
12 a Senior Engineer in the Resource Planning Department.

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

16
17 **A.** I received a Bachelor of Marine Engineering degree in
18 1986 from the Maine Maritime Academy and a Master of
19 Business Administration from the University of Tampa in
20 2002. Prior to joining Tampa Electric, I worked in the
21 areas of operations engineering and management. In
22 January 1996, I joined Tampa Electric and worked in
23 field operations and power plant engineering. In April
24 2000, I transferred to the Resource Planning department
25 where I provide engineering and technical support in the

development of Tampa Electric's integrated resource planning process and business planning activities.

10 Q. Have you previously testified before the Florida Public
11 Service Commission ("FPSC" or "Commission")?

12 A. Yes. On behalf of Tampa Electric, I testified before
13 this Commission in Docket No. 040001-EI regarding the
14 calculation of the Generating Performance Incentive
15 Factor ("GPIF") targets.

16 Q. What is the purpose of your testimony?

17 A. My testimony presents Tampa Electric's actual performance
18 results from unit equivalent availability and station
19 heat rate used to determine the GPIF for the period
20 January 2004 through December 2004. I will also compare
21 these results to the targets established prior to the
22 beginning of the period.

23 Q. Have you prepared an exhibit to support your testimony?

24 A. Yes, Exhibit No. _____ (DRK-1), consisting of two
25 documents, was prepared under my direction and
supervision. Document No. 1, entitled "Tampa Electric

1 Company, Generating Performance Incentive Factor, January
2 2004 - December 2004, True-up" is consistent with the
3 GPIF Implementation Manual previously approved by the
4 Commission. In addition, Document No. 2 provides the
5 company's Actual Unit Performance Data for the 2004
6 period.

7
8 **Q.** Which generating units on Tampa Electric's system are
9 included in the determination of the GPIF?

10
11 **A.** Five of the company's units are included. They are Big
12 Bend Station Units 1, 2, 3, and 4 and Polk Station Unit
13 1.

14
15 **Q.** Have you calculated the results of Tampa Electric's
16 performance under the GPIF during the January 2004
17 through December 2004 period?

18
19 **A.** Yes, I have. This is shown on Document No. 1, page 4 of
20 26. Based upon 1.323 GPIF points, the result is a reward
21 amount of \$729,534 for the period.

22
23 **Q.** Please proceed with your review of the actual results for
24 the January 2004 through December 2004 period.

25

1 A. On Document No. 1, page 3 of 26, the actual average
2 common equity for the period is shown on line 14 as
3 \$1,396,325,730. This produces the maximum penalty or
4 reward amount of \$5,514,963 as shown on line 21.

5
6 Q. Will you please explain how you arrived at the actual
7 equivalent availability results for the five units
8 included within the GPIF?

9
10 A. Yes. Operating data on each of the units is filed
11 monthly with the Commission on the Actual Unit
12 Performance Data form. Additionally, outage information
13 is reported to the Commission on a monthly basis. A
14 summary of this data for the 12 months provides the basis
15 for the GPIF.

16
17 Q. Are the equivalent availability results shown on Document
18 No. 1, page 6 of 26, column 2, directly applicable to the
19 GPIF table?

20
21 A. No. Adjustments to equivalent availability may be
22 required as noted in section 4.3.3 of the GPIF Manual.
23 The actual equivalent availability including the required
24 adjustment is shown on Document No. 1, page 6 of 26. The
25 necessary adjustments as prescribed in the GPIF Manual

1 are further defined by a letter dated October 23, 1981,
2 from Mr. J. H. Hoffsis of the Commission's Staff. The
3 adjustments for each unit are as follows:
4

5 **Big Bend Unit No. 1**

6 On this unit, 504 planned outage hours were originally
7 scheduled for 2004. Actual outage activities required
8 662.4 planned outage hours. Consequently, the actual
9 equivalent availability of 66.6% is adjusted to 67.9% as
10 shown on Document No. 1, page 7 of 26.
11

12 **Big Bend Unit No. 2**

13 On this unit, 504 planned outage hours were originally
14 scheduled for 2004. Actual outage activities required
15 651.9 planned outage hours. Consequently, the actual
16 equivalent availability of 69.1% is adjusted to 70.4% as
17 shown on Document No. 1, page 8 of 26.
18

19 **Big Bend Unit No. 3**

20 On this unit, 504 planned outage hours were originally
21 scheduled for 2004. Actual outage activities required
22 689.6 planned outage hours. Consequently, the actual
23 equivalent availability of 67.2% is adjusted to 68.8% as
24 shown on Document No. 1, page 9 of 26.
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Big Bend Unit No. 4

On this unit, 504 planned outage hours were originally scheduled for 2004. Actual outage activities required no planned outage hours. Consequently, the actual equivalent availability of 79.3% is adjusted to 74.8% as shown on Document No. 1, page 10 of 26.

Polk Unit No. 1

On this unit, 384 planned outage hours were originally scheduled for 2004. Actual outage activities required 279.3 planned outage hours. Consequently, the actual equivalent availability of 90.5% is adjusted to 89.4%, as shown on Document No. 1, page 11 of 26.

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

A. The final adjusted equivalent availabilities for each unit are shown on Document No. 1, page 6 of 26, column 4. This number is entered into the respective Generating Performance Incentive Point ("GPIP") table for each particular unit on pages 20 of 26 through 24 of 26. Page 4 of 26 summarizes the equivalent availability points to be awarded or penalized.

1 Q. Will you please explain the heat rate results relative to
2 the GPIF?

3
4 A. The actual heat rate and adjusted actual heat rate for
5 Big Bend Units 1, 2, 3, and 4 and Polk Unit 1 are shown
6 on Document No. 1, page 6 of 26. The adjustment was
7 developed based on the guidelines of section 4.3.16 of
8 the GPIF Manual. This procedure is further defined by a
9 letter dated October 23, 1981, from Mr. J.H. Hoffsis of
10 the FPSC Staff. The final adjusted actual heat rates are
11 also shown on page 5 of 26. The heat rate value is
12 entered into the respective GPIF table for the particular
13 unit, shown on pages 20 of 26 through 24 of 26. Page 4
14 of 26 summarizes the weighted heat rate and equivalent
15 availability points to be awarded.

16
17 Q. What is the overall GPIF for Tampa Electric for the
18 January 2004 through December 2004 period?

19
20 A. This is shown on Document No. 1, page 26 of 26.
21 Essentially, the weighting factors shown on page 4 of 26,
22 column 3, plus the equivalent availability points and the
23 heat rate points shown on page 4 of 26, column 4, are
24 substituted within the equation. The resulting value,
25 1.323, is then entered into the GPIF table on page 2 of

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26. Using linear interpolation, the reward amount is \$729,534.

Q. Does this conclude your testimony?

A. Yes, it does.

EXHIBIT NO. _____
TAMPA ELECTRIC COMPANY
DOCKET NO. 050001-EI
(DRK-1)

TAMPA ELECTRIC COMPANY

GENERATING PERFORMANCE INCENTIVE FACTOR

JANUARY 2004 - DECEMBER 2004

GENERATING PERFORMANCE INCENTIVE FACTOR

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EXHIBIT NO. _____
TAMPA ELECTRIC COMPANY
DOCKET NO. 050001-EI
(DRK-1)
DOCUMENT NO. 1

EXHIBIT TO THE TESTIMONY OF
DAVID R. KNAPP

DOCKET NO. 050001-EI

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
JANUARY 2004 - DECEMBER 2004
TRUE-UP

DOCUMENT NO. 1

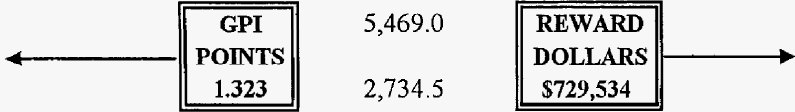
GPIF SCHEDULES

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
JANUARY 2004 - DECEMBER 2004
TRUE-UP
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**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
REWARD / PENALTY TABLE - ACTUAL
JANUARY 2004 - DECEMBER 2004**

GENERATING PERFORMANCE INCENTIVE POINTS (GPIP)	FUEL SAVINGS / (LOSS) (\$000)	GENERATING PERFORMANCE INCENTIVE FACTOR (\$000)
+10	27,344.8	5,515.0
+9	24,610.4	4,963.5
+8	21,875.9	4,412.0
+7	19,141.4	3,860.5
+6	16,406.9	3,309.0
+5	13,672.4	2,757.5
+4	10,937.9	2,206.0
+3	8,203.5	1,654.5
+2	5,469.0	1,103.0
+1	2,734.5	551.5
0	0.0	0.0
-1	(4,295.9)	(551.5)
-2	(8,591.8)	(1,103.0)
-3	(12,887.7)	(1,654.5)
-4	(17,183.6)	(2,206.0)
-5	(21,479.5)	(2,757.5)
-6	(25,775.4)	(3,309.0)
-7	(30,071.3)	(3,860.5)
-8	(34,367.2)	(4,412.0)
-9	(38,663.0)	(4,963.5)
-10	(42,958.9)	(5,515.0)



**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS - ACTUAL
JANUARY 2004 - DECEMBER 2004**

Line 1	Beginning of period balance of common equity:		\$ 1,386,339,366
	End of month common equity:		
Line 2	Month of January	2004	\$ 1,396,650,842
Line 3	Month of February	2004	\$ 1,402,389,658
Line 4	Month of March	2004	\$ 1,379,215,571
Line 5	Month of April	2004	\$ 1,374,075,579
Line 6	Month of May	2004	\$ 1,390,196,267
Line 7	Month of June	2004	\$ 1,407,964,310
Line 8	Month of July	2004	\$ 1,396,042,590
Line 9	Month of August	2004	\$ 1,419,563,076
Line 10	Month of September	2004	\$ 1,429,355,834
Line 11	Month of October	2004	\$ 1,383,668,444
Line 12	Month of November	2004	\$ 1,391,937,487
Line 13	Month of December	2004	\$ 1,394,835,461
Line 14	(Summation of line 1 through line 13 divided by 13)		\$ 1,396,325,730
Line 15	25 Basis points		0.0025
Line 16	Revenue Expansion Factor		61.38%
Line 17	Maximum Allowed Incentive Dollars (line 14 times line 15 divided by line 16)		\$ 5,687,146
Line 18	Jurisdictional Sales		18,432,561 MWH
Line 19	Total Sales		19,008,044 MWH
Line 20	Jurisdictional Separation Factor (line 18 divided by line 19)		96.97%
Line 21	Maximum Allowed Jurisdictional Incentive Dollars (line 17 times line 20)		\$ 5,514,963

TAMPA ELECTRIC COMPANY
CALCULATION OF SYSTEM GPIF POINTS - ACTUAL
JANUARY 2004 - DECEMBER 2004

<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	67.9%	EAF	14.90%	1.304	0.194
BIG BEND 2	70.4%	EAF	16.04%	6.385	1.024
BIG BEND 3	68.8%	EAF	13.98%	2.146	0.300
BIG BEND 4	74.8%	EAF	10.47%	-4.819	-0.504
POLK 1	89.4%	EAF	2.09%	10.000	0.209
BIG BEND 1	10,599	ANOHR	7.58%	0.788	0.060
BIG BEND 2	10,396	ANOHR	8.85%	0.000	0.000
BIG BEND 3	10,507	ANOHR	10.33%	-2.645	-0.273
BIG BEND 4	10,444	ANOHR	10.30%	-2.257	-0.232
POLK 1	9,928	ANOHR	<u>5.46%</u>	10.000	<u>0.546</u>
			100.00%		1.323

GPIF REWARD \$ 729,534

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

EQUIVALENT AVAILABILITY (%)

<u>PLANT / UNIT</u>	<u>WEIGHTING FACTOR</u>	<u>EAFF TARGET</u>	<u>EAFF TARGET RANGE</u>		<u>MAX. FUEL SAVINGS (\$000)</u>	<u>MAX. FUEL LOSS (\$000)</u>	<u>ACTUAL ADJUSTED EAF</u>	<u>ACTUAL FUEL SAVINGS/ LOSS (\$000)</u>
			<u>MAX.</u>	<u>MIN.</u>				
BIG BEND 1	14.90%	67.2%	72.90%	55.73%	4,074.5	(8,083.0)	67.90%	1,054.3
BIG BEND 2	16.04%	66.7%	72.50%	55.09%	4,386.4	(8,770.2)	70.40%	5,600.0
BIG BEND 3	13.98%	67.6%	73.20%	56.36%	3,822.1	(7,513.0)	68.80%	1,612.2
BIG BEND 4	10.47%	78.2%	81.70%	71.17%	2,862.2	(5,826.8)	74.80%	(2,807.8)
POLK 1	<u>2.09%</u>	85.6%	87.80%	81.15%	<u>571.1</u>	<u>(1,137.4)</u>	89.40%	1,137.4
GPIF SYSTEM	57.47%				15,716.3	(31,330.4)		

AVERAGE NET OPERATING HEAT RATE (Btu/kwh)

<u>PLANT / UNIT</u>	<u>WEIGHTING FACTOR</u>	<u>ANOHR (Btu/kwh)</u>	<u>TARGET NOF</u>	<u>ANOHR TARGET RANGE</u>		<u>MAX. FUEL SAVINGS (\$000)</u>	<u>MAX. FUEL LOSS (\$000)</u>	<u>ACTUAL ADJUSTED ANOHR</u>	<u>ACTUAL FUEL SAVINGS/ LOSS (\$000)</u>
				<u>MIN.</u>	<u>MAX.</u>				
BIG BEND 1	7.58%	10,708	77.88%	10,204	11,212	2,073.1	(2,073.1)	10,599	163.3
BIG BEND 2	8.85%	10,384	82.24%	9,821	10,948	2,421.0	(2,421.0)	10,396	0.0
BIG BEND 3	10.33%	10,278	78.51%	9,622	10,935	2,825.9	(2,825.9)	10,507	(747.4)
BIG BEND 4	10.30%	10,272	83.95%	9,767	10,777	2,815.9	(2,815.9)	10,444	(635.6)
POLK 1	<u>5.46%</u>	10,569	89.34%	10,135	11,003	<u>1,492.6</u>	<u>(1,492.6)</u>	9,928	1,492.6
GPIF SYSTEM	42.53%					11,628.5	(11,628.5)		

TAMPA ELECTRIC COMPANY
UNIT PERFORMANCE DATA - ACTUAL
JANUARY 2004 - DECEMBER 2004

<u>PLANT / UNIT</u>	<u>ACTUAL EAF</u>	<u>ADJUSTMENTS TO EAF (1)</u>	<u>ACTUAL ADJUSTED EAF</u>
BIG BEND 1	66.6%	1.3%	67.9%
BIG BEND 2	69.1%	1.3%	70.4%
BIG BEND 3	67.2%	1.6%	68.8%
BIG BEND 4	79.3%	-4.5%	74.8%
POLK 1	90.5%	-1.1%	89.4%

<u>PLANT / UNIT</u>	<u>ACTUAL ANOHR (Btu/kwh)</u>	<u>ADJUSTMENTS TO ANOHR (2) (Btu/kwh)</u>	<u>ACTUAL ADJUSTED ANOHR (Btu/kwh)</u>
BIG BEND 1	10,733	-134	10,599
BIG BEND 2	10,623	-227	10,396
BIG BEND 3	10,731	-224	10,507
BIG BEND 4	10,877	-433	10,444
POLK 1	10,114	-186	9,928

(1) Documentation of adjustments to Actual EAF on pages 7 - 11

(2) Documentation of adjustments to Actual ANOHR on pages 12 - 16

TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO PERFORMANCE
BIG BEND UNIT NO. 1
JANUARY 2004 - DECEMBER 2004

WEIGHTING FACTOR = 14.90%

	<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	67.2	66.6	67.9
POH	504.0	662.4	504.0
FOH + EFOH	1,875.1	1,824.8	1,860.4
MOH + EMOH	506.4	446.5	455.2
POF	5.7	7.5	5.7
EFOF	21.3	20.8	21.2
EMOF	5.8	5.1	5.2

1.304

EQUIVALENT AVAILABILITY POINTS

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

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

$$\frac{8,784.0 - 504.0}{8,784.0 - 662.4} \times (1,824.8 + 446.5) = 2,315.6$$

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

$$100 - 5.7 - \frac{2,315.6}{8,784.0} \times 100 = 67.9$$

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 2004 - DECEMBER 2004

WEIGHTING FACTOR = 16.04%

	<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	66.7	69.1	70.4
POH	504.0	651.9	504.0
FOH + EFOH	1,926.7	1,346.1	1,370.6
MOH + EMOH	495.2	714.5	727.5
POF	5.7	7.4	5.7
EFOF	21.9	15.3	15.6
EMOF	5.6	8.1	8.3
	6.385		

EQUIVALENT AVAILABILITY POINTS

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

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

$$\frac{8,784.0 - 504.0}{8,784.0 - 651.9} \times (1,346.1 + 714.5) = 2,098.1$$

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

$$100 - 5.7 - \frac{2,098.1}{8,784.0} \times 100 = 70.4$$

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 2004 - DECEMBER 2004**

WEIGHTING FACTOR = 13.98%

	<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	67.6	67.2	68.8
POH	504.0	689.6	504.0
FOH + EFOH	2,017.3	1,283.0	1,312.4
MOH + EMOH	324.9	909.4	930.3
POF	5.7	7.9	5.7
EFOF	23.0	14.6	14.9
EMOF	3.7	10.4	10.6
	2.146		EQUIVALENT AVAILABILITY POINTS

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

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

$$\frac{8,784.0 - 504.0}{8,784.0 - 689.6} \times (1,283.0 + 909.4) = 2,242.7$$

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

$$100 - 5.7 - \frac{2,242.7}{8,784.0} \times 100 = 68.8$$

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 2004 - DECEMBER 2004

WEIGHTING FACTOR = 10.47%

	<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	78.2	79.3	74.8
POH	504.0	0.0	504.0
FOH + EFOH	1,140.5	1,366.6	1,288.2
MOH + EMOH	272.5	454.3	428.2
POF	5.7	0.0	5.7
EFOF	13.0	15.6	14.7
EMOF	3.1	5.2	4.9
	-4.819		EQUIVALENT AVAILABILITY POINTS

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

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

$$\frac{8,784.0 - 504.0}{8,784.0 - 0.0} \times (1,366.6 + 454.3) = 1,716.4$$

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

$$100 - 5.7 - \frac{1,716.4}{8,784.0} \times 100 = 74.8$$

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 2004 - DECEMBER 2004

WEIGHTING FACTOR = 2.09%

	<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	85.6	90.5	89.4
POH	384.0	279.3	384.0
FOH + EFOH	614.1	518.1	511.7
MOH + EMOH	266.9	34.1	33.7
POF	4.4	3.2	4.4
EFOF	7.0	5.9	5.8
EMOF	3.0	0.4	0.4
	10.000		EQUIVALENT AVAILABILITY POINTS

ADJUSTMENTS TO ACTUAL EAF FOR COMPARISON

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

$$\frac{8,784.0 - 384.0}{8,784.0 - 279.3} \times (518.1 + 34.1) = 545.4$$

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

$$100 - 4.4 - \frac{545.4}{8,784.0} \times 100 = 89.4$$

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 2004 - DECEMBER 2004**

WEIGHTING FACTOR = 7.58%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,708	10,733
NET GENERATION (GWH)	2,149.2	2,035.1
OPERATING BTU (10 ⁹)	23,959.6	21,844.2
NET OUTPUT FACTOR	77.9	73.8

0.788

HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $NOF * (-32.95) + 13,273.61 = ANOHR$

$$73.8 * (-32.95) + 13,273.61 = 10,842$$

$$10,733 - 10,842 = -109$$

$$10,708 + -109 = 10,599$$

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 2004 - DECEMBER 2004

WEIGHTING FACTOR = 8.85%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,384	10,623
NET GENERATION (GWH)	2,286.9	2,155.1
OPERATING BTU (10 ⁹)	24,934.1	22,892.4
NET OUTPUT FACTOR	82.2	71.4

0.000

HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $NOF * (-20.91) + 12,104.24 = ANOHR$

$$71.4 * (-20.91) + 12,104.24 = 10,611$$

$$10,623 - 10,611 = 12$$

$$10,384 + 12 = 10,396 \quad \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

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

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
BIG BEND UNIT NO. 3
JANUARY 2004 - DECEMBER 2004**

WEIGHTING FACTOR = 10.33%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,278	10,731
NET GENERATION (GWH)	2,263.9	2,199.4
OPERATING BTU (10 ⁹)	24,428.7	23,602.1
NET OUTPUT FACTOR	78.5	70.8

-2.645

HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $NOF * (-28.98) + 12,553.42 = ANOHR$

$$70.8 * (-28.98) + 12,553.42 = 10,502$$

$$10,731 - 10,502 = 229$$

$$10,278 + 229 = 10,507$$

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 2004 - DECEMBER 2004**

WEIGHTING FACTOR = 10.30%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,272	10,877
NET GENERATION (GWH)	2,798.3	2,702.0
OPERATING BTU (10 ⁹)	29,571.2	29,388.7
NET OUTPUT FACTOR	83.9	75.5

-2.257

HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $NOF * (-51.32) + 14,579.79 = ANOHR$

$$75.5 * (-51.32) + 14,579.79 = 10,705$$

$$10,877 - 10,705 = 172$$

$$10,272 + 172 = 10,444 \quad \text{ADJUSTED ACTUAL HEAT RATE AT TARGET NOF}$$

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

**TAMPA ELECTRIC COMPANY
ADJUSTMENTS TO HEAT RATE
POLK UNIT NO. 1
JANUARY 2004 - DECEMBER 2004**

WEIGHTING FACTOR = 5.46%

	<u>12 MONTH TARGET</u>	<u>12 MONTH ACTUAL PERFORMANCE</u>
ANOHR (Btu/kwh)	10,569	10,114
NET GENERATION (GWH)	1,728.8	1,687.3
OPERATING BTU (10 ⁹)	18,924.5	17,065.1
NET OUTPUT FACTOR	89.3	84.3

10.000

HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION: $NOF * (-37.02) + 13,876.37 = ANOHR$

$$84.3 * (-37.02) + 13,876.37 = 10,756$$

$$10,114 - 10,756 = -642$$

$$10,569 + -642 = 9,928$$

ADJUSTED ACTUAL
HEAT RATE AT
TARGET NOF

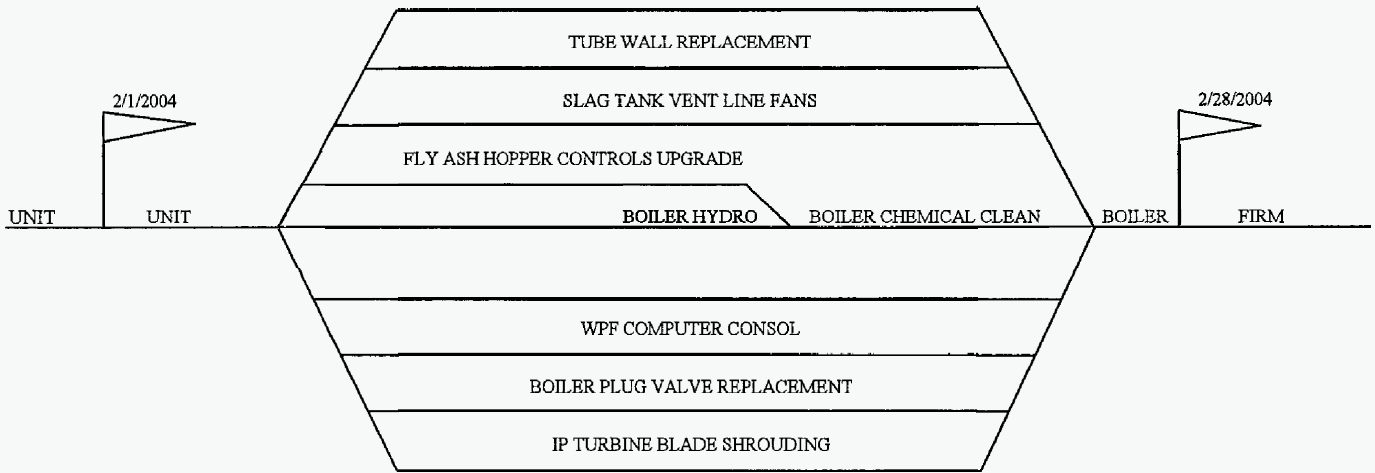
ANOHR = AVERAGE NET OPERATING HEAT RATE
NOF = NET OPERATING FACTOR

TAMPA ELECTRIC COMPANY
PLANNED OUTAGE SCHEDULE (ACTUAL)
GPIF UNITS
JANUARY 2004 - DECEMBER 2004

<u>PLANT/UNIT</u>	<u>ACTUAL PLANNED OUTAGE DATES</u>	<u>OUTAGE DESCRIPTION</u>
BIG BEND 1	Feb 01 - Feb 28	Tube wall Replacement (E/W lower furnace sidewall), Slag Tank Vent Line Fans, Fly Ash Hopper Controls Upgrade, Burner Nozzles, Air Preheater Basket Replacement, Blow down Tank, WPF Computer Consol, Boiler Plug Valve Replacement, Boiler Swell System, Steam Turbine Vibration Equipment, IP Turbine Blade Shrouding
+ BIG BEND 2	Oct 06 - Nov 01	Boiler Access Door Repair, Classifiers Replacement, 3rd Point Feedwater Heater Replacement, Boiler Swell System, Cold Reheat Safety Valve Replacement, Air Preheater Basket Replacement, Fly ash Control System Replacement, Hot Air Slide Gate, Installation ESP Expansion Joint Replacement, 2nd Air Damper Control System Replacement, Air Removal Pump Replacement
BIG BEND 3	Nov 13 - Dec 11	ESP Duct Work Replacement, "C" Booster Fan Wheel Replacement, Mill Inlet/Outlet Boxes Replacement, Slag Tank Neck Replacement, Seal Air Fans Replacement, Coal Plug Valve Replacement, Boiler Swell Control System Replacement.
+ POLK 1	Feb 22 - Mar 04	CT Combustion Path Inspection, CSC Cleanout/Maintenance, Gasifier Brick Inspection, RSC Tube Leak Repair, Syngas Scrubber Piping Modifications, GEHO Feed Pump Maintenance, Rod Mill - Rod Change Out.

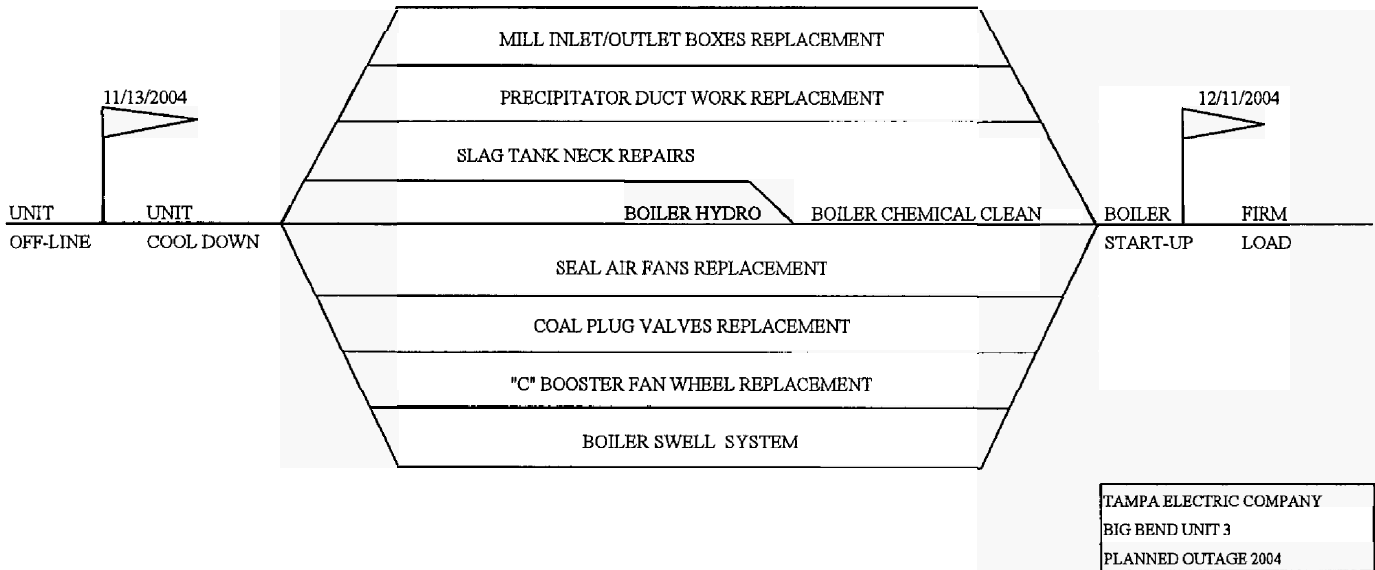
+ CPM for outages of less than 4 weeks are not included.

TAMPA ELECTRIC COMPANY
CRITICAL PATH METHOD DIAGRAMS
GPIF UNITS OUTAGE ≥ FOUR WEEKS
JANUARY 2004 - DECEMBER 2004



TAMPA ELECTRIC COMPANY
BIG BEND UNIT 1
PLANNED OUTAGE 2004

TAMPA ELECTRIC COMPANY
 CRITICAL PATH METHOD DIAGRAMS
 GPIF UNITS OUTAGE ≥ FOUR WEEKS
 JANUARY 2004 - DECEMBER 2004



TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2004 - DECEMBER 2004

BIG BEND UNIT NO. 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	4,074.5	72.9%	+10	2,073.1	10,204
+9	3,667.1	72.3%	+9	1,865.8	10,247
+8	3,259.6	71.8%	+8	1,658.5	10,290
+7	2,852.2	71.2%	+7	1,451.2	10,333
+6	2,444.7	70.6%	+6	1,243.9	10,375
+5	2,037.3	70.0%	+5	1,036.5	10,418
+4	1,629.8	69.5%	+4	829.2	10,461
+3	1,222.4	68.9%	+3	18 - 19 621.9	10,504
+2	814.9	68.3%	+2	20 - 24 414.6	10,547
+1	407.5	67.7%	+1	25.0	10,590
0	0.0	67.2%	0	207.3	10,633
-1	(808.3)	66.0%	-1	26.0	10,708
-2	(1,616.6)	64.9%	-2	0.0	10,783
-3	(2,424.9)	63.7%	-3	(207.3)	10,826
-4	(3,233.2)	62.6%	-4	(414.6)	10,869
-5	(4,041.5)	61.4%	-5	(621.9)	10,911
-6	(4,849.8)	60.3%	-6	(829.2)	10,954
-7	(5,658.1)	59.2%	-7	(1,036.5)	10,997
-8	(6,466.4)	58.0%	-8	(1,243.9)	11,040
-9	(7,274.7)	56.9%	-9	(1,451.2)	11,083
-10	(8,083.0)	55.7%	-10	(1,658.5)	11,126
				(1,865.8)	11,169
				(2,073.1)	11,212

Weighting Factor =

14.90%

Weighting Factor =

7.58%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2004 - DECEMBER 2004

BIG BEND UNIT NO. 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	4,386.4	72.5%	+10	2,421.0	9,821
+9	3,947.8	71.9%	+9	2,178.9	9,870
+8	3,509.1	71.3%	+8	1,936.8	9,919
+7	3,070.5	70.8%	+7	1,694.7	9,968
+6	2,631.8	70.2%	+6	1,452.6	10,017
+5	2,193.2	69.6%	+5	1,210.5	10,065
+4	1,754.6	69.0%	+4	968.4	10,114
+3	1,315.9	68.4%	+3	726.3	10,163
+2	877.3	67.9%	+2	484.2	10,212
+1	438.6	67.3%	+1	242.1	10,261
0	0.0	66.7%	0	0.0	10,309
-1	(877.0)	65.5%	-1	(242.1)	10,384
-2	(1,754.0)	64.4%	-2	(484.2)	10,459
-3	(2,631.1)	63.2%	-3	(726.3)	10,508
-4	(3,508.1)	62.1%	-4	(968.4)	10,557
-5	(4,385.1)	60.9%	-5	(1,210.5)	10,606
-6	(5,262.1)	59.7%	-6	(1,452.6)	10,655
-7	(6,139.1)	58.6%	-7	(1,694.7)	10,704
-8	(7,016.2)	57.4%	-8	(1,936.8)	10,752
-9	(7,893.2)	56.3%	-9	(2,178.9)	10,801
-10	(8,770.2)	55.1%	-10	(2,421.0)	10,850

EAF POINTS 6.385

Adjusted EAF 70.4%

AHR POINTS 0.000

Adjusted ANOHR 10,396

Weighting Factor =

16.04%

Weighting Factor =

8.85%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2004 - DECEMBER 2004

BIG BEND UNIT NO. 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	3,822.1	73.2%	+10	2,825.9	9,622
+9	3,439.9	72.6%	+9	2,543.3	9,680
+8	3,057.7	72.1%	+8	2,260.7	9,738
+7	2,675.5	71.5%	+7	1,978.1	9,796
+6	2,293.3	71.0%	+6	1,695.5	9,854
+5	1,911.0	70.4%	+5	1,413.0	9,913
+4	1,528.8	69.8%	+4	1,130.4	9,971
+3	1,146.6	69.3%	+3	847.8	10,029
+2	764.4	68.7%	+2	565.2	10,087
+1	382.2	68.2%	+1	282.6	10,145
0	0.0	67.6%	0	0.0	10,203
-1	(751.3)	66.5%	-1	(282.6)	10,278
-2	(1,502.6)	65.4%	-2	(565.2)	10,353
-3	(2,253.9)	64.2%	-3	(847.8)	10,411
-4	(3,005.2)	63.1%	-4	(1,130.4)	10,470
-5	(3,756.5)	62.0%	-5	(1,413.0)	10,528
-6	(4,507.8)	60.9%	-6	(1,695.5)	10,586
-7	(5,259.1)	59.7%	-7	(1,978.1)	10,644
-8	(6,010.4)	58.6%	-8	(2,260.7)	10,702
-9	(6,761.7)	57.5%	-9	(2,543.3)	10,760
-10	(7,513.0)	56.4%	-10	(2,825.9)	10,818

EAF POINTS
2.146

Adjusted EAF
68.8%

AHR POINTS
-2.645

Adjusted ANOHR
10,507

Weighting Factor =

13.98%

Weighting Factor =

10.33%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE

JANUARY 2004 - DECEMBER 2004

BIG BEND UNIT NO. 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	2,862.2	81.7%	+10	2,815.9	9,767
+9	2,576.0	81.3%	+9	2,534.3	9,810
+8	2,289.8	81.0%	+8	2,252.7	9,853
+7	2,003.5	80.6%	+7	1,971.1	9,896
+6	1,717.3	80.3%	+6	1,689.6	9,939
+5	1,431.1	79.9%	+5	1,408.0	9,982
+4	1,144.9	79.6%	+4	1,126.4	10,025
+3	858.7	79.2%	+3	844.8	10,068
+2	572.4	78.9%	+2	563.2	10,111
+1	286.2	78.5%	+1	281.6	10,154
					10,197
0	0.0	78.2%	0	0.0	10,272
					10,347
-1	(582.7)	77.5%	-1	(281.6)	10,390
-2	(1,165.4)	76.8%	-2	(563.2)	10,433
-3	(1,748.0)	76.1%	-3	(844.8)	10,476
-4	(2,330.7)	75.4%	-4	(1,126.4)	10,519
-5	(2,913.4)	74.7%	-5	(1,408.0)	10,562
-6	(3,496.1)	74.0%	-6	(1,689.6)	10,605
-7	(4,078.8)	73.3%	-7	(1,971.1)	10,648
-8	(4,661.4)	72.6%	-8	(2,252.7)	10,691
-9	(5,244.1)	71.9%	-9	(2,534.3)	10,734
-10	(5,826.8)	71.2%	-10	(2,815.9)	10,777

Weighting Factor =

10.47%

Weighting Factor =

10.30%

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS TABLE
JANUARY 2004 - DECEMBER 2004

POLK UNIT NO. 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	571.1	87.8%	+10	1,492.6	10,135
	EAFF POINTS 10.000	Adjusted EAFF 89.4%		AHR POINTS 10.000	Adjusted ANOHR 9,928
+9	514.0	87.6%	+9	1,343.4	10,171
+8	456.9	87.4%	+8	1,194.1	10,207
+7	399.8	87.1%	+7	1,044.8	10,243
+6	342.7	86.9%	+6	895.6	10,279
+5	285.5	86.7%	+5	746.3	10,315
+4	228.4	86.5%	+4	597.0	10,351
+3	171.3	86.3%	+3	447.8	10,387
+2	114.2	86.0%	+2	298.5	10,423
+1	57.1	85.8%	+1	149.3	10,458
					10,494
0	0.0	85.6%	0	0.0	10,569
					10,644
-1	(113.7)	85.2%	-1	(149.3)	10,680
-2	(227.5)	84.7%	-2	(298.5)	10,716
-3	(341.2)	84.3%	-3	(447.8)	10,752
-4	(455.0)	83.8%	-4	(597.0)	10,788
-5	(568.7)	83.4%	-5	(746.3)	10,824
-6	(682.4)	82.9%	-6	(895.6)	10,860
-7	(796.2)	82.5%	-7	(1,044.8)	10,896
-8	(909.9)	82.0%	-8	(1,194.1)	10,932
-9	(1,023.7)	81.6%	-9	(1,343.4)	10,967
-10	(1,137.4)	81.2%	-10	(1,492.6)	11,003

Weighting Factor =

2.09%

Weighting Factor =

5.46%

**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 04 - DEC 04</u>			<u>ACTUAL PERFORMANCE JAN 04 - DEC 04</u>		
			<u>POF</u>	<u>EUOF</u>	<u>EUOR</u>	<u>POF</u>	<u>EUOF</u>	<u>EUOR</u>
BIG BEND 1	14.90%	25.9%	5.7%	27.1%	28.8%	7.5%	25.9%	28.0%
BIG BEND 2	16.04%	27.9%	5.7%	27.6%	29.3%	7.4%	23.5%	25.3%
BIG BEND 3	13.98%	24.3%	5.7%	26.7%	28.3%	7.9%	25.0%	27.1%
BIG BEND 4	10.47%	18.2%	5.7%	16.1%	17.1%	0.0%	20.7%	20.7%
POLK 1	<u>2.09%</u>	<u>3.6%</u>	<u>4.4%</u>	<u>10.0%</u>	<u>10.5%</u>	<u>3.2%</u>	<u>6.3%</u>	<u>6.5%</u>
GPIF SYSTEM	57.47%	100.0%	5.7%	24.5%	26.0%	6.1%	23.3%	24.9%
GPIF SYSTEM WEIGHTED EQUIVALENT AVAILABILITY			<u>69.8%</u>			<u>70.6%</u>		
			3 PERIOD AVERAGE			3 PERIOD AVERAGE		
			<u>POF EUOF EUOR</u>			<u>EAF</u>		
			6.7% 24.5% 26.2%			68.8%		

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 04 - DEC 04</u>	<u>JAN 04 - DEC 04</u>
BIG BEND 1	7.58%	17.8%	10,708	10,599
BIG BEND 2	8.85%	20.8%	10,384	10,396
BIG BEND 3	10.33%	24.3%	10,278	10,507
BIG BEND 4	10.30%	24.2%	10,272	10,444
POLK 1	<u>5.46%</u>	<u>12.8%</u>	<u>10,569</u>	<u>9,928</u>
GPIF SYSTEM	42.53%	100.0%		
GPIF SYSTEM WEIGHTED AVERAGE HEAT RATE (Btu/kwh)			<u>10,413</u>	<u>10,411</u>

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE POINTS CALCULATION
JANUARY 2004 - DECEMBER 2004

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.

$$\begin{aligned} GPIP = & 14.90\% * (\text{BB 1 EAP}) + 16.04\% * (\text{BB 2 EAP}) + 13.98\% * (\text{BB 3 EAP}) \\ & + 10.47\% * (\text{BB 4 EAP}) + 2.09\% * (\text{PK 1 EAP}) + 7.58\% * (\text{BB 1 AHRP}) \\ & + 8.85\% * (\text{BB 2 AHRP}) + 10.33\% * (\text{BB 3 AHRP}) + 10.30\% * (\text{BB 4 AHRP}) \\ & + 5.46\% * (\text{PK 1 AHRP}) \end{aligned}$$

$$\begin{aligned} GPIP = & 14.90\% * 1.304 + 16.04\% * 6.385 + 13.98\% * 2.146 \\ & + 10.47\% * -4.819 + 2.09\% * 10.000 + 7.58\% * 0.788 \\ & + 8.85\% * 0.000 + 10.33\% * -2.645 + 10.30\% * -2.257 \\ & + 5.46\% * 10.000 \end{aligned}$$

$$\begin{aligned} GPIP = & 0.194 + 1.024 + 0.300 \\ & + -0.504 + 0.209 + 0.060 \\ & + 0.000 + -0.273 + -0.232 \\ & + 0.546 \end{aligned}$$

$$GPIP = \underline{1.323} \text{ POINTS}$$

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.

$$GPIF \text{ REWARD} = \underline{\$729,534}$$

EXHIBIT NO. _____
TAMPA ELECTRIC COMPANY
DOCKET NO. 050001-EI
(DRK-1)
DOCUMENT NO. 2

EXHIBIT TO THE TESTIMONY OF
DAVID R. KNAPP

DOCKET NO. 050001-EI

TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
JANUARY 2004 - DECEMBER 2004
TRUE-UP

DOCUMENT NO. 2

ACTUAL UNIT PERFORMANCE DATA

**TAMPA ELECTRIC COMPANY
ACTUAL UNIT PERFORMANCE DATA
JANUARY 2004 - DECEMBER 2004
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ORIGINAL SHEET NO. 8.401.04A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2004 - DECEMBER 2004

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 04	FEB 04	MAR 04	APR 04	MAY 04	JUN 04	JUL 04	AUG 04	SEP 04	OCT 04	NOV 04	DEC 04	2004
1. EAF (%)	14.4	2.2	94.6	78.3	61.8	79.2	65.4	79.8	54.4	90.6	81.1	93.7	66.6
2. PH	744.0	696.0	744.0	719.0	744.0	720.0	744.0	744.0	720.0	745.0	720.0	744.0	8,784.0
3. SH	150.0	15.5	734.8	587.1	489.2	589.4	530.4	729.4	586.3	744.0	613.9	744.0	6,513.7
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0	0.0	14.6
5. UH	594.0	680.5	9.2	131.9	254.9	130.6	213.6	0.0	133.7	1.0	106.2	0.0	2,255.7
6. POH	0.0	662.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	662.4
7. FOH	476.6	1.6	3.7	131.9	254.9	28.0	213.6	0.0	6.9	1.0	106.2	0.0	1,224.3
8. MOH	117.5	16.6	5.6	0.0	0.0	102.6	0.0	0.0	126.9	0.0	0.0	0.0	369.1
9. PFOH	139.6	0.0	43.1	45.2	103.1	42.0	163.9	694.3	704.1	293.6	78.9	139.7	2,447.6
10. LR PF (MW)	112.0	0.0	148.6	143.0	90.3	115.9	81.7	78.8	116.4	98.6	157.8	143.4	103.9
11. PMOH	10.3	0.0	34.0	18.5	16.3	13.5	23.8	34.7	0.0	0.0	0.0	0.0	150.9
12. LR PM (MW)	264.4	0.0	201.0	203.0	186.6	228.0	206.6	243.4	0.0	0.0	0.0	0.0	217.1
13. NSC (MW)	428.0	428.0	428.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	428.0	423.3
14. OPR BTU(GBTU)	414.7	36.8	2,455.3	1,979.0	1,647.7	2,049.6	1,822.0	2,472.3	1,664.0	2,394.2	2,183.6	2,725.1	21,844.2
15. NET GEN (MWH)	39,880.0	2,337.0	236,659.0	186,295.0	154,066.0	188,737.0	168,163.0	222,459.0	152,175.0	227,624.0	202,520.5	254,230.0	2,035,145.5
16. ANOHR (BTU/KWH)	10,397.7	15,765.6	10,375.0	10,622.8	10,694.7	10,859.3	10,834.5	11,113.3	10,935.1	10,518.2	10,782.0	10,719.0	10,733.0
17. NOF (%)	62.1	35.3	75.3	75.4	74.8	76.1	75.3	72.4	61.7	72.7	78.4	79.8	73.8
18. NPC (MW)	428.0	428.0	428.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	421.0	428.0	423.3
19. ANOHR EQUATION	ANOHR = NOF(-32.945) +	10.736.84								

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ORIGINAL SHEET NO. 8.401.04A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2004 - DECEMBER 2004

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
	JAN 04	FEB 04	MAR 04	APR 04	MAY 04	JUN 04	JUL 04	AUG 04	SEP 04	OCT 04	NOV 04	DEC 04	
BIG BEND 2													2004
1. EAF (%)	73.3	88.5	56.8	56.3	80.7	66.6	52.7	73.8	91.7	14.2	86.4	91.0	69.1
2. PH	744.0	696.0	744.0	719.0	744.0	720.0	744.0	744.0	720.0	745.0	720.0	744.0	8,784.0
3. SH	744.0	681.7	557.6	510.1	744.0	532.2	480.7	709.5	720.0	121.5	690.4	721.9	7,213.5
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.2	0.0	0.0	0.0	0.0	17.2
5. UH	0.0	14.3	186.4	208.9	0.0	187.9	263.3	17.3	0.0	623.5	29.6	22.1	1,553.3
6. POH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	623.5	28.4	0.0	651.9
7. FOH	0.0	14.3	0.0	12.4	0.0	86.8	263.3	17.3	0.0	0.0	1.2	22.1	417.4
8. MOH	0.0	0.0	186.4	196.5	0.0	101.0	0.0	0.0	0.0	0.0	0.0	0.0	483.9
9. PFOH	413.4	85.8	527.4	403.9	466.2	101.5	147.6	556.9	197.3	56.0	172.1	109.2	3,237.4
10. LR PF (MW)	178.3	177.1	102.4	92.0	120.5	150.2	132.7	75.9	107.5	115.0	163.6	177.2	120.0
11. PMOH	62.2	62.5	22.7	32.7	11.5	34.7	62.6	146.2	13.4	0.0	0.0	0.0	468.4
12. LR PM (MW)	199.9	211.8	191.3	186.5	254.6	186.3	205.0	210.7	241.3	0.0	0.0	0.0	205.9
13. NSC (MW)	433.0	433.0	433.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	433.0	418.3
14. OPR BTU(GBTU)	2,008.4	2,286.1	1,780.2	1,550.6	2,371.4	1,608.5	1,435.9	2,206.3	2,374.2	402.1	2,347.3	2,521.3	22,892.4
15. NET GEN (MWH)	187,359.0	212,055.0	171,696.0	148,509.0	222,298.0	148,509.0	134,849.0	198,761.0	218,615.0	36,836.0	227,035.5	248,552.0	2,155,074.5
16. ANOHR (BTU/KWH)	10,719.4	10,780.6	10,368.5	10,440.9	10,667.7	10,831.2	10,648.0	11,100.3	10,860.3	10,916.1	10,339.0	10,144.0	10,623.0
17. NOF (%)	58.2	71.8	71.1	70.8	72.7	67.9	68.2	68.2	73.9	73.8	80.0	79.5	71.4
18. NPC (MW)	433.0	433.0	433.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	411.0	433.0	418.3
19. ANOHR EQUATION	ANOHR = NOF(-20.911) +	9,992.20								

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EXHIBIT NO. _____ (DRK-1)
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TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2004 - DECEMBER 2004

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 04	FEB 04	MAR 04	APR 04	MAY 04	JUN 04	JUL 04	AUG 04	SEP 04	OCT 04	NOV 04	DEC 04	2004	
1. EAF (%)	96.4	62.7	59.3	86.9	57.8	83.8	67.8	73.8	75.8	52.1	29.4	60.2	67.2	
2. PH	744.0	696.0	744.0	719.0	744.0	720.0	744.0	744.0	720.0	745.0	720.0	744.0	8,784.0	
3. SH	736.6	540.1	623.1	697.9	459.2	707.6	650.3	651.4	700.4	661.2	286.9	487.5	7,202.1	
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	7.4	155.9	120.9	21.1	284.9	12.4	93.7	92.7	19.6	83.8	433.1	256.5	1,581.9	
6. POH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	433.1	256.5	689.6	
7. FOH	7.4	0.0	68.8	21.1	0.0	12.4	0.0	4.5	4.0	0.0	0.0	0.0	118.3	
8. MOH	0.0	155.9	52.1	0.0	284.9	0.0	93.7	68.1	15.6	83.8	0.0	0.0	774.0	
9. PFOH	31.4	245.7	496.0	274.6	78.1	356.3	576.4	338.4	601.4	661.2	286.9	133.9	4,080.2	
10. LR PF (MW)	215.3	185.0	141.8	104.1	119.8	87.7	89.8	85.9	105.4	177.0	111.7	129.9	123.1	
11. PMOH	8.2	0.0	39.9	11.4	13.5	49.7	48.2	52.1	12.2	0.0	0.0	0.0	235.1	
12. LR PM (MW)	197.3	0.0	237.1	236.5	222.0	266.7	222.1	282.7	241.6	0.0	0.0	0.0	248.3	
13. NSC (MW)	438.0	438.0	438.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0	438.0	431.3	
14. OPR BTU(GBTU)	2,690.9	1,786.2	1,819.9	2,466.7	1,609.1	2,361.1	2,202.7	2,163.6	2,275.9	1,636.2	926.7	1,663.1	23,602.1	
15. NET GEN (MWH)	257,990.0	166,314.0	170,017.0	229,949.0	152,765.0	220,203.0	204,087.0	199,051.0	204,755.0	148,666.0	85,220.5	160,360.0	2,199,377.5	
16. ANOHR BTU/KWH	10,430.1	10,739.7	10,704.4	10,727.2	10,533.0	10,722.3	10,792.8	10,869.8	11,115.5	11,005.6	10,874.4	10,371.2	10,731.0	
17. NOF (%)	80.0	70.3	62.3	77.0	77.7	72.7	73.3	71.4	68.3	52.5	69.4	75.1	70.8	
18. NPC (MW)	438.0	438.0	438.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0	428.0	438.0	431.3	
19. ANOHR EQUATION	ANOHR = NOF(-28.979) +										10,278.22

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EXHIBIT NO. _____ (DRK-1)
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ORIGINAL SHEET NO. 8.401.04A
TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2004 - DECEMBER 2004

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 04	FEB 04	MAR 04	APR 04	MAY 04	JUN 04	JUL 02	AUG 04	SEP 04	OCT 04	NOV 04	DEC 04	2004
1. EAF (%)	81.1	87.9	96.7	65.0	87.6	89.5	88.8	85.7	50.1	81.3	84.3	52.7	79.3
2. PH	744.0	696.0	744.0	719.0	744.0	720.0	744.0	744.0	720.0	745.0	720.0	744.0	8,784.0
3. SH	629.1	637.5	732.4	544.8	741.6	720.0	744.0	715.3	427.4	739.4	720.0	521.6	7,873.0
4. RSH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	0.0	0.0	0.0	0.0	20.2
5. UH	114.9	58.5	11.6	174.2	2.4	0.0	0.0	8.5	292.6	5.6	0.0	222.4	890.8
6. POH	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
7. FOH	3.4	0.0	11.6	70.4	2.4	0.0	0.0	8.5	292.6	5.6	0.0	222.4	617.0
8. MOH	111.5	58.5	0.0	103.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	273.9
9. PFOH	92.6	9.8	1.2	67.8	124.2	655.4	728.6	694.0	306.0	739.4	720.0	516.9	4,655.7
10. LR PF (MW)	102.1	124.3	130.1	296.0	82.1	42.5	46.8	55.3	94.2	81.8	71.1	116.3	73.2
11. PMOH	10.3	57.0	26.1	82.0	198.3	28.4	15.0	20.7	5.2	0.0	0.0	0.0	442.9
12. LR PM (MW)	234.1	183.7	220.8	182.7	153.1	226.3	279.0	290.7	282.5	0.0	0.0	0.0	185.3
13. NSC (MW)	460.0	460.0	460.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	460.0	454.7
14. OPR BTU(GBTU)	2,373.5	2,566.2	2,789.0	1,832.3	2,674.8	2,835.4	2,952.3	2,784.0	1,498.2	2,671.8	2,701.6	1,709.5	29,388.7
15. NET GEN (MWH)	226,298.0	243,548.0	266,889.0	161,796.0	251,038.0	256,929.0	262,938.1	247,187.0	135,051.0	246,835.0	246,733.5	156,725.0	2,701,967.6
16. ANOHR BTU/KWH	10,488.5	10,536.8	10,449.9	11,324.8	10,654.9	11,035.6	11,228.1	11,262.9	11,094.0	10,824.4	10,949.6	10,907.9	10,877.0
17. NOF (%)	78.2	83.1	79.2	65.7	74.9	78.9	78.2	76.5	69.9	73.9	75.8	65.3	75.5
18. NPC (MW)	460.0	460.0	460.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	460.0	454.7
19. ANOHR EQUATION	ANOHR = NOF(-51.316) +								10,271.96

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EXHIBIT NO. _____ (DRK-1)
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TAMPA ELECTRIC COMPANY

ACTUAL UNIT PERFORMANCE DATA

JANUARY 2004 - DECEMBER 2004

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 04	FEB 04	MAR 04	APR 04	MAY 04	JUN 04	JUL 02	AUG 04	SEP 04	OCT 04	NOV 04	DEC 04	2004
1. EAF (%)	95.0	71.8	87.4	98.4	95.2	89.2	84.2	91.3	90.3	95.5	94.4	92.4	90.5
2. PH	744.0	696.0	744.0	719.0	744.0	720.0	744.0	744.0	720.0	745.0	720.0	744.0	8,784.0
3. SH	574.7	502.4	693.3	744.1	736.0	672.4	742.6	754.2	455.0	651.4	605.1	666.5	7,797.6
4. RSH	132.0	193.1	41.1	(34.7)	(5.4)	32.6	(5.1)	(14.2)	222.2	79.7	95.3	63.3	799.9
5. UH	37.4	0.5	9.6	9.6	13.4	15.0	6.5	4.1	42.9	13.9	19.6	14.2	186.5
6. POH	0.0	195.5	83.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	279.3
7. FOH	26.4	0.5	9.6	1.8	11.8	3.9	6.5	3.3	42.9	13.9	18.6	13.2	152.4
8. MOH	10.9	0.0	0.0	7.8	1.5	11.1	0.0	0.8	0.0	0.0	1.0	1.0	34.1
9. PFOH	0.0	0.0	0.0	37.0	480.6	585.1	720.5	728.0	394.3	626.9	452.4	389.8	4,414.6
10. LR PF (MW)	0.0	0.0	0.0	11.8	11.9	27.5	39.2	21.2	17.3	7.8	11.8	28.0	21.3
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) **	260.0	260.0	260.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	260.0	256.7
14. OPR BTU(GBTU)	1,196.9	1,236.3	1,466.7	1,633.2	1,634.4	1,403.5	1,583.8	1,642.7	990.0	1,491.8	1,355.5	1,430.3	17,065.1
15. NET GEN (MWH)	121,575.0	116,723.0	148,840.0	164,781.0	170,292.0	137,271.0	150,553.0	160,682.0	91,673.0	145,727.0	134,926.0	144,235.0	1,687,278.0
16. ANOHR BTU/KWH	9,845.3	10,592.1	9,853.9	9,911.6	9,597.4	10,224.3	10,520.1	10,223.1	10,799.3	10,236.9	10,046.4	9,916.1	10,114.0
17. NOF (%)	82.1	89.6	83.1	88.0	91.0	81.2	79.8	83.9	80.3	88.1	88.0	83.5	84.3
18. NPC (MW) **	260.0	260.0	260.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	255.0	260.0	256.7
19. ANOHR EQUATION	ANOHR = NOF(-37.017) +		10,569.39						

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