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May 20, 1996

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05573 MAY 20 H

FPSC-RECORDS/REPORTING

Tallahassee

HAND DELIVERED

Ms. Blanca S. Bayo, Director Division of Records and Reporting Florida Public Service Commission

2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

FPSC Docket No. 960001-EI Dear Ms. Bayo:

SEC \_\_

WAS \_\_\_

OTH

Enclosed for filing in the above docket, on behalf of Tampa Electric Company, are fifteen (15) copies of each of the following:

Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor;

- Prepared Direct Testimony of Mary Jo Pennino and Exhibit (MJP-1) entitled Fuel Cost Recovery and Capacity Cost Recovery for the period October 1995 through March 1966.
- Prepared Direct Testimony of George A. Keselowsky with Exhibit (GAK-1) regarding Tampa Electric Company's Congrating Performance Incentive Factor Results for the

	period October 1995 through March 1966.
ACI	Unit a contract of
AFA	Thank you for your assistance in connection with this matter.
Cit	Sincerely,
Citi	Jun 183ca Co
E	Jun 1834
	JDB/pp
A	3 Enclosures
	CC: All Parties of Record (W/encls ) DADE TENUND BOCUMENT NUMBER -DATE

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FPSC-RECORDS/REPORTING

#### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing testimony and exhibits, filed on behalf of Tampa Electric Company, has been furnished by U. S. Mail or hand delivery (\*) on this 20 day of May, 1996 to the following:

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Florida Public Service Comm'n.
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MILL CORNEY

TAMPA ELECTRIC COMPANY LE COPY DOCKET NO. 960001-EI SUBMITTED FOR FILING 5/20/96 (TRUE UP)

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
3		OF
4		GEORGE A. KESELOWSKY
5	The s	
6	Ω.	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	Q.	Please furnish us with a brief outline of your educational
14	1	background and business experience.
15	-53	
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	11 85	My current position is that of Senior Consulting Engineer
21		-Production Engineering.
22		
23	110	
24		
25	_	

DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

What are your current responsibilities? 1 2 am responsible for testing and reporting unit 3 A. performance, and the compilation and reporting 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 1995 through March 1996. 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 Q. month period? 17 18 Under my direction and supervision an exhibit has 19 been prepared entitled, "Tampa Electric Company, October 20 1995 - March 1996, 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

Have you calculated the results of Tampa Electric Company Q. 1 for its performance under the GPIF during this period? 2 3 Yes I have. This is shown on page 4 of my exhibit. 4 upon -0.494 GPIF points, the result is a penalty amount of 5 \$104,014 for the period. 6 7 Please proceed with your review of the actual results for 8 Q. the October 1995 - March 1996 period. 9 10 On page 3 of my exhibit, the actual average common equity 11 for the period is shown on line 8 as \$1,037,899,631. 12 produces the maximum penalty or reward figure of \$2,105,538 13 as shown on line 15, page 3, and also page 2 of my exhibit. 14 15 Would you please explain how you arrived at the actual 16 Q. equivalent availability results for the six units included 17 within the GPIF? 18 19 Yes I will. Operating data on each of our operating units 20 A. is filed monthly with the Florida Public Service Commission 21 on the Actual Unit Performance data form. Additionally, 22 outage information is reported to the Commission on a 23 monthly basis. A summary of this data for the six months 24

provides the basis for the GPIF.

25

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, 1248 planned outage hours were originally scheduled to fall within the Winter 1995 period. The actual planned outage activities required 1362.3 hours. Consequently, the actual equivalent availability of 60.4% is adjusted to 62.6%, as shown on page 7 of my exhibit.

#### Gannon Unit No. 6

On this unit, 168 planned outage hours were originally scheduled to fall within the Winter 1995 period. The actual planned outage activities required 170.2 hours. Consequently, the actual equivalent availability of 84.9% is adjusted to 85.0%, as shown on page 8 of my exhibit.

## Big Bend Unit No. 1

This unit was not scheduled to have a planned outage during the Winter 1995 period and did not in fact have one. Consequently, the actual equivalent availability of 87.4% requires no adjustment as shown on page 9 of my exhibit.

11.

#### Big Bend Unit No. 2

On this unit 936 planned outage hours were originally scheduled to fall within the Winter 1995 period. Due to a revision of the outage schedule, planned outage activities were rescheduled such that no planned outage took place during the period. Consequently, the actual equivalent availability of 85.5% is adjusted to 67.3% as shown on page 10 of my exhibit.

#### Big Bend Unit No. 3

Or this unit no planned outage hours were originally scheduled to fall within the Winter 1995 period. Due to a revision of the outage schedule, an outage was moved forward and associated planned outage activities required 457.1 hours. Consequently, the actual equivalent availability of 75.7 is adjusted to 84.5 as shown on page 11 of my exhibit.

# Big Bend Unit No. 4

On this unit 384 planned outage hours were originally scheduled to fall within the Winter 1995 period. Actual planned outage activities required 484.6 hours. Consequently, the actual equivalent availability of 84.4% is adjusted to 86.5% 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 Q. 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, -0.494, is then entered into the GPIF table on page 2. Using linear interpolation, a penalty amount of \$104,014 is calculated. Does this conclude your testimony? Q. Yes, it does. 

# TAMPA ELECTRIC COMPANY OCTOBER 1995 - MARCH 1996 GENERATING PERFORMANCE INCENTIVE FACTOR RESULTS TABLE OF CONTENTS

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# TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE POINTS TABLE REWARD / PENALTY TABLE - ACTUAL OCTOBER 1995 - MARCH 1996

GENERATING PERFORMANCE INCENTIVE POINTS (GPIP)	FUEL SAVINGS / (LOSS) (\$000)	GENERATING PERFORMANCE INCENTIVE FACTOR (\$000)
+10	5,848.7	2,105.5
+9	5,263.8	1,895.0
+6	4,679.0	1,684.4
+7	4,094.1	1,473.9
+6	3,509.2	1,263.3
+5	2,924.4	1,052.8
+4	2,339.5	842.2
+3	1,754.6	631.7
+2	1,169.7	421.1
+1	584.9	210.6
0		REWARD 0.0
-1	Points -0.494 (843.6)	(\$104,014) (219.6)
-2	(1,687.3)	(421.1)
-3	(2,530.9)	(631.7)
-4	(3,374.6)	(842.2)
-5	(4,218.2)	(1,052.8)
-6	(5,861.8)	(1,263.3)
-7	(5,905.5)	(1,473.9)
-8	(6,749.1)	(1,684.4)
-9	(7,592.8)	(1,895.0)
-10	(8,436.4)	(2,105.5)

# TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE FACTOR CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS ACTUAL OCTOBER 1995 - MARCH 1996

Line 1	Beginning of period balance end of month common equ		\$1,039,227,974	
Line 2	Month of October	1995	\$1,005,966,630	
Line 3	Month of November	1995	\$1,033,300,593	
Line 4	Month of December	1995	\$1,040,147,535	
Line 5	Month of January	1996	\$1,017,746,140	
Line 6	Month of February	1996	\$1,062,757,358	
Line 7	Month of March	1996	\$1,066,157,188	
Line 8	(summation of line 1 throu	gh line 7 divided by 7)	\$1,037,899,631	
Line 9	25 Basis points		0.0025	
Line 10	Revenue expansion factor		61.3738%	
Line 11	Maximum allowed incentive (Line 8 times line 9 divided times 0.5)		\$2,113,890	
Line 12	Jurisdictional Sales		7128371 M	гwн
Line 13	Total Sales		7156645 M	ГwН
Line 14	Jurisdictional Seperation F (Line 12 divided by line 13		99.60%	
Line 15	Maximum Allowed Jurisdi Dollars	ctional Incentive		
	(Line 11 times line 14)		\$2,105,538	

# TAMPA ELECTRIC COMPANY CALCULATION OF SYSTEM GPIF POINTS OCTOBER 1995 - MARCH 1996 ACTUAL

PLANT/UNIT	ADJ AC PERFOR		WEIGHTING FACTOR %	UNIT POINTS	WEIGHTED UNIT POINTS
GANNON 5	62.6%	EAF	0.57%	-1.558	-0.009
GANNON 6	85.0%	EAF	3.47%	10.000	0.347
BIG BEND 1	87.4%	EAF	6.04%	7.000	0.423
BIG BEND 2	67.3%	EAF	4.88%	-0.941	-0.046
BIG BEND 3	84.5%	EAF	5.48%	-5.904	-0.324
BIG BEND 4	86.5%	EAF	3.16%	10.000	0.316
GANNON 5	10124	ANOHR	7.73%	0.000	0.000
GANNON 6	10677	ANOHR	12.86%	-9.338	-1.201
BIG BEND 1	9908	ANOHR	9.82%	0.000	0.000
BIG BEND 2	9854	ANOHR	12.94%	0.000	0.000
BIG BEND 3	9632	ANOHR	19.03%	0.000	0.000
BIG BEND 4	9936	ANOHR	14.02%	0.000	0.000
					-0.494

GPIF REWARD

(\$104,014)

#### GPIF TARGET AND RANGE SUMMARY

#### OCTOBER 1995 - MARCH 1996

#### EQUIVALENT AVAILABILITY

PLANTAINT	WEIGHTING FACTOR (%)	EAF TARGET (%)	EAF MAX. (%)	RANGE MIN. (%)	MAX. FUEL SAVINGS (\$000)	MAX. FUEL LOSS (3000)	EAF ADJUSTED ACTUAL %	FUEL SAVINGS/ LOSS (5000)
GANNON 5	0.57%	63.6	66.5	57.4	21.5	(72.8)	62.6%	(3.4)
GANNON 6	3.47%	81.9	84.9	75.8	130.1	(240.2)	85.0%	130.1
BIO BEND 1	6.04%	85.4	88.3	79.6	226.7	(445.4)	87.4%	158.7
BIO BEND 2	4.88%	67.9	71.1	61.5	182.9	(449.8)	67.3%	(17.2)
BIO BEND 3	5.48%	87,4	89.9	82.4	205.4	(561.1)	84.5%	(331.3)
BIG BEND 4	3.16%	82.9	84.9	78.6	118.7	(413.7)	86.5%	118.7
OPIF SYSTEM	23.60%				885.3	(2,183.0)		

#### AVERAGE NET OPERATING HEAT RATE FOR GPIF COAL GENERATING UNITS

PLANT/UNIT	WEIGHTING FACTOR (%)	ANOHR Bts/kwh	TARGET NOF	ANOHR T. RANG MIN.		MAX. FUEL SAVINGS (\$000)	MAX. FUEL LOSS (\$000)	ACTUAL ADJUSTED ANOHR	ACTUAL FUEL SAVINGS/ LOSS (3000)
GANNON 5	7.73%	10178	78.3	9760	10596	289.8	(289.8)	10124	0.0
GANNON 6	12.86%	10348	70.7	10001	10695	482.3	(482.3)	10677	(450.4)
BIG BEND 1	9.82%	9931	90.9	9747	10115	368.4	(368.4)	9908	0.0
BIG BEND 2	12.94%	9837	91.7	9533	10141	485.3	(485.3)	9854	0.0
BIG BEND 3	19.03%	9596	91.5	9244	9948	713.9	(713.9)	9632	0.0
BIG BEND 4	14.02%	9989	91.1	9667	10311	526.4	(526.4)	9936	0.0
<b>GPIF SYSTEM</b>	76.40%					2,866.1	(2,866.1)		

# TAMPA ELECTRIC COMPANY ACTUAL UNIT PERFORMANCE DATA OCTOBER 1995 - MARCH 1996

PLANT / UNIT	ACTUAL EAF %	ADJUSTMENTS (1) EAF %	EAF ADJUSTED ACTUAL %
GANNON 5	63.6	-1.0	62.6
GANNON 6	81.9	3.1	85.0
BIG BEND 1	85.4	2.0	87.4
BIG BEND 2	67.9	-0.6	67.3
BIG BEND 3	87.4	-2.9	84.5
BIG BEND 4	82.9	3.6	86.5
PLANT/UNIT_	ACTUAL ANOHR Btu/kwh	ADJUSTMENTS (1) TO ANOHR Btu/kwh	ANOHR ADJUSTED ACTUAL Btu/kwh
GANNON 5	10047	77	10124
GANNON 6	10657	20	10677
BIG BEND 1	9940	-32	9908
BIG BEND 2	9906	-52	9854
BIG BEND 3	9763	-131	9632
BIG BEND 4	9995	-59	9936

<sup>(1)</sup> Documentation of adjustments to Actual EAF on pages 7 - 12

<sup>(1)</sup> Documentation of adjustments to Actual ANOHR on pages 13 - 18

#### TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE GANNON UNIT NO. 5 OCTOBER 1995 - MARCH 1996

WEIGHTING FACTOR -

0.57%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4393.0	4393.0	4393.0
E.A.F.	63.6	60.4	62.6
P.O.H.	1248.0	1362.3	1248.0
F.O.H. + E.F.O.H	315.0	288.9	299.8
M.O.H. + E.M.O.H	38.0	90.3	93.7
P.O.F.	28.4	31.0	28.4
E.F.O.F.	7.2	6.6	6.8
E.NLO.F.	0.9	2.1	2.1

#### -1.558 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 1995 - MARCH 1996

WEIGHTING FACTOR =

3,47%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4393.0	4393.0	4393.0
E.A.F.	81.9	84.9	85.0
P.O.H.	168.0	170.2	168.0
F.O.H. + E.F.O.H	524.0	218.2	218.3
M.O.H. + E.M.O.H	106.0	273.6	273.7
P.O.F.	3.8	3.9	3.8
E.F.O.F.	11.9	5.0	5.0
E.M.O.F.	2.4	6.2	6.2

#### 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

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 1995 - MARCH 1996

WEIGHTING FACTOR -

6.04%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4393.0	4393.0	4393.0
E.A.F.	84.5	87.4	87.4
P.O.H.	0.0	0.0	0.0
F.O.H. + E.F.O.H	470.0	396.3	396.3
M.O.H. + E.M.O.H	171.0	155.9	155.9
P.O.F.	0.0	0.0	0.0
E.F.O.F.	10.7	9.0	9.0
E.M.O.F.	3.9	3.5	3.5

#### 7.000 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

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 1995 - MARCH 1996

WEIGHTING FACTOR -

4.88%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4393.0	4393.0	4393.0
E.A.F.	67.9	85.5	67.3
P.O.H.	936.0	0.0	936.0
F.O.H. + E.F.O.H	380.0	331.8	261.1
M.O.H. + E.M.O.H	93.0	304.4	239.5
P.O.F.	21.3	0.0	21.3
E.F.O.F.	8.7	7.6	5.9
E.M.O.F.	2.1	6.9	5.5

#### -0.941 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

EUOH = EQUIVALENT UNFLANNED OUTAGE HOURS

POF = PLANNED OUTAGE FACTOR

EFOF = EQUIVALENT FORCED OUTAGE FACTOR

#### TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE BIG BEND UNIT NO. 3 OCTOBER 1995 - MARCH 1996

WEIGHTING FACTOR -

5.48%

	€ MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4393.0	4393.0	4393.0
E.A.F.	87.4	75.7	84.5
P.O.H.	0.0	457.1	0.0
F.O.H. + E.F.O.H	387.0	483.9	540.1
M.O.H. + E.M.O.H	167.0	128.2	143.1
P.O.F.	0.0	10.4	0.0
E.F.O.F.	8.8	11.0	12.3
E.M.O.F.	3.8	2.9	3.3

#### -5.904 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

EUOH = EQUIVALENT UNPLANNED OUTAGE HOURS

POF = PLANNED OUTAGE FACTOR

EFOF = EQUIVALENT FORCED OUTAGE FACTOR

206.7

#### TAMPA ELECTRIC COMPANY ADJUSTMENTS TO PERFORMANCE BIG BEND UNIT NO. 4 OCTOBER 1995 - MARCH 1996

WEIGHTING FACTOR =

3.16%

	6 MO. TARGET	6 MO. ACTUAL PERFORMANCE	ADJUSTED ACTUAL PERFORMANCE
P.H.	4393.0	4393.0	4393.0
E.A.F.	82.9	84.4	86.5
P.O.H.	384.0	484.6	384.0
F.O.H. + E.F.O.H	184.0	83.1	85.2
M.O.H. + E.M.O.H	184.0	118.4	121.4
P.O.F.	8.7	11.0	8.7
E.F.O.F.	42	1.9	1.9
E.M.O.F.	4.2	2.7	2.8

10.000 E. A. POINTS

#### ADJUSTMENTS TO E.A.F.

100.0 - 13.5 - 86.5

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 1995 - MARCH 1996

WEIGHTING FACTOR =

7.73%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwb)	10178	10047
STA. NET GEN. (GWH)	470.5	510.3
OPER. Btu (10^9 btu)	4788.480	5126.900
NET OUTPUT FACTOR	78.3	81.5

#### 0.000 HEAT RATE POINTS

#### ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-23.5270) + 12019.7 = ANOHR 81.5 (-23.5270) + 12019.7 = 10101 10047 - 10101 = -54 10178 + -54 = 10124

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 1995 - MARCH 1996

WEIGHTING FACTOR = 12.86%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwb)	10348	10657
STA. NET GEN. (GWH)	930.8	1007.8
OPER. Btu (10^9 btu)	9631.980	10740.300
NET OUTPUT FACTOR	70.7	77.1

-9.338 HEAT RATE POINTS

#### ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-3.0507) + 10563.7 = ANOHR

77.1 (-3.0507) + 10563.7 = 10328

10657 - 10328 = 329

10348 + 329 = 10677

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 1995 - MARCH 1996

WEIGHTING FACTOR = 9.82%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwh)	9931	9940
STA. NET GEN. (GWH)	1550.1	1502.4
OPER. Btu (10 <sup>4</sup> 9 btu)	15393.900	14934.200
NET OUTPUT FACTOR	90.9	85.3

0.000 HEAT RATE POINTS

9908

## ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-5.8450) + 10462.1 = ANOHR 85.3 (-5.8450) + 10462.1 = 9963 9940 - 9963 = -23

-23 =

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

9931 +

# TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE BIG BEND UNIT NO. 2 HEAT RATE DATA OCTOBER 1995 - MARCH 1996

WEIGHTING FACTOR = 12.94%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwh)	9837	9906
STA. NET GEN. (GWH)	1237.3	1509.8
OPER. Btu (10^9 btu)	12171.500	14956.900
NET OUTPUT FACTOR	91.7	86.7

#### 0.000 HEAT RATE POINTS

9854

#### ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-10.3610) + 10787.2 = ANOHR 86.7 (-10.3610) + 10787.2 = 9889 9906 - 9889 = 17

17

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

9837 +

# TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE BIG BEND UNIT NO. 3 HEAT RATE DATA OCTOBER 1995 - MARCH 1996

WEIGHTING FACTOR = 19.03%

	6 MO. TARGET	6 MO ACTUAL PERFORMANCE	
ANOHR (Btu/kwh)	9596	9763	
STA. NET GEN. (GWH)	1608.2	1390.5	
OPER. Btu (10^9 btu)	15431.700	13575.100	
NET OUTPUT FACTOR	91.5	82.7	

0.000 HEAT RATE POINTS

#### ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION NOF(-14.9350) + 10962.1 = ANOHR 82.7 (-14.9350) + 10962.1 = 9727 9763 - 9727 = 36 9596 + 36 = 9632

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

## TAMPA ELECTRIC COMPANY ADJUSTMENTS TO HEAT RATE BIG BEND UNIT NO. 4 HEAT RATE DATA OCTOBER 1995 - MARCH 1996

WEIGHTING FACTOR = 14.02%

	6 MO. TARGET	6 MO. TARGET	6 MO ACTUAL PERFORMANCE
ANOHR (Btu/kwh)	9989	9989	9995
STA. NET GEN. (GWH)	1545.0	1545.0	1450.5
OPER. Btu (10^9 btu)	15431.800	15431.800	14497.100
NET OUTPUT FACTOR	91.1	91.1	83.7

0.000 HEAT RATE POINTS

#### ADJUSTMENTS TO ACTUAL HEAT RATE FOR COMPARISON

CURRENT EQUATION	NOF(-8.0	541) + 10722.3	= ANOHR
83.7 (-8.0541) + 1072	22.3	-	10048
9995 -	10048		-53
9989 +	-53		9936

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

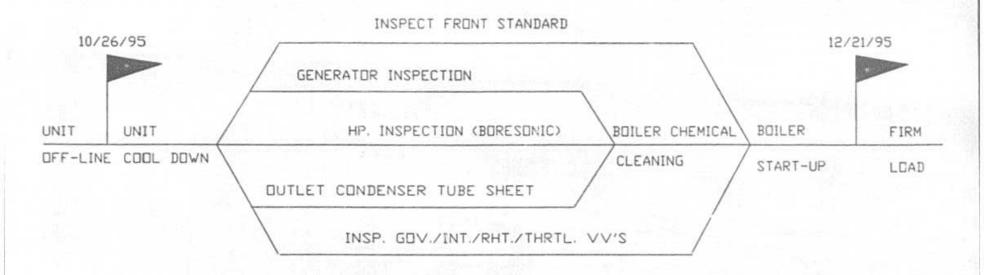
# TAMPA ELECTRIC COMPANY GPIF PLANNED OUTAGE SCHEDULE - ACTUAL OCTOBER 1995 - MARCH 1996

STATION/UNIT	PLANNED OUTAGE DATES	OUTAGE REASON
*BIG BEND 3	MAR 14 - APR 1	ANNUAL MAINTENANCE OUTAGE
BIG BEND 4	FEB 17 - MAR 8	ANNUAL MAINTENANCE OUTAGE
GANNON 5	OCT 26 - DEC 21	HP INSPECTION (BORESONIC)* GENERATOR INSPECTION INSP. FRT. STD. INSP. GOV/INT/THRTL. VV'S OUTLET CONDENSER TUBE SHEETS BOILER CHEMECIAL CLN.
GANNON 6	OCT 19 - OCT 25	ANNUAL MAINTENANCE OUTAGE

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

<sup>\*</sup>Start / End dates outside of GPIF period.

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



TAMPA ELECTRIC COMPANY GANNON UNIT NO. 5 PLANNED DUTAGE 1995 ACTUAL CPM 05/14/96

#### GENERATING PERFORMANCE INCENTIVE POINTS TABLE

#### OCTOBER 1995 - MARCH 1996

#### **GANNON 5**

EQUIVALENT AVAILABILITY POINTS	FUEL BAYDIOS / (LOSS) (S X 1990)	ADRIETED ACTUAL EQUIVALENT AVAILABILITY	HEAT RATE PODITS	EAVINGS / (LOSE) (3 X 1000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	21.5	66.5	+10	289.8	9760
+9	19.4	66.2	+9	260.8	9794
+8	17.2	65.9	+4	231.8	9829
+7	15.1	65.6	+7	202.9	9463
+6	12.9	65.3	+6	173.9	9897
+5	10.0	65.1	+5	144.9	9932
+4	8.6	64.1	+4	115.9	9966
+3	6.5	64.5	+3	\$6.9	10000
+2	4.3	64.2	+2	58.0	10034
+1	2.2	63.9	+1	29.0	10069
				AHR 0.0 Actual	10103
0	0.0	63.6		0.00 0.0 ANOES	10178
				0.0	10253
-1 EA		63.0	-1	(29.0)	10287
-2 POII		62.4	-2	(58.0)	10322
-3	(21.8)	61.7	-3	(86.9)	10356
4	(29.1)	61.1	4	(115.9)	10390
-5	(36.4)	60.5	-3	(144.9)	10425
-6	(43.7)	59.9	-6	(173.9)	10459
-7	(51.0)	59.3	-7	(202.9)	10493
-4	(58.2)	58.6	4	(231.8)	10527
-9	(65.5)	56.0	-9	(260.8)	10562
-10	(72.8)	57.4	-10	(289.8)	10596
	Weighting Factor =	0.57%		Weighting Factor =	7.73%

#### GENERATING PERFORMANCE INCENTIVE POINTS TABLE

#### OCTOBER 1995 - MARCH 1996

#### **GANNON 6**

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINOS / (LOSS) G X 1000)  EAP Adjuste	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAYINGS / (LOSS) (S X 1000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10 ◀ P	DINTS 130.1 EAF	84.9	+10	482.3	9760
+9	117.1	84.6	+9	434.1	9611
+8	104.1	84.3	+6	345.8	9463
+7	91.1	84.0	+7	337.6	9914
+6	78.1	83.7	+6	289.4	9965
+5	65.1	83.4	+5	241.2	10017
+4	52.0	83.1	+4	192.9	10068
+3	39.0	92.8	+3	144.7	10119
+2	26.0	82.5	+2	96.5	10170
+1	13.0	82.2	+1	48.2	10222
				0.0	10273
0	0.0	81.9	0	0.0	10348
				0.0	10423
-1	(24.0)	81.3	-1	(48.2)	10450
-2	(48.0)	80.7	-2	(96.5)	10477
-3	(72.1)	80.1	-3	(144.7)	10505
4	(96.1)	79.5	-4	(192.9)	10532
-5	(120.1)	78.9	-5	(241.2)	10559
-6	(144.1)	78.2	-4	(289.4)	10586
-7	(168.1)	77.6	-7	(337.6)	10613
4	(192.2)	77.0	4	(385.8)	10641
-9	(216.2)	76.4	-9	AHR (434.1) Actual	10668
-10	(240.2)	75.8	-10	-9.338 (482.3) ANOHR 19677	10695
	Weighting Factor =	3.47%		Weighting Factor =	12.86%

#### GENERATING PERFORMANCE INCENTIVE POINTS TABLE

#### OCTOBER 1995 - MARCH 1996

EQUIVALENT AVAILABILITY POINTS	PUEL SAVINGE/(LOSS) (S X 1000)	ADRISTED ACTUAL BQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	PUBL SAVINOS / (LOSS) (S X 1000)	ADJUSTED ACTUAL AVERAGE HEAT SATE
+10	226.7	88.3	+10	368.4	9747
+9	204.0	88.0	+9	331.6	9758
**	181.4 Adjusted	87.7	+8	294.7	9769
	POINTS 158.7 EAF	<b>₩</b> 87.4	+7	257.9	9780
+6	7.600 136.0	87.1	+6	221.0	9791
+5	113.4	86.9	+5	184.2	9802
+4	90.7	86.6	+4	147.4	9812
+3	68.0	163	+3	110.5	9823
+2	45.3	86.0	+2	73.7	9834
+1	22.7	85.7	+1	36.8	9645
				0.0	9856
0	0.0	85.4	0 - PC	AHR Adjusted Adjusted DINTS 0.0 Actual	9931
				0.0 ANOFER 9908	10006
-1	(44.5)	54.8	-1	(36.8)	10017
-2	(119.1)	84.2	-2	(73.7)	10028
-3	(133.6)	83.7	-3	(110.5)	10039
-4	(178.2)	83.1	4	(147.4)	10050
-5	(222.7)	82.5	-5	(184.2)	10061
-6	(267.2)	E1.9	-6	(221.0)	10071
-7	(311.8)	81.3	-7	(257.9)	10082
-4	(356.3)	80.8	4	(294.7)	10093
-9	(400.9)	80.2	-9	(331.6)	10104
-10	(445.4)	79.6	-10	(368.4)	10175
	Weighting Factor =	6.04%		Weighting Factor =	9.82%

# GENERATING PERFORMANCE INCENTIVE POINTS TABLE

#### OCTOBER 1995 - MARCH 1996

EQUIVALENT VAILABILITY PODITS	EAVIDAGE / (LOSE) (5 X 1000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	HEAT RATE POINTS	BAYDIGE ( (LOSS) (3 X 1000)	ADRUSTED ACTU AVERAGE HEAT RATE
+10	182.9	71.1	+10	485.3	9533
+9	164.6	70.8	+9	436.8	9356
+8	146.3	70.5	+8	368.2	9579
+7	128.0	70.1	+7	339.7	9602
+6	109.7	69.1	+6	291.2	9625
+5	91.5	69.5	+5	242.7	9648
+4	73.2	69.2	+4	194.1	9670
+3	54.9	68.9	+3	145.6	9693
+2	36.6	68.5	+2	97.1	9716
+1	18.3	68.2	+1	48.5	9739
			per	0.0	9762
0	0.0	67.9	0 - P	AHR OINTS 0.0 Actus 8.600 ANOEL	1 9837 R
	Alfuni			0.0 9854	9912
-0.	NTS (45.0) EAF 941 (7.3%	Mary Company	-1	(48.5)	9935
-2	(90.0)	66.6	-2	(97.1)	9958
-3	(134.9)	66.0	-3	(145.6)	9981
-4	(179.9)	65.3	-4	(194.1)	10004
-5	(224.9)	64.7	-5	(242.7)	10027
-6	(269.9)	64.1	-4	(291.2)	10049
-7	(314.9)	63.4	-7	(339.7)	10072
-4	(359.8)	62.8	4	(388.2)	10095
-9	(404.8)	62.1	-9	(436.8)	10118
-10	(449.8)	61.5	-10	(403.3)	10141
	Weighting Factor =	4.82%		Weightleig Factor =	12.94%

#### GENERATING PERFORMANCE INCENTIVE POINTS TABLE

#### OCTOBER 1995 - MARCH 1995

BQUIVALENT AVAILABILITY POINTS	PUEL BAVINGS / (LOSS) (S X 1000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	EAVINGS (COSE) (\$ X 1640)	ADRUSTED ACTUAL AVERAGE HEAT RATE
+10	205.4	89.9	+10	713.9	9244
+9	184.9	89.7	+9	642.5	9272
+8	164.3	89.4	+1	571.1	9299
+7	143.8	89.2	+7	499.7	9307
+6	123.2	88.9	+6	428.3	9355
+5	102.7	88.7	+5	357.0	9383
+4	82.2	22.4	+4	285.6	9410
+3	61.6	88.2	+3	214.2	9434
+2	41.1	87.9	+2	142.8	9466
+1	20.5	87.7	+1	71.4	9493
				0.0	9521
0	0.0	87.4	0	AHR 0.0 Adjusted	9396
			4	POINTS Actual ANOHR	9671
-1	(56.1)	86.9	-1	(71.4)	9699
-2	(112.2)	86.4	-2	(142.8)	9726
-3	(168.3)	85.9	-3	(214.2)	9754
4	(224.4)	85.4	4	(285.6)	9782
-5 pm	(280.6)	84.9	-5	(357.0)	9810
-6 - 1	EAF POINTS (336.7) EAF	₽ 84.4	-6	(428.3)	9837
-7	-5,994 B4,5%	83.9	-7	(499.7)	9665
-8	(442.9)	83.4	4	(571.1)	9893
-9	(505.0)	82.9	-9	(642.5)	9920
-10	(561.1)	82.4	-10	(713.9)	9948
	Weighting Factor =	5.48%		Weighting Factor =	19.03%

#### GENERATING PERFORMANCE INCENTIVE POINTS TABLE

#### OCTOBER 1995 - MARCH 1996

EQUIVALENT AVAILABILITY POINTS	PUEL SAVINGS/(LOSS) (3 X 1000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POD/TE	PUEL SAVINGS / (LOSS) (S X 1909)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10 -	POINTE 118.7 KAP	84.9	+10	526.4	9667
+9	10.000 106.0	84.7	+9	473.8	9692
+4	95.0	84.5		421.1	9716
+7	83.1	84.3	+7	368.5	9741
+6	71.2	84.1	+6	315.8	9766
+5	59.4	83.9	+5	263.2	9791
+4	47.5	83.7	+4	210.6	9615
+3	35.6	\$3.5	+3	157.9	9640
+2	23.7	£3.3	+2	105.3	9865
+1	11.9	83.1	+1	52.6	9689
			-	0.0	9914
0	0.0	82.9	0 1	AHR OINTS 0.0 Actual	9989
				0.0 ANOH	10064
-1	(41.4)	82.5	-1	(52.6)	10089
-2	(82.7)	82.0	-2	(105.3)	10113
-3	. (124.1)	81.6	-3	(157.9)	10138
4	(165.5)	\$1.2	4	(210.6)	10163
-5	(206.9)	80.8	-5	(263.2)	19188
-6	(248.2)	80.3	-6	(315.8)	10212
-7	(289.6)	79.9	-7	(368.5)	10237
4	(331.0)	79.5	4	(421.1)	10262
-9	(372.3)	79.0	-9	(473.8)	10286
-10	(413.7)	78.6	-10	(526.4)	10311
	Weighting Factor =	3.16%		Weighting Factor =	14.02%
			23.69		

# COMPARISON OF GPIF TARGETS VS. PRIOR PERIOD ACTUAL PERFORMANCE

#### OCTOBER 1995 - MARCH 1996

#### AVAILABILITY

	TARGET WEIGHTING	NORMALIZED WEIGHTING		GET PERIOD 95 - MAR 96			PERFORMA 95 - MAR 96	
PLANT/UNIT	FACTOR	FACTOR	POF	EUOF	EUOR	POF	EUOF	EUOR
BIG BEND I	6.04%	25.6	0.0	14.6	14.6	0.0	12.6	12.6
BIG BEND 2	4.88%	20.7	21.3	10.8	13.7	0.0	14.5	14.5
BIO BEND 3	5.48%	23.2	0.0	12.6	12.6	10.4	13.9	15.6
BIG BEND 4	3.16%	13.4	8.7	8.4	9.2	11.0	4.6	5.2
GANNON 5	0.57%	2.4	20.4	8.0	11.2	31.0	8.6	12.5
GANNON 6	3.47%	14.7	3.8	14.3	14.9	3.9	11.2	11.6
	23.60%	100.0						
OPIF SYSTEM WI	EIGHTED AVERAGE		6.8	12.3	13.2	5.2	11.9	12.5
GPIF SYSTEM WI	EIGHTED EQUIVALES	T AVAILABILITY	_	80.9		_	82.9	
			5 PERIO	D AVERAGE EUOF	EUOR	5 PERI	OD AVERAC EAF	Æ
			8.8	11.4	12.9		79.8	

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

PLANT/UNIT	TARGET WEIGHTING FACTOR	NORMALIZED WEIGHTING FACTOR	HEAT RATE TARGET	ADJUSTED ACTUAL HEAT RATE APR 95 - SEP 95
GANNON 5	7.73%	10.1	10178	10124
GANNON 6	12.86%	16.8	10348	10677
BIG BEND 1	9.82%	12.9	9931	9908
BIG BEND 2	12.94%	16.9	9837	9854
BIG BEND 3	19.03%	24.9	9596	9632
BIG BEND 4	14.02%	18.4	9989	9936
	76.40%	100.0		
OPIF SYSTEM WE	IGHTED AVERAGE	HEAT RATE (Blu/kwh)	9937	9987

# TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE POINTS CALCULATION OCTOBER 1995 - MARCH 1996

Points are calculated according to the formula:

GPIP 
$$= < \binom{n}{1} [(a_i)(EAP_i) + (e_i)(AHRP_i)]$$

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 Incertive Factor (GPIF) are determined directly from the table for the corresponding Generating Performance Points (GPIP) - see page 2.

GPIP = (\$104,014)