



BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 060001-EI  
IN RE: FUEL & PURCHASED POWER COST RECOVERY  
AND  
CAPACITY COST RECOVERY

GENERATING PERFORMANCE INCENTIVE FACTOR  
PROJECTIONS

JANUARY 2007 THROUGH DECEMBER 2007

TESTIMONY AND EXHIBIT

OF

WILLIAM A. SMOTHERMAN

DOCUMENT NUMBER-DATE

08073 SEP-18

FLORIDA PUBLIC SERVICE COMMISSION

1                   BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

2                               PREPARED DIRECT TESTIMONY

3   OF

4   WILLIAM A. SMOTHERMAN

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

8  
9   A.   My name is William A. Smotherman. My mailing and business  
10       address is 702 N. Franklin Street, Tampa, Florida 33602. I am  
11       employed by Tampa Electric Company ("Tampa Electric" or  
12       "company") as Director of the Resource Planning Department.

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

16  
17   A.   I received a Bachelor of Electrical Engineering degree in 1986  
18        from the University of South Florida. In May 1986, I joined  
19        Tampa Electric as an associate engineer, and I have worked in  
20        the areas of system planning, commercial/ industrial account  
21        management and wholesale power marketing. In February 2001, I  
22        was promoted to Director, Resource Planning. My present  
23        responsibilities include the areas of system reliability,  
24        generation expansion and system fuel and purchased power  
25        forecasting and related economic analyses.

1 Q. What is the purpose of your testimony?

2

3 A. My testimony describes Tampa Electric's maintenance planning  
4 processes and presents Tampa Electric's methodology for  
5 determining the various factors required to compute the  
6 Generating Performance Incentive Factor ("GPIF") as ordered by  
7 the Commission.

8

9 Q. Have you prepared any exhibits to support your testimony?

10

11 A. Yes, Exhibit WAS-1, consisting of two documents, was prepared  
12 under my direction and supervision. Document No. 1 contains  
13 the GPIF schedules. Document No. 2 is a summary of the GPIF  
14 targets for the 2007 period.

15

16 **GPIF Calculations**

17 Q. Which generating units on Tampa Electric's system are included  
18 in the determination of the GPIF?

19

20 A. Four of the company's coal-fired units, one integrated  
21 gasification combined cycle unit and one natural gas combined  
22 cycle unit are included. These are Big Bend Station units 1  
23 through 4, Polk Power Station unit 1 and Bayside unit 1.

24

25 Q. Do the exhibits you prepared comply with Commission-approved

1 GPIF methodology?  
2

3 A. Yes, the documents are consistent with the GPIF Implementation  
4 Manual previously approved by the Commission, with the  
5 exception of the criterion that the company shall include  
6 generating units that will represent at least 80 percent of  
7 projected system net generation.  
8

9 Q. Please explain why does Tampa Electric does not include units  
10 that represent 80 percent of projected system net generation?  
11

12 A. Due to the repowering of Gannon unit 6 to H. L. Culbreath  
13 Bayside ("Bayside") unit 2, the remaining GPIF units do not  
14 represent 80 percent of projected system net generation.  
15 Although Bayside unit 2 began commercial operation in 2004 the  
16 repowered unit is not included in the GPIF calculations  
17 because the company does not have the historical operational  
18 data required by the GPIF Implementation Manual to set GPIF  
19 targets. In addition, Tampa Electric has no other base load  
20 generating unit to substitute for Gannon unit 6. Section 3.2  
21 of the GPIF Implementation Manual states that the Commission  
22 will approve exclusion of units from the calculation of the  
23 GPIF on a case-by-case basis, and the Commission previously  
24 approved this exception for Tampa Electric's projected GPIF  
25 filings. Therefore, Tampa Electric requests approval of its

1 2007 GPIF calculation excluding the repowered Bayside unit 2.

2  
3 Q. Has Tampa Electric modified its GPIF methodology to account  
4 for the concerns expressed in Staff's testimony in the 2006  
5 fuel hearing?

6  
7 A. Yes. As requested by the Commission, Tampa Electric has worked  
8 with the Commission Staff and other interested parties to  
9 reach a mutually agreeable alternative proposal.

10  
11 Q. Please describe the change in methodology.

12  
13 A. Tampa Electric Company has agreed to remove the outage hours  
14 related to any forced outage that is identified as an outlier.  
15 The process of identifying outlying outages includes reviewing  
16 three years of historical performance and determining the  
17 average length (mean) and variation (standard deviation) of  
18 all forced outages. If a forced outage within the current  
19 sample period (July 2005 through June 2006) is greater than  
20 two standard deviations above the three year average outage  
21 duration (mean) its associated hours are removed from the GPIF  
22 calculations.

23  
24 Q. As a result of the methodology change, were any outages  
25 identified as outliers?

1 A. Yes. An outage on Big Bend unit 3 was identified as an  
2 outlying outage; therefore, its associated forced outage hours  
3 were removed from the study.  
4

5 Q. How will the methodology impact the true-up process?  
6

7 A. The agreed upon methodology will not impact the true-up  
8 process, since no adjustments will be made to exclude  
9 outliers.  
10

11 Q. Is this methodology consistent with the GPIF Implementation  
12 Plan?  
13

14 A. Yes. Section 3.3 of the GPIF Implementation Manual allows for  
15 removal of outliers in the calculation.  
16

17 Q. Please describe how Tampa Electric developed the various  
18 factors associated with the GPIF.  
19

20 A. Targets were established for equivalent availability and heat  
21 rate for each unit considered for the 2007 period. A range of  
22 potential improvements and degradations were determined for  
23 each of these parameters.  
24

25 Q. How were the target values for unit availability determined?

1 A. The Planned Outage Factor or POF and the Equivalent Unplanned  
2 Outage Factor or EUOF were subtracted from 100 percent to  
3 determine the target Equivalent Availability Factor or EAF.  
4 The factors for each of the six units included within the GPIF  
5 are shown on page 5 of Document No. 1.

6  
7 To give an example for the 2007 period, the projected  
8 Equivalent Unplanned Outage Factor for Big Bend unit 2 is  
9 17.74 percent, and the Planned Outage Factor is 5.75 percent.  
10 Therefore, the target equivalent availability factor for Big  
11 Bend unit 2 equals 76.51 percent or:

$$12 \quad 100\% - [(17.74 + 5.75\%)] = 76.51\%$$

13  
14  
15 This is shown on page 4, column 3 of Document No. 1.

16  
17 Q. How was the potential for unit availability improvement  
18 determined?

19  
20 A. Maximum equivalent availability is derived by using the  
21 following formula:

$$22 \quad \text{EAF}_{\text{MAX}} = 100\% - [0.8 (\text{EUOF}_T) + 0.95 (\text{POF}_T)]$$

23  
24  
25 The factors included in the above equations are the same

1 factors that determine the target equivalent availability. To  
2 determine the maximum incentive points, a 20 percent reduction  
3 in Equivalent Forced Outage Factor or EUOF and Equivalent  
4 Maintenance Outage Factor or EMOF, plus a five percent  
5 reduction in the Planned Outage Factor are necessary.  
6 Continuing with the Big Bend unit 2 example:

$$7$$
$$8 \quad \text{EAF}_{\text{MAX}} = 100\% - [0.8 (17.74\%) + 0.95 (5.75\%)] = 80.34\%$$
$$9$$

10 This is shown on page 4, column 4 of Document No. 1.

11 Q. How was the potential for unit availability degradation  
12 determined?

13

14 A. The potential for unit availability degradation is  
15 significantly greater than the potential for unit availability  
16 improvement. This concept was discussed extensively during  
17 the development of the incentive. To incorporate this biased  
18 effect into the unit availability tables, Tampa Electric uses  
19 a potential degradation range equal to twice the potential  
20 improvement. Consequently, minimum equivalent availability is  
21 calculated using the following formula:

$$22$$
$$23 \quad \text{EAF}_{\text{MIN}} = 100\% - [1.4 (\text{EUOF}_T) + 1.10 (\text{POF}_T)]$$
$$24$$

25 Again, continuing with the Big Bend unit 2 example,



1           EAF<sub>MIN</sub> = 100% - [1.4 (17.74%) + 1.10 (5.75%)] = 68.83%

2  
3           The equivalent availability maximum and minimum for the other  
4           four units are computed in a similar manner.

5  
6           **Q.** How did Tampa Electric determine the Planned Outage,  
7           Maintenance Outage, and Forced Outage Factors?

8  
9           **A.** The company's planned outages for January through December  
10           2007 are shown on page 19 of Document No. 1. Three GPIF units  
11           have a major outage (28 days or greater) in 2007; therefore,  
12           three Critical Path Method diagrams are provided. Planned  
13           Outage Factors are calculated for each unit. For example, Big  
14           Bend unit 4 is scheduled for a planned outage from February 1,  
15           2007 to April 30, 2007. There are 2,136 planned outage hours  
16           scheduled for the 2006 period, and a total of 8,760 hours  
17           during this 12-month period. Consequently, the Planned Outage  
18           Factor for Big Bend unit 4 is 24.38 percent or:

19  
20                            $\frac{2,136}{8,760} \times 100 = 24.38\%$   
21

22  
23           The factor for each unit is shown on pages 5 and 13 through 18  
24           of Document No. 1. Big Bend unit 1 has a Planned Outage  
25           Factor of 3.84 percent. Big Bend unit 2 has a Planned Outage

1 Factor of 5.75 percent. Big Bend 3 has a Planned Outage  
2 Factor of 8.49 percent. Polk unit 1 has a Planned Outage  
3 Factor of 3.29 percent and Bayside unit 1 has a Planned Outage  
4 Factor of 9.59 percent.  
5

6 Q. How did you determine the Forced Outage and Maintenance Outage  
7 Factors for each unit?  
8

9 A. Graphs for both factors, adjusted for planned outages, versus  
10 time were prepared. Monthly data and 12-month rolling average  
11 data were recorded. For each unit the most current 12-month  
12 ending value, June 2006, was used as a basis for the  
13 projection. All projected factors are based upon historical  
14 unit performance unless adjusted for outlying forced outages.  
15 These target factors are additive and result in an Equivalent  
16 Unplanned Outage Factor of 16.12 percent for Big Bend unit 4.  
17 The Equivalent Unplanned Outage Factor for Big Bend unit 4 is  
18 verified by the data shown on page 16, lines 3, 5, 10 and 11  
19 of Document No. 1 and calculated using the following formula:  
20

$$\text{EUOF} = \frac{(\text{EFOH} + \text{EMOH})}{\text{Period Hours}} \times 100$$

23 Or  
24  
25

1                                    EUOF =  $\frac{(1,129 + 284)}{8,760} \times 100 = 16.12\%$   
2  
3

4            Relative to Big Bend unit 4, the EUOF of 16.12 percent forms  
5            the basis of the equivalent availability target development as  
6            shown on pages 4 and 5 of Document No. 1.  
7

8                                    Big Bend Unit 1

9            The projected Equivalent Unplanned Outage Factor for this unit  
10           is 35.47 percent.    The unit will have a planned outage in  
11           2007, and the Planned Outage Factor is 3.84 percent.  
12           Therefore, the target equivalent availability for this unit is  
13           60.69 percent.  
14

15                                   Big Bend Unit 2

16           The projected Equivalent Unplanned Outage Factor for this unit  
17           is 17.74 percent.    The unit will have a planned outage in  
18           2007, and the Planned Outage Factor is 5.75 percent.  
19           Therefore, the target equivalent availability for this unit is  
20           76.51 percent.  
21

22                                   Big Bend Unit 3

23           The projected Equivalent Unplanned Outage Factor for this unit  
24           is 34.15 percent.    The unit will have a planned outage in  
25           2007, and the Planned Outage Factor is 8.49 percent.

1 Therefore, the target equivalent availability for this unit is  
2 57.36 percent.

3  
4 Big Bend Unit 4

5 The projected Equivalent Unplanned Outage Factor for this unit  
6 is 16.12 percent. The unit will have a planned outage in  
7 2007, and the Planned Outage Factor is 24.38 percent.  
8 Therefore, the target equivalent availability for this unit is  
9 59.50 percent.

10  
11 Polk Unit 1

12 The projected Equivalent Unplanned Outage Factor for this unit  
13 is 8.36 percent. The unit will have a planned outage in 2007,  
14 and the Planned Outage Factor is 3.29 percent. Therefore, the  
15 target equivalent availability for this unit is 88.35 percent.

16  
17 Bayside Unit 1

18 The projected Equivalent Unplanned Outage Factor for this unit  
19 is 9.39 percent. The unit will have a planned outage in 2007,  
20 and the Planned Outage Factor is 9.59 percent. Therefore, the  
21 target equivalent availability for this unit is 81.02 percent.

22  
23 Q. Please summarize your testimony regarding Equivalent  
24 Availability Factor.

1 A. The GPIF system weighted Equivalent Availability Factor of  
2 64.3 percent is shown on Page 5 of Document No. 1. This  
3 target is similar to the July 2005 through June 2006 GPIF  
4 period. Contributing to the system EAF are the planned outages  
5 at Big Bend unit 4 to install SCR equipment.

6  
7 Q. Why are Forced and Maintenance Outage Factors adjusted for  
8 planned outage hours?

9  
10 A. The adjustment makes the factors more accurate and comparable.  
11 Obviously, a unit in a planned outage stage or reserve  
12 shutdown stage will not incur a forced or maintenance outage.  
13 Since the units in the GPIF are usually base load units,  
14 reserve shutdown is generally not a factor.

15  
16 To demonstrate the effects of a planned outage, note the  
17 Equivalent Unplanned Outage Rate and Equivalent Unplanned  
18 Outage Factor for Big Bend unit 4 on page 16 of Document No.  
19 1. During the months of January and May through December, the  
20 Equivalent Unplanned Outage Rate and the Equivalent Unplanned  
21 Outage Factor are equal. This is because no planned outages  
22 are scheduled during these months. During the months of  
23 February through April, the Equivalent Unplanned Outage Rate  
24 exceeds Equivalent Unplanned Outage Factor due to the  
25 scheduling of a planned outage. Therefore, the adjusted

1 factors apply to the period hours after the planned outage  
2 hours have been extracted.

3  
4 Q. Does this mean that both rate and factor data are used in  
5 calculated data?

6  
7 A. Yes. Rates provide a proper and accurate method of  
8 determining the unit parameters, which are subsequently  
9 converted to factors. Therefore,

$$10 \qquad \qquad \qquad \text{FOF} + \text{MOF} + \text{POF} + \text{EAF} = 100\%$$

11  
12  
13 Since factors are additive, they are easier to work with and  
14 to understand.

15  
16 Q. Has Tampa Electric prepared the necessary heat rate data  
17 required for the determination of the GPIF?

18  
19 A. Yes. Target heat rates and ranges of potential operation have  
20 been developed as required and have been adjusted to reflect  
21 the aforementioned agreed upon GPIF methodology.

22  
23 Q. How were these targets determined?

24  
25 A. Net heat rate data for the three most recent July through June

1 annual periods formed the basis of the target development.  
2 The historical data and the target values are analyzed to  
3 assure applicability to current conditions of operation. This  
4 provides assurance that any periods of abnormal operations or  
5 equipment modifications having material effect on heat rate  
6 can be taken into consideration.  
7

8 Q. How were the ranges of heat rate improvement and heat rate  
9 degradation determined?  
10

11 A. The ranges were determined through analysis of historical net  
12 heat rate and net output factor data. This is the same data  
13 from which the net heat rate versus net output factor curves  
14 have been developed for each unit. This information is shown  
15 on pages 29 through 34 of Document No. 1.  
16

17 Q. Please elaborate on the analysis used in the determination of  
18 the ranges.  
19

20 A. The net heat rate versus net output factor curves are the  
21 result of a first order curve fit to historical data. The  
22 standard error of the estimate of this data was determined,  
23 and a factor was applied to produce a band of potential  
24 improvement and degradation. Both the curve fit and the  
25 standard error of the estimate were performed by computer

1 program for each unit. These curves are also used in post-  
2 period adjustments to actual heat rates to account for  
3 unanticipated changes in unit dispatch.

4  
5 Q. Please summarize your heat rate projection (Btu/Net kWh) and  
6 the range about each target to allow for potential improvement  
7 or degradation for the 2007 period.

8  
9 A. The heat rate target for Big Bend unit 1 is 10,971 Btu/Net  
10 kWh. The range about this value, to allow for potential  
11 improvement or degradation, is  $\pm 497$  Btu/Net kWh. The heat rate  
12 target for Big Bend unit 2 is 10,484 Btu/Net kWh with a range  
13 of  $\pm 361$  Btu/Net kWh. The heat rate target for Big Bend unit 3  
14 is 11,090 Btu/Net kWh, with a range of  $\pm 908$  Btu/Net kWh. The  
15 heat rate target for Big Bend unit 4 is 10,828 Btu/Net kWh  
16 with a range of  $\pm 651$  Btu/Net kWh. The heat rate target for  
17 Polk unit 1 is 10,428 Btu/Net kWh with a range of  $\pm 1,011$   
18 Btu/Net kWh. The heat rate target for Bayside unit 1 is 7,378  
19 Btu/Net kWh with a range of  $\pm 277$  Btu/Net kWh. A zone of  
20 tolerance of  $\pm 75$  Btu/Net kWh is included within the range for  
21 each target. This is shown on page 4, and pages 7 through 12  
22 of Document No. 1.

23  
24 Q. Do the heat rate targets and ranges in Tampa Electric's  
25 projection meet the criteria of the GPIF and the philosophy of



1 the Commission?

2  
3 A. Yes.

4  
5 Q. After determining the target values and ranges for average net  
6 operating heat rate and equivalent availability, what is the  
7 next step in the GPIF?

8  
9 A. The next step is to calculate the savings and weighting factor  
10 to be used for both average net operating heat rate and  
11 equivalent availability. This is shown on pages 7 through 12.  
12 The baseline production costing analysis was performed to  
13 calculate the total system fuel cost if all units operated at  
14 target heat rate and target availability for the period. This  
15 total system fuel cost of \$1,079,796.6 is shown on page 6,  
16 column 2.

17  
18 Multiple production cost simulations were performed to  
19 calculate total system fuel cost with each unit individually  
20 operating at maximum improvement in equivalent availability  
21 and each station operating at maximum improvement in average  
22 net operating heat rate. The respective savings are shown on  
23 page 6, column 4 of Document No. 1.

24  
25 After all of the individual savings are calculated, column 4

1 totals \$58,301,700 which reflects the savings if all of the  
2 units operated at maximum improvement. A weighting factor for  
3 each parameter is then calculated by dividing individual  
4 savings by the total. For Big Bend unit 1, the weighting  
5 factor for equivalent availability is 12.26 percent as shown  
6 in the right-hand column on page 6. Pages 7 through 12 of  
7 Document No. 1 show the point table, the Fuel Savings / (Loss)  
8 and the equivalent availability or heat rate value. The  
9 individual weighting factor is also shown. For example, on  
10 Big Bend unit 2, page 8, if the unit operates at 80.3 percent  
11 equivalent availability, fuel savings would equal \$4,148,500  
12 and ten equivalent availability points would be awarded.

13  
14 The GPIF Reward/Penalty Table on page 2 is a summary of the  
15 tables on pages 7 through 12. The left-hand column of this  
16 document shows the incentive points for Tampa Electric. The  
17 center column shows the total fuel savings and is the same  
18 amount as shown on page 6, column 4, or \$58,301,700. The  
19 right hand column of page 2 is the estimated reward or penalty  
20 based upon performance.

21  
22 Q. How was the maximum allowed incentive determined?

23  
24 A. Referring to page 3, line 14, the estimated average common  
25 equity for the period January through December 2007 is

1 \$1,473,616,457. This produces the maximum allowed  
2 jurisdictional incentive of \$5,829,646 shown on line 21.  
3

4 Q. Are there any other constraints set forth by the Commission  
5 regarding the magnitude of incentive dollars?  
6

7 A. Yes. Incentive dollars are not to exceed 50 percent of fuel  
8 savings. Page 2 of Document No. 1 demonstrates that this  
9 constraint is met.  
10

11 Q. Please summarize your testimony on the GPIF.  
12

13 A. Tampa Electric has complied with the Commission's directions,  
14 philosophy, and methodology in its determination of the GPIF.  
15 The GPIF is determined by the following formula for  
16 calculating Generating Performance Incentive Points (GPIP):  
17

$$\begin{aligned} \text{GPIP:} = & ( 0.1226 \text{ EAP}_{\text{BB1}} + 0.0712 \text{ EAP}_{\text{BB2}} \\ & + 0.1713 \text{ EAP}_{\text{BB3}} + 0.1300 \text{ EAP}_{\text{BB4}} \\ & + 0.0559 \text{ EAP}_{\text{PK1}} + 0.0040 \text{ EAP}_{\text{BAY1}} \\ & + 0.0512 \text{ HRP}_{\text{BB1}} + 0.0408 \text{ HRP}_{\text{BB2}} \\ & + 0.0730 \text{ HRP}_{\text{BB3}} + 0.0627 \text{ HRP}_{\text{BB4}} \\ & + 0.0727 \text{ HRP}_{\text{PK}} + 0.1446 \text{ HRP}_{\text{BAY1}} ) \end{aligned}$$

1 Where:

2 GPIIP = Generating Performance Incentive Points.

3 EAP = Equivalent Availability Points awarded/deducted for  
4 Big Bend units 1, 2, 3, and 4, Polk unit 1 and Bayside  
5 unit 1.

6 HRP = Average Net Heat Rate Points awarded/deducted for  
7 Big Bend units 1, 2, 3, and , Polk unit 1 and Bayside  
8 unit 1.

9  
10 Q. Have you prepared a document summarizing the GPIIF targets for  
11 the January through December 2007 period?

12  
13 A. Yes. Document No. 2 entitled "Summary of GPIIF Targets"  
14 provides the availability and heat rate targets for each unit.

15  
16 Q. Does this conclude your testimony?

17  
18 A. Yes.  
19  
20  
21  
22  
23  
24  
25

EXHIBIT TO THE TESTIMONY OF  
WILLIAM A. SMOTHERMAN

GENERATING PERFORMANCE INCENTIVE FACTOR  
JANUARY 2007 - DECEMBER 2007

DOCUMENT NO. 1

GPIF SCHEDULES

TAMPA ELECTRIC COMPANY

DOCKET NO. 060001-EI

FILED: 9/1/06

EXHIBIT TO THE TESTIMONY OF  
WILLIAM A. SMOTHERMAN

GENERATING PERFORMANCE INCENTIVE FACTOR  
JANUARY 2007 - DECEMBER 2007

DOCUMENT NO. 2

SUMMARY OF GPIF TARGETS

**TAMPA ELECTRIC COMPANY  
GENERATING PERFORMANCE INCENTIVE FACTOR  
JANUARY 2007 - DECEMBER 2007  
TARGETS  
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TAMPA ELECTRIC COMPANY  
 GENERATING PERFORMANCE INCENTIVE FACTOR  
 REWARD / PENALTY TABLE - ESTIMATED  
 JANUARY 2007 - DECEMBER 2007

GENERATING PERFORMANCE INCENTIVE POINTS (GPIP)	FUEL SAVINGS / (LOSS) (\$000)	GENERATING PERFORMANCE INCENTIVE FACTOR (\$000)
+10	58,301.7	5,829.6
+9	52,471.5	5,246.7
+8	46,641.4	4,663.7
+7	40,811.2	4,080.8
+6	34,981.0	3,497.8
+5	29,150.9	2,914.8
+4	23,320.7	2,331.9
+3	17,490.5	1,748.9
+2	11,660.3	1,165.9
+1	5,830.2	583.0
0	0.0	0.0
-1	(7,276.0)	(583.0)
-2	(14,552.0)	(1,165.9)
-3	(21,828.0)	(1,748.9)
-4	(29,104.0)	(2,331.9)
-5	(36,380.0)	(2,914.8)
-6	(43,655.9)	(3,497.8)
-7	(50,931.9)	(4,080.8)
-8	(58,207.9)	(4,663.7)
-9	(65,483.9)	(5,246.7)
-10	(72,759.9)	(5,829.6)



**TAMPA ELECTRIC COMPANY  
GENERATING PERFORMANCE INCENTIVE FACTOR  
CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS  
(ESTIMATED)  
JANUARY 2007 - DECEMBER 2007**

Line 1	Beginning of period balance of common equity: End of month common equity:		\$ 1,450,299,000
Line 2	Month of January	2007	\$ 1,415,063,000
Line 3	Month of February	2007	\$ 1,428,918,825
Line 4	Month of March	2007	\$ 1,442,910,322
Line 5	Month of April	2007	\$ 1,464,427,497
Line 6	Month of May	2007	\$ 1,478,766,683
Line 7	Month of June	2007	\$ 1,493,246,273
Line 8	Month of July	2007	\$ 1,457,531,692
Line 9	Month of August	2007	\$ 1,471,803,356
Line 10	Month of September	2007	\$ 1,486,214,764
Line 11	Month of October	2007	\$ 1,507,798,793
Line 12	Month of November	2007	\$ 1,522,562,656
Line 13	Month of December	2007	\$ 1,537,471,082
Line 14	(Summation of line 1 through line 13 divided by 13)		\$ 1,473,616,457
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)		\$ 6,001,946
Line 18	Jurisdictional Sales		19,970,292 MWH
Line 19	Total Sales		20,560,533 MWH
Line 20	Jurisdictional Separation Factor (line 18 divided by line 19)		97.13%
<b>Line 21</b>	<b>Maximum Allowed Jurisdictional Incentive Dollars (line 17 times line 20)</b>		<b>\$ 5,829,646</b>

TAMPA ELECTRIC COMPANY  
GPIF TARGET AND RANGE SUMMARY  
JANUARY 2007 - DECEMBER 2007

EQUIVALENT AVAILABILITY

<u>PLANT / UNIT</u>	<u>WEIGHTING FACTOR (%)</u>	<u>EAF TARGET (%)</u>	<u>EAF RANGE</u>		<u>MAX. FUEL SAVINGS (\$000)</u>	<u>MAX. FUEL LOSS (\$000)</u>
			<u>MAX. (%)</u>	<u>MIN. (%)</u>		
BIG BEND 1	12.26%	60.7	68.0	46.1	7,147.5	(9,639.5)
BIG BEND 2	7.12%	76.5	80.3	68.8	4,148.5	(4,937.8)
BIG BEND 3	17.13%	57.4	64.6	42.9	9,984.3	(15,386.3)
BIG BEND 4	13.00%	59.5	63.9	50.6	7,576.5	(11,725.7)
POLK 1	5.59%	88.4	90.2	84.7	3,260.8	(2,475.3)
BAYSIDE 1	0.40%	81.0	83.4	76.3	233.5	(2,644.7)
<b>GPIF SYSTEM</b>	<b>55.49%</b>					

AVERAGE NET OPERATING HEAT RATE

<u>PLANT / UNIT</u>	<u>WEIGHTING FACTOR (%)</u>	<u>ANOHR Btu/kwh</u>	<u>TARGET NOF</u>	<u>ANOHR RANGE</u>		<u>MAX. FUEL SAVINGS (\$000)</u>	<u>MAX. FUEL LOSS (\$000)</u>
				<u>MIN.</u>	<u>MAX.</u>		
BIG BEND 1	5.12%	10971	71.1	10474	11468	2,986.9	(2,986.9)
BIG BEND 2	4.08%	10484	83.8	10123	10844	2,380.9	(2,380.9)
BIG BEND 3	7.30%	11090	64.2	10182	11998	4,258.0	(4,258.0)
BIG BEND 4	6.27%	10828	82.6	10177	11478	3,657.3	(3,657.3)
POLK 1	7.27%	10428	85.8	9417	11440	4,237.1	(4,237.1)
BAYSIDE1	14.46%	7378	84.7	7101	7655	8,430.3	(8,430.3)
<b>GPIF SYSTEM</b>	<b>44.51%</b>						

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

**EQUIVALENT AVAILABILITY (%)**

PLANT / UNIT	WEIGHTING FACTOR (%)	NORMALIZED WEIGHTING FACTOR	TARGET PERIOD JAN 07 - DEC 07			ACTUAL PERFORMANCE JAN 05 - DEC 05			ACTUAL PERFORMANCE JAN 04 - DEC 04			ACTUAL PERFORMANCE JAN03 - DEC 03		
			POF	EUOF	EUOR	POF	EUOF	EUOR	POF	EUOF	EUOR	POF	EUOF	EUOR
BIG BEND 1	12.26%	22.1%	3.8	35.5	36.9	8.6	30.4	33.2	7.5	25.9	28.0	0.0	35.3	35.3
BIG BEND 2	7.12%	12.8%	5.8	17.7	18.8	16.0	19.2	22.8	7.4	23.5	25.3	0.0	39.8	39.8
BIG BEND 3	17.13%	30.9%	8.5	34.2	37.3	7.1	41.4	44.6	7.9	25.0	27.1	0.0	37.6	37.6
BIG BEND 4	13.00%	23.4%	24.4	16.1	21.3	7.8	21.5	23.3	0.0	20.7	20.7	10.5	18.2	20.3
POLK 1	5.59%	10.1%	3.3	8.4	8.6	0.0	31.5	31.5	3.2	6.3	6.5	11.1	20.6	23.1
BAYSIDE 1	<u>0.40%</u>	<u>0.7%</u>	<u>9.6</u>	<u>9.4</u>	<u>10.4</u>									
<b>GPIF SYSTEM</b>	<b>55.49%</b>	<b>100.0%</b>	<b>10.3</b>	<b>25.3</b>	<b>28.0</b>	<b>8.0</b>	<b>30.4</b>	<b>32.7</b>	<b>5.4</b>	<b>22.1</b>	<b>23.3</b>	<b>3.6</b>	<b>31.1</b>	<b>31.6</b>
<b>GPIF SYSTEM WEIGHTED EQUIVALENT AVAILABILITY (%)</b>			<b>64.3</b>			<b>61.6</b>			<b>72.5</b>			<b>65.3</b>		
			<b>3 PERIOD AVERAGE</b>			<b>3 PERIOD AVERAGE</b>								
			<b>POF</b>	<b>EUOF</b>	<b>EUOR</b>	<b>EAF</b>								
			<b>5.7</b>	<b>27.8</b>	<b>29.2</b>	<b>66.5</b>								

**AVERAGE NET OPERATING HEAT RATE (Btu/kwh)**

PLANT / UNIT	WEIGHTING FACTOR (%)	NORMALIZED WEIGHTING FACTOR	TARGET	ADJUSTED	ADJUSTED	ADJUSTED
			HEAT RATE JAN 07 - DEC 07	ACTUAL PERFORMANCE HEAT RATE JAN 05 - DEC 05	ACTUAL PERFORMANCE HEAT RATE JAN 04 - DEC 04	ACTUAL PERFORMANCE HEAT RATE JAN03 - DEC 03
BIG BEND 1	5.12%	11.5%	10,971	10,943	10,943	11,217
BIG BEND 2	4.08%	9.2%	10,484	10,466	10,466	10,457
BIG BEND 3	7.30%	16.4%	11,090	11,244	11,215	11,121
BIG BEND 4	6.27%	14.1%	10,828	10,729	10,729	10,606
POLK 1	7.27%	16.3%	10,428	10,428	10,420	10,642
BAYSIDE 1	14.46%	32.5%	7,378			
<b>GPIF SYSTEM</b>	<b>44.51%</b>	<b>100.0%</b>				
<b>GPIF SYSTEM WEIGHTED AVERAGE HEAT RATE (Btu/kwh)</b>			<b>9,670</b>	<b>10,782</b>	<b>10,773</b>	<b>10,824</b>

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TAMPA ELECTRIC COMPANY  
DERIVATION OF WEIGHTING FACTORS  
JANUARY 2007 - DECEMBER 2007  
PRODUCTION COSTING SIMULATION  
FUEL COST (\$000)

UNIT PERFORMANCE INDICATOR	AT TARGET (1)	AT MAXIMUM IMPROVEMENT (2)	SAVINGS (3)	WEIGHTING FACTOR (% OF SAVINGS)
<b>EQUIVALENT AVAILABILITY</b>				
EA <sub>1</sub> BIG BEND 1	1,079,796.6	1,072,649.1	7,148	12.26%
EA <sub>2</sub> BIG BEND 2	1,079,796.6	1,075,648.1	4,149	7.12%
EA <sub>3</sub> BIG BEND 3	1,079,796.6	1,069,812.3	9,984	17.13%
EA <sub>4</sub> BIG BEND 4	1,079,796.6	1,072,220.1	7,577	13.00%
EA <sub>7</sub> POLK 1	1,079,796.6	1,076,535.8	3,261	5.59%
EA <sub>8</sub> BAYSIDE 1	1,079,796.6	1,079,563.1	234	0.40%
<b>AVERAGE HEAT RATE</b>				
AHR <sub>1</sub> BIG BEND 1	1,079,796.6	1,076,809.7	2,987	5.12%
AHR <sub>2</sub> BIG BEND 2	1,079,796.6	1,077,415.7	2,381	4.08%
AHR <sub>3</sub> BIG BEND 3	1,079,796.6	1,075,538.6	4,258	7.30%
AHR <sub>4</sub> BIG BEND 4	1,079,796.6	1,076,139.3	3,657	6.27%
AHR <sub>7</sub> POLK 1	1,079,796.6	1,075,559.5	4,237	7.27%
AHR <sub>8</sub> BAYSIDE 1	1,079,796.6	1,071,366.3	8,430	14.46%
<b>TOTAL SAVINGS</b>			<b>58,301.7</b>	<b>100.00%</b>

- (1) Fuel Adjustment Base Case - All unit performance indicators at target.  
(2) All other units performance indicators at target.  
(3) Expressed in replacement energy cost.

TAMPA ELECTRIC COMPANY  
GPIF TARGET AND RANGE SUMMARY  
JANUARY 2007 - DECEMBER 2007

BIG BEND 1

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	7,147.5	68.0	+10	2,986.9	10,474
+9	6,432.8	67.2	+9	2,688.3	10,516
+8	5,718.0	66.5	+8	2,389.6	10,559
+7	5,003.3	65.8	+7	2,090.9	10,601
+6	4,288.5	65.1	+6	1,792.2	10,643
+5	3,573.8	64.3	+5	1,493.5	10,685
+4	2,859.0	63.6	+4	1,194.8	10,727
+3	2,144.3	62.9	+3	896.1	10,770
+2	1,429.5	62.1	+2	597.4	10,812
+1	714.8	61.4	+1	298.7	10,854
					10,896
0	0.0	60.7	0	0.0	10,971
					11,046
-1	(964.0)	59.2	-1	(298.7)	11,088
-2	(1,927.9)	57.8	-2	(597.4)	11,131
-3	(2,891.9)	56.3	-3	(896.1)	11,173
-4	(3,855.8)	54.9	-4	(1,194.8)	11,215
-5	(4,819.8)	53.4	-5	(1,493.5)	11,257
-6	(5,783.7)	51.9	-6	(1,792.2)	11,300
-7	(6,747.7)	50.5	-7	(2,090.9)	11,342
-8	(7,711.6)	49.0	-8	(2,389.6)	11,384
-9	(8,675.6)	47.6	-9	(2,688.3)	11,426
-10	(9,639.5)	46.1	-10	(2,986.9)	11,468

Weighting Factor =

12.26%

Weighting Factor =

5.12%

TAMPA ELECTRIC COMPANY  
GPIF TARGET AND RANGE SUMMARY  
JANUARY 2007 - DECEMBER 2007

BIG BEND 2

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	4,148.5	80.3	+10	2,380.9	10,123
+9	3,733.7	80.0	+9	2,142.8	10,152
+8	3,318.8	79.6	+8	1,904.7	10,180
+7	2,904.0	79.2	+7	1,666.6	10,209
+6	2,489.1	78.8	+6	1,428.5	10,238
+5	2,074.3	78.4	+5	1,190.5	10,266
+4	1,659.4	78.0	+4	952.4	10,295
+3	1,244.6	77.7	+3	714.3	10,323
+2	829.7	77.3	+2	476.2	10,352
+1	414.9	76.9	+1	238.1	10,380
					10,409
0	0.0	76.5	0	0.0	10,484
					10,559
-1	(493.8)	75.7	-1	(238.1)	10,587
-2	(987.6)	75.0	-2	(476.2)	10,616
-3	(1,481.3)	74.2	-3	(714.3)	10,644
-4	(1,975.1)	73.4	-4	(952.4)	10,673
-5	(2,468.9)	72.7	-5	(1,190.5)	10,702
-6	(2,962.7)	71.9	-6	(1,428.5)	10,730
-7	(3,456.5)	71.1	-7	(1,666.6)	10,759
-8	(3,950.2)	70.4	-8	(1,904.7)	10,787
-9	(4,444.0)	69.6	-9	(2,142.8)	10,816
-10	(4,937.8)	68.8	-10	(2,380.9)	10,844

Weighting Factor =

7.12%

Weighting Factor =

4.08%

**TAMPA ELECTRIC COMPANY**  
**GPIF TARGET AND RANGE SUMMARY**  
**JANUARY 2007 - DECEMBER 2007**

**BIG BEND 3**

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	9,984.3	64.6	+10	4,258.0	10,182
+9	8,985.9	63.9	+9	3,832.2	10,265
+8	7,987.4	63.2	+8	3,406.4	10,348
+7	6,989.0	62.4	+7	2,980.6	10,432
+6	5,990.6	61.7	+6	2,554.8	10,515
+5	4,992.2	61.0	+5	2,129.0	10,598
+4	3,993.7	60.3	+4	1,703.2	10,682
+3	2,995.3	59.5	+3	1,277.4	10,765
+2	1,996.9	58.8	+2	851.6	10,848
+1	998.4	58.1	+1	425.8	10,932
					11,015
0	0.0	57.4	0	0.0	11,090
					11,165
-1	(1,538.6)	55.9	-1	(425.8)	11,248
-2	(3,077.3)	54.5	-2	(851.6)	11,331
-3	(4,615.9)	53.0	-3	(1,277.4)	11,415
-4	(6,154.5)	51.6	-4	(1,703.2)	11,498
-5	(7,693.1)	50.1	-5	(2,129.0)	11,581
-6	(9,231.8)	48.7	-6	(2,554.8)	11,665
-7	(10,770.4)	47.2	-7	(2,980.6)	11,748
-8	(12,309.0)	45.8	-8	(3,406.4)	11,831
-9	(13,847.7)	44.3	-9	(3,832.2)	11,914
-10	(15,386.3)	42.9	-10	(4,258.0)	11,998

Weighting Factor =

17.13%

Weighting Factor =

7.30%

TAMPA ELECTRIC COMPANY  
GPIF TARGET AND RANGE SUMMARY  
JANUARY 2007 - DECEMBER 2007

BIG BEND 4

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	7,576.5	63.9	+10	3,657.3	10,177
+9	6,818.9	63.5	+9	3,291.6	10,235
+8	6,061.2	63.1	+8	2,925.9	10,292
+7	5,303.6	62.6	+7	2,560.1	10,350
+6	4,545.9	62.2	+6	2,194.4	10,408
+5	3,788.3	61.7	+5	1,828.7	10,465
+4	3,030.6	61.3	+4	1,462.9	10,523
+3	2,273.0	60.8	+3	1,097.2	10,580
+2	1,515.3	60.4	+2	731.5	10,638
+1	757.7	59.9	+1	365.7	10,695
					10,753
0	0.0	59.5	0	0.0	10,828
					10,903
-1	(1,172.6)	58.6	-1	(365.7)	10,960
-2	(2,345.1)	57.7	-2	(731.5)	11,018
-3	(3,517.7)	56.8	-3	(1,097.2)	11,076
-4	(4,690.3)	55.9	-4	(1,462.9)	11,133
-5	(5,862.8)	55.1	-5	(1,828.7)	11,191
-6	(7,035.4)	54.2	-6	(2,194.4)	11,248
-7	(8,208.0)	53.3	-7	(2,560.1)	11,306
-8	(9,380.6)	52.4	-8	(2,925.9)	11,363
-9	(10,553.1)	51.5	-9	(3,291.6)	11,421
-10	(11,725.7)	50.6	-10	(3,657.3)	11,478

Weighting Factor =

13.00%

Weighting Factor =

6.27%



TAMPA ELECTRIC COMPANY  
GPIF TARGET AND RANGE SUMMARY

JANUARY 2007 - DECEMBER 2007

POLK 1

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	3,260.8	90.2	+10	4,237.1	9,417
+9	2,934.7	90.0	+9	3,813.4	9,511
+8	2,608.6	89.8	+8	3,389.7	9,604
+7	2,282.6	89.6	+7	2,966.0	9,698
+6	1,956.5	89.5	+6	2,542.2	9,791
+5	1,630.4	89.3	+5	2,118.5	9,885
+4	1,304.3	89.1	+4	1,694.8	9,979
+3	978.2	88.9	+3	1,271.1	10,072
+2	652.2	88.7	+2	847.4	10,166
+1	326.1	88.5	+1	423.7	10,260
					10,353
0	0.0	88.4	0	0.0	10,428
					10,503
-1	(247.5)	88.0	-1	(423.7)	10,597
-2	(495.1)	87.6	-2	(847.4)	10,691
-3	(742.6)	87.2	-3	(1,271.1)	10,784
-4	(990.1)	86.9	-4	(1,694.8)	10,878
-5	(1,237.6)	86.5	-5	(2,118.5)	10,971
-6	(1,485.2)	86.1	-6	(2,542.2)	11,065
-7	(1,732.7)	85.8	-7	(2,966.0)	11,159
-8	(1,980.2)	85.4	-8	(3,389.7)	11,252
-9	(2,227.8)	85.0	-9	(3,813.4)	11,346
-10	(2,475.3)	84.7	-10	(4,237.1)	11,440

Weighting Factor = 5.59%

Weighting Factor = 7.27%

TAMPA ELECTRIC COMPANY  
GPIF TARGET AND RANGE SUMMARY  
JANUARY 2007 - DECEMBER 2007

BAYSIDE 1

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	233.5	83.4	+10	8,430.3	7,101
+9	210.2	83.1	+9	7,587.3	7,121
+8	186.8	82.9	+8	6,744.3	7,141
+7	163.5	82.7	+7	5,901.2	7,162
+6	140.1	82.4	+6	5,058.2	7,182
+5	116.8	82.2	+5	4,215.2	7,202
+4	93.4	82.0	+4	3,372.1	7,222
+3	70.1	81.7	+3	2,529.1	7,242
+2	46.7	81.5	+2	1,686.1	7,263
+1	23.4	81.3	+1	843.0	7,283
					7,303
0	0.0	81.0	0	0.0	7,378
					7,453
-1	(264.5)	80.6	-1	(843.0)	7,473
-2	(528.9)	80.1	-2	(1,686.1)	7,494
-3	(793.4)	79.6	-3	(2,529.1)	7,514
-4	(1,057.9)	79.1	-4	(3,372.1)	7,534
-5	(1,322.3)	78.7	-5	(4,215.2)	7,554
-6	(1,586.8)	78.2	-6	(5,058.2)	7,574
-7	(1,851.3)	77.7	-7	(5,901.2)	7,595
-8	(2,115.8)	77.3	-8	(6,744.3)	7,615
-9	(2,380.2)	76.8	-9	(7,587.3)	7,635
-10	(2,644.7)	76.3	-10	(8,430.3)	7,655

Weighting Factor = 0.40%

Weighting Factor = 14.46%

TAMPA ELECTRIC COMPANY

ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2007 - DECEMBER 2007

PLANT/UNIT	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	2007
BIG BEND I													
1. EAF (%)	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	63.1	33.7	63.1	60.69
2. POF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.7	0.0	3.84
3. EUOF	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	19.7	36.9	35.47
4. EUOR	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9	36.9
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8760
6. SH	682	616	682	660	682	660	682	682	660	682	352	682	7718
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	62	56	62	60	62	60	62	62	60	62	368	62	1042
9. POH	0	0	0	0	0	0	0	0	0	0	336	0	336
10. FOH & EFOH	242	218	242	234	242	234	242	242	234	242	125	242	2737
11. MOH & EMOH	33	30	33	32	33	32	33	33	32	33	17	33	370
12. OPER BTU (GBTU)	2187	1972	2187	2116	2187	2116	2187	2187	2116	2187	1129	2186	24758
13. NET GEN (MWH)	199,364	179,690	199,335	192,829	199,365	192,882	199,309	199,397	192,901	199,378	102,903	199,263	2,256,616
14. ANOHR (Btu/kwh)	10,971	10,974	10,971	10,972	10,971	10,971	10,971	10,970	10,971	10,971	10,971	10,972	10,971
15. NOF (%)	71.2	71.0	71.2	71.1	71.1	71.1	71.1	71.2	71.2	71.2	71.2	71.1	71.1
16. NPC (MW)	411	411	411	411	411	411	411	411	411	411	411	411	411
17. ANOHR EQUATION	ANOHR = NOF( -25.102 ) + 12757												

ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2007 - DECEMBER 2007

PLANT/UNIT	MONTH OF: Jan-07	MONTH OF: Feb-07	MONTH OF: Mar-07	MONTH OF: Apr-07	MONTH OF: May-07	MONTH OF: Jun-07	MONTH OF: Jul-07	MONTH OF: Aug-07	MONTH OF: Sep-07	MONTH OF: Oct-07	MONTH OF: Nov-07	MONTH OF: Dec-07	PERIOD 2007
BIG BEND 2	81.2	81.2	81.2	81.2	31.4	75.8	81.2	81.2	81.2	81.2	81.2	81.2	76.50
1. EAF (%)	0.0	0.0	0.0	0.0	61.3	6.7	0.0	0.0	0.0	0.0	0.0	0.0	5.75
2. POF	18.8	18.8	18.8	18.8	7.3	17.6	18.8	18.8	18.8	18.8	18.8	18.8	17.74
3. EUOF	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
4. EUOR	744	672	744	744	744	720	744	744	720	744	720	744	8760
5. PH	692	625	692	670	246	647	692	692	670	692	670	692	7681-
6. SH	0	0	0	0	0	0	0	0	0	0	0	0	0
7. RSH	52	47	52	50	498	73	52	52	50	52	50	52	1079
8. UH	0	0	0	0	456	48	0	0	0	0	0	0	504
9. POH	114	103	114	111	44	103	114	114	111	114	111	114	1270
10. FOH & EFOH	26	23	26	25	10	23	26	26	25	26	25	26	285
11. MOH & EMOH	2379	2148	2379	2302	845	2224	2379	2379	2302	2379	2302	2379	26396
12. OPER BTU (GBTU)	226,893	204,918	226,892	219,568	80,585	212,178	226,891	226,893	219,572	226,893	219,574	226,891	2,517,748
13. NET GEN (MWH)	10,484	10,484	10,484	10,484	10,484	10,484	10,484	10,484	10,484	10,484	10,484	10,484	10,484
14. ANOHR (Btu/kwh)	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8	83.8
15. NOF (%)	391	391	391	391	391	391	391	391	391	391	391	391	391
16. NPC (MW)	ANOHR = NOF												
17. ANOHR EQUATION			-19.503	) +	12119								

TAMPA ELECTRIC COMPANY

ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2007 - DECEMBER 2007

PLANT/UNIT	MONTH OF: Jan-07	MONTH OF: Feb-07	MONTH OF: Mar-07	MONTH OF: Apr-07	MONTH OF: May-07	MONTH OF: Jun-07	MONTH OF: Jul-07	MONTH OF: Aug-07	MONTH OF: Sep-07	MONTH OF: Oct-07	MONTH OF: Nov-07	MONTH OF: Dec-07	PERIOD
BIG BEND 3	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	2007
1. EAF (%)	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	62.7	57.36
2. POF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	8.49
3. EUOF	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	34.15
4. EUOR	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3	37.3
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8760
6. SH	598	540	598	578	598	578	598	598	578	598	578	598	6459
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	146	132	146	142	146	142	146	146	142	146	142	142	2301
9. POH	0	0	0	0	0	0	0	0	0	0	0	744	744
10. FOH & EFOH	245	221	245	237	245	237	245	245	237	245	237	245	2641
11. MOH & EMOH	33	29	33	31	33	31	33	33	31	33	31	33	350
12. OPER BTU (GBTU)	1766	1620	1813	1728	1796	1734	1788	1805	1737	1771	1760	60	19394
13. NET GEN (MWH)	156,961	144,799	162,532	156,615	163,068	157,356	162,158	164,264	157,769	159,966	158,026	5,337	1,748,851
14. ANOHR (Btu/kwh)	11,249	11,191	11,152	11,035	11,012	11,021	11,029	10,990	11,013	11,069	11,139	11,175	11,090
15. NOF (%)	60.7	61.9	62.8	65.4	65.9	65.7	65.5	66.4	65.9	64.6	63.1	62.3	64.2
16. NPC (MW)	433	433	433	414	414	414	414	414	414	414	433	433	422
17. ANOHR EQUATION	ANOHR = NOF( -45.088 ) + 13984												

TAMPA ELECTRIC COMPANY

ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2007 - DECEMBER 2007

PLANT/UNIT	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	PERIOD
BIG BEND 4													2007
1. EAF (%)	78.7	0.0	0.0	0.0	78.7	78.7	78.7	78.7	78.7	78.7	78.7	78.7	59.49
2. POF	0.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.38
3. EUOF	21.3	0.0	0.0	0.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	16.12
4. EUOR	21.3	0.0	0.0	0.0	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3	21.3
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8760
6. SH	620	0	0	40	620	600	620	620	600	620	600	620	5562
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	124	672	744	680	124	120	124	124	120	124	120	124	3198
9. POH	0	672	744	720	0	0	0	0	0	0	0	0	2136
10. FOH & EFOH	127	0	0	0	127	123	127	127	123	127	123	127	1129
11. MOH & EMOH	32	0	0	0	32	31	32	32	31	32	31	32	284
12. OPER BTU (GBTU)	2634.93	0.00	0.00	100.09	2219.93	2487.83	2568.54	2582.52	2503.15	2638.18	2490.68	2587.57	22823.75
13. NET GEN (MWH)	244,102	0	0	8,890	202,371	230,125	237,568	239,003	231,698	244,736	230,144	239,236	2,107,873
14. ANOHR (Btu/kwh)	10,794	11,877	11,877	11,259	10,970	10,811	10,812	10,805	10,804	10,780	10,822	10,816	10,828
15. NOF (%)	85.2	0.0	0.0	48.6	71.4	83.9	83.8	84.3	84.5	86.4	83.0	83.5	82.6
16. NPC (MW)	462	462	462	457	457	457	457	457	457	457	462	462	459
17. ANOHR EQUATION													

ANOHR = NOF( -12.70629064 ) + 11876.88211

TAMPA ELECTRIC COMPANY  
ESTIMATED UNIT PERFORMANCE DATA  
JANUARY 2007 - DECEMBER 2007

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 I	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	2007
1. EAF (%)	91.4	91.4	91.4	70.0	91.4	91.4	91.4	91.4	91.4	76.6	91.4	91.4	88.35
2. POF	0.0	0.0	0.0	23.3	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	3.29
3. EUOF	8.6	8.6	8.6	6.6	8.6	8.6	8.6	8.6	8.6	7.3	8.6	8.6	8.36
4. EUOR	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8760
6. SH	708	639	708	525	708	685	708	708	685	594	685	708	8059
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	36	33	36	195	36	35	36	36	35	150	35	36	701
9. POH	0	0	0	168	0	0	0	0	0	120	0	0	288
10. FOH & EFOH	45	40	45	33	45	43	45	45	43	37	43	45	507
11. MOH & EMOH	20	18	20	15	20	19	20	20	19	17	19	20	226
12. OPER BTU (GBTU)	1678.62	1516.17	1669.08	1156.73	1580.38	1529.40	1580.38	1580.38	1566.54	1400.88	1624.47	1678.62	18562.26
13. NET GEN (MWH)	161,240	145,636	160,244	110,605	151,281	146,401	151,281	151,281	150,256	134,495	156,038	161,240	1,779,998
14. ANOHR (Btu/kwh)	10,411	10,411	10,416	10,458	10,447	10,447	10,447	10,447	10,426	10,416	10,411	10,411	10,428
15. NOF (%)	87.6	87.6	87.1	82.6	83.8	83.8	83.8	83.8	86.0	87.1	87.6	87.6	85.8
16. NPC (MW)	260	260	260	255	255	255	255	255	255	260	260	260	257
17. ANOHR EQUATION	ANOHR = NOF( -9.460055341 ) + 11239.71057												

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TAMPA ELECTRIC COMPANY

ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2007 - DECEMBER 2007

PLANT/UNIT	MONTH OF: Jan-07	MONTH OF: Feb-07	MONTH OF: Mar-07	MONTH OF: Apr-07	MONTH OF: May-07	MONTH OF: Jun-07	MONTH OF: Jul-07	MONTH OF: Aug-07	MONTH OF: Sep-07	MONTH OF: Oct-07	MONTH OF: Nov-07	MONTH OF: Dec-07	PERIOD
BAYSIDE 1	89.6	89.6	69.4	89.6	89.6	89.6	89.6	89.6	89.6	34.7	62.7	89.6	81.0
1. EAF (%)	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0	0.0	61.3	30.0	0.0	9.6
2. POF	10.4	10.4	8.0	10.4	10.4	10.4	10.4	10.4	10.4	4.0	7.3	10.4	9.4
3. EUOF	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
4. EUOR	744	672	744	720	744	744	744	744	720	744	720	744	8760
5. PH	488	521	438	497	517	487	515	510	476	217	359	553	5579
6. SH	0	0	0	0	0	0	0	0	0	0	0	0	0
7. RSH	256	151	306	223	227	233	229	234	244	527	361	191	3181
8. UH	0	0	168	0	0	0	0	0	0	456	216	0	840
9. POH	4	3	3	3	4	3	4	4	3	1	2	4	38
10. FOH & EFOH	74	67	57	71	74	71	74	74	71	29	50	74	784
11. MOH & EMOH	1893.7	2313.7	2116.0	2257.9	2453.2	2271.6	2399.6	2386.2	2228.9	1064.0	1721.7	2432.8	25539.0
12. OPER BTU (GIBTU)	256,806	313,672	286,818	305,997	332,424	307,842	325,185	323,365	302,044	144,168	233,305	329,827	3,461,453
13. NET GEN (MWH)	7,374	7,376	7,378	7,379	7,380	7,379	7,379	7,379	7,379	7,380	7,380	7,376	7,378
14. ANOHR (Btu/kwh)	66.3	76.0	82.5	87.8	91.6	90.0	89.9	90.3	90.3	94.6	92.6	75.2	84.7
15. NOF (%)	793	793	793	702	702	702	702	702	702	702	702	793	732
16. NPC (MW)	ANOHR = NOF( 0.22 ) +												
17. ANOHR EQUATION	7360												

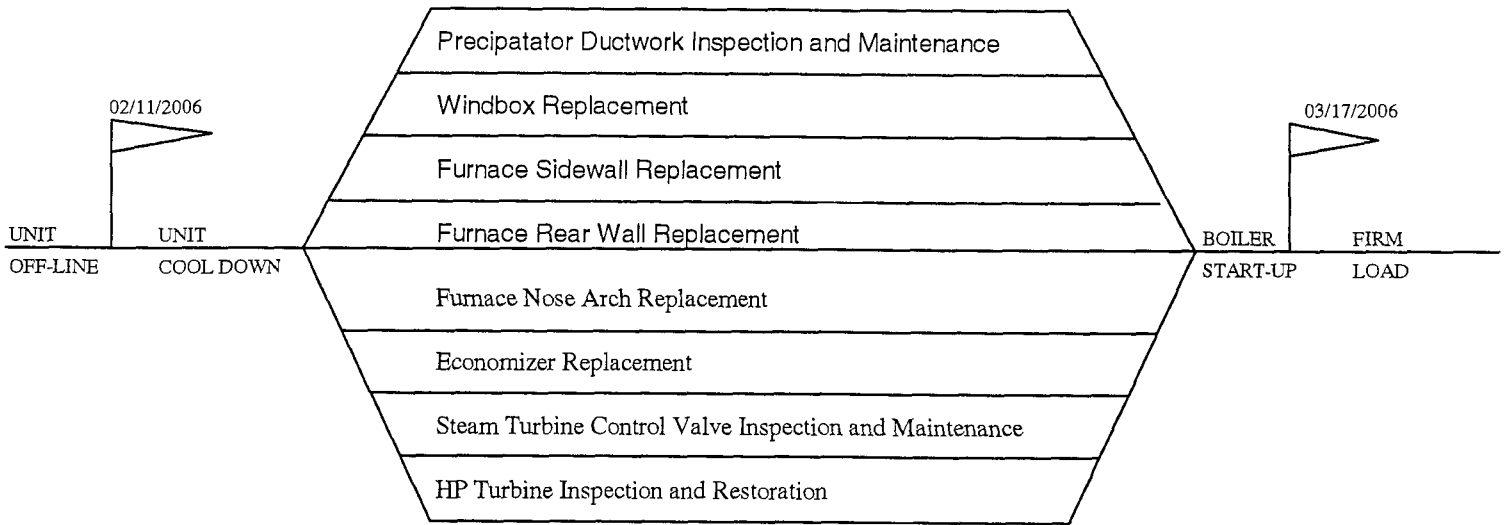


**TAMPA ELECTRIC COMPANY  
PLANNED OUTAGE SCHEDULE (ESTIMATED)  
GPIF UNITS  
JANUARY 2007 - DECEMBER 2007**

<u>PLANT / UNIT</u>	<u>PLANNED OUTAGE DATES</u>	<u>OUTAGE DESCRIPTION</u>
BIG BEND 1	Nov 03 - Nov 16	Fuel System Clean-up
BIG BEND 2	May 13 - Jun 02	Fuel System Clean-up
+ BIG BEND 3	Dec 01 - Dec 31	Duct Work Outage *
+ BIG BEND 4	Feb 01 - Apr 30	SCR Outage *
POLK 1	Apr 02 - Apr 08 Oct 21 - Oct 25	Gasifier / CT Outage Gasifier Outage
+ BAYSIDE 1	Mar 17 - Mar 23 Oct 13 - Nov 09	Combustion Path Inspection Steam Turbine Overhaul *

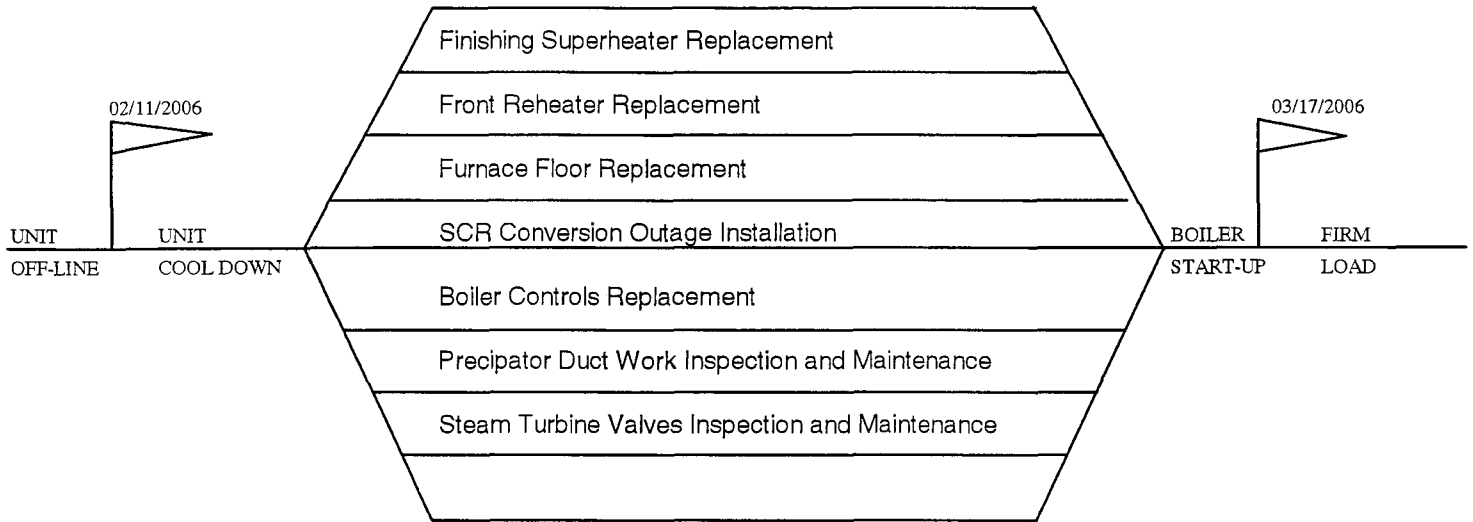
+ CPM for units with less than or equal to 4 weeks are not included.

TAMPA ELECTRIC COMPANY  
CRITICAL PATH METHOD DIAGRAMS  
GPIF UNITS > FOUR WEEKS  
JANUARY 2007 - DECEMBER 2007



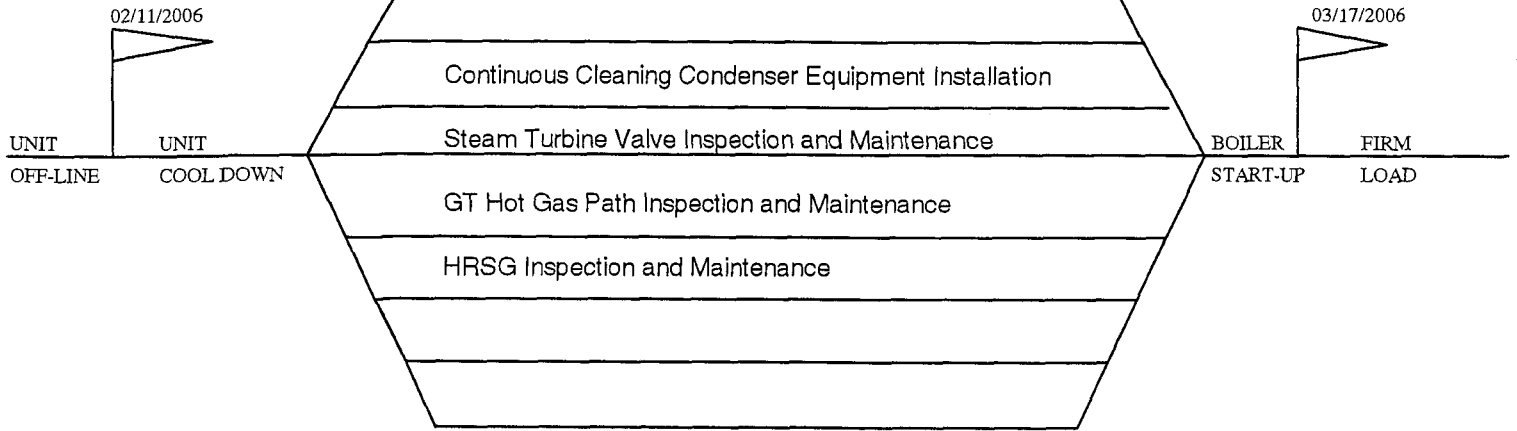
TAMPA ELECTRIC COMPANY  
BIG BEND UNIT NUMBER 3  
PLANNED OUTAGE 2007  
PROJECTED CPM  
8/25/2007

TAMPA ELECTRIC COMPANY  
CRITICAL PATH METHOD DIAGRAMS  
GPIF UNITS > FOUR WEEKS  
JANUARY 2007 - DECEMBER 2007



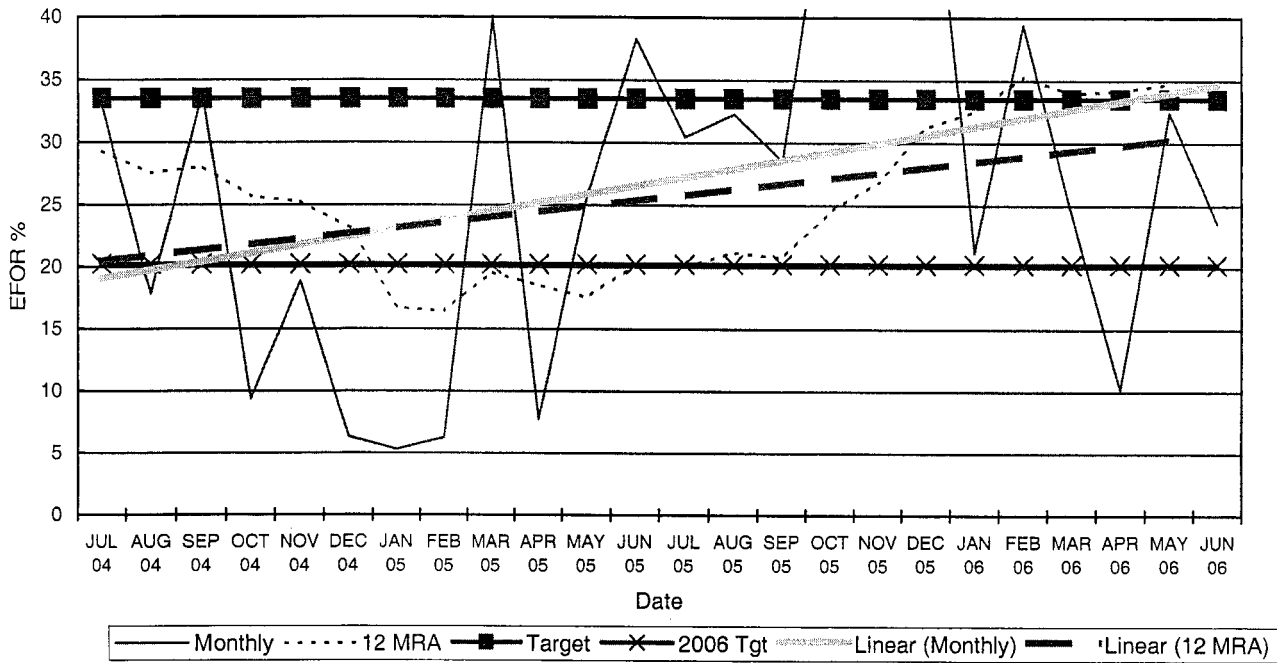
TAMPA ELECTRIC COMPANY  
BIG BEND UNIT NUMBER 4  
PLANNED OUTAGE 2007  
PROJECTED CPM  
8/25/2007

TAMPA ELECTRIC COMPANY  
CRITICAL PATH METHOD DIAGRAMS  
GPIF UNITS > FOUR WEEKS  
JANUARY 2007 - DECEMBER 2007

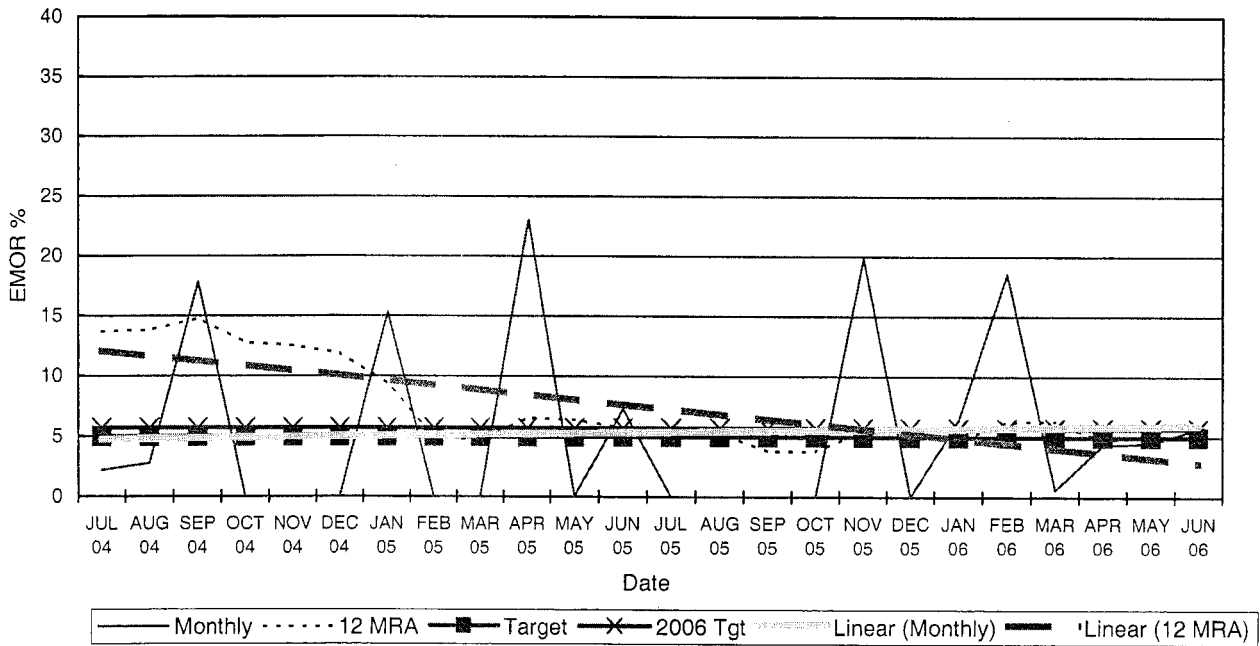


TAMPA ELECTRIC COMPANY  
BAYSIDE UNIT # 1  
PLANNED OUTAGE 2007  
PROJECTED CPM  
8/25/2007

**Big Bend Unit 1**  
EFOR

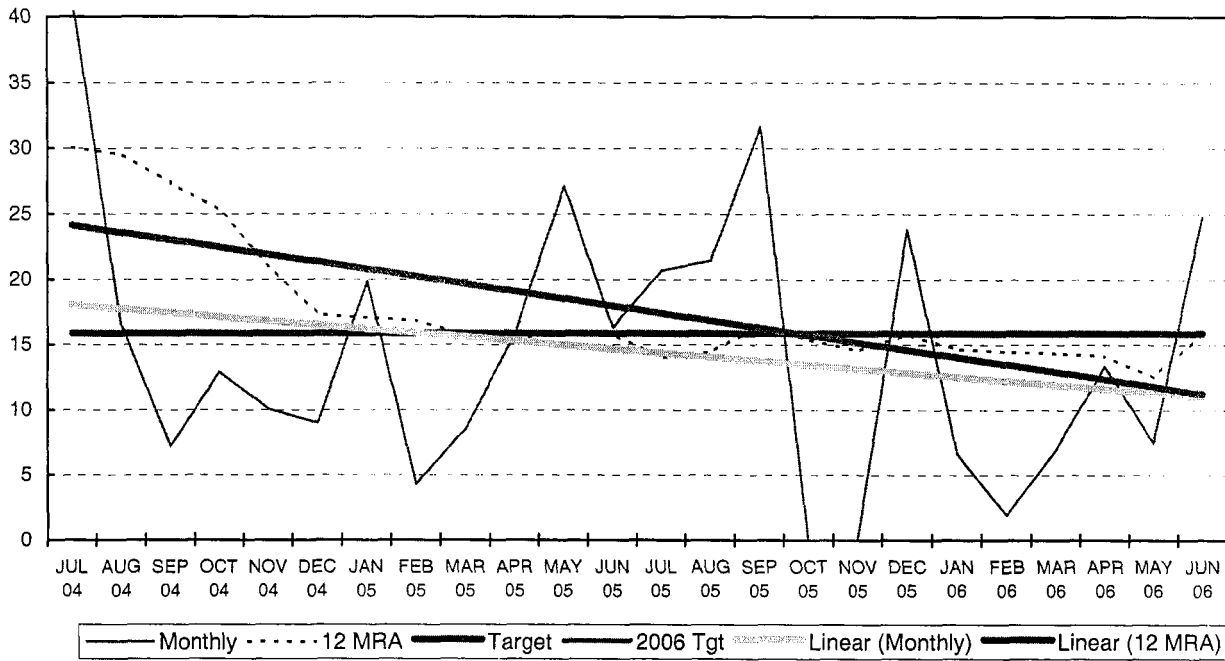


**Big Bend Unit 1**  
EMOR

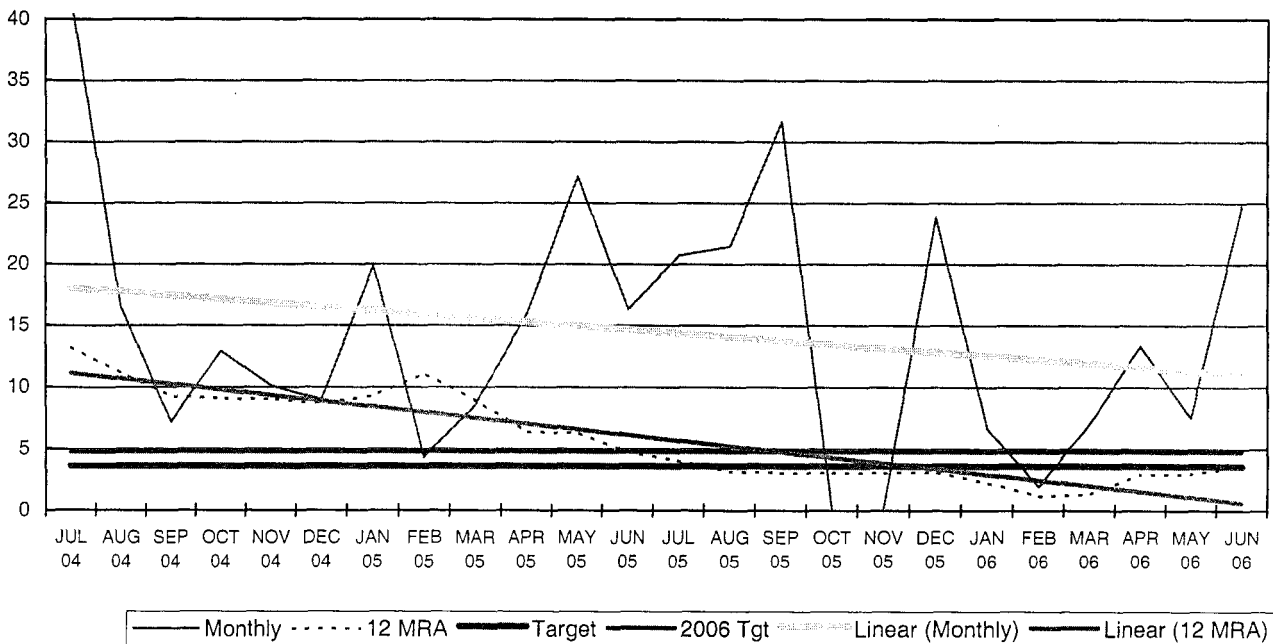


12 MRA = 12 Month Rolling Average

**Big Bend Unit 2**  
EFOR

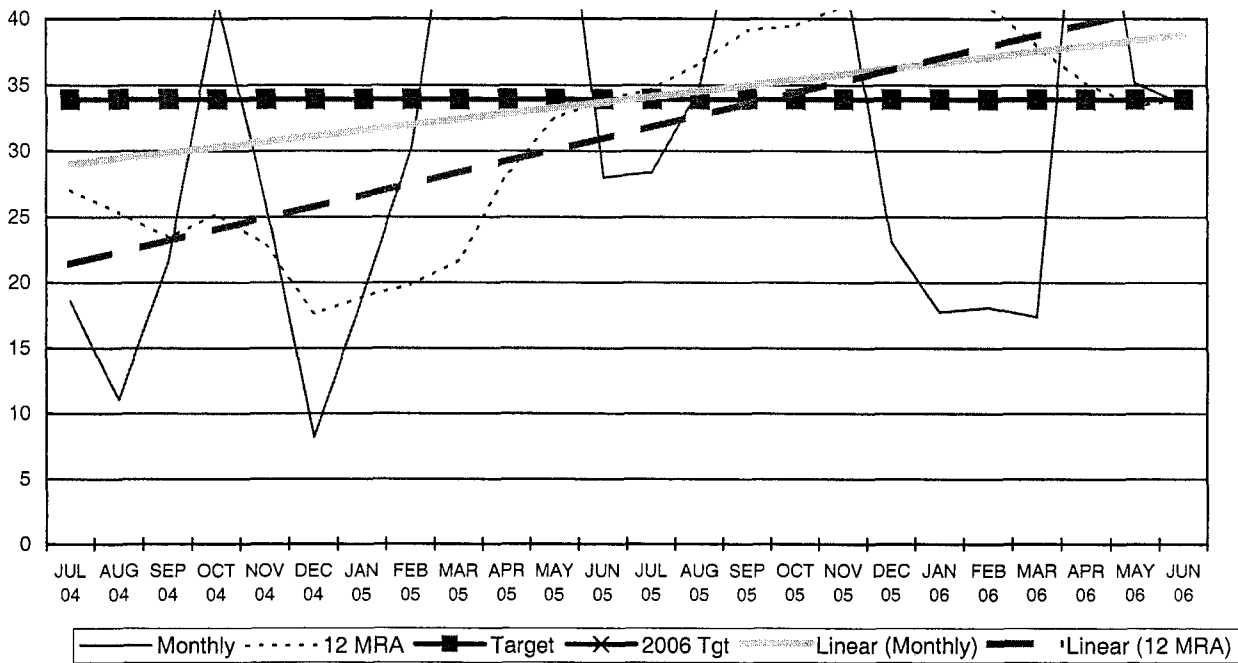


**Big Bend Unit 2**  
EMOR

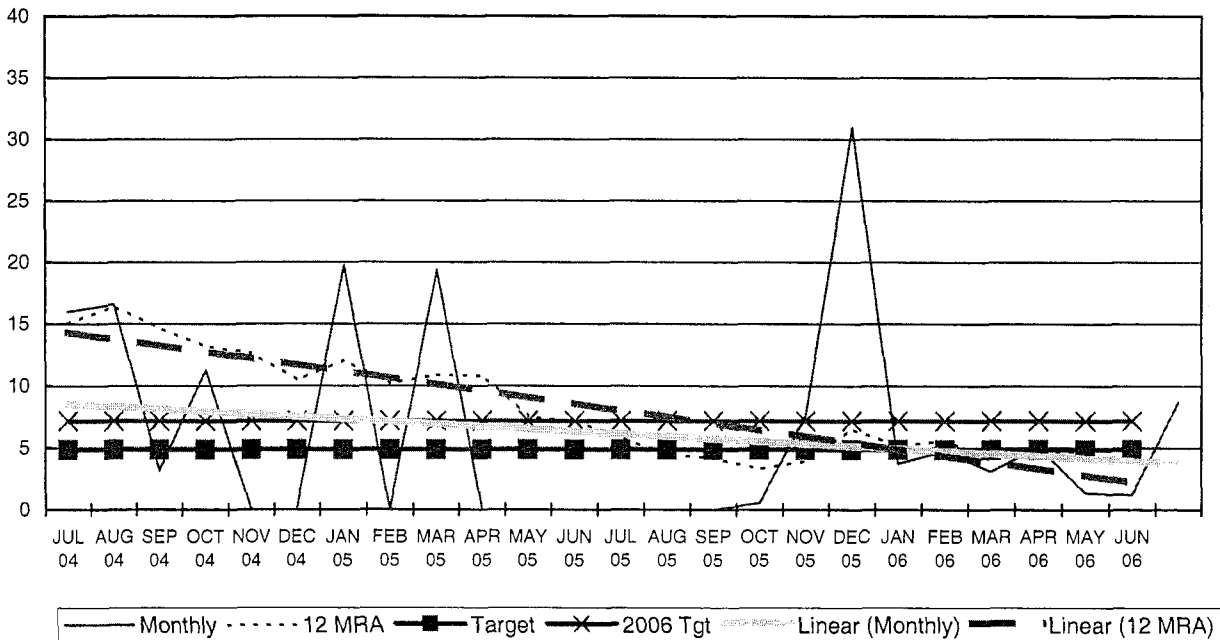


12 MRA = 12 Month Rolling Average

**Big Bend Unit 3**  
EFOR

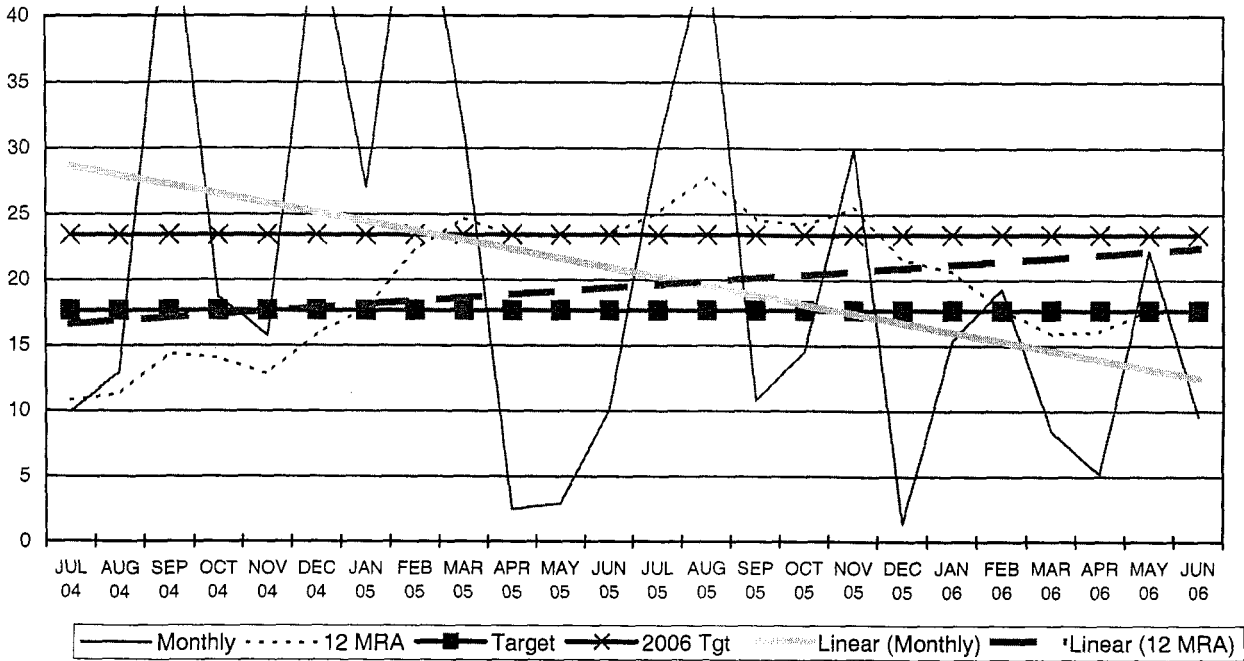


**Big Bend Unit 3**  
EMOR

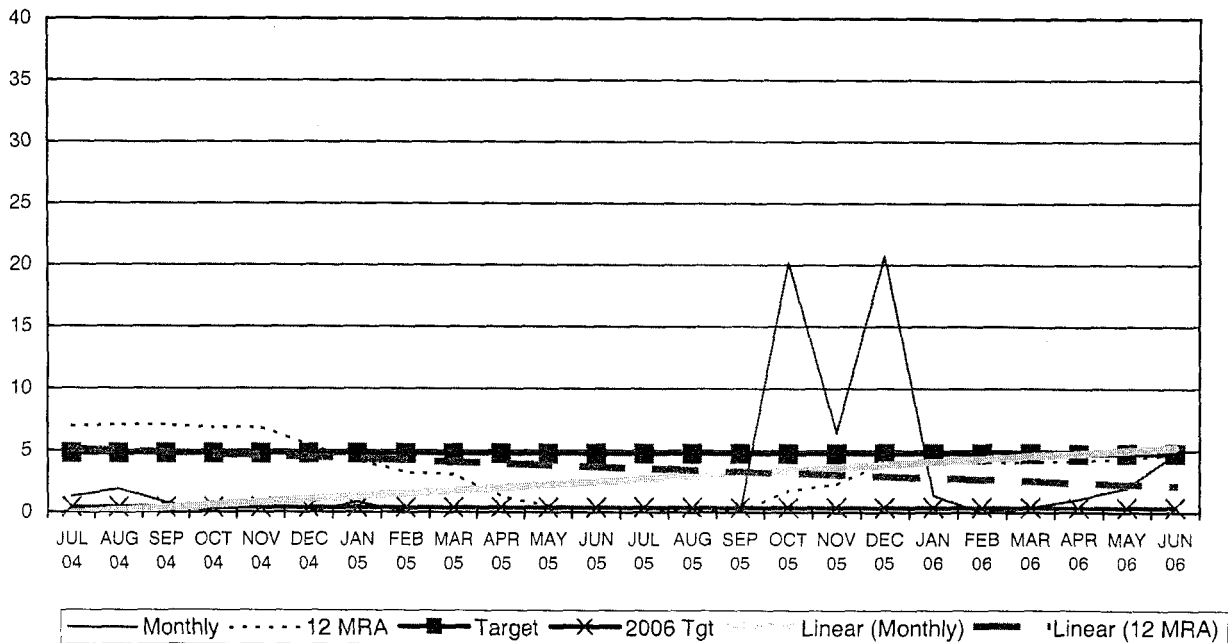


12 MRA = 12 Month Rolling Average

**Big Bend Unit 4**  
EFOR



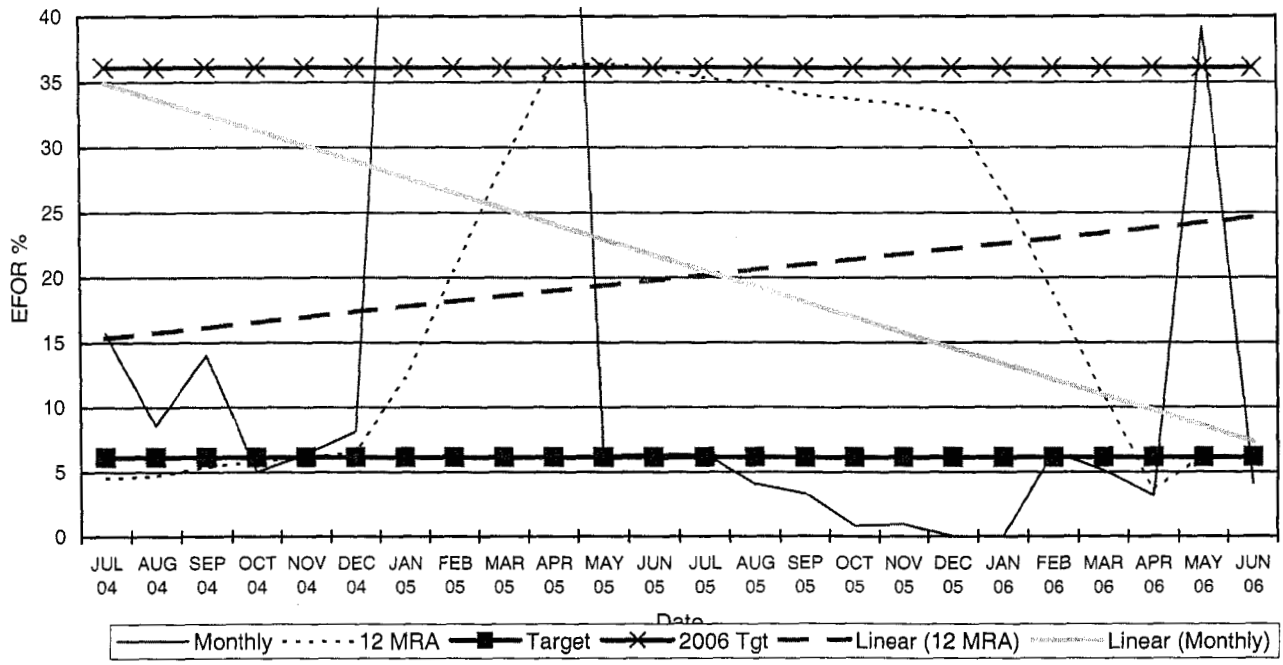
**Big Bend Unit 4**  
EMOR



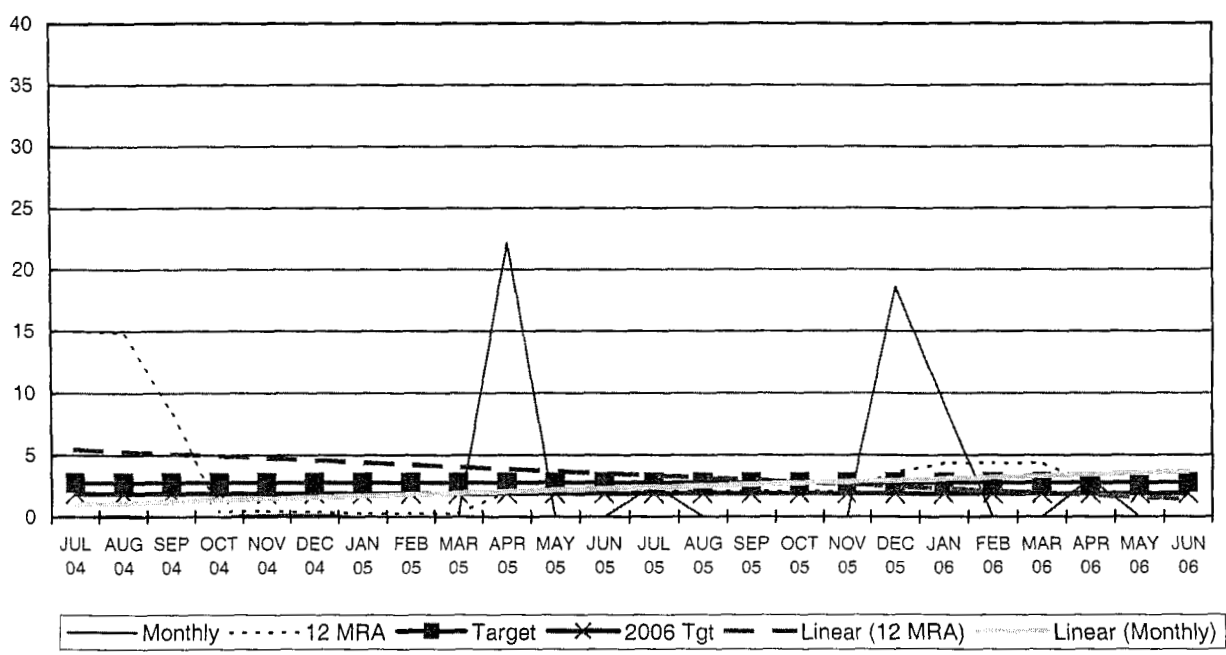
12 MRA = 12 Month Rolling Average



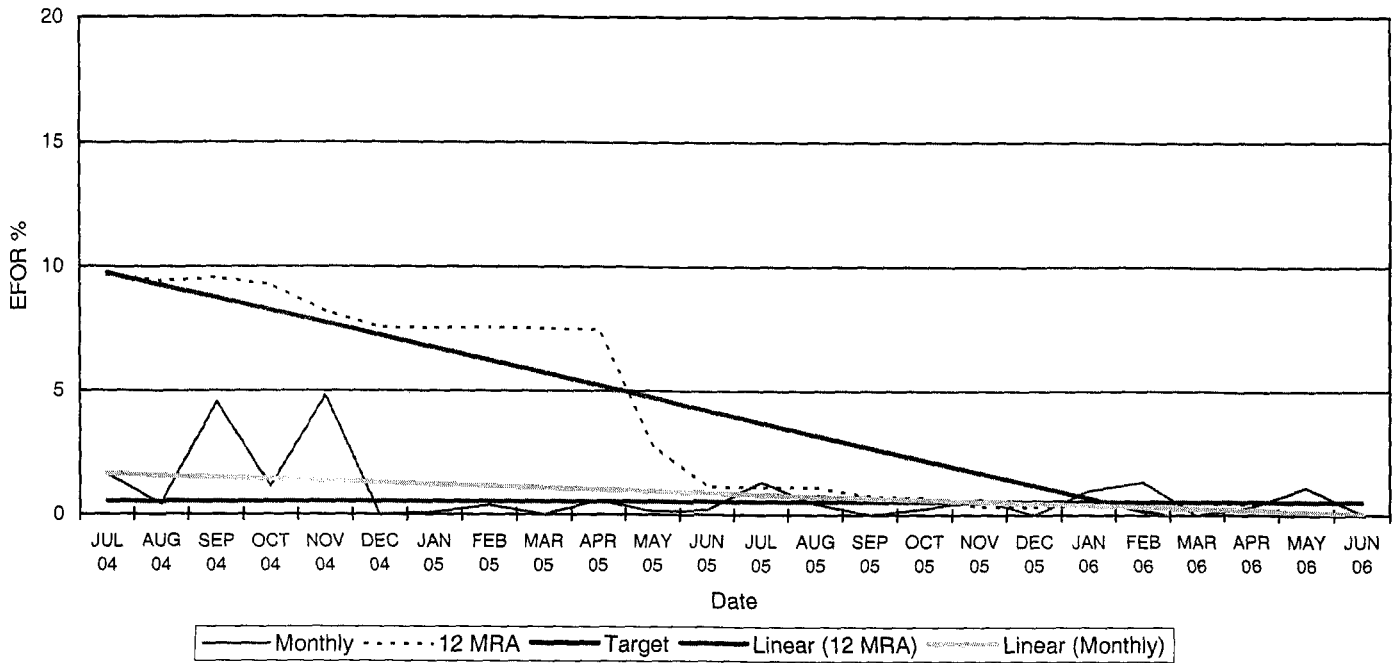
**Polk Unit 1**  
EFOR



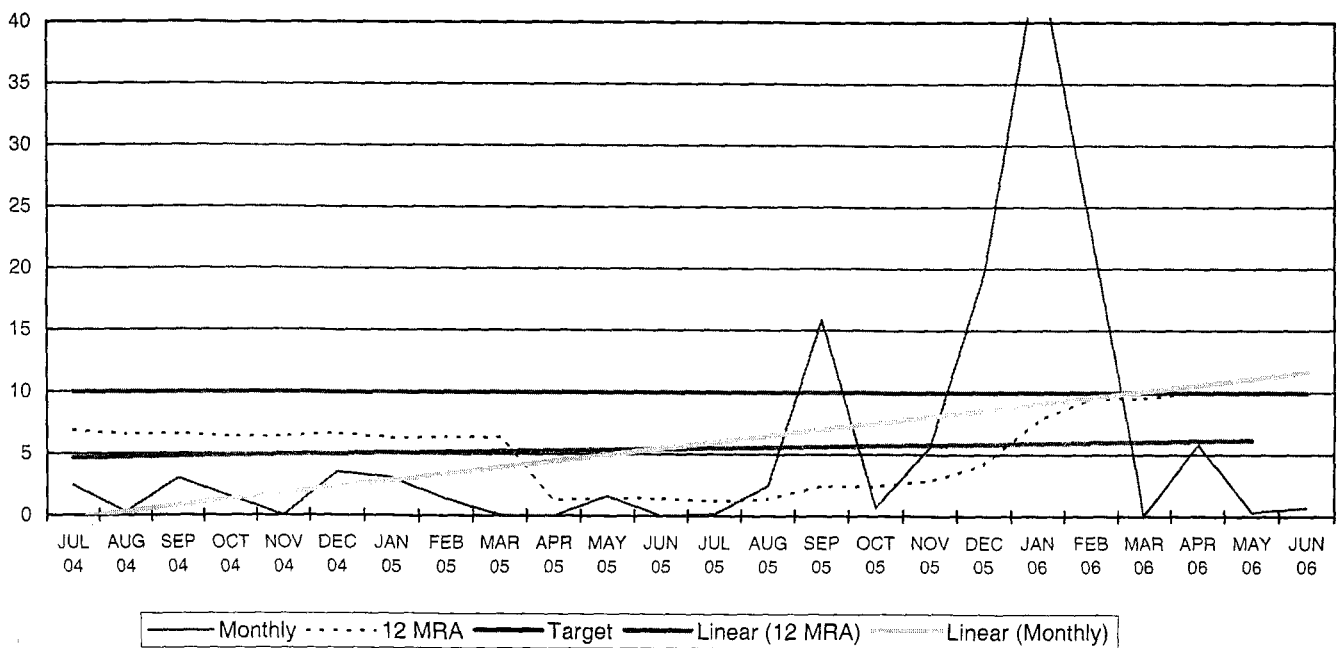
**Polk Unit 1**  
EMOR



Bayside Unit 1  
EFOR

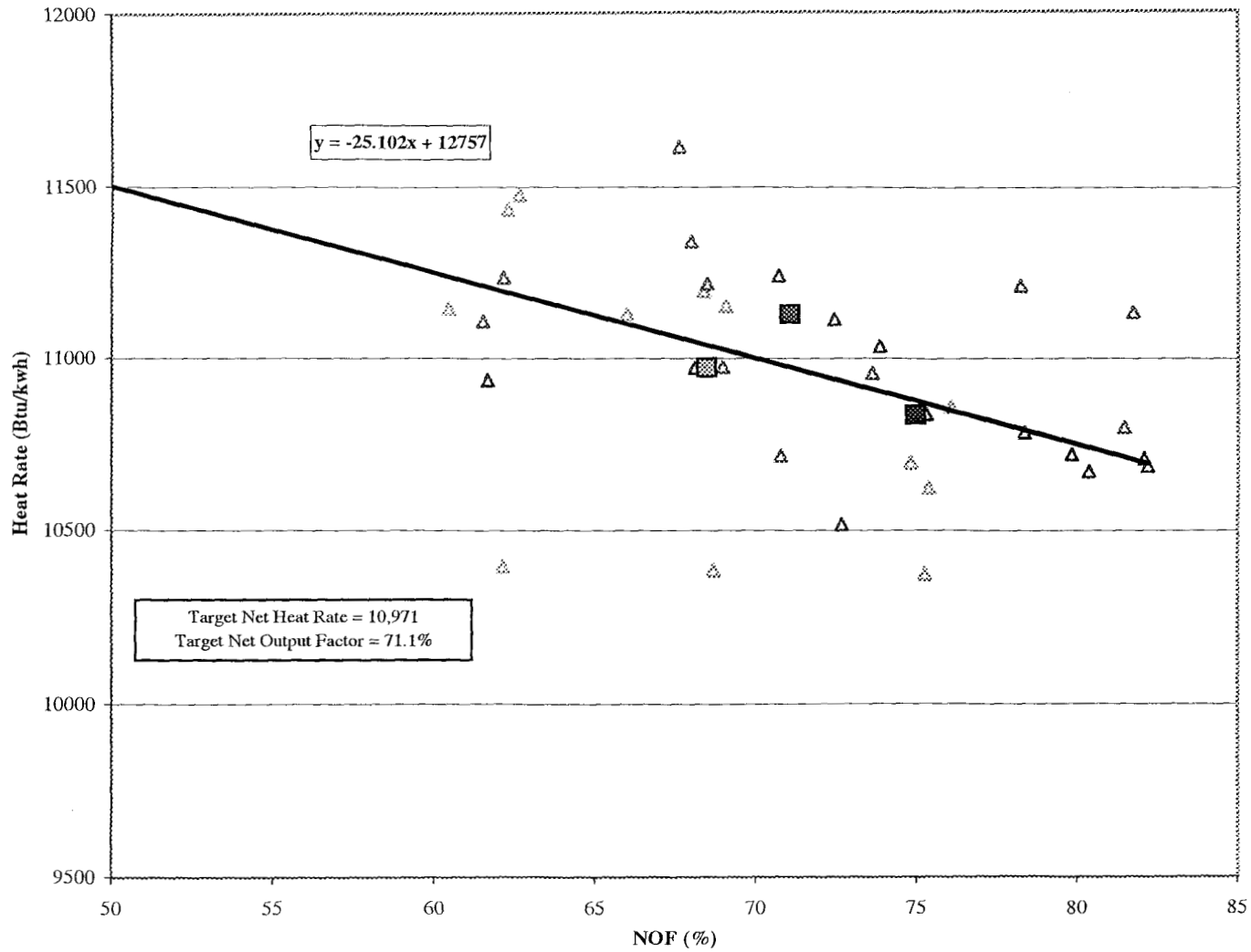


Bayside Unit 1  
EMOR



12 MRA = 12 Month Rolling Average

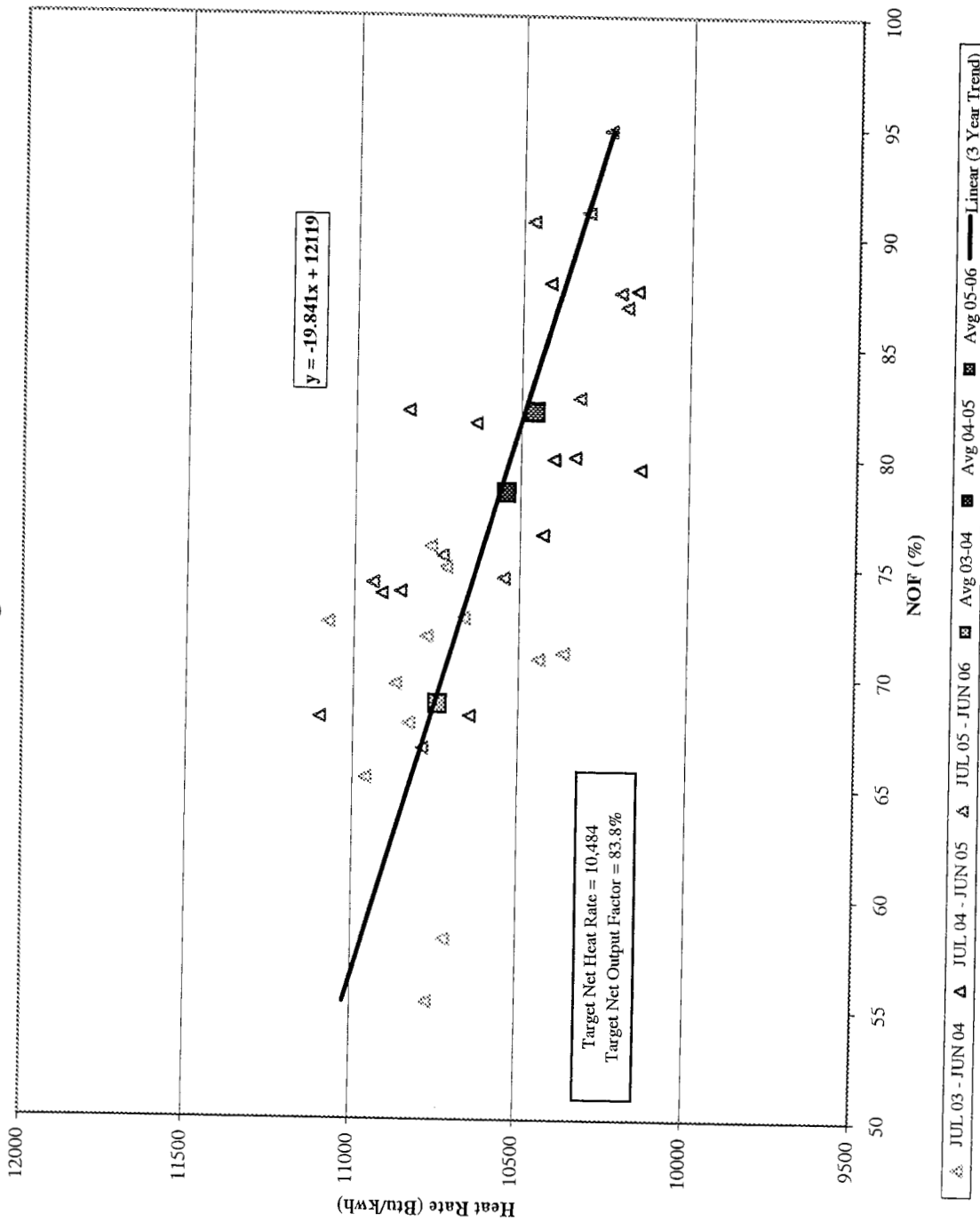
# Tampa Electric Company Heat Rate vs Net Output Factor Big Bend Unit #1



△ JUL 03 - JUN 04    ▲ JUL 04 - JUN 05    △ JUL 05 - JUN 06    ▣ Avg 03-04    ▤ Avg 04-05    ▥ Avg 05-06    — Linear (3 Year Trend)

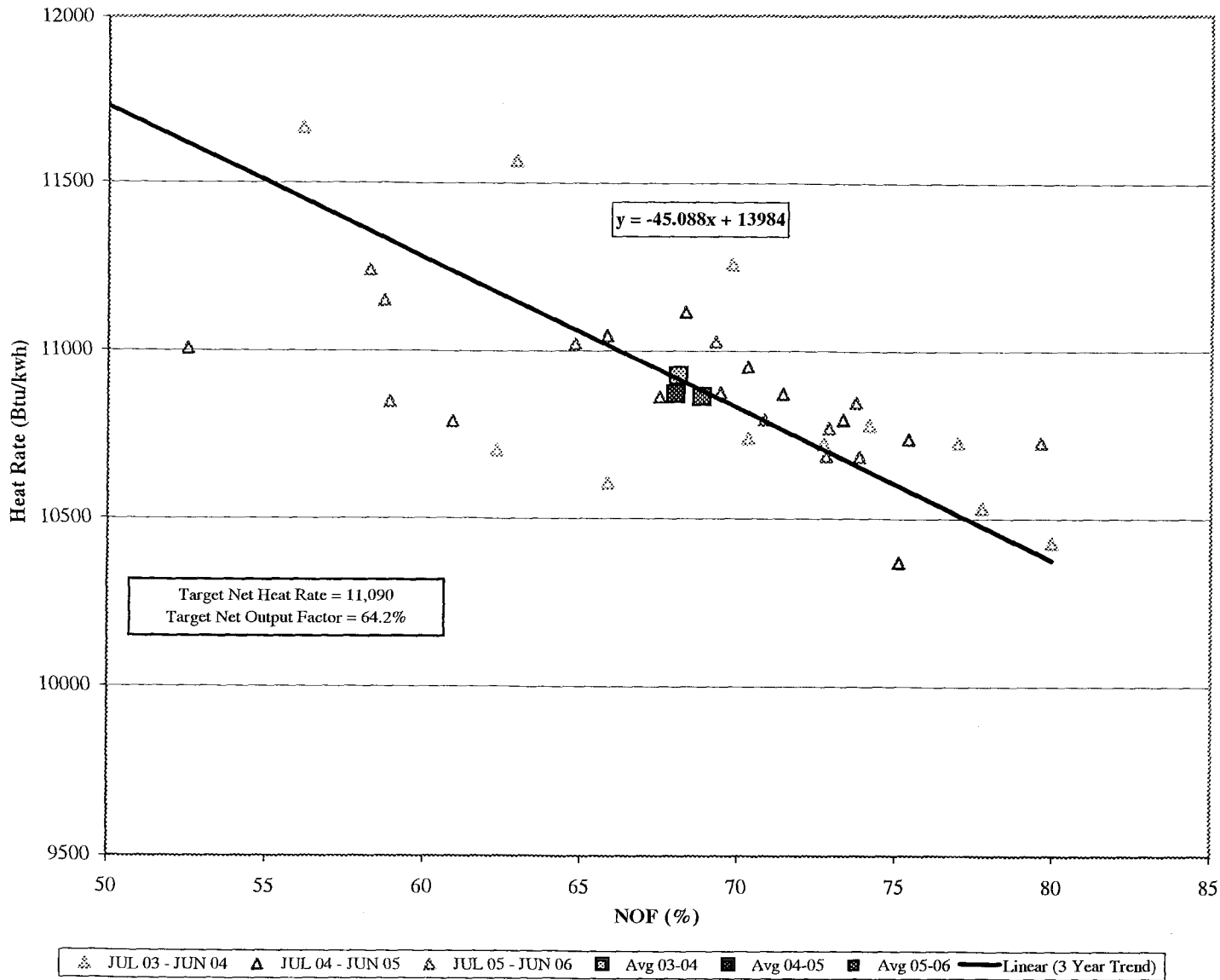
50

### Tampa Electric Company Heat Rate vs Net Output Factor Big Bend Unit #2

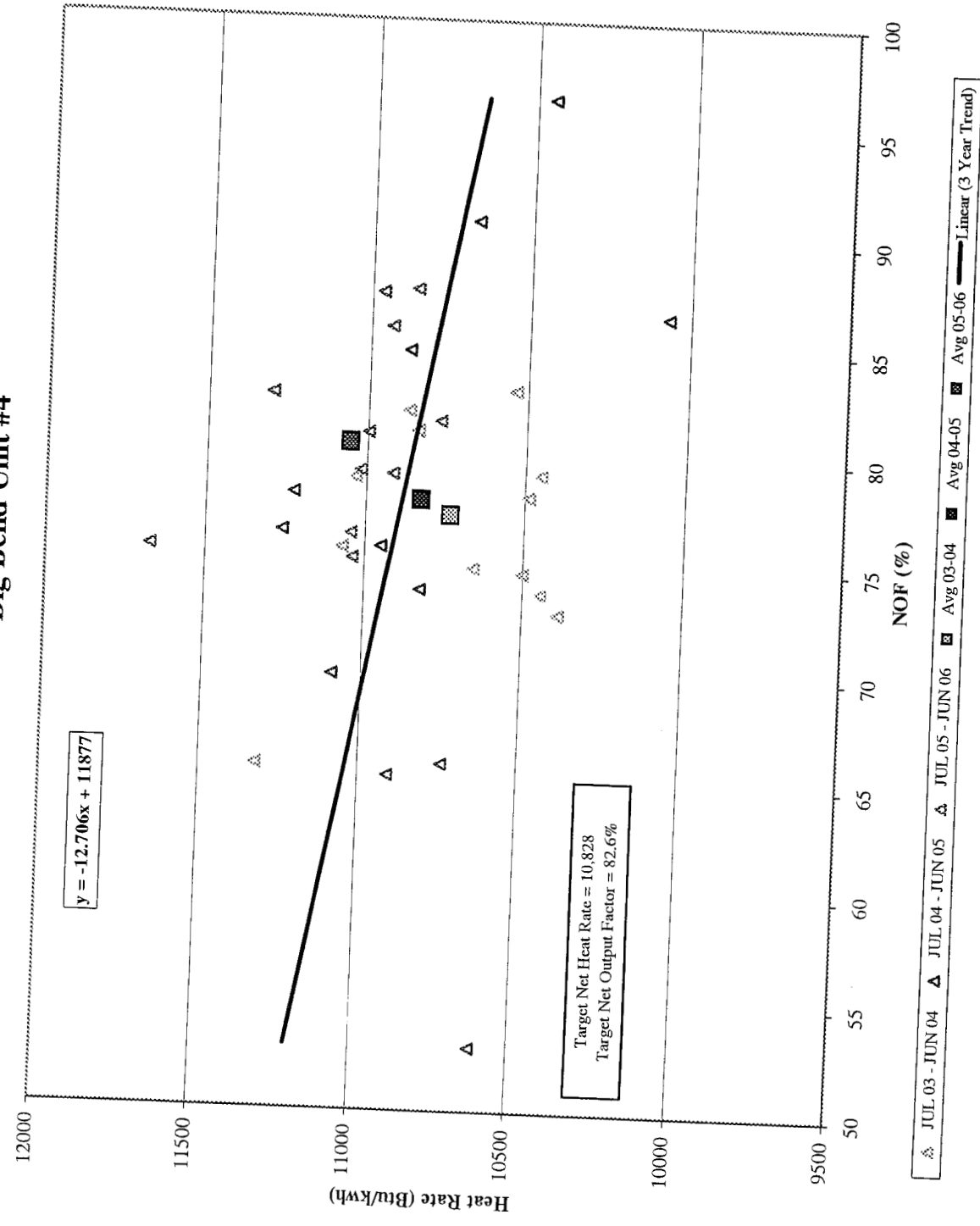


**Tampa Electric Company  
Heat Rate vs Net Output Factor  
Big Bend Unit #3**

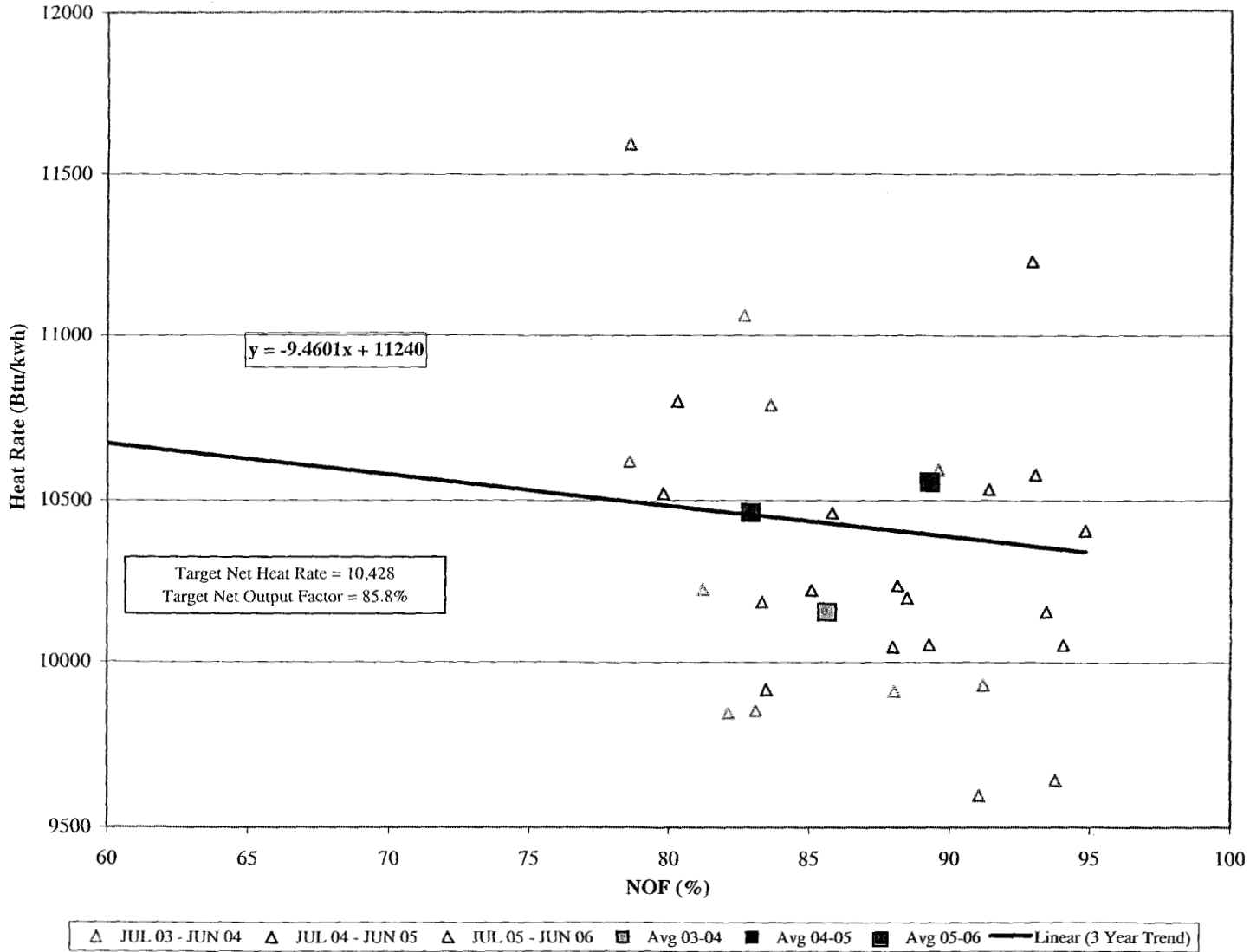
52



**Tampa Electric Company  
 Heat Rate vs Net Output Factor  
 Big Bend Unit #4**

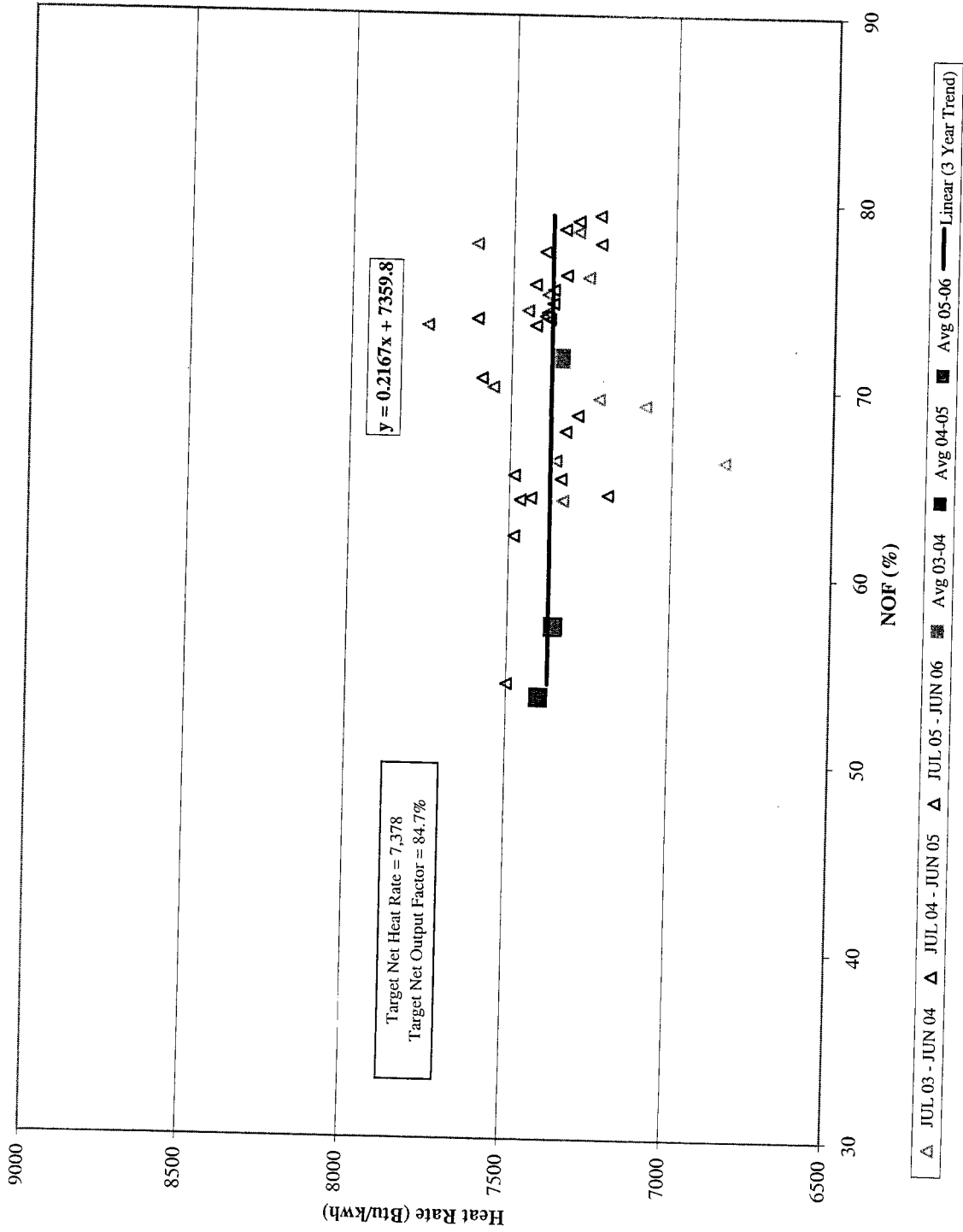


**Tampa Electric Company  
Heat Rate vs Net Output Factor  
Polk Unit #1**



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**Tampa Electric Company  
 Heat Rate vs Net Output Factor  
 Bayside Unit #1**





TAMPA ELECTRIC COMPANY  
 GENERATING UNITS IN GPIF  
 TABLE 4.2  
 JANUARY 2007 - DECEMBER 2007

<u>PLANT / UNIT</u>	<u>ANNUAL GROSS MDC (MW)</u>	<u>ANNUAL NET NDC (MW)</u>
BIG BEND 1	411.0	411.0
BIG BEND 2	391.0	391.0
BIG BEND 3	433.0	423.5
BIG BEND 4	462.0	459.5
POLK 1	260.0	257.5
BAYSIDE 1	793.0	747.5
GPIF TOTAL	<u>2750.0</u>	<u>2690.0</u>
SYSTEM TOTAL	4745.0	4562.5
% OF SYSTEM TOTAL	57.96%	58.96%

TAMPA ELECTRIC COMPANY  
UNIT RATINGS  
JANUARY 2007 - DECEMBER 2007

<u>PLANT / UNIT</u>	<u>ANNUAL GROSS MDC (MW)</u>	<u>ANNUAL NET NDC (MW)</u>
BIG BEND 1	411.0	411.0
BIG BEND 2	391.0	391.0
BIG BEND 3	433.0	423.5
BIG BEND 4	462.0	459.5
BIG BEND TOTAL	<u>1697.0</u>	<u>1685.0</u>
BIG BEND CT1	15.0	14.5
BIG BEND CT2	80.0	73.0
BIG BEND CT3	80.0	73.0
CT TOTAL	<u>175.0</u>	<u>160.5</u>
PHILLIPS 1	18.0	17.5
PHILLIPS 2	18.0	17.5
PHILLIPS TOTAL	<u>36.0</u>	<u>35.0</u>
POLK 1	260.0	257.5
POLK 2	184.0	172.0
POLK 3	184.0	172.0
POLK 4	184.0	172.0
POLK 5	184.0	172.0
POLK TOTAL	<u>996.0</u>	<u>945.5</u>
BAYSIDE 1	793.0	747.5
BAYSIDE 2	1048.0	989.0
BAYSIDE TOTAL	<u>1841.0</u>	<u>1736.5</u>
SYSTEM TOTAL	<u>4745.0</u>	<u>4562.5</u>

TAMPA ELECTRIC COMPANY  
PERCENT GENERATION BY UNIT  
JANUARY 2007 - DECEMBER 2007

PLANT	UNIT	NET OUTPUT MWH	PERCENT OF PROJECTED OUTPUT	PERCENT CUMULATIVE PROJECTED OUTPUT
BAYSIDE	2	4,305,127	23.39%	23.39%
BAYSIDE	1	3,461,453	18.81%	42.20%
BIG BEND	2	2,517,748	13.68%	55.88%
BIG BEND	1	2,256,616	12.26%	68.14%
BIG BEND	4	2,107,873	11.45%	79.59%
POLK	1	1,779,998	9.67%	89.26%
BIG BEND	3	1,748,851	9.50%	98.77%
POLK	4	100,322	0.55%	99.31%
POLK	5	55,797	0.30%	99.61%
POLK	2	35,465	0.19%	99.81%
POLK	3	18,680	0.10%	99.91%
PHILLIPS	2	9,050	0.05%	99.96%
PHILLIPS	1	7,146	0.04%	100.00%
BIG BEND CT	2	347	0.00%	100.00%
BIG BEND CT	3	282	0.00%	100.00%
BIG BEND CT	1	28	0.00%	100.00%

TOTAL GENERATION

18,404,783

100.00%

GENERATION BY COAL UNITS: 10,411,086 MWH

GENERATION BY NATURAL GAS UNITS: 7,976,844 MWH

% GENERATION BY COAL UNITS: 56.57%

% GENERATION BY NATURAL GAS UNITS: 43.34%

GENERATION BY OIL UNITS: 16,853 MWH

GENERATION BY GPIF UNITS: 13,872,539 MWH

% GENERATION BY OIL UNITS: 0.09%

% GENERATION BY GPIF UNITS: 75.37%