BEFORE THE 1 FLORIDA PUBLIC SERVICE COMMISSION 2 3 : In the Matter of : DOCKET NO. 950001-EI 4 : Fuel and Purchased Power : Cost Recovery Clause and : 5 Generating Performance : Incentive Factor. 6 : ____ 7 VOLUME - 2 8 Pages 180 through 244 9 10 HEARING PROCEET NGS: 11 12 COMMISSIONER J. TERRY DEASON BEFORE: COMMISSIONER DIANE K. KIESLING 13 COMMISSIONER JOE GARCIA 14 DATE: Wednesday, August 9, 1995 15 16 Commenced at 9:30 a.m. TIME: Concluded at 10:50 a.m. 17 18 The Betty Easley Conference Center PLACE: Hearing Room 148 19 4075 Esplanade Way Tallahassee, Florida 20 DOCUMENT NUMBER-DATE 21 56 AUG 10 b ROWENA NASH HACKNEY **REPORTED BY:** Official Commission Reporter 22 APPEARANCES: 07633 23 (As heretofore noted.) 24 25

FLORIDA PUBLIC SERVICE COMMISSION

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FLORIDA PUBLIC SERVICE COMMISSION

TAMPA ELECTRIC COMPANY DOCKET NO. 950001-EI SUEMITTED FOR FILING 05/19/95

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
3		OF
4		MARY JO PENNINO
5		
6	Q.	Please state your name, address, occupation and employer.
7		
8	A.	My name is Mary Jo Pennino. My business address is 702
9		North Franklin Street, Tampa, Florida 33602. I am Manager
10		- Energy Issues and Administration in the Regulatory
11		Affairs Department of Tampa Electric Company.
12		
13	۵.	Please provide a brief outline of your educational
14		background and business experience.
15		
16	A.	I received a Bachelor of Science Degree in Chemical
17		Engineering from the University of South Florida, Tampa,
18		Florida in 1985. Upon graduation, I began my career at
19		Tampa Electric Company in the Production Department. My
20		responsibilities included heat rate testing, support
21		services for the Plant Chemical Engineers, and start-up
22		assistance for Hookers Point Station. In 1991, I
23		transferred to the Generation Planning Department where I
24		was responsible for annual expansion planning analyses,
25		alternative technology evaluation and several other

(Transcript continues in sequence from Volume 2.)182

1		business planning activities. In 1993, I was promoted to
2		Administrator - Wholesale and Fuel in the Regulatory
3		Affairs Department and in 1995 to Manager - Energy Issues
4		and Administration, also in Regulatory Affairs. My present
5		responsibilities include the areas of fuel adjustment
6		filings, capacity cost recovery filings, and rate design.
7		
8	Q.	What is the purpose of your testimony in this proceeding?
9		
10	А.	The purpose of my testimony is to present the net true-up
11		amounts for the October 1994 through March 1995 period for
12		both the Fuel Cost Recovery and the Capacity Cost Recovery
13		Clauses.
14		
15		FUEL COST RECOVERY CLAUSE
16		
17	Q.	What is the net true-up amount for the fuel cost recovery
18		clause for the period October 1994 through March 1995.
19		
20	А.	An over/(under) - recovery of (\$5,963,794). The actual
21		fuel cost over/(under) - recovery, including interest, is
22		(\$3,508,681) for the period October 1994 through March 1995
23		(Schedule A2, page 3 of 4, of March 1995 monthly filing, in
24		Document No. 4, reflects an end of period total net true-up
25		\$459,884. Subtracting the beginning of period deferred

1		true-up of \$3,968,565 yields the (\$3,508,681). This
2		(\$3,508,681) amount, less the actual/estimated over/(under)
3		- recovery approved in the March 1995 fuel hearings of
4		\$2,455,113 results in a final over/(under) - recovery for
5		the period of (\$5,963,794). This over/(under) - recovery
6		amount of (\$5,963,794) will be carried over and applied in
7		the calculation of the fuel recovery factor for the period
8		October 1995 through March 1996.
9		
10	Q.	How much effect will this (\$5,963,794) over/(under) -
11		recovery in the October 1994 through March 1995 period,
12		have on the October 1995 through March 1996 period?
13		
14	А.	The (\$5,963,794) over/(under) - recovery will cause a 1,000
15		KWH residential bill to be approximately \$0.89 higher.
16		
17	Q.	Have you prepared an Exhibit in this proceeding?
18		
19	А.	Yes. Exhibit No. (MJP-1, Fuel Cost Recovery and Capacity
20		Cost Recovery) which contains four documents. Document No.
21		3 is used to explain the capacity cost recovery clause
22		which is discussed later in my testimony. Document No. 4
23		contains Commission Schedules A-1 through A-12 for the
24		months of October 1994 through March 1995. Included with
25		the March 1995 monthly filing is a six months summary for

1.84

each of Commission Schedules A7, A7A, A8, A8a, A9, and A10, 1 for the period October 1994 through March 1995. 2 3 Please explain Document No. 1. 4 Q. 5 Document No. 1, entitled "Tampa Electric Company Final Fuel 6 A. Over/(Under) - Recovery for the period October 1994 through 7 March 1995" shows the calculation of the final fuel 8 over/(under) - recovery for the period of (\$5,963,794) 9 which will be applied to jurisdictional sales during the 10 period October 1995 through March 1996. 11 12 Line 1 shows the total company fuel costs of \$158,519,222 13 for the period October 1994 through March 1995. The 14 jurisdictional amount of total fuel costs is \$158,317,099 15 as shown on line 2. This amount is compared to the 16 jurisdictional fuel revenues applicable to the period on 17 line 3 to obtain the actual over/(under) - recovered fuel 18 costs for the period, shown on line 4. The resulting 19 (\$3,597,561) over/(under) - recovered fuel costs for the 20 period, combined with \$88,880 of interest shown on line 5, 21 actual over/(under) recovery of constitute the 22 (\$3,508,681) shown on line 6. The (\$3,508,681) less the 23 actual/estimated over/(under) - recovery of \$2,455,113 24 shown on line 7, which was approved in the March 1995 fuel 25

hearings, results in the final over/(under) - recovery of 1 (\$5,963,794) shown on line 8. 2 3 What does Document No. 2 show? 4 0. 5 "Tampa Electric Company Document No. 2, entitled 6 A. Calculation of True-Up Amount Actual vs. Original Estimates 7 for the period October 1994 through March 1995, " shows the 8 calculat.on of the actual over/(under) - recovery as 9 compared to the original estimate for the same period. 10 11 What was the variance in jurisdictional fuel revenues for Q. 12 the period October 1994 through March 1995? 13 14 As shown on line D1 of my Document No. 2, the company 15 A. collected \$2,131,656 or 1.4% more jurisdictional fuel 16 revenues than originally estimated. 17 18 What was the total fuel and net power transaction cost Q. 19 variance for the period October 1994 through March 1995? 20 21 As shown on line A7 of Document No. 2, the fuel and net 22 А. power transactions cost variance is \$5,736,543 or 3.8%. 23 24 What a g the reasons for the total fuel and net power 25 Q.

1		transactions cost being higher by \$5,736,543 or 3.8%?
2		
3	A.	Although Net Energy for Load was up 112,959 MWH or 1.7%,
4		the ¢/KWH cost for Total Fuel and Net Power Transaction was
5		more than estimated by 2.0%. This 2.0% increase is
6		primarily due to a 7.5% decrease in the ¢/KWH credited for
7		power sales.
8		
9		CAPACITY COST RECOVERY CLAUSE
10		
11	Q.	What is the net true-up amount for the capacity cost
12		recovery clause for the period October 1994 through March
13		1995?
14		
15	А.	An over/(under) - recovery of (\$667,853). The actual
16		capacity cost over/(under) - recovery, including interest,
17		is \$361,879 for the period October 1994 through March 1995
18		(Document No. 3, pages 2 and 3 of 5). This amount, less
19		the actual/estimated over/(under) - recovery approved in
20		the March 1995 fuel hearings of \$1,029,732 results in a
21		final over/(under) - recovery for the period of (\$667,853)
22		(Document No. 3, page 5 of 5). This over/(under) -
23		recovery amount of (\$667,853) will be carried over and
24		applied in the calculation of the capacity cost recovery
25		factor for the period October 1995 through March 1996.

How much effect will this (\$667,853) over/(under) Q. 1 recovery in the October 1994 through March 1995 period, 2 have on the October 1995 through March 1996 period? 3 4 The (\$667,853) over/(under) - recovery will approximately 5 A. cause a \$0.10 increase in a 1,000 KWH residential bill. 6 7 Does this conclude your testimony? 8 Q. 9

10 A. Yes.

DOCKET NO. 950001-EI TAMPA ELECTRIC COMPANY SUBMITTED FOR FILING 06/23/95

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
3		OF
4		MARY JO PENNINO
5		
6	Q.	Please state your name, address, occupation and employer.
7		
8	А.	My name is Mary Jo Pennino. My business address is 702
9		North Franklin Street, Tampa, Florida 33602. My title is
10		Manage: - Energy Issues and Administration. I work in the
11		Regulatory Affairs Department of Tampa Electric Company.
12		
13	۵.	Please provide a brief outline of your educational
14		background and business experience.
15		
16	А.	I was educated in both public and private schools in
17		Illinois and received a Bachelor of Science Degree in
18		Chemical Engineering from the University of South Florida,
19		Tampa, Florida in 1985. Upon graduation, I began my career
20		with Tampa Electric in the Production Department. My
21		responsibilities included heat rate testing, support
22		service for the Plant Chemical Engineers, and start-up
23		engineering for Hookers Point Station. In 1991, I
24		transferred to the Generation Planning Department where I
25		was responsible for annual expansion planning analyses,

alternative technology evaluation and several other 1 business planning activities. In 1993, I was promoted to 2 Administrator - Wholesale and Fuel in the Regulatory 3 Affairs Department and in 1995 to Manager - Energy Issues 4 and Administration, also in Regulatory Affairs. My present 5 responsibilities include the areas of fuel adjustment 6 7 filings, capacity cost recovery filings, and rate design. 8 9 Q. What is the purpose of your testimony in this proceeding? 10 The purpose of my testimony is to present to the Commission 11 А. the proposed Total Fuel and Purchased Power Cost Recovery 12 factors for the period of October 1995 - March 1996, and 13 the proposed Capacity Cost Recovery factors for the same 14 period. 15 16 17 Fuel and Purchased Power Cost Recovery Factors / Capacity Cost 18 Recovery Clause 19 20 Q. Did you review the projected data necessary to calculate 21 the Total Fuel and Purchased Power Cost Recovery factors for the period October 1995 - March 1996? 22 23 24 Α. Yes I have. 25

1	Q.	Do you wish to sponsor an exhibit consisting of Schedules
2		H-1 (October - March, 1993 through 1996) and Schedules E-1
з		through E-10 (October 1995 - March 1996)?
4	6	
5	A.	Yes. Also contained in this exhibit are Schedules E-2, E-
6		3, E-5, E-6, E-7, E-8 and E-9 for the prior period April
7		1995 - September 1995. These schedules are furnished as
8		back-up for the projected true-up for this period and
9		consist of two actual months and four projected months.
10		
11		(Have identified as Exhibit No. 28 (MJP-2), Fuel
12		Projection.)
13		
14	۵.	Does Schedule E-1 of Exhibit No. 28 (MJP-2), Fuel
15		Projection, show the proper value for the Total Fuel and
16		Purchased Power Cost Recovery Clause as projected for the
17		period October 1995 - March 1996?
18		
19	А.	Yes.
20		
21	Q.	What is the proper value for the new period?
22		
23	А.	The proper value for the new period is 2.365 cents per kwh
24		before the application of the factors that adjust for
25		variations in line losses.

1	Q.	Please describe the information provided on Schedule E-1C.
2		
3	А.	The GPIF and True-up factors are provided on Schedule E-1C.
4		We propose that a GPIF penalty of (\$471,209) be included in
5		the projection period. The True-up amount for the April
6		1995 - September 1995 period is an underrecovery of
7		(\$8,925,155). This underrecovery is comprised of a final
8		True-up underrecovery amount of (\$5,963,794) for the
9		October 1994 - March 1995 period and an estimated
10		underrecovery in the amount of (\$2,961,361) for the April
11		1995 - September 1995 period.
12		
13	۵.	Please describe the information provided on Schedule E-1D.
14		
15	А.	Schedule E-1D presents the company's on-peak and off-peak
16		fuel charge factors for the October 1995 - March 1996
17		period.
18		
19	Q.	What is the purpose of Schedule E-1E?
20		
21	А.	The purpose of Schedule E-1E is to present the standard,
22		on-peak and off-peak fuel charge factors after adjusting
23		for variations in line losses.
24		
25	Q.	Please recap the proposed Fuel and Purchased Power Cost

1		Recovery factors for the October 1995 - March 1996 period.
2		
3	А.	Fuel Charge
4		Rate Schedule Factor (cents per kwh)
5		
6		Average Factor 2.365
7		RS, GS and TS 2.380
8		RST and GST 2.597 (on-peak)
9		2.297 (off-peak)
10		SL-2, OL-1 and OL-3 2.342
11		GSD, GSLD and SBF 2.368
12		GSDT, GSLDT and SBFT 2.583 (on-peak)
13		2.285 (off-peak)
14		IS-1, IS-3, SBI-1, SBI-3 2.299
15		IST-1, IST-3, SBIT-1, SBIT-3 2.508 (on-peak)
16		2.218 (off-peak)
17		
18	Q.	How does Tampa Electric Company's proposed average fuel
19		charge factor of 2.365 cents per kwh compare to the average
20		fuel charge factor for the April 1995 - September 1995
21		period?
22		
23	А.	The proposed fuel charge factor is 0.021 cents per kwh (or
24		21 cents per 1000 kwh) lower than the average fuel charge
25		factor of 2.386 cents per kwh for the April 1995 -

September 1995 period. 1 2 3 Are you also requesting Commission approval of the 4 Q. projected Capacity Cost Recovery factors for the Company's 5 various rate schedules? 6 7 8 A. Yes. 9 Have ou prepared or caused to be prepared under your 10 Q. direction or supervision an exhibit which supports this 11 request? 12 13 It consists of five pages indentified as Exhibit No. 14 Α. Yes. 29 MJP-3, Capacity Cost Recovery. 15 16 What payments are included in Tampa Blectric's capacity Q. 17 cost recovery factor? 18 19 Tampa Electric is requesting recovery, through the capacity 20 A. cost recovery factor, of capacity payments made pursuant to 21 22 cogeneration, small power production and purchased power 23 agreements to which we are a party. 24 What credits are included in Tampa Electric's capacity cost 25 Q.

		recovery factor?	
1		recovery factor?	
2			
3	Α.	One-half of the \$1,106,760 option payment Tampa Electr	ic
4		received in 1993 from Polk Power Partners is included as	a
5		credit to the capacity cost recovery factor. The credi	t,
6		plus interest, is included as part of the true-	up
7		calculation. This treatment is consistent with Order N	ο.
8		PSC-95-0450-FOF-EI of Docket No. 950001-EI issued on Apr	il
9		6, 1995.	
10			
11	Q.	Please re-cap the proposed Capacity Cost Recovery Clau	se
12		factors for the October 1995 - March 1996 period.	
13			
14	А.	Capacity Cost Recovery	
15		Rate Schedule Factor (cents per kwh)	
16			
17		RS 0.229	
18		GS and TS 0.211	
19		GSD 0.159	
20		GSLD and SBF 0.145	
21		IS-1, IS-3, SBI-1, SBI-3 0.013	
22		SL-2, OL-1 and OL-3 0.035	
23			
24		These factors can be seen in Exhibit No. $\frac{29}{2}$ (MJP-3), pa	ge
25		3 of 5.	

1	۵.	What is the compos	ite effect of the above changes on a
2		1,000 kwh residenti	al Customer?
3			
4	А.	A residential bill f	or 1,000 kwh will decrease twice during
5		the six month fuel	projection period. It will decrese by
6		\$0.02 in October 199	95. In January 1996, a residential bill
7		for 1,000 kwh will	decrease again by \$0.59 when the oil
8		backout recovery fac	tor is eliminated. The prepared direct
9		testimony and exhibi	its of Elizabeth A. Townes describes the
10		derivation of the o	il backout recovery factor for October
11		1995 through Decemb	er 1995 and its elimination in January
12		1996.	
13			
14			Apr. 95 Oct. 95 Jan. 96
15			thru thru thru
16		Time of Charge	Sen. 95 Dec. 95 Mar. 96
17		ATTO VA VAMASS	
18		Customer	\$ 8.50 \$ 8.50 \$ 8.50
19			
20		Energy	43.42 43.42 43.42
21			
22		Conservation	1.53 1.53 1.53
23			
24		Oil Backout	0.81 0.58 0.00
25			
26		Fuel	24.01 23.80 23.80
27		-	1 07 2 20 2 20
28		Capacity	1.87 2.29 2.29
29		BGB Max	2 05 2 05 2 04
30		FGR Tax	6.V2 6.V2 6.V1
32		Total	S 82.19 S 82.17 S 81.58
33		Iotai	· ····· · ·····
34			
35	0	When should the new	charges go into effect?

1	А.	They should go into effect commensurate with the first
2		billing cycle in October 1995.
3		
4	Q.	Does this conclude your testimony?
5		
6	А.	Yes it does.
7		
8		
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1	DOCKET NO. 950001-EI
2	TAMPA ELECTRIC COMPANY
3	SUBMITTED FOR FILING 5/19/95
4	TY8 (TRUE UP)
5	
6	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
7	PREPARED DIRECT TESTIMONY
8	OF
9	GEORGE A. KESELOWSKY
10	
11	
12	
13	
14	Q. Will you please state your name, business address, and employer?
15	
16	A. My name is George A. Keselowsky and my business address is Post Office Box
17	111, Tampa, Florida 33601. I am employed by Tampa Electric Company.
18	
19	Q. Please furnish us with a brief outline of your educational background and business
20	experience.
21	
22	A. I graduated in 1972 from the University of South Florida with a Bachelor of
23	Science Degree in Mechanical Engineering. I have been employed by Tampa
24	Electric Company in various engineering positions since that time. My current
25	position is that of Senior Consulting Engineer -Production Engineering.
26	
27	
28	GK950001.EI\FPSCDOCS Page 1 of 7

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1	Q.	What are your current responsibilities?
2		
3	А.	I am responsible for testing and reporting unit performance, and the compilation
4		and reporting of generation statistics.
5		
6	Q.	What is the purpose of your testimony?
7		
8	Α.	My testimony presents the actual performance results from unit equivalent
9		availability and station heat rate used to determine the Generating Performance
10		Incentive Factor (GPIF) for the period October 1994 through March 1995. I will
11		also compare these results to the targets established prior to the beginning of the
12		period.
13		
14	Q.	Have you prepared an exhibit with the results for this six month period?
15		
16	Α.	Yes. Under my direction and supervision an exhibit has been prepared entitled,
17		"Tampa Electric Company, October 1994 - March 1995, Generating Performance
18		Incentive Factor Results" consisting of 30 pages that was filed with this testimony
19		(Have identified as Exhibit GAK-1).
20		
21	Q.	Have you calculated the results of Tampa Electric Company for its performance
22		under the GPIF during this period?
23		
24	Α.	Yes I have. This is shown on page 4 of my exhibit. Based upon -2.775 GPIF
25		points, the result is a penalty amount of \$471,209 for the period.
26		
27		
28	GK950	001.EI\FPSCDOCS Page 2 of 7

1	Q.	Please proceed with your review of the actual results for the October 1994 -
2		March 1995 period.
3		
4	Α.	On page 3 of my exhibit, the actual average common equity for the period is
5		shown on line 8 as \$953,527,765. This produces the maximum penalty or reward
6		figure of \$1,938,772 as shown on line 15, page 3. Page 2 of my exhibit
7		demonstrates that this calculated incentive amount has been modified to comply
8		with the constraint set forth by the Commission that incentive dollars are not to
9		exceed fifty percent of fuel savings.
10		
11	Q.	Would you please explain how you arrived at the actual equivalent availability
12		results for the six units included within the GPIF?
13		
14	Α.	Yes I will. Operating data on each of our operating units is filed monthly with
15		the Florida Public Service Commission on the Actual Unit Performance data
16		form. Additionally, outage information is reported to the Commission on a
17		monthly basis. A summary of this data for the six months provides the basis for
18		the GPIF.
19		
20	Q.	Are the equivalent availability results shown on page 6, column 2, directly
21		applicable to the GPIF table?
22		
23	Α.	Not exactly. Adjustments to equivalent availability may be required as noted in
24		section 4.3.3 of the GPIF Manual. The actual equivalent availability including
25		the required adjustment is shown on page 6 of my exhibit. The necessary
26		
27		
28	GK950	001.ENFPSCDOCS Page 3 of 7

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, no planned outage hours were originally scheduled to fall within the Winter 1994 period. A major outage scheduled for the month immediately following the Winter 1994 period was postponed until later in the year. This necessitated a short fuel system planned outage during the period, which required 173.4 hours. Consequently, the actual equivalent availability of 90.4% is adjusted to 94.2% as shown on page 7 of my exhibit.

Gannon Unit No. 6

On this unit, 408 planned outage hours were originally scheduled to fall within the Winter 1994 period. A planned fuel system outage was rescheduled to take place after the period ended, and planned outage activities within the period required 243.1 hours. Consequently, the actual equivalent availability of 84.6% is adjusted to 81.2%, as shown on page 8 of my exhibit.

Big Bend Unit No. 1

On this unit, no planned outage hours were originally scheduled to fall within the Winter 1994 period. A planned outage was moved forward from the month following the period and took place within the Winter 1994 period. The outage required 335.2 planned outage hours. Consequently, the actual equivalent availability of 84.7% is adjusted to 91.8% as shown on page 9 of my exhibit.

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Page 4 of 7

Big Bend Unit No. 2 1 On this unit 1344 planned outage hours were originally scheduled to occur during 2 the Winter 1994 period. The actual planned outage activities required 1297.8 3 hours. Consequently, the actual equivalent availability of 59.3% is adjusted to 4 58.4% as shown on page 10 of my exhibit. 5 6 Big Bend Unit No. 3 7 On this unit 840 planned outage hours were orignially scheduled to fall within the 8 Winter 1994 period. Due to a revision of the outage schedule, the outage was 9 shifted to begin after the end of the period, and no planned outage hours fell 10 within the Winter 1994 period. Consequently, the actual equivalent availability 11 of 87.4% is adjusted to 70.6% as shown on page 11 of my exhibit. 12 13 Big Bend Unit No. 4 14 This unit was not originally scheduled to have a planned outage during the Winter 15 1994 period. Due to a revision of the outage schedule, an outage scheduled to 16 occur after the end of the period was rescheduled to take place during the Winter 17 1994 period and required 822.4 planned outage hours. Consequently, the actual 18 equivalent availability of 71.1% is adjusted to 87.6% as shown on page 12 of my 19 exhibit. 20 21 How did you arrive at the applicable equivalent availability points for each unit? 22 **O**. 23 The final adjusted equivalent availabilities for each unit are shown on page 24 Α. 6, column 4, of my exhibit. This number is entered into the respective Generating 25 26 27 Page 5 of 7 GK950001.EI\FPSCDOCS 28

1	Q.	Does this conclude y	your testimony?	204
2				
3	А.	Yes, it does.		
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1	DOCUMENTING ARAMALES
2	DOCKET NO. 950001-EI
3	TAMPA ELECTRIC COMPANY
4	SUBMITTED FOR FILING 6/23/95
5	(PROJECTION)
6	
7	
8	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
9	PREPARED DIRECT TESTIMONY
10	OF
11	GEORGE A. KESELOWSKY
12	
13	
14	Q. Will you please state your name, business address, and employer?
15	
16	A. My name is George A. Keselowsky and my business address is Post Office Box
17	111, Tampa, Florida 33601. I am employed by Tampa Electric Company.
18	
19	Q. Please furnish us with a brief outline of your educational background and business
20	experience.
21	
22	A. I graduated in 1972 from the University of South Florida with a Bachelor of
23	Science Degree in Mechanical Engineering. I have been employed by Tampa
24	Electric Company in various engineering positions since that time. My current
25	position is that of Senior Consulting Engineer - Production Engineering.

i÷.

1	Q.	What are your current responsibilities?
2		
3	Α.	I am responsible for testing and reporting unit performance, and the compilation
4		and reporting of generation statistics.
5		
6	Q.	What is the purpose of your testimony?
7		
8	A.	My testimony presents Tampa Electric Company's methodology for determining
9		the various factors required to compute the Generating Performance Incentive
10		Factor (GPIF) as ordered by this Commission.
11		
12	Q.	Have you preps ed an exhibit showing the various elements of the derivation of
13		Tampa Electric Company's GPIF formula?
14		
15	Α.	Yes, I have prepared, under my direction and supervision, an exhibit entitled
16		"Tampa Electric Company, Generating Performance Incentive Factor" October
17		1995 - March 1996, consisting of 35 pages filed with the Commission on
18		June 23, 1995. (Have identified as Exhibit GAK-2). The data prepared within
19		this exhibit is consistent with the GPIF Implementation Manual previously
20		approved by this Commission.
21		
22		
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Page 2 of 16

1	Q.	Which generating units on Tampa Electric Company's system are included in the
2		determination of your GPIF?
3		
4	Α.	Six of our coal-fired units are included. These are: Gannon Station Units 5 and
5		6; and Big Bend Station Units 1, 2, 3, and 4.
6		
7	Q.	Will you describe how Tampa Electric Company evolved the various factors
8		associated with the GPIF as ordered by this Commission?
9		
10	Α.	Yes. First, the two factors to be used, as set forth by the Commission Staff, are
11		unit availability and station heat rate.
12		
13	Q.	Please continue.
14		
15	A.	A target was established for equivalent availability for each unit considered for
16		this period. Heat rate targets were also established for each unit. A range of
17		potential improvement and degradation was determined for each of these
18		parameters.
19		
20	Q.	Would you describe how the target values for unit availability were determined?
21		
22	A.	Yes I will. The Planned Outage Factor (POF) and the Equivalent Unplanned
23		Outage Factor (EUOF) were subtracted from 100% to determine the target
24		equivalent availability. The factors for each of the 6 units included within the
25		GPIF are shown on page 5 of my exhibit. For example, the projected EUOF for

Gannon Unit Six is 14.3%. The Planned Outage Factor for this same unit during 1 this period is 3.8%. Therefore, the target equivalent availability for this unit 2 3 equals: 4 100% - [(14.3% + 3.8%)] = 81.9%5 6 This is shown on page 4, column 3 of my exhibit. 7 8 How was the potential for unit availability improvement determined? 9 Q. 10 Maximum equivalent availability is arrived at using the following formula. 11 Α. Equivalent Availability Maximum 12 EAF $_{MAX} = 100\% - [0.8 (EUOF_T) + 0.95 (POF_T)]$ 13 14 The factors included in the above equations are the same factors that determine 15 target equivalent availability. To attain the maximum incentive points, a 20% 16 reduction in Forced Outage and Maintenance Outage Factors (EUOF), plus a 5% 17 reduction in the Planned Outage Factor (POF) will be necessary. Continuing with 18 our example on Gannon Unit Six: 19 20 EAF $_{MAX} = 100\% - [0.8 (14.3\%) + 0.95 (3.8\%)] = 84.9\%$ 21 22 This is shown on page 4, column 4 of my exhibit. 23 24 25

1	Q.	How was the potential for unit availability degradation determined?
2		
3	Α.	The potential for unit availability degradation is significantly greater than is the
4		potential for unit availability improvement. This concept was discussed
5		extensively and approved in earlier hearings before this Commission. Tampa
6		Electric Company's approach to incorporating this skewed effect into the unit
7		availability tables is to use a potential degradation range equal to twice the
8		potential improvement. Consequently, minimum equivalent availability is arrived
9		at via the following formula:
10		
11		Equivalent Availability Minimum
12		EAF $_{MIN} = 100\% - [1.4 (EUOF_T) + 1.10 (POF_T)]$
13		
14		Again, continuing with our example of Gannon Unit Six,
15		
16		EAF $_{MIN} = 100\% - [1.4(14.3\%) + 1.1(3.8\%)] = 75.8\%$
17		
18		Equivalent availability MAX and MIN for the other five units is computed in a
19		similar manner.
20		
21	Q.	How do you arrive at the Planned Outage, Maintenance Outage and Forced
22		Outage Factors?
23		
24	Α.	Our planned outages for this period are shown on page 19 of my exhibit. A
25		Critical Path Method (C.P.M.) for each major planned outage which affects GPIF

is included in my exhibit. For example, Gannon Unit 5 is scheduled for a major unit inspection from October 4 to November 17, 1995. A short planned outage is also scheduled from February 3 to February 9, 1996. There are 1248 planned outage hours scheduled for the winter 1995 period, and a total of 4393 hours during this 6 month period. Consequently, the Planned Outage Factor for Unit 5 at Gannon is 1248/4393 x 100% or 28.4%. This factor is shown on pages 5 and 13 of my exhibit. Big Bend Units 1 and 3 have planned outage factors of zero. Gannon Unit 6 has a planned outage factor of 3.8%, Big Bend Unit 2 has a planned outage factor of 21.3, and Big Bend Unit 4 has a planned outage factor of 8.7%.

Q. How did you arrive at the Forced Outage and Maintenance Outage Factors on each unit?

15 Α. Graphs of both of these factors (adjusted for planned outages) vs. time are prepared. Both monthly data and 12 month moving average data are recorded. 16 17 For each unit the most current, March 1995, 12 month ending value was used as 18 a basis for the projection. This value was adjusted up or down by analyzing trends and causes for recent forced and maintenance outages. All projected factors are 19 20 based upon historical unit performance, engineering judgment, time since last 21 planned outage, and equipment performance resulting in a forced or maintenance 22 outage. These target factors are additive and result in a EUOF of 8.0% for 23 Gannon Unit Five. The Equivalent Unplanned Outage Factor (EUOF) for Gannon Unit Five is verified by the data shown on page 13, lines 3, 5, 10 and 11 24 25 of my exhibit and calculated using the formula:

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1		$EUOF = (FOH + EFOH + MOH + EMOH) \times 100$
2		Period Hours
3		or
4		EUOF = $(315 + 38) \times 100 = 8.0\%$
5		4393
6		Relative to Gannon Unit Five, the EUOF of 8.0% forms the basis of our
7		Equivalent Availability target development as shown on sheets 4 and 5 of my
8		exhibit.
9		
10	Q.	Please continue with your review of the remaining units.
11		
12		Big Bend Unit One
13	Α.	The projected EUOF for this unit is 14.6% during this period. This unit will not
14		have a planned outage this period and the Planned Outage Factor is 0.0%. This
15		results in a target equivalent availability of 85.4% for the period.
16		
17		Big Bend Unit Two
18		The projected EUOF for this unit is 10.8%. This unit will have a planned outage
19		during this period and the Planned Outage Factor is 21.3%. Therefore, the target
20		equivalent availability for this unit is 67.9%.
21		
22		Big Bend Unit Three
23		The projected EUOF for this unit is 12.6% during this period. This unit will not
24		have a planned outage this period and the Planned Outage Factor is 0.0% .
25		Therefore, the target equivalent availability for this unit is 87.4%.

1		Big Bend Unit Four
2		The projected EUOF for this unit is 8.4%. This unit will have a planned outage
3		during this period and the Planned Outage Factor is 8.7%. This results in a
4		target equivalent availability of 82.9% for the period.
5		
6		Gannon Unit Five
7		The projected EUOF for this unit is 8.0%. This unit will have a planned outage
8		during this period and the Planned Outage Factor is 28.4%. Therefore, the target
9		equivalent availability for this unit is 63.6%.
10		
11		Gannon Unit Six
12		The projected EUOF for this unit is 14.3%. This unit will have a planned outage
13		during this period and the Planned Outage Factor is 3.8%. Therefore, the target
14		equivalent availability for this unit is 81.9%.
15		
16	Q.	Would you summarize your testimony regarding Equivalent Availability Factor
17		(EAF), Equivalent Unplanned Outage Factor (EUOF) and Equivalent Unplanned
18		Outage Rate (EUOR)?
19		
20	A.	Yes I will. Please note on page 5 that the GPIF system weighted Equivalent
21		Availability Factor (EAF) equals 80.9%. This target compares very favorably to
22		previous GPIF periods in that it is better than four of the five previous periods,
23		as well as the five period average EAF. These targets represent an outstanding
24		level of performance for our system.
25	1	

As you graph and monitor Forced and Maintenance Outage Factors, why are they 1 О. adjusted for planned outage hours? 2 3 This adjustment makes these factors more accurate and comparable. Obviously, 4 Α. 5 a unit in a planned outage stage or reserve shutdown stage will not incur a forced 6 or maintenance outage. Since our units are usually base loaded, reserve shutdown 7 is generally not a factor. To demonstrate the effects of a planned outage, note the 8 EUOR and EUOF for Gannon Unit Six on page 14. During the months of 9 October and November, and for January through March, EUOF and EUOR are equal. This is due to the fact that no planned outages are scheduled during these 10 11 months. During the month of December, EUOR exceeds EUOF. The reason for 12 this difference is the scheduling of a planned outage. The adjusted factors apply 13 to the period hours after planned outage hours have been extracted. 14 Does this mean that both rate and factor data are used in calculated data? 15 Q. 16 17 Α. Yes it does. Rates provide a proper and accurate method of arriving at the unit 18 parameters. These are then converted to factors since they are directly additive. 19 That is, the Forced Outage Factor + Maintenance Outage Factor + Planned 20 Outage Factor + Equivalent Availability = 100%. Since factors are additive. 21 they are easier to work with and to understand. 22 23 24 25

Q. You previously stated that you had developed a CPM for your unit outages. How 1 2 do you use the CPM in conjunction with your planned outages? 3 The CPM's included in this exhibit are preliminary and include only the major 4 Α. 5 work activities we expect to accomplish during the planned outage. Planned outages are very complex and are anticipated months in advance. The actual 6 7 CPM's utilized in the execution of the planned outage are detailed for all major 8 and minor work activities. 9 Since it is important to the company and beneficial to our Customers to control 10 11 outage length, we have implemented a computerized outage management system. 12 Essentially, this tool enables management to monitor outage progress, measure activity results against previously established milestones, and verify timely 13 execution of all critical path events. This results in the shortest outage time 14 possible and the maximum utilization of all resources. Any reduction in planned 15 outage length directly improves unit equivalent availability. 16 17 18 Has Tampa Electric Company prepared the necessary heat rate data required for 0. 19 the determination of the Generating Performance Incentive Factor? 20 21 Target heat rates as well as ranges of potential operation have been Α. Yes. 22 developed as required. 23 24 25

1	Q.	On what basis were the heat rate targets determined?
2		
3	Α.	Average net operating heat rates are determined and reported on a unit basis.
4		Therefore, all heat rate data pertaining to the GPIF is calculated on this basis.
5		
6	Q.	How were these targets determined?
7		
8	А.	Net heat rate data for the three most recent winter periods, along with the
9		PROMOD III program, formed the basis of our target development. Projections
10		of unit performance were made with the aid of PROMOD III. The historical data
11		and the target values are analyzed to assure applicability to current conditions of
12		operation. This provides assurance that any periods of abnormal operations, or
13		equipment modifications having material effect on heat rate can be taken into
14		consideration.
15		
16	Q.	Have you developed the heat rate targets in accordance with GPIF guidelines?
17		
18	Α.	Yes.
19		
20		
21		
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How were the ranges of heat rate improvement and heat rate degradation 1 Q. determined? 2 3 The ranges were determined through analysis of historical net heat rate and net 4 Α. output factor data. This is the same data from which the net heat rate vs. net 5 output factor curves have been developed for each station. This information is 6 7 shown on pages 27 through 32 of my exhibit. 8 Would you elaborate on the analysis used in the determination of the ranges? 9 Q. 10 The net heat rate vs. net output factor curves are the results of a first order curve 11 Α. The standard error of the estimate of this data was 12 fit to histerical data. determined, and a factor was applied to produce a band of potential improvement 13 and degradation. Both the curve fit and the standard error of the estimate were 14 performed by computer program for each station. These curves are also used in 15 post period adjustments to actual heat rates to account for unanticipated changes 16 17 in unit dispatch. 18 19 Q. Can you summarize your heat rate projection for the winter 1995 period? 20 21 Α. Yes. The heat rate target for Big Bend Unit 1 is 9,931 Btu/Net kwh. The range about this value, to allow for potential improvement or degradation, is 22 +184 Btu/Net kwh. The heat rate target for Big Bend Unit 2 is 9,837 Btu/Net 23 kwh with a range of ± 304 Btu/Net kwh. The heat rate target for Big Bend 24 Unit 3 is 9,596 Btu/Net kwh, with a range of ±352 Btu/Net kwh. The heat rate 25

target for Big Bend Unit 4 is 9,989 Btu/Net kwh with a range of ± 322 Btu/Net kwh. The heat rate target for Gannon Unit 5 is 10,178 Btu/Net kwh with a range of ± 418 Btu/Net kwh. The heat rate target for Gannon Unit 6 is 10,348 Btu/Net kwh with a range of ± 347 Btu/Net kwh. A zone of tolerance of ± 75 Btu/Net kwh is included within the range for each target. This is shown on page 4, and pages 7 through 12 of my exhibit.

Q. Do you feel that the heat rate targets and ranges in your projection meet the criteria of the GPIF and the philosophy of this Commission?

11 A. Yes I do.

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

A. The next step is to calculate the savings and weighing factor to be used for both average net operating heat rate and equivalent availability. This is shown on pages 7 through 12. Our PROMOD III cost simulation model was used to calculate the total system fuel cost if all units operated at target heat rate and target availability for the period. This total system fuel cost of \$103,635,600 is shown on page 6 column 2.

The PROMOD III output was then used to calculate total system fuel cost with each unit individually operating at maximum improvement in equivalent availability and each station operating at maximum improvement in average net

operating heat rate. The respective savings are shown on page 6 column 4. After 1 all the individual savings are calculated, column 4 is totaled: \$3,751,400 reflects 2 the savings if all units operated at maximum improvement. A weighting factor 3 for each parameter is then calculated by dividing individual savings by the total. 4 For Big Bend Unit One, the weighting factor for equivalent availability is 6.04% 5 as shown in the right hand column on page 6. Pages 7 thru 12 show the point 6 table, the Fuel Savings/(Loss), and the equivalent availability or heat rate value. 7 The individual weighting factor is also shown. For example, on Big Bend Unit 8 One, page 9, if the unit operates at 88.3% equivalent availability, fuel savings 9 would equal \$226,700 and 10 equivalent availability points would be awarded. 10 11 a e Generating Performance Incentive Factor Reward/Penalty Table on page 2 12 is a summary of the tables on pages 7 through 12. The left hand column of this 13 document shows the Tampa Electric Company's incentive points. The center 14 column shows the total fuel savings and is the same amount as shown on page 6, 15 column 4, \$3,751,400. The right hand column of page 2 is the estimated reward 16 17 or penalty based upon performance. 18 How were the maximum allowed incentive dollars determined? 19 Q. 20 Referring to my exhibit on page 3, line 8, the estimated average common equity 21 Α. for the period October 1995 - March 1996 is shown to be \$1,020,616,000. This 22 produces the maximum allowed jurisdictional incentive dollars of \$2,067,145 23 24 shown on line 15.

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1	Q.	Is there any other constraint set forth by this Commission regarding the magnitude
2		of incentive dollars?
3		
4	Α.	Yes. Incentive dollars are not to exceed fifty percent of fuel savings. Page 2 of
5		my exhibit demonstrates that the incentive amount calculated on page 3 has been
6		reduced to meet this constraint.
7		
8	Q.	Do you wish to summarize your testimony on the GPIF?
9		
10	A.	Yes. To the best of my knowledge and understanding, Tampa Electric Company
11		has fully complied with the Commission's directions, philosophy, and
12		methodology in our determination of Generating Performance Incentive Factor.
13		The GPIF for Tampa Electric Company is expressed by the following formula for
14		calculating Generating Performance Incentive Points (GPIP):
15		$GPIP = (0.0057 \text{ EAP}_{GN5} + 0.0347 \text{ EAP}_{GN6})$
16		$+ 0.0604 \text{ EAP}_{BB1} + 0.0488 \text{ EAP}_{BB2}$
17		$+ 0.0548 \text{ EAP}_{BB3} + 0.0316 \text{ EAP}_{BB4}$
18		+ 0.0773 HRP_{GNS} + 0.1286 HRP_{GN6}
19		$+ 0.0982 \text{ HRP}_{BB1} + 0.1294 \text{ HRP}_{BB2}$
20		$+ 0.1903 \text{ HRP}_{BB3} + 0.1402 \text{ HRP}_{BB4}$
21		Where:
22		GPIP = Generating performance incentive points.
23		EAP = Equivalent availability points awarded/deducted for
24		Units 5 and 6 at Gannon and Units 1, 2, 3 and 4 at Big Bend.
25		

1		HRP = Average net heat rate points awarded/deducted for Units 5
2		and 6 at Gannon and Units 1, 2, 3 and 4 at Big Bend.
3		
4	Q.	Have you prepared a document summarizing the GPIF targets for the October
5		1995 - March 1996 period?
6		
7	А.	Yes. The availability and heat rate targets for each unit are listed on attachment
8		"A" to this testimony entitled "Tampa Electric Company GPIF Targets,
9		October 1, 1995 - March 31, 1996".
10		
11	Q.	Do you wish to sponsor an exhibit consisting of estimated unit performance data
12		supporting he fuel adjustment?
13		
14	A .	Yes I do. (Have identified as Exhibit GAK-3).
15		
16	Q.	Briefly describe this exhibit.
17		
18	A.	This exhibit consists of 22 pages. This data is Tampa Electric Company's
19		estimate of the Unit Performance Data and Unit Outage Data for the October
20		1995 - March 1996 period.
21		
22	Q.	Does this conclude your testimony?
23		
24	Α.	Yes.
25	1	

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TAMPA ELECTRIC COMPANY 221 DOCKET NO. 950001-EI OIL BACKOUT SUBMITTED FOR FILING 06/23/95

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
3		OF
4		W. N. CANTRELL
5		
6	۵.	Please state your name, address and occupation.
7		
8	А.	My name is William N. Cantrell. My mailing address is
9		P. O. Box 111, Tampa, Florida 33601, and my business
10		address is 6820 South Tamiami Trail, North Ruskin, Florida
11		33570. I am Vice President-Energy Supply of Tampa Electric
12		Company.
13		
14	۵.	Please furnish a brief outline of your educational
15		background and business experience.
16		
17	А.	I was educated in the public schools of Tampa, Florida and
18		received a Bachelor of Science degree in Electrical
19		Engineering from the Georgia Institute of Technology in
20		1974. I am a registered Professional Engineer licensed in
21		the State of Florida. I also received a Master of Business
22		Administration degree in 1979 from the University of Tampa.
23		I have been employed at Tampa Electric Company since June
24		1975. Since that time I have served as Manager of

Generation Planning, Assistant Director, Budgets and 1 Director of Fuels. In 1987, I was elected Vice Presidentof 2 the company. In 1994, I was elected to my current position 3 as Vice President-Energy Supply. 4 5 Will you describe some of the responsibilities of your 6 ٥. present position? 7 8 As Vice President - Energy Supply, I am responsible for the 9 A. engineering, operation, maintenance, and construction of 10 the power production facilities including safety of 11 personnel and equipment, security, training, control of 12 costs, and various personnel and administrative functions. 13 I am also responsible for environmental matters and fuel 14 procurement. 15 16 Mr. Cantrell, what is the objective of your testimony? 17 Q. 18 The objective of my testimony is to present the cost 19 Α. associated with the conversion of four of Tampa Electric 20 Company's generating units from oil to coal. In addition, 21 I will sponsor the calculation of the operation and 22 maintenance expense differential and the determination of 23 fuel savings for the projection period and the projected 24 payoff period. 25

222

1	Q.	How does your testimony relate to the testimony of other
2		witnesses in this proceeding?
3		
4	A.	Ms. Elizabeth Townes is sponsoring the overall calculation
5		of the company's Oil Backout Cost Recovery Factor for the
6		period October 1995 - December 1995, as well as the
7		estimated payoff period for the total project. In these
8		calculations, Ms. Townes develops the basic revenue
9		requirements of the project using the actual cost of the
10		conversion assets, and my projection of the operation and
11		maintenance expense differential and the fuel savings
12		resulting from the conversion. Kilowatt-hour sales and
13		fuel costs are consistent with those used in the company's
14		fuel adjustment filing.
15		
16	۵.	Have you prepared documents in support of your testimony?
17		
18	А.	Yes. I have prepared portions of documents which are
19		included in a composite Exhibit No. (WNC/EAT-2) titled
20		"Schedules Supporting Oil Backout Cost Recovery Factor" and
21		Exhibit No. (WNC/EAT-3) titled "Comparison of Projected
22		Payoff with Original Estimate, as of May 1995." These
23		exhibits are being jointly sponsored by Ms. Townes and me.
24		
25	Q.	What is the status of the project?

The conversion of Gannon units 1 through 4 from oil to coal 1 Α. 2 is complete. The units were placed into commercial service as follows: 3 4 5 Unit 1 October 6, 1985 Unit 2 May 23, 1985 6 7 Unit 3 July 12, 1984 November 7, 1983 8 Unit 4 9 What is the cost of the Oil Backout assets which are 10 Q. 11 included in the cost recovery computation in this 12 proceeding? 13 The total cost of the conversion project to be recovered 14 λ. through the Clause is \$140.5 million. No additional 15 expenditures are anticipated. 16 17 18 What are the projected fuel savings which will occur as a Q. result of the operation of the converted Gannon units 19 during the projection period? 20 21 As shown on Line 4 of Document 1, total fuel savings 22 Α. resulting from the project for the period October 1995 -23 December 1995 are expected to be \$1,305,690. This amount 24

is based upon the difference in fuel expenses from

25

production costing runs which simulate dispatch of all generating units with and without the conversion of the Gannon units. The assumptions for sales, unit ratings, heat rates, coal and No. 6 oil prices and availability factors are consistent with those used by the company in its fuel adjustment filing in this docket. Have you calculated the projected operating and maintenance expense differential of the project for October 1995 -December 1995? Yes, I have calculated the operation and maintenance expense differential for this period to be \$824,880 as shown on line 9 of Document 1. Please explain how the operation and maintenance expense differential was calculated.

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19 A. The operation and maintenance differential consists of the 20 oil/non-oil operating expense differential and other 21 projected costs resulting from the Oil Backout project. 22 This differential was calculated by applying a percentage 23 representing the increased operation and maintenance costs 24 associated with coal-firing to total projected operation 25 and maintenance expenses pertaining to the converted Gannon

units. The percentage was derived by comparing histor.cal 1 operation and maintenance costs for Gannon units 1-4 as 2 oil-fired to historical operation and maintenance costs for 3 Gannon units 5 and 6 as coal-fired. Specifically 4 identifiable costs to be incurred to comply with the Oil 5 Backout Cost Recovery Rule were added to the operating 6 expense differential to derive the total operation and 7 maintenance differential. 8 9 The operation and maintenance differential as shown on 10 Exhibit No. (WNC/EAT-3) "Comparison of Projected Payoff 11 with Original Estimate, as of May 1995, " is now higher than 12 the original estimate since the original estimate did not 13 include maintaining the assets required for dual firing 14 capability. In addition, the current estimate is based on 15 more detailed engineering estimates and actual experience 16 associated with the converted units. 17 18 Mr. Cantrell, please explain the decrease in fuel savings 19 0. indicated on the projected payoff exhibit. 20 21 The reduction in fuel savings is due to a decrease in the 22 Α. projected differential between the price of oil and the 23 price of coal, and a decrease in the projected system 24 energy requirements. The current estimate of fuel savings 25

226

ı		is based on long-term fuel price and energy projections
2		prepared in conjunction with this current fuel adjustment
з		clause filing.
4		
5	۵.	Does this conclude your testimony?
6		
7	А.	Yes.
8		
9		E. Halle
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DOCKET NO. 950001-EI TAMPA ELECTRIC COMPANY OIL BACKOUT SUBMITTED FOR FILING 06/23/95

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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
з		OF
4		ELIZABETH A. TOWNES
5		
6	Q.	Would you please state your name and address?
7		
8	А.	My name is Elizabeth A. Townes. My business address is 702
9		North Franklin Street, Tampa, Florida 33602.
10		
11	Q.	Please describe your educational background and experience.
12		
13	A.	I received a Bachelor of Business Administration degree in
14		Accounting from Florida International University in 1978
15		and a Master of Business Administration from the University
16		of Tampa in 1982. I am a Certified Public Accountant in
17		the state of Florida and a Member of the Florida Institute
18		of Certified Public Accountants and American Institute of
19		Certified Public Accountants.
20		
21		Prior to joining Tampa Electric Company in January 1982, I
22		was employed by General Telephone Company of Florida. I
23		joined Tampa Electric as a regulatory accountant. In
24		September 1983, I was promoted to Manager-Regulatory
25		Control and subsequently in February 1991, I was promoted

1		to my current position as Assistant Controller.
2		
3		My current responsibilities include accounting for fuel
4		activities, conservation, oil backout and other regulatory
5		accounting areas. I am also responsible for the revenue
6		and financial reporting functions and accounts payable.
7		
8	Q.	Ms. Townes, what is the purpose of your testimony in this
9		proceeding?
10		
11	А.	The purpose of my testimony is to present a summary
12		c. putation of the estimated Oil Backout Cost Recovery
13		Factor to be collected during the three-month projection
14		period beginning October 1995 and ending December 1995,
15		including the estimated true-up adjustment required as of
16		September 1995.
17		
18	۵.	Have you prepared documents in support of your testimony?
19		
20	А.	Yes. I have jointly prepared with Mr. Cantrell a composite
21		exhibit titled "Schedules Supporting Oil Backout Cost
22		Recovery Factor" indicated as Exhibit No. (WNC/EAT-2).
23		This exhibit is a summary of the detailed computations,
24		prepared under my supervision and direction, to derive the
25		estimated Oil Backout Cost Recovery Factor. This exhibit

1 consists of six documents and I will make references in my 2 testimony to each of the documents and explain the 3 development, or source, of each line item. I have also jointly prepared with Mr. Cantrell Exhibit No. (WNC/EAT-3) 4 titled "Comparison of Projected Payoff with Original 5 Estimate, as of May 1995." This exhibit provides a 6 7 comparison of the estimated payback of the Gannon conversion project with the original projection submitted 8 during the 1982 qualification hearings. 9 10 Ms. Townes, would you first please summarize the key 11 Q. ass mptions used in your derivation of the estimated 12 13 factor? 14 15 A. Yes. The key assumptions involved with the determination of the factor for the projection period are the estimated 16 fuel savings, the estimated revenue requirements associated 17 with the converted Gannon Units and common facilities, the 18 19 estimated energy sales, and the estimated true-up as of 20 September 1995. 21 What is the estimated Oil Backout Cost Recovery Factor 22 ο. which you have determined for the three-month projection 23 period ended December 1995? 24 25

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1	А.	The factor which I have determined to be appropriate for
2		the projection period is .058 cents per kilowatt hour.
3		This factor is shown on line 19, of Document 1.
4		
5	۵.	Please explain the computations shown on Document 1.
6		
7	А.	The computations begin with the estimated energy sales
8		during the projection period shown on line 1. These
9		amounts are consistent with the company's fuel adjustment
10		filing in this docket. Lines 2 through 4 reflect the
11		c timated fuel savings supplied by Mr. Cantrell. Lines 5
12		through 10 reflect a computation of the estimated revenue
13		requirements associated with the Gannon Oil Backout
14		Project. Lines 11 through 13 reflect a computation of the
15		estimated net savings and the amount available for
16		additional depreciation under the Clause, as determined on
17		a six-month basis. Lines 14 through 19 reflect the
18		computation of the Oil Backout Cost Recovery Factor
19		including the estimated net true-up adjustment required as
20		of September 1995.
21		
22	۵.	Ms. Townes, please explain your computation of revenue
23		requirements shown on lines 5 through 10.
24		
25	А.	The computation begins on line 5 with the estimated

straight-line depreciation expense associated with the various components of the Plant in Service investment. The monthly provisions for depreciation reflected on line 5 are based on the currently approved depreciation rates for the various components of the Plant in Service investment. Line 6 reflects the estimated interest carrying cost of the Plant in Service investment. The projected monthly interest expense is determined based on the projected debt cost applied to the average debt balance for each month. Income tax expense, shown on line 7, is computed on Document 3. The estimated monthly property tax expense is shc 1 as Taxes Other Than Income Taxes on line 8. The amounts shown on line 9 represent the operation and maintenance expense differential which was furnished by Mr. Cantrell. Total revenue requirements reflected on line 10 represent the sum of all revenue requirement components

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Q. Ms. Townes, would you please explain Document 2 reflecting your computation of the Plant in Service investment?

shown on lines 5 through 9.

A. Yes. Line 1 of Document 2 reflects the actual unrecovered
investment in Plant in Service at the beginning of each
month shown. Since no additional expenditures are
currently anticipated, line 2 indicates no additions to

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1		Plant in Service. Line 5 reflects the provision for
2		depreciation for the period. These are the same amounts
3		shown on line 5 of Documents 1 and 5. Line 6 reflects the
4		additional depreciation permitted under the Oil Backout
5		Recovery Clause, equivalent to 2/3 of the estimated net
6		savings which is shown on line 13 of Documents 1 and 5.
7		Line 7 reflects the estimated net unrecovered investment in
8		Plant in Service at the end of the month.
9		
10	Q.	Ms. Townes, would you please explain further the
11		computation of income tax expense reflected on line 7 of
12		Documents 1 and 5?
13		
14	A.	Yes. The computation of these amounts is shown on Document
15		3. Referring to Document 3, lines 1 through 5 agree with
16		amounts shown as components of revenue requirements
17		including those associated with additional depreciation, on
18		lines 5, 6, 8, 9, 10 and 13 on Documents 1 and 5. Line 7
19		reflects the portion of depreciation on line 2 which
20		represents depreciation of the equity portion of AFUDC
21		capitalized during construction. As this amount is not tax
22		deductible, it represents a "permanent" difference between
23		book and tax basis of plant. Thus, this portion of
24		depreciation expense for each month must be added back to
25		book income to compute income before income taxes on line

Line 9 reflects the income tax expense before ratable 1 8. amortization of investment tax credits using an effective 2 income tax rate of 38.575%. Line 10 reflects the ratable 3 amortization of investment tax credit consistent with the 4 investment recovery via depreciation expense. Line 11 5 reflects the total income tax expense which agrees with 6 amounts shown on line 7 of Documents 1 and 5. 7 8 Ms. Townes, you indicated earlier that a key assumption in 9 Q. determining the factor for this projection period is the 10 estimated true-up adjustment required for the six-month 11 Please explain the period ending September 1995. 12 calculation of the net true-up adjustment. 13 14 The projected cumulative net true-up adjustment as of 15 Α. September 1995 represents an overrecovery of \$909,253 as 16 shown on line 15 of Document 1. The true-up adjustment is 17 calculated on Documents 4, 5 and 6. 18 19 The computation begins on Document 4 with the estimated 20 tariff revenues to be billed under the Clause for each 21 month in the period from April 1995 through September 1995, 22 shown on Line 1. The Oil Backout Revenue applicable to 23 this period is then reduced by the estimated/actual cost 24 recovery under the Clause for each month in the period from 25

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April 1995 through September 1995. The amounts on Line 4 1 are calculated on Document 5. To this true-up provision 2 shown on Line 5 by month, is added the beginning of the 3 month true-up and interest provision, shown on Line 6 for 4 a cumulative end of the period net true-up before interest, 5 shown on Line 8. The resulting estimated true-up provision 6 at September 1995, of \$909,253 is shown on Line 10 of 7 Document 4. 8 9 What was the projected true-up amount for the six months 10 Q. ended March 1995 which was included in the Oil Backout cost 11 recovery for the period April 1995 - September 1995? 12 13 In the filing dated January 17, 1995, the company projected 14 А. a cumulative overrecovery of \$153,138 as of March 1995 15 currently being collected. The actual which is 16 overrecovery at March 1995 was \$375,548, as reflected on 17 line 6 of Document 4. The actual overrecovery at March 31, 18 19 1995, is due to lower than anticipated operating expense. 20 What is the status of the estimated payback of the Gannon 21 Q. conversion project? 22 23 As shown on Exhibit No. (WNC/EAT-3), titled "Comparison of 24 А. Projected Payoff with Original Estimate, as of May 1995," 25

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cost recovery is now projected to end on January 1, 1996. 1 On January 1, 1996, the oil-backout cost recovery clause 2 will be eliminated pursuant to PSC Order No. PSC-95-0580-3 Any remaining true-up FOF-EI, Docket No. 950379-EI. 4 dollars related to oil-backout costs for 1995 will be 5 recovered as a line item adjustment to fuel cost through 6 the fuel and purchased power cost recovery clause during 7 the period April 1, 1996 through September 30, 1996. 8 9 Please explain any significant variances noted in the 10 Q. payoff comparison. 11 12 Actual straight-line depreciation is less than the original 13 A. projection in 1982. This is due to the 1982 estimation of 14 early retirement of existing plant. 15 16 Significant variances noted in the cost of capital and 17 income tax components are due to the current estimate being 18 based on the approved 100% debt financing; whereas, the 19 original estimate was based on conventional financing, 20 which included a combination of debt and equity. Since 21 conventional financing included an equity component, income 22 taxes were provided on the return associated with the 23 equity component. 24

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An estimate for taxes other than income taxes was not included in the original estimate. An estimate is now included since property taxes can be more reasonably determined.

In the original estimate, revenue taxes were included as part of the base revenue requirement (the sum of straightline depreciation, cost of capital, income taxes, taxes 8 other than income taxes, operation and maintenance differential, and revenue taxes). Revenue taxes are now excluded from the base revenue requirement. The Regulacory 11 Assessment fee is included in the total to be billed by 12 grossing up the Oil Backout factor. 13

The net result of the changes between the original and 15 current estimate is a decrease in base revenue requirement. 16 However, the expected additional depreciation has declined 17 due to reduced fuel savings. Additional depreciation is 18 computed as two-thirds of the excess of fuel savings over 19 the base revenue requirement determined on a six-month 20 filing period as required under the Oil Backout Clause. 21 22

Ms. Townes, does this conclude your testimony? ο.

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Yes, it does. Α.

DOCKET NO. 950001-EI TAMPA ELECTRIC COMPANY SUBMITTED FOR FILING 06/23/95

1	1	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
3		OF
4		WILLIAM N. CANTRELL
5		
6	Q.	Please state your name, address and occupation.
7		
8	А.	My name is William N. Cantrell. My mailing address is P.O.
9		Box 111, Tampa, Florida 33601, and my business address is
10		6820 South Tamiami Trail, North Ruskin, Florida 33570. I
11		am Vice President-Energy Supply of Tampa Electric Company.
12		
13	۵.	Please furnish a brief outline of your educational
14		background and business experience.
15		
16	А.	I was educated in the public schools of Tampa, Florida and
17		received a Bachelor of Science degree in Electrical
18		Engineering from the Georgia Institute of Technology in
19		1974. I am a registered Professional Engineer licensed in
20		the State of Florida. I also received a Master of Business
21		Administration degree in 1979 from the University of Tampa.
22		I have been employed at Tampa Electric Company since June
23		1975. Since that time, I have served as Manager of
24		Generation Planning, Assistant Director, Budgets and
25		Director of Fuels. In 1987, I was elected Vice President
26	1	of the company. In 1994, I was elected to my current

1		position as Vice President-Energy Supply.
2		
3	Q.	Will you describe some of the responsibilities of your
4		present position?
5		
6	A.	As Vice President - Energy Supply, I am responsible for the
7		engineering, operation, maintenance, and construction of
8		the power production facilities including safety of
9		personnel and equipment, security, training, control of
10		costs, and various personnel and administrative functions.
11		I am also responsible for environmental matters and fuel
12		procurement.
13		
14		
15	Q.	Please state the purpose of your testimony.
16		
17	А.	The purpose of my testimony is to report to the Commission
18		the actual 1994 costs of Tampa Electric's affiliated coal
19		and coal transportation transactions compared to the
20		benchmark prices calculated in accordance with Order No.
21		20298 (coal transportation) and Order No. PSC-93-0443-FOF-
22		EI ("Order No. 93-0443") (coal). I conclude that the 1994
23		prices paid by Tampa Electric to its affiliates TECO
24		Transport and Trade Company and Gatliff Coal are reasonable
25		and prudent.

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1	Q.	Have you prepared an exhibit which you sponsor in this
2		proceeding?
3		
4	А.	Yes. Exhibit No. (WNC-1) titled "Exhibit of William N.
5		Cantrell", consisting of 2 documents, was prepared under my
6		direction and supervision.
7		
8		AFFILIATED COAL TRANSPORTATION PRICES
9		
10	۵.	Were Tampa Electric's actual affiliated coal transportation
11		prices for 1994 at or below the transportation benchmark?
12		
13	А.	Yes, they were. This is reflected in Document No. 1 of my
14		exhibit.
15		
16	۵.	Were Tampa Electric's actual 1994 affiliated coal prices at
17		or below the benchmark as established in Order No. 93-0443?
18		
19	A.	Yes, they were. This is reflected in Document No. 2 of my
20		exhibit.
21		
22	۵.	Please summarize your testimony.
23		
24	Α.	My testimony justifies the prices paid for coal and coal
25		transportation by Tampa Electric Company in 1994 to its

1		affiliated suppliers, Gatliff Coal and TECO Transport and
2		Trade. I demonstrate that the average prices for the year
3		1994 for all coal and coal waterborne transportation
4		services were at or below the appropriate benchmark
5		calculations as directed by Order No. 20298 and Order No.
6		93-0443 of this Commission. Therefore, Tampa Electric
7		should recover its payments for coal and coal
8		transportation made during 1994.
9		
10	Q.	Does this conclude your testimony?
11		
12	A .	Yes, it does
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1	COMMISSIONER DEASON: So at this point we have a
2	full and complete record?
3	MS. JOHNSON: That's correct.
4	Staff would request that the Commission approve the
5	stipulation as identified in the Prehearing Order.
6	COMMISSIONER DEASON: We have the stipulations
7	presently before us. Before we vote on that, I've already
8	shared some information with Commissioner Kiesling that was
9	just presented to me by Staff. I'll also show that to
10	Commissioner Garcia, especially the comparison of the fuel
11	factors from the previous period and what the stipulated
12	factors are today. And it shows the changes in those factors.
13	Commissioner Garcia, would you like to review that?
14	Okay, Commissioners, we have the full record before
15	us. All issues have been stipulated. The stipulations are
16	currently before us. We can approve those. If there are any
17	problems with any of these stipulations, we can at this time
18	take those up and discuss those.
19	COMMISSIONER KIESLING: Well, I have no problems
20	within the stipulations having reviewed them, and I would move
21	that we adopt the stipulations and move the issues as set
22	forth.
23	COMMISSIONER DEASON: And we have a motion. Is
24	there a second to that motion?
25	COMMISSIONER GARCIA: Yeah, I'll second the motion.

FLORIDA PUBLIC SERVICE COMMISSION

1	COMMISSIONER DEASON: The motion has been made and
2	seconded. Show that the stipulations are approved
3	unanimously. And I believe that would conclude the 0001
4	docket?
5	MS. JOHNSON: That's correct.
6	(Thereupon, the hearing concluded at 10:50 a.m.)
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	FLORIDA PUBLIC SERVICE COMMISSION

STATE OF FLORIDA) 1 CERTIFICATE OF REPORTER COUNTY OF LEON 2) I, ROWENA NASH HACKNEY, Official Commission 3 Reporter, 4 DO HEREBY CERTIFY that the Hearing in Docket No. 950001-EI was heard by the Florida Public Service Commission 5 at the time and place herein stated; it is further 6 CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my 7 direct supervision; and that this transcript, consisting of Volumes 1 and 2, 243 pages, constitutes a true transcription 8 of my notes of said proceedings. 9 DATED this 10th day of August, 1995. 10 11 ROWENA NASH HACKNEY 12 Official Commission Reporter (904) 413-6736 13 14 15 16 17 18 19 20 21 22 23 24 25 FLORIDA PUBLIC SERVICE COMMISSION

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