AUSLEY & MCMULLEN

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May 20, 1997

HAND DELIVERED

Ms. Blanca S. Bayo, Director Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

cc: All Parties of Record (w/enc.)

Re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor; FPSC Docket No. 970001-EI

Dear Ms. Bayo:

RCH

OTH ____

Enclosed for filing in the above docket, on behalf of Tampa Electric Company, are ten copies of each of the following:

- 1. Prepared Direct Testimony and Exhibit (KAB-1) of Karen A. Branick regarding Fuel Cost Recovery and Capacity Cost Recovery, Final True-Up for the period October 1996 through March 1997.
- 2. Prepared Direct Testimony and Exhibit (GAK-1) regarding Tampa Electric Company's Generating Performance Incentive Factor Results for the period October 1996 through March 1997.

		1997.	- Sel Phin	12/35 14		0 3001-9		
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CAF	Т	hank you	for your	assistance	in connec	ction with	n this ma	tter.
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	JDB/pp							
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TAMPA ELECTRIC COMPANY LE COPY DOCKET NO. 970001-EI SUBMITTED FOR FILING 05/20/97 (TRUE UP)

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
3		OF
4		GEORGE A. KESELOWSKY
5		
6	Q.	Will you please state your name, business address, and
7		employer?
8		
9	A.	My name is George A. Keselowsky and my business address is
10		Post Office Box 111, Tampa, Florida 33601. I am employed
11		by Tampa Electric Company.
12		
13	Ω.	Please furnish us with a brief outline of your educational
14		background and business experience.
15		
16	A.	I graduated in 1972 from the University of South Florida
17		with a Bachelor of Science Degree in Mechanical
18		Engineering. I have been employed by Tampa Electric
19		Company in various engineering positions since that time.
20		My current position is that of Senior Consulting Engineer
21	100	-Production Engineering.
22		
23		
24		
25		0.77

DOCUMENT NUMBER-DATE

05067 MAY 20%

FPSC-RECORDS/REPORTING

What are your current responsibilities? Q. 1 2 reporting unit and testing responsible for 3 I am performance, and the compilation and reporting of 4 generation statistics. 5 6 What is the purpose of your testimony? 7 Q. 8 My testimony presents the actual performance results from 9 A. unit equivalent availability and station heat rate used to 10 determine the Generating Performance Incentive Factor 11 (GPIF) for the period October 1996 through March 1997. I 12 will also compare these results to the targets established 13 prior to the beginning of the period. 14 15 Have you prepared an exhibit with the results for this six 16 month period? 17 18 Under my direction and supervision an exhibit has 19 A. been prepared entitled, "Tampa Electric Company, October 20 1996 - March 1997, Generating Performance Incentive Factor 21 Results" consisting of 28 pages that was filed with this 22 testimony (Have identified as Exhibit GAK-1). 23

24

25

1 Q. Have you calculated the results of Tampa Electric Company
2 for its performance under the GPIF during this period?

- A. Yes I have. This is shown on page 4 of my exhibit. Based upon + 0.512 GPIF points, the result is a reward amount of \$96,660 for the period.
- 8 Q. Please proceed with your review of the actual results for 9 the October 1996 - March 1997 period.
- 11 A. On page 3 of my exhibit, the actual average common equity

 12 for the period is shown on line 8 as \$1,118,087,092. This

 13 produces the maximum penalty or reward figure of \$2,258,102

 14 as shown on line 15, page 3, and also page 2 of my exhibit.
 - Q. Would you please explain how you arrived at the actual equivalent availability results for the six units included within the GPIF?
 - A. Yes I will. Operating data on each of our operating units is filed monthly with the Florida Public Service Commission on the Actual Unit Performance data form. Additionally, outage information is reported to the Commission on a monthly basis. A summary of this data for the six months provides the basis for the GPIF.

Q. Are the equivalent availability results shown on page 6, column 2, directly applicable to the GPIF table?

A. Not exactly. Adjustments to equivalent availability may be required as noted in section 4.3.3 of the GPIF Manual. The actual equivalent availability including the required adjustment is shown on page 6 of my exhibit. The necessary adjustments as prescribed in the GPIF Manual are further defined by a letter dated October 23, 1981, from Mr. J.H. Hoffsis of the Commission's Staff. The adjustments for each unit are as follows:

Gannon Unit No. 5

On this unit, 336 planned outage hours were originally scheduled to fall within the Winter 1996 period. Due to a revision of the outage schedule 604.9 planned outage hours were accomplished within the Winter 1996 period. Consequently, the actual equivalent availability of 63.8% is adjusted to 68.3%, as shown on page 7 of my exhibit.

Gannon Unit No. 6

On this unit, 336 planned outage hours were originally scheduled to fall within the Winter 1996 period. Accual planned outage activities required 413.2 hours. Consequently, the actual equivalent availability of 79.1%

is adjusted to 80.6%, as shown on page 8 of my exhibit.

Big Bend Unit No. 1

On this unit 600 planned outage hours were originally scheduled to fall within the Winter 1996 period. Due to a revision of the outage schedule 404.8 planned outage hours were required. Consequently, the actual equivalent availability of 75.0% is adjusted to 71.3% as shown on page 9 of my exhibit.

Big Bend Unit No. 2

On this unit 505 planned outage hours were originally scheduled to fall within the Winter 1996 period. Actual planned outage activities required 460.3 hours. Consequently, the actual equivalent availability of 79.5% is adjusted to 79.6% as shown on page 10 of my exhibit.

Big Bend Unit No. 3

On this unit 744 planned outage hours were originally scheduled to fall within the Winter 1996 period. Due to a revision of the outage schedule, the outage was moved to begin after the end of the period, and no planned outage hours fell within the period. Consequently, the actual equivalent availability of 83.5% is adjusted to 69.2% as shown on page 11 of my exhibit.

Big Bend Unit No. 4

This unit was not scheduled to have a planned outage during the Winter 1996 period. Due to a revision of the outage schedule, a planned outage was moved forward and was accomplished within the period. Consequently, the actual equivalent availability of 82.7% was adjusted to 93.7% as shown on page 12 of my exhibit.

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 page 6, column 4, of my exhibit. This number is entered into the respective Generating Performance Incentive Point (GPIP) Table for each particular unit on pages 21 through 26. Page 4 of my exhibit summarizes the equivalent availability points to be awarded or penalized.

Q. Would you please explain the heat rate results relative to the GPIF?

A. The actual heat rate and adjusted actual heat rate for Gannon and Big Bend Station are shown on page 6 of my exhibit. The adjustment was developed based on the guidelines of section 4.3.6 of the GPIF Manual. This

procedure is further defined by a letter dated October 23, 1981, from Mr. J.H. Hoffsis of the FPSC Staff. The final adjusted actual heat rates are also shown on page 5 of my exhibit. This heat rate number is entered into the respective GPIP table for the particular unit, shown on pages 21 through 26. Page 4 of my exhibit summarizes the weighted heat rate and equivalent availability points to be awarded.

Q. Were any additional adjustments to heat rate required?

A. In order to assure compatability of data, Big Bend Unit 3 heat rates have been calculated in the standard fashion, without scrubber power. This methodology has been reviewed and approved by the PSC staff, to be employed until there is sufficient operational history with the scrubber to meet target preparation guidelines.

Q. Does this assure that the Big Bend 3 heat rate for the period is appropriate for comparison to its target and meets GPIF criteria?

A. Yes.

What is the overall GPIP for Tampa Electric Company during this six month period? This is shown on page 28 of my exhibit. Essentially, the weighting factors shown on page 4, column 3, plus the equivalent availability points and the heat rate points shown on page 4, column 4, are substituted within the equation. This resultant value, +0.512, is then entered into the GPIF table on page 2. Using linear interpolation, a reward amount of \$96,660 is calculated. Does this conclude your testimony? Yes, it does.

EXHIBIT NO. DOCKET NO. 970001 - EI
TAMPA ELECTRIC COMPANY
(GAK -1)
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DOCUMENT NUMBER-DATE

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FRSC-RECORDS/REPORTING

TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE POINTS TABLE REWARD / PENALTY TABLE - ACTUAL OCTOBER 1996 - MARCH 1997

GENERATING PERFORMANCE INCENTIVE POINTS (GPIP)		FUEL SAVINGS / (LOSS) (\$800)		GENERATING PERFORMANCE INCENTIVE FACTOR (\$000)
+10		3,775.8		1,887.9
+9		3,398.2		1,699.1
+8		3,020.6		1,510.3
+7		2,643.1		1,321.5
+6		2,265.5		1,132.7
+5		1,887.9		944.0
+4		1,510.3		755.2
+3		1,132.7		566.4
+2		755.2		377.6
+1	GPIP	377.6	REWARD	188.8
0	Points 0.512	0	DOLLARS \$96,660	0.0
-1		(461.7)		(188.8)
-2		(923.3)		(377.6)
-3		(1,385.0)		(566.4)
-4		(1,846.6)		(755.2)
-5		(2,308.3)		(944.0)
-6		(2,770.0)		(1,132.7)
-7		(3,231.6)		(1,321.5)
-8		(3,693.3)		(1,510.3)
-9		(4,154.9)		(1,699.1)
-10		(4,616.6)		(1,887.9)

TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE FACTOR CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS ACTUAL OCTOBER 1996 - MARCH 1997

Line 1	Beginning of period bala end of month common ec	nce of common equity quity:	\$1,145,869,725	
Line 2	Month of October	1996	\$1,109,165,893	
Line 3	Month of November	1996	\$1,118,413,960	
Line 4	Month of December	1996	\$1,127,178,586	
Line 5	Month of January	1997	\$1,100,093,359	
Line 6	Month of February	1997	\$1,107,764,565	
Line 7	Month of March	1997	\$1,118,123,557	
Line 8	(summation of line 1 thr	ough line 7 divided by 7)	\$1,118,087,092	
Line 9	25 Basis points		0.0025	
Line 10	Revenue expansion facto	or	61.3738%	
Line 11	Maximum allowed incen (Line 8 times line 9 divid times 0.5)		\$2,277,208	
Line 12	Jurisdictional Sales		6866832 MV	VH
Line 13	Total Sales		6924931 MV	VH
Line 14	Jurisdictional Seperatio (Line 12 divided by line		99.16%	
Line 15	Maximum Allowed Juri Dollars (Line 11 times line 14)	edictional Incentive	\$2,258,102	

TAMPA ELECTRIC COMPANY CALCULATION OF SYSTEM GPIF POINTS OCTOBER 1996 - MARCH 1997 ACTUAL

PLANT/UNIT	ADJ AC		WEIGHTING FACTOR %	UNIT POINTS	WEIGHTED UNIT POINTS
GANNON 5	68.3%	EAF	3.10%	-10.000	-0.310
GANNON 6	80.6%	EAF	7.75%	-4.304	-0.334
BIG BEND 1	71.3%	EAF	1.98%	-6.681	-0.132
BIG BEND 2	79.6%	EAF	5.46%	7.877	0.430
BIG BEND 3	69.2%	EAF	7.45%	-2.273	-0.169
BIG BEND 4	93.7%	EAF	6.06%	10.000	0.606
GANNON 5	10335	ANOHR	6.70%	-0.102	-0.007
GANNON 6	10294	ANOHR	11.44%	3.231	0.370
BIG BEND 1	10120	ANOHR	9.85%	-3.037	-0.299
BIG BEND 2	10037	ANOHR	12.92%	0.000	0.000
BIG BEND 3	9673	ANOHR	13.51%	0.000	0.000
BIG BEND 4	9928	ANOHR	13.78%	2.588	0.357
					0.512

GPIF REWARD

\$96,660

GPIF TARGET AND RANGE SUMMARY

OCTOBER 1996 - MARCH 1997

EQUIVALENT AVAILABILITY

			ALI	MACALLANDON LA	ALLANSS ASSESSMENT			ACCRIAN
PLANT/UNIT	WEIGHTING FACTOR (%)	EAF TARGET (%)	EAF MAX. (%)	RANGE MIN. (%)	MAX. FUEL SAVINGS (\$600)	MAX. FUEL LOSS (\$000)	EAF ADJUSTED ACTUAL %	ACTUAL FUEL SAVINGS/ LOSS (\$000)
GANNON 5	3.10%	£3.4	85.6	79.1	117.0	(217.4)	68.3%	(117.0)
GANNON 6	7.75%	82.6	84.9	78.0	292.6	(502.8)	80.6%	(125.9)
BIG BEND 1	1.98%	75.2	78.1	69.4	74.8	(241.0)	71.3%	(50.0)
BIG BEND 2	5.46%	77.0	80.3	70.4	206.2	(330.0)	79.6%	162.4
BIG BEND 3	7.45%	70.7	74.0	64.1	281.4	(534.5)	69.2%	(64.0)
BIG BEND 4	6.06%	91.3	93.0	87.8	228.8	(215.9)	93.7%	228.8
GPIF SYSTEM	31.80%				1,200.8	(2,041.6)		

AVERAGE NET OPERATING HEAT RATE FOR GPIF COAL GENERATING UNITS

PLANT/UNIT	WEIGHTING FACTOR (%)	ANOHR Btu/lovh	TARGET NOF	ANOHR TA RANG MIN,		MAX. FUEL SAVINGS (3000)	MAX. FUEL LOSS (\$000)	ACTUAL ADJUSTED ANOHR	ACTUAL FUEL SAVINGS/ LOSS (\$000)
GANNON 5	6.70%	10258	72.2	9987	10529	253.0	(253.0)	10335	(2.6)
GANNON 6	11.44%	10443	72.4	10139	10747	432.0	(432.0)	10294	0.0
BIG BEND 1	9.85%	10004	83.5	9794	10214	372.0	(372.0)	10120	(113.0)
BIG BEND 2	12.92%	9979	82.1	9706	10252	488.0	(488.0)	10037	0.0
BIG BEND 3	13.51%	9600	84.1	9268	9932	510.0	(510.0)	9673	0.0
BIG BEND 4	13.78%	10047	84.7	9802	10292	520.0	(520.0)	9928	134.6
OPIF SYSTEM	68.20%					2,575.0	(2,575.0)		

TAMPA ELECTRIC COMPANY ACTUAL UNIT PERFORMANCE DATA OCTOBER 1996 - MARCH 1997

PLANT / UNIT	ACTUAL EAF %	ADJUSTMENTS (1) EAF %	EAF ADJUSTED ACTUAL %
GANNON 5	63.7	4.6	68.3
GANNON 6	79.1	1.5	80.6
BIG BEND 1	75.0	-3.7	71.3
BIG BEND 2	79.5	0.1	79.6
BIG BEND 3	83.4	-14.2	69.2
BIG BEND 4	82.6	11.1	93.7
PLANT/UNIT	ACTUAL ANOHR Btu/kwh	ADJUSTMENTS (1) TO ANOHR Btu/kwh	ANOHR ADJUSTED ACTUAL Btu/kwh
GANNON 5	10260	75	10335
GANNON 6	10330	-36	10294
BIG BEND 1	10242	-122	10120
BIG BEND 2	10080	-43	10037
BIG BEND 3	9838	-165	9673
BIG BEND 4	9918	10	9928

⁽¹⁾ Documentation of adjustments to Actual EAF on pages 7 - 12

⁽¹⁾ Documentation of adjustments to Actual ANOHR on pages 13 - 18

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE GANNON UNIT NO. 5 OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR =

3.10%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4369.0	4369.0	4369.0
E.A.F.	83.4	63.8	68.3
P.O.H.	336.0	604.9	336.0
F.O.H. + E.F.O.H	342.0	826.8	885.9
M.O.H. + E.M.O.H	49.0	153.3	164.3
P.O.F.	7.7	13.8	7.7
E.F.O.F.	7.8	18.9	20.3
E.M.O.F.	1.1	3.5	3.8

-10.000 E. A. POINTS

ADJUSTMENTS TO E.A.F.

PH = PERIOD HOURS

EAF = EQUIVALENT AVAILABILITY FACTOR

POH = PLANNED OUTAGE HOURS

FOH = FORCED OUTAGE HOURS

MOH = MAINTENANCE OUTAGE HOURS

POF = PLANNED OUTAGE FACTOR

EFOF = EQUIVALENT FORCED OUTAGE FACTOR

EMOF = EQUIVALENT MAINTENANCE OUTAGE FACTOR

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE GANNON UNIT NO. 6 OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR -

7.75%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4369.0	4369.0	4369.0
E.A.F.	82.6	79.1	80.6
P.O.H.	336.0	413.2	336.0
F.O.H. + E.F.O.H	250.0	330.4	336.8
M.O.H. + E.M.O.H	174.0	170.6	173.9
P.O.F.	7.7	9.5	7.7
E.F.O.F.	5.7	7.6	7.7
E.M.O.F.	4.0	3.9	4.0

4.304 E. A. POINTS

ADJUSTMENTS TO E.A.F.

100.0 - 19.4 - 80.6

PH - PERIOD HOURS

EAF - EQUIVALENT AVAILABILITY FACTOR

POH - PLANNED OUTAGE HOURS

FOH - FORCED OUTAGE HOURS

MOH - MAINTENANCE OUTAGE HOURS

EUOH - EQUIVALENT UNPLANNED OUTAGE HOURS

POF - PLANNED OUTAGE FACTOR

EFOF - EQUIVALENT FORCED OUTAGE FACTOR

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE BIG BEND UNIT NO. 1 OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR -

1.98%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	AVJUSTED ACTUAL PERFORMANCE
P.H.	4369.0	4369.0	4369.0
E.A.F.	75.2	75.0	71.3
P.O.H.	600.0	404.8	600.0
F.O.H. + E.F.O.H	315.0	470.4	447.2
M.O.H. + E.M.O.H	170.0	216.3	205.6
P.O.F.	13.7	9.3	13.7
E.F.O.F.	7.2	10.8	10.2
E.M.O.F.	3.9	5.0	4.7

-6.681 E. A. POINTS

ADJUSTMENTS TO E.A.F.

100.0 - 28.7 - 71.3

PH - PERIOD HOURS

EAF - EQUIVALENT AVAILABILITY FACTOR

POH - PLANNED OUTAGE HOURS

FOH - FORCED OUTAGE HOURS

MOH - MAINTENANCE OUTAGE HOURS

EUOH - EQUIVALENT UNPLANNED OUTAGE HOURS

POF - PLANNED OUTAGE FACTOR

EFOF - EQUIVALENT FORCED OUTAGE FACTOR

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE BIG BEND UNIT NO. 2 OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR -

5.46%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4369.0	4369.0	4369.0
E.A.F.	77.0	79.5	79.6
P.O.H.	384.0	386.6	384.0
F.O.H. + E.F.O.H	505.0	460.3	460.6
M.O.H. + E.M.O.H	117.0	46.7	46.7
P.O.F.	8.8	8.8	8.8
E.F.O.F.	11.6	10.5	10.5
E.M.O.F.	2.7	1.1	1.1

7.877 E. A. POINTS

ADJUSTMENTS TO E.A.F.

100.0 -

79.6

PH = PERIOD HOURS

EAF = EQUIVALENT AVAILABILITY FACTOR

POH = PLANNED OUTAGE HOURS

FOH = FORCED OUTAGE HOURS

MOH = MAINTENANCE OUTAGE HOURS

EUOH = EQUIVALENT UNPLANNED OUTAGE HOURS

POF = PLANNED OUTAGE FACTOR

EFOF = EQUIVALENT FORCED OUTAGE FACTOR

20.4 -

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE BIG BEND UNIT NO. 3 OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR =

7.45%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4369.0	4369.0	4369.0
E.A.F.	70.7	83.5	69.2
P.O.H.	744.0	0.0	744.0
F.O.H. + E.F.O.H	362.0	478.2	396.8
M.O.H. + E.M.O.H	177.0	246.2	204.3
P.O.F.	17.0	0.0	17.0
E.F.O.F.	8.3	10.9	9.1
E.M.O.F.	4.1	5.6	4.7

-2.273 E. A. POINTS

ADJUSTMENTS TO E.A.F.

100.0 - 30.8 - 69.2

PH = PERIOD HOURS

EAF = EQUIVALENT AVAILABILITY FACTOR

POH = PLANNED OUTAGE HOURS

FOH = FORCED OUTAGE HOURS

MOH = MAINTENANCE OUTAGE HOURS

EUOH = EQUIVALENT UNPLANNED OUTAGE HOURS

POF = PLANNED OUTAGE FACTOR

EFOF = EQUIVALENT FORCED OUTAGE FACTOR

273.6

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE BIG BEND UNIT NO. 4 OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR =

6.05%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4369.0	4369.0	4369.0
E.A.F.	91.3	82.7	93.7
P.O.H.	0.0	520.3	0.0
F.O.H. + E.F.O.H	176.0	192.8	218.9
M.O.H. + E.M.O.H	206.0	48.2	54.7
P.O.F.	0.0	11.9	0.0
E.F.O.F.	4.0	4.4	5.0
E.M.O.F.	4.7	1.1	1.3

10.000 E. A. POINTS

ADJUSTMENTS TO E.A.F.

0 + 274 X 100 = 6.3

100.0 - 6.3 - 93.7

PH = PERIOD HOURS

EAF = EQUIVALENT AVAILABILITY FACTOR

POH = PLANNED OUTAGE HOURS

FOH = FORCED OUTAGE HOURS

MOH = MAINTENANCE OUTAGE HOURS

EUOH = EQUIVALENT UNPLANNED OUTAGE HOURS

POF = PLANNED OUTAGE FACTOR

EFOF = EQUIVALENT FORCED OUTAGE FACTOR

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE GANNON UNIT NO. 5 HEAT RATE DATA OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR =

6.70%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwh)	10258	10260
STA. NET GEN. (GWH)	628.2	500.0
OPER. Btu (10^9 btu)	6444.452	5130.057
NET OUTPUT FACTOR	72.2	76.7

-0.102 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-16.6072) + 11457.1 = ANOHR

76.7 (-16.6072) + 11457.1 = 10183 10260 - 10183 = 77

10258 + 77 = 10335

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

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE GANNON UNIT NO. 6 HEAT RATE DATA OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR =

11.44%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANCHR (Btu/kwh)	10443	10330
STA. NET GEN. (GWH)	941.6	1025.2
OPER. Btu (10^9 btu)	9833.300	10590.163
NET OUTPUT FACTOR	72.4	77.0

3.231 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURREN	NT EQUATION	NOF(7.9	043) + 9871.0	= ANOHR
77.0	(7.9043) + 9871	.0 =		10479
10330		10479	-	-149
10443	+	-149		10294

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

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE BIG BEND UNIT NO. 1 HEAT RATE DATA OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR =

9.85%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwh)	10004	10242
STA. NET GEN. (GWH)	1215.0	1229.4
OPER. Btu (10^9 btu)	12155.016	12591.550
NET OUTPUT FACTOR	83.5	75.0

-3.037 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-14.3332) + 11201.0 = ANOHR

75.0 (-14.3332) + 11201.0 = 10126

10242 - 10126 = 116

10004 + 116 = 10120

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

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE BIG BEND UNIT NO. 2 HEAT RATE DATA OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR = 12.92%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwb)	9979	10080
STA. NET GEN. (GWH)	1221.8	1303.4
OPER. Btu (10^9 btu)	12191.893	13138.758
NET OUTPUT FACTOR	82.1	78.3

0.000 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-11.3058) + 10907.1 = ANOHR

78.3 (-11.3058) + 10907.1 = 10022

10080 - 10022 = 58

9979 + 58 = 10037

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

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE BIG BEND UNIT NO. 3 HEAT RATE DATA OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR = 13.51%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwh)	9600	9838
STA. NET GEN. (GWH)	1158.6	1459.1
OPER. Btu (10^9 btu)	11122.669	14354.788
NET OUTPUT FACTOR	84.1	83.7

0.000 HEAT RATE POINTS

ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-13.73530) + 10913.8 = ANOHR

83.7	(-13.7353	0)+10913.8 =		9765
9838		9765		73
9600	+	73	-	9673

ANOHR = A VERAGE NET OPERATING HEAT RATE NOF = NET OPERATING FACTOR

TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE BIG BEND UNIT NO. 4 HEAT RATE DATA OCTOBER 1996 - MARCH 1997

WEIGHTING FACTOR = 13.78%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwh)	10047	9918
STA. NET GEN. (GWH)	1545.1	1462.0
OPER. Btu (10^9 btu)	15523.350	14499.006
NET OUTPUT FACTOR	84.7	88.6

2.588 HEAT RATE POINTS

CURRENT EQUATION NOF(-2.45735) + 10255.1 = ANOHR

88.6 (-2.45735) + 10255.1 = 10037 9918 - 10037 = -119 10047 + -119 = 9928

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

TAMPA ELECTRIC COMPANY GPIF PLANNED OUTAGE SCHEDULE - ACTUAL

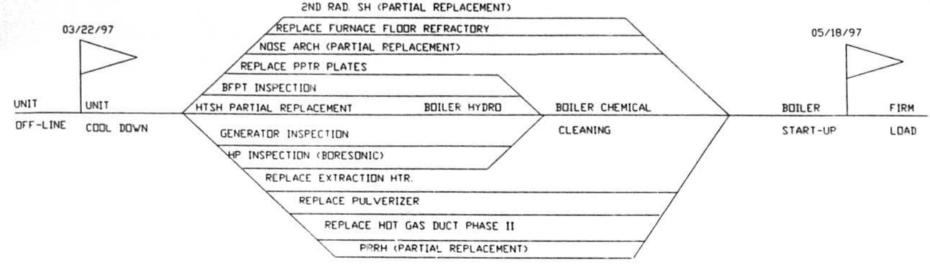
OCTOBER 1996 - MARCH 1997

STATION/UNIT	PLANNED OUTAGE DATES	OUTAGE REASON
** GANNON 5	OCT 21 - NOV 02	FUEL SYSTEM CLEANUP OUTAGE
** GANNON 5	JAN 30 - FEB 14	ACID CLEAN OUTAGE
•• GANNON 6	MAR 7 - MAR 25	FUEL SYSTEM CLEANUP OUTAGE
** BIG BEND 1	NOV 14 - NOV 21	ANNUAL MAINTENANCE OUTAGE
• BIG BEND 1	MAR 22 - MAY 18	REPL. FURNACE FLOOR REF. HP INSPECTION (BORESONIC) GENERATOR INSPECTION PRRH. (PARTIAL REPL.) HTSH (PARTIAL REPL.) REPL 2ND RAD. SH. PART. REPL. HOT GAS DUCT PH-2 REPL. PPTR. PLATES PARTIAL REPL. NOSE ARCH BFPI INSPECTION
** BIG BEND 2	NOV 29 - DEC 16	ANNUAL MAINTENANCE OUTAGE
** BIG BEND 4	FEB 15 - MAR 8	ANNUAL MAINTENANCE OUTAGE

Milestone or Critical Path Charts of actual schedule are included on page 20.

^{*}Start / End dates outside of GPIF period.

Outage is less than three weeks in duration and a CPM was not included for this unit.



TAMPA ELECTRIC COMPANY
BIG BEND UNIT NO 1
PLANNED DUTAGE 1997
ACTUAL CPM
05/01/97

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

OCTOBER 1996 - MARCH 1997

GANNON 5

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (3 X 1600)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS ((LOSS) (S X 1690)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	117.0	85.6	+10	253.0	9987
+9	105.3	85.4	+9	227.7	10007
•1	93.6	85.2	+8	202.4	10026
+7	81.9	84.9	+7	177.1	10046
+6	70.2	84.7	+6	151.8	10065
+5	58.5	84.5	+5	126.5	10085
-4	46.8	84.3	+4	101.2	10105
+3	35.1	84.1	+3	75.9	10124
+2	23.4	£3.£	+2	50.6	10144
+1	11.7	83.6	+1	25.3	10163
	•			0.0	10183
0	0.0	83.4	0	0.0	10258
(#W			4	POINTS 0.0 Actual	10333
-1	(21.7)	£3.0	-1	4.102 ANOHR 16335	10353
-2	(43.5)	82.5	-2	(50.6)	10372
-3	(65.2)	82.1	-3	(75.9)	10392
4	(87.0)	81.7	4	(101.2)	10411
-5	(108.7)	81.3	-5	(126.5)	10431
-6	(130.4)	80.8	-6	(151.8)	10451
.7	(152.2)	80.4	-7	(177.1)	10470
4	(173.9)	80.0	-4	(202.4)	10490
.,	(195.7)	79.5	.9	(227.7)	10509
-10 <table-cell-columns></table-cell-columns>	EAF OINTS (217.4) EAF 10.000 68.3%		-10	(253.0)	10529
	Weighting Factor -	3.10%		Weighting Factor =	6.70%

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

OCTOBER 1996 - MARCH 1997

GANNON 6

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (S X 1000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	SAVINGS / (LOSE) (\$ X 1000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	292.6	84.9	+10	432.0	10139
+9	263.3	84.7	+9	388.8	10162
-1	234.1	84.4	+1	345.6	10185
•7	204.8	84.2	+7	302.4	10208
+6	175.6	84.0	+6	259.2	10231
+5	146.3	83.8	+5	216.0 Adjusted	10254
+4	117.0	83.5	· .	AHR 172.8 Actual	10276
+3	87.8	83.3	., 🕶	3.231 129.6 ANOHR 10294	10299
+2	58.5	83.1	+2	86.4	10322
•1	29.3	82.8	+1	43.2	10345
(3.5)				0.0	10368
0	0.0	82.6	0	0.0	10443
				0.0	10518
-1	(50.3)	62.1	-1	(43.2)	10541
-2	(100.6)	81.7	-2	(86.4)	10564
-3	(150.8)	81.2	-3	(129.6)	10587
17	EAF (201.1) Adjusto	an	4	(172.8)	10610
⋖ P	DINTS EAF 4304 (251.4) 80.6%		-5	(216.0)	10633
4	(301.7)	29.E	4	(259.2)	10655
-7	(352.0)	79.4	-7	(302.4)	10678
-4	(402.2)	78.9	4	(345.6)	10701
-9	(452.5)	78.5	-9	(388.8)	10724
-10	(502.8)	78.0	-10	(432.0)	10747
	Weighting Factor =	7.75%		Weighting Factor =	11.44%

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

OCTOBER 1996 - MARCH 1997

EQUIVALENT AVAILABILITY FORTS	FUEL SAVINGS / (LOSS) (S.X.1000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (S X 1000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	74.8	78.1	+10	372.0	9794
+9	67.3	77.8	+9	334.8	9808
+8	59.8	77.5	+8	297.6	9821
+7	52.4	77.2	+7	260.4	9835
+6	44.9	76.9	+6	223.2	9848
•5	37.4	76.7	+5	186.0	9862
+4	29.9	76.4	+4	148.0	9875
+3	22.4	76.1	+3	111.6	9889
+2	15.0	75.8	+2	74.4	9902
+1	7.5	75.5	+1	37.2	9916
				0.0	9929
0	0.0	75.2	0	0.0	10004
				0.0	10079
-1	(24.1)	74.6	-1	(37.2)	10093
-2	(48.2)	74.0	-2	(74.4)	10106
-3	(72.3)	73.5	-3 ◀	AHR POINTS (111.6) Actual	10120
4	(96.4)	72.9	٦ I	-3.637 ANOHR 10120	10133
-5	(120.5)	72.3	-5	(186.0)	10147
	EAF (144.6) Adjusted	71.7	-6	(223.2)	10160
- P	OINTS EAF 4.681 (168.7) 71.3	71.1	-7	(260.4)	10174
4	(192.8)	70.6	-4	(297.6)	10187
-\$ -9	(216.9)	70.0	-9	(334.8)	10201
	(241.0)	69.4	-10	(372.0)	10214
-10	(2113)			According #	
	Weighting Factor =	1.98%		Weighting Factor =	9.85%

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

OCTOBER 1996 - MARCH 1997

EQUIVALENT AVAILABILITY POINTS	FUEL SAVENGS / (LOSS) (5 X 1000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL BAVENGS / (LOSS) (S X 1000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	206.2	80.3	+10	488.0	9706
+9	185.6	80.0	+9	. 439.2	9726
	AF 165.0 Adjuste	79.6	+1	390.4	9746
	ENTS EAF 79.6%	79.3	+7	341.6	9765
+6	123.7	79.0	+6	292.8	9785
+5	103.1	78.7	+5	244.0	9805
+4	82.5	78.3	•4	195.2	9825
+3	61.9	78.0	+3	146.4	9845
+2	41.2	77.7	+2	97.6	9864
+1	20.6	77.3	+1	48.8	9284
			Com	0.0	9904
0	0.0	77.0	0 1	AHR Adjusted OINTS 0.0 Actual	9979
			▼	0.000 ANOHR	10054
-1 *	(33.0)	76.3	-1	(48.8)	10074
-2	(66.0)	75.7	-2	(97.6)	10094
-3	(99.0)	75.0	-3	(146.4)	10113
4	(132.0)	74.4	4	(191.2)	10133
-5	(165.0)	73.7	-5	(244.0)	10153
-6	(198.0)	73.0	-6	(292.8)	10173
-7	(231.0)	72.4	-7	(341.6)	10193
-1	(264.0)	71.7	-4	(390.4)	10212
-9	(297.0)	71.1	-9	(439.2)	10232
-10	(330.0)	70.4	-10	(488.0)	10252
	Weighting Factor =	5.46%		Weighting Factor =	12.92%

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

OCTOBER 1996 - MARCH 1997

EQUIVALENT AVAILABILITY POINTS	SAVINGS / (LOSS) (3 X 1000)	ADJUSTED ACTUAL EQUIVALISHT AVAILABILITY	AVERAGE HEAT RATE POINTS	SAVINGS / (LOSS) (5 X 1000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	281.4	74.0	+10	510.0	9268
+9	253.3	73.7	+9	459.0	9294
+8	225.1	73.3	+6	408.0	9319
+7	197.0	73.0	+7	357.0	9345
+6	168.8	72.7	+6	306.0	9371
+5	140.7	72.4	+5	255.0	9397
+4	112.6	72.0	+4	204.0	9422
+3	84.4	71.7	+3	153.0	9448
+2	56.3	71.4	+2	102.0	9474
+1	28.1	71.0	+1	51.0	9499
1705.				0.0	9525
0	0.0	70.7	• г	AHR 0.0 Adjusted	9600
237.0			4-	POINTS Actual ANOHR	9675
-1	(53.5)	70.0	-1	(51.0)	9701
-2	EAF (106.9) Adjusted	69.4	-2	(102.0)	9726
	DINTS EAF 2.273 (160.4) 69.2%	68.7	-3	(153.0)	9752
4	(213.8)	68.1	4	(204.0)	9778
-5	(267.3)	67.4	-5	(255.0)	9804
-6	(320.7)	66.7	-6	(306.0)	9829
-7	(374.2)	66.1	-7	(357.0)	9655
-4	(427.6)	65.4	-4	(408.0)	9681
-9	(481.1)	64.8	-9	(459.0)	9906
-10	(534.5)	64.1	-10	(510.0)	9932
	Weighting Factor =	7.45%		Weighting Factor *	13.51%

GENERATING PERFORMANCE INCENTIVE POINTS TABLE

OCTOBER 1996 - MARCH 1997

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$ X 1000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (S X 1000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	POINTS 228.8 EAF	93.0	+10	520.0	9802
., L	10.000 93.7%	92.8	+9	468.0	9819
+6	183.0	92.7	+8	416.0	9836
+7	160.2	92.5	+7	364.0	9853
+6	137.3	92.3	+6	312.0	9870
+5	114.4	92.2	+5	260.0	9687
+4	91.5	92.0	+4	208.0	9904
+3	68.6	91.8	+3	AHR 156.0 Adjusted	9921
+2	45.8	91.6	•2	POINTS Actual ANOHR	9938
•1	22.9	91.5	+1	52.0	9955
				0.0	9972
0	0.0	91.3	0	0.0	10047
				0.0	10122
-1	(21.6)	91.0	-1	(52.0)	10139
-2	(43.2)	90.6	-2	(104.0)	10156
-3	(64.8)	90.3	-3	(156.0)	10173
4	(86.4)	89.9	4	(208.0)	10190
-5	(108.0)	89.6	-5	(260.0)	10207
-6	(129.5)	89.2	-6	(312.0)	10224
-7	(151.1)	88.9	-7	(364.0)	10241
-1	(172.7)	88.5	4	(416.0)	10258
-9	(194.3)	88.2	-9	(468.0)	10275
-10	(215.9)	87.8	-10	(520.0)	10292
	Weighting Factor *	6.06%		Weighting Factor =	13.78%

COMPARISON OF GPIF TARGETS VS. PRIOR PERIOD ACTUAL PERFORMANCE

OCTOBER 1996 - MARCH 1997

AVAILABILITY

	TARGET	NORMALIZED		GET PERIOD 96 - MAR 97			PERFORMA 96 - MAR 97	
PLANT/UNIT	WEIGHTING FACTOR	FACTOR .	POF	EUOF	EUOR	POF	EUOF	EUOR
BIG BEND 1	1.98%	6.2	13.7	11.1	12.9	9.3	15.7	17.3
BIG BEND 2	5.46%	17.2	8.8	14.2	15.6	8.8	11.6	12.7
BIG BEND 3	7.45%	23.4	17.0	12.3	14.9	0.0	16.6	16.6
BIG BEND 4	6.06%	19.1	0.0	8.7	8.7	11.9	5.5	6.3
GANNON 5	3.10%	9.7	7.7	8.9	9.7	13.8	22.4	26.0
GANNON 6	7.75%	24.4	7.7	9.7	10.5	9.5	11.5	12.7
	31.80%	100.0						
GPIF SYSTEM W	EIGHTED AVERAGE		9.0	10.9	12.1	8.0	12.9	14.0
GPIF SYSTEM W	EIGHTED EQUIVALE	NT AVAILABILITY		80.1		-	79.1	
				D AVERAGE		5 PERI	OD AVERA	GE
			POF	EUOF	Enge		EAF	
			7.2	11.9	12.9		80.9	

AVERAGE NET OPERATING HEAT RATE (Btu/kwh)

PLANT/UNIT	TARGET WEIGHTING FACTOR	NORMALIZED WEIGHTING FACTOR	HEAT RATE TARGET	ADJUSTED ACTUAL HEAT RATE APR 96 - SEP 97
GANNON 5	6.70%	9.8	10258	10260
GANNON 6	11.44%	16.8	10443	10330
BIG BEND 1	9.85%	14.4	10004	10242
BIG BEND 2	12.92%	18.9	9979	10080
BIG BEND 3	13.51%	19.8	9600	9838
BIG BEND 4	13.78%	20.2	10047	9918
	68.20%	100.0		
OPIF SYSTEM WE	EIGHTED AVERAGE	HEAT RATE (Btu/kwh)	10027	10082

TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE POINTS CALCULATION OCTOBER 1996 - MARCH 1997

Points are calculated according to the formula:

GPIP =
$$<_1^n$$
 [(a_i)(EAP_i) + (e_i)(AHRP_i)]

Where:

i=1,n

a = Unit equivalent availability weighting factor

EAP = Unit equivalent availability points

e = Station average heat rate weighting factor

AHRP = Station average heat rate points

Weighting factors and point values are listed in separate tables.

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