ORIGINAL

TAMPA ELECTRIC COMPANY DOCKET NO. 980007-EI FILED 10/05/1998

1		BEFORE THE PUBLIC SERVICE COMMISSION
2		PREPARED DIRECT TESTIMONY
3	1917	OP OP
4		KAREN O. ZWOLAK
5	200	
6	Q.	Please state your name, address, occupation and employer.
7		
8	λ.	My name is Karen O. Zwolak. My business address is 702
9		North Franklin Street, Tampa, Florida 33602. I am employed
10		by Tampa Electric Company in the position of Manager,
11		Energy Issues in the Electric Regulatory Affairs
12	1	Department.
13		
14	Q.	Please provide a brief outline of your educational
15		background and business experience.
16		
17	A.	I received a Bachelor of Arts Degree in Microbiology in
18		1977 and a Bachelor of Science degree in Chemical
19		Engineering in 1985 from the University of South Florida.
20		I began my engineering career in 1986 at the Florida
21		Department of Environmental Regulation and was employed as
22		a Permitting Engineer in the Industrial Wastewater Program.
23	2000	In 1990, I joined Tampa Electric Company as an engineer in
24	M	the Environmental Planning Department and was responsible
25	5.6	for permitting and compliance issues relating to wastewater
	100	

treatment and disposal. In 1995, I transferred to Tampa Electric's Energy Supply Department and assumed the duties of the plant chemical engineer at the F. J. Gannon Station. In 1997, I was promoted to Manager, Energy Issues in the Electric Regulatory Affairs Department. My present responsibilities include the areas of fuel adjustment, capacity cost recovery, environmental filings and rate design.

Q. What is the purpose of your testimony in this proceeding?

The purpose of my testimony is to present, for Commission review and approval, both the calculation of the revenue requirements and the estimation of the environmental cost recovery factors for the billing period January 1999 through December 1999. My testimony also addresses the recovery of 0 & M costs associated with the environmental compliance activities for the period January 1, 1999 through December 31, 1999 as well as the actual/estimated costs for the April 1998 through December 1998 period.

Q. Have you provided any exhibits which show the determination of the recoverable environmental cost for the period of January 1, 1999 through December 31, 1999?

Yes. Exhibit No. ___ (KOZ-1) includes Forms 42-1P through 42-7P, prepared under my direction and supervision calculate and summarize the capital and 0 & M costs, and develop the environmental cost recovery factors for 1999 which are being presented for recovery at this time. Forms 42-1E through 42-8E, also prepared under my direction and supervision, calculate the current period true-up amount to be refunded for 1999 and are provided in Exhibit No. ____ (KOZ-1).

Q. What has Tampa Electric calculated as the total true-up to be applied in the period January 1999 through December 1999?

A. The total true-up applicable for this period is an overrecovery of \$1,611,312. This true-up consists of a final true-up overrecovery of \$351,717 and a five-month actual/one month estimated true-up overrecovery of \$386,745 for the April 1998 through September 1998 period plus an estimated true-up overrecovery of \$872,850 for the period October 1998 through December 1998. A detailed calculation supporting the estimated true-up is shown on Schedules 42-1E through 42-8E of Exhibit No. ___ (KOZ-1).

Q. How do the actual/estimated project O&M expenses for April

1998 through December 1998 period compare with the original projection?

A. As shown on Form 42-4E, total O&M activities were \$1,302,574 or 43.7% lower than projected costs. This variance is primarily attributable to two projects.

In June 1998 Tampa Electric received approval from the Federal Energy Regulatory Commission to collect SO₂ allowance costs from incremental sales. (The SO₂ costs charged to interchange sales are based on the projected replacement cost of SO₂ allowances.) Since this time, Tampa Electric has been collecting revenues including SO₂ allowance costs and crediting back the jurisdictional retail customers. This credit is now reflected in the costs passed through the ECRC. Overall, retail customers are projected to realize credits totaling \$508,157 for October, November and December of 1998 based on the impact of estimated economy sales.

2) The FMPA SO₂ credit resulted in a decreased credit to Tampa Electric's jurisdictional retail customers due to differences in actual unit generation and allowance costs. Q. Are there any new O & M activities and associated expenses for which Tampa Electric is seeking cost recovery?

A. Yes. Schedule 42-2P itemizes 13 projects in which 0 & M costs are to be recovered. Of these 13 0 & M compliance activities, the only 0 & M project and associated expenses which have not yet been reviewed by the Commission relate to the National Pollutant Discharge Elimination System (NPDES) Annual Surveillance Fee.

As Mr. Nelson states in his testimony, the Florida Department of Environmental Protection (FDEP), in 1995, enacted a rule requiring payment of annual surveillance fees for the administration of the NPDES program. Tampa Electric Company is seeking, prospectively, recovery of these costs in this projection filing. Because this is a new rule that had not been anticipated at the time of Tampa Electric's rate case and the costs were incurred after April 13, 1993, these costs are appropriate for recovery through the clause.

Q. Has Tampa Electric Company included any capital project costs for recovery through the Environmental Cost Recovery Clause?

Tampa Electric has included fifteen capital projects 1 for recovery through the Environmental Cost Recovery 2 Clause. Of these fifteen projects, seven new projects have 3 been included. As Mr. Nelson points out in his prepared 4 testimony, five of these projects are projects required to 5 meet the NOx emission requirements of Title IV of the Clean 6 Air Act Amendments of 1990. These projects include Big 7 Bend Units 1 and 2 classifier Replacements, Gannon Units 5 8 Gannon coal crushers. 9 and 6 classifier additions, and Additionally, Tampa Electric Company will be extending the 10 stacks at Gannon Units 5 and 6 to meet Title V permitting 11 requirements. 12

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Q. Are there currently any new capital projects already in service for which Tampa Electric is seeking recovery?

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A. Yes. The Gannon Unit 5 classifier addition was in service as of December 1997 and the Big Bend Unit 2 classifier replacement went into service in May 1998. These projects are being considered together as the basis of Tampa Electric's NOx compliance plan. Capital expenditures for these in-service project are being recovered on a prospective basis and no construction carrying costs are included.

Do you have any exhibits showing the calculation of the 1 recoverable capital project costs for 1999? 2 3 Schedule 42-3P summarizes all the cost estimates Yes. 4 5 projected for these projects and Schedules 42-4P pages 1 through 8, which were prepared under my direction and 6 supervision, show the calculations of these costs. 7 8 Do you have an exhibit which shows the description and 9 progress reports for environmental compliance activities 10 and projects? 11 12 Project descriptions, as well as the projected 13 recoverable cost estimates, are provided in Schedules 42-14 5P, pages 1 through 17. 15 16 What are the total projected jurisdictional costs estimated 17 Q. 18 for environmental compliance in the year 1999? 19 20 A. Based on cost estimates for the O & M and capital projects 21 summarized on Schedules 42-3P and 42-4P, the total 22 jurisdictional amount to be recovered through 23 Environmental Cost Recovery Clause calculated on Schedule

42-1P, is \$6,127,114.

24

Q. How were environmental cost recovery factors calculated?

A. The environmental cost recovery factors were calculated as shown on Schedules 42-6P and 42-7P. The demand allocation factors are calculated by determining the percentage each rate class contributes to the monthly system peaks. This information is obtained from Tampa Electric's 1997 load data study and is provided in Exhibit No.___ (KOZ-1). The energy allocation factors are determined by the percentage each rate class contributes to total kWh sales, as adjusted for losses, for each rate class. Form 42-7P presents the calculation of the proposed Environmental Cost Recovery

Q. Are the costs Tampa Electric is requesting for recovery through the Environmental Cost Recovery Clause for the period January 1999 through December 1999 consistent with criteria established for environmental cost recovery in PSC-94-0044-FOF-EI?

Clause factors by rate class.

A. Yes, they are. The costs identified for recovery through the Environmental Cost Recovery Clause are costs that:

 have been prudently incurred or will be incurred after April 13, 1993;

1		2. the activities are legally required to comply with a
2		governmentally imposed environmental regulation which
3		was enacted, became effective or whose effect was
4		triggered after the company's last test year upon
5	114	which rates are based; and
6		
7	113	3. such costs are not recovered through some other cost
8		recovery mechanism or through base rates.
9		
10	Q.	What are the Environmental Cost Recovery clause billing
11		factor rates for which you are seeking approved new
12		factors?
13		
14	A.	The computation of the billing factors is shown on Form 42-
15		7P of my exhibit. In summary, the billing factors are:
16		
17	2 47 (2)	Rate Class Factor (¢/kWh)
18		RS, RST 0.029
19		GS, GST, TS 0.029
20		GSD, GSDT 0.028
21		GSLD, GSLDT, SBF 0.028
22		IS1, IST1, SBI1,
23		SBIT1, IS3, IST3,

0.026

0.028

SBI3, SBIT3

24

1	Q.	When does Tampa Electric propose to collect these
2		environmental cost recovery charges?
3		
4	A.	They should go into effect concurrent with the first
5		billing cycle in January 1999.
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7	Q.	Does this conclude your testimony?
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9	A.	Yes, it does.
- 1		
	-	
. 21		

EXHIBIT NO. DOCKET NO. 980007-EI
TAMPA ELECTRIC COMPANY (KOZ-1)
FILED: OCTOBER 5, 1998

ENVIRONMENTAL COST RECOVERY COMMISSION FORMS

42-1P THROUGH 42-7P JANUARY 1999 THROUGH DECEMBER 1999

42-1E THROUGH 42-8E APRIL 1998 THROUGH DECEMBER 1998

ENVIRONMENTAL COST RECOVERY COMMISSION FORMS

42-1P THROUGH 42-7P JANUARY 1999 THROUGH DECEMBER 1999

42-1E THROUGH 42-8E APRIL 1998 THROUGH DECEMBER 1998

DOCUMENT NO.	TITLE	PAGE NO.
1	Forms 42-1P	1
2	Forms 42-2P	2
3	Forms 42-3P	3
4	Forms 42-4P	4
5	Forms 42-5P	19
6	Forms 42-6P	36
7	Forms 42-7P	37
8	Forms 42-1E	38
9	Forms 42-2E	39
10	Forms 42-3E	40
11	Forms 42-4E	41
12	Forms 42-5E	42
13	Forms 42-6E	43
14	Forms 42-7E	44
15	Forms 42-8E	45
16	Variation in Losses	53

Tampa Electric Company
Environmental Cost Recovery Classe (ECRC)
Total Jurisdictional Amount to Be Recovered

For the Projected Period January 1999 to December 1999 Total

	6	(3)	(3)
Total Jurisdictional Revenue Requirements for the projected period a. Projected O&M Activities (Form 42-2P, Lines 7, 8 & 9) b. Projected Capital Projects (Form 42-3P, Lines 7, 8 & 9) c. Total Jurisdictional Revenue Requirements for the projected period (Lines 1s + 1b)	\$3,031,234 2,814,020 5,845,254	231,957	3,045,977
True-up for Enimated Over/Under) Recovery for the current period April 1998 to September 1998 (Form 42-22, Line 5 + 6 + 10)	827,538	4,316	386,745
True-up for Estimated Over/Unider) Recovery for the period October 1998 to December 1998 (Form 42-2E, Line 5 + 6 + 10)	069'16£	11,160	872,830
Final True-up for the period October 1997 to March 1998 (Form 42-1A, Line 3)	350,549	1,168	351,717
Total Jurisdictional Amount to De Recovered (Refunded) in the projection period January 1999 to December 1999 (Line 1 - Line 2n - Line 2h - Line 3)	4,320,586	195,216	4,515,802
Total Projected Jurisdictional Amount Adjusted for Taxes (Line 4 x Revenue Tax Mathinder)	24176176	811 1013	77 013 73 013 013 013 013 013 013 013 013 013 01

FORM 42-1P

Notes:
Allocation to energy and demand in each period are in proportion to the respective period apile of costs indicated on Lines 7 and 8 of Forms 42-5 and 42-7 of the estimates and actuals.

LARDE LACIDIC LANDRESS
Environmental Cost Environy Chans (ECR.C.)
Calculation of the Projected Period America
January 1999 to Desymbol 1999

O. & M. Activities

1. Description of OAM Artivities

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Projected Dec-89				178,641	•	•	•	•		•	•	•	•	1	297,043	297,042	6.9477,894	0.9007189	287,313	-
Projected Nov-89	1	1,440		164231	•		•					•	•	1	334,884	334,904	0.502678	0.9051383	322,500	
Prejected One-tre				100'001		•		•		•	•	•	•	1	115,195	mense.	8,9568203	4.5117377	200,134	• 20
Projected Sap-89		3.448		384,783	•	•		•				•	•		485,633	489,433	6.5323004	0.9913212	179,434	· rown
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12		3.448	•	132,116	•	•		•				•	•		SHARE	257,035 0	4/11757	4.91479134	226,645	0
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Tale of the last o	200	3.642	•	285,746	•		•	•		•	•	•	•	•	461,996	461,934	0.9078BE17	0.9051340	189'619	· 2019/48
Projected Age-89	20.000	3.640	•	193,258			•	•		•			•	•	134,398	525.238 0	0.9504903	0.9511748	318,793	60 100
Projected Mar-fro		3,468	•	(34,960)				•		•	•	•		•	6366	96.369	6.9703009	6.8925745	(84,234)	
Projected Pd-99	1139 901	3.648	•	68,263		•		•				•			288,716	386,716	6 9703489	0.9945425	194,343	EBK30
Projected Projected Jee-99 Fd-99	1130611	3.418	•	(203,940)	•	•	•	•		•	•	•	•	95,298	015310	\$17,000 \$10,000 9,000 0	6,971,7435	0.9040423	(78.192)	0 1969 011380 01430

FORM 42-2P

Lames Electric Consumer Environmental Cost Recovery Clause (ECEC) Calculation of the Projected Period Amount January 1999 to December 1999 Caphal lavestasest Projects-Receverable Cests (in Dollars)

Method of Clessification Demand Energy Period Total Projected Dec-99 Projected Nov-79 Projected Oct-99 Projected Sup-P9 Projected Aug-99 Projected Jul-99 Projected Jun-99 Projected May-99 Projected Apr-99 Projected Mar-99 Projected Feb-99 Projected Jun-79 Description of Investment Projects (A)

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RAM HOUSE HO 1,979,312 259,852 5,000 114,710 5,236 11,290 ALLES CALADA TOLICA CALADA TOLICA COLUMN TOL 231,957 25,652 \$4,000 \$4,000 \$116,710 \$1,556 1,334,764 11,045,977 10,297 6,429 11,793 11,745 11, 19671894 18,922 \$236,420 9595 18,728 6,948 11,789 11,784 11,784 11,784 11,784 11,784 11,784 11,784 11,784 11,784 94254710 19,018 \$283,469 4,566 4,566 4,566 11,54 4,674 9,661 459 1,099 11,189 1,9969303 36,589 \$180,814 19,345 8.9213212 6,000 11,000 10, 19,496 \$274,686 500 S 100 S 277,818 24,000 24,000 24,000 11 19,429 ST78,530 1922727 19767614 19,60 M6.130 11.300 11.300 11.300 11.300 10 525.00 517.00 540.00 1,106 \$36,1852 11,362 24,200 24 19,531 ない。 19161713 916477 1245,663 24.511 24 9651340 18,337 22772 TANK BELL 24,678 24,678 24,678 24,578 27 19,300 **医证证表**因 \$233,592 9503089 5,781 1,781 1,117 19,234 \$227,338 9045425 C 48 CE 11,518 9703409 1917 1982,81 1983,81 1983,81 1983,11 1 19,464 \$227,441 35,048 11,050 11 2000年記 21,509 1971763 263,362 19,499 \$222,881 Total breatment Projects - Recoverable Costs nable Costs (C) heindictional Energy Recoverable Costs (B) Big Bend Foal OS Tank 41 Upgrade Big Bend Foal OS Tank 42 Upgrade Phillips Upgrade Took #1 for FUEP Phillips Upgrade Took #4 for FUEP Recoverable Costs Allocated to Energy Locoverable Costs Allocated to Demand Is Big Boad Unit 3 Plan Clas Doublifes

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FORM 42-3P

(A) Each projects Total System Recoverable Expenses on Form 42-49, Line 9 (B) Line 3 x Line 5 (C) Line 4 x Line 6

Notes

* # #

Notes:
(A) Lines 6 x 2.252595 x 1/12. Thunsd on NOE of 11.79% and weig
(B) Line 9s x Lines 10
(C) Line 95 x Lines 11

rate of 38 575% (expension factor of 1.628002)

FORM 42-4P

TAMPA ELECTRIC COMPAN DOCKET NO. 980007-EI

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Description

Projected Jan-99

Projected Oct-99

Projected Nov-99

Projected Doc-99

End of Period Amount

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- Form 42 -49 Page 1 of 13

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of 38.575% (expension factor of 1.628002)

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Reten as Capital Investments, Depreciation and Taxes For Project: Big Bend Units 1 and 2 Flae Our Conditioning

Angleted Aug-89

Projected Sep-99

Projected Oct-99

Projected Dec-99

End of Period Amores

Inter Destric Company
mental Cost Pacovery Chase (ECRC)
fron of the Projected Period Amount
seary 1999 to December 1999

FORM 42-4F

SVCE 7 OLIS DOCUMENT NO. 4 TAMPA ELECTRIC COMPANY DOCKET NO. 980007-E! EXHIBIT NO.

Form 42-4P Page 2 of 15

Entire District Company
Environmental Cost Recovery Chime (BCRC)
Calculation of the Projected Period Anneas
Jeansey 1999 to December 1999

4	Isana	1101	6. Arm	1.80	10	4.4	2.0		9. Total		6	11. Beta	13. Rand	14 Total
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Projected Feb-79	****	(101,335) (236,680) (236,680)	TEL, CER	55	144	•	•	••	1,812	7,012	6.9703499	iii)	•	54 800
Projected Mar-99	****	(103,412) (124,489) (234,489) (24,291)	927,720	55	15		•	••	5	5	6,35920.0	****	•	84 444
Projected Age-89	g	(105,389) (236,489) 536,514	33,450	35	5			•	25	5	0.9594005	107	•	14.644
Prejected May-77	****	(197,146) (204,489) (204,489)	STATE	95	Ē			•	63	469	0.5073817	6316	•	44 414
Projected Jun-79	****	(100,042) (230,648) (330,648)	531,699	88	mn mn	•	•	••	603	639	633673	4.80	•	694 993
Projected Jul-99	g	(118,500) (138,600) (138,600) 518,000	519,822	95	5	•	•	••	125	600	0.922225	700	•	44 104
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tep-79	2	(TACO) (TACO) (TACO) SECTO	514,868	55	5	•	•	••	15	5	2000000	640	•	64 AAA
Prejected Oct-79		(114.39) (134.48) (134.48)	514,191	55	19	•	•	••	1907	9167	6.9567203		•	44 644
Projected New-89		(118,420) (234,480) (124,480)	NCSR	25.7	5	•			Can	630	05/2000			200 000
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(A) Expression the New Yorks of the replaced Eng Steed Unit 4 CDMs which is currently recovered though bean rates.
(B) Ellies 6 at \$2200 s. \$775, (expression factor of 1.62002).
(C) Likes 9 at Like 19

(C) Likes 9 at Like 11

Leman Rectric Connects
Environmental Cost Recovery Cleane (ECE)C)
Calculation of the Projected Period Assesse
Jenuary 1999 to December 1999

Return on Capital Investments, Dependation and Tanns For Project: Big Bend Und 1 Chanifer Replacement

4	Description	Beginning of Projected Period Amount Jun-99	Projected Jen-89	Projected Feb-99	Projected Mer-99	Projected Age-79	Projected May-59	Projected Jun-79	Projected 746-99	Project Angles	Projected Sep-89	Projected Oct-89	Projected Nov-89	Projected	East of Period Amount
1. Investments s. Expendiment/Ad	Miles		877.728	310.450				3			3			3	
b. Clestings to Ples			•			•			•		•			•	
c. Retirements			•	•	•	0	•	•	•	٠	•	•	•	•	
4. Other			•	•		•	•	•	•	•	•	•	•	•	
1 Plat-in-ToniesDays 3 Line: AccomplishED	yrecision has Deprecision	(C) (C)	11,442,250 (5,846)	11,471,300 (9,889)	11,073,300	11,475,386 (18,839)	\$1,479,380 (21,183)	11,473,300 (24,171)	\$1,479,380 (78,239)	11,479,386 (34,389)	\$1,479,388 (28,273)	\$1,479,388 (42,443)	11,479,500	81,473,300 (81,579)	
	#(jhm2+3+4)	1,388,717	1,463,604	1,409,401	1,465,333	1,461,265	1,457,1977	1453,129	1,449,041	1,464,995	1,448,925	1,434,857	1411.199	1,428,721	
6. Average Nat Investores	1		1,435,311	1,454,203	1,467,367	1,463,299	1(49,23)	1,455,163	1,451,085	1,447,627	1,442.999	LORIN	1,494,833	1,09,755	
1. Series on Average a. Equity Compress. b. Delt Compress.	one Choused Up For Team (A) one Choused Up For Team (A) ore Class 6 x 2 X276 x 1/12)		10,488	N.M.	M.78 MAS	1,08	14,78	1,78	10,078	19,640	1858	18.98	14.550	MASS	107,120 101,120
A. Department Super-	•		3,933	587	85	3	3	85	46	95	85	85	807	9	100
b. Americation			•					•	•	•	•	•	•	•	•
c. Dismandement				•	•		•		•	•	•	•		•	
a Other			• •	••	••	••	••	••	••	••	••	•	•••	•••	••
8. Total Bystom Rocom	in Excessible Express (Lines 7 + 8)		17.73	18,200	M.396	ILAO	m.m	18,198	18,140	18,109	11,965	ILED	17,990	17,951	317.337
a. Rassverible Costs All b. Rassverible Costs All	Receverable Costs Albosted to Beergy Receverable Costs Albosted to Denumed		11,773	16.28	11.386	18.367	TI'N	H °	18,940	18,109	11,000	11,029	17,990	17,951	287,187
M. thengs besidestond Paint 11. Domaid Josishifostond Paris	of Peaker and Peaker		0.9717435	0.992569	6300364.0 8303648.0	8,51106.8	0.9031290	6.9161713	0.9327257 0.9957859	0.91287997	4 9253884 4 9253884	0.0500000	0.94736788 8.945363	8.94718M 8.9467189	
12. Rated Savegy-Radas	dated Resovenible Cests (B)		17.71	11,736	17,396	17,509	14.548	14,663	16,746	NAPH	14,982	17,253	17,318	1136	STATE
and Dename Rat	Intel Secrementals Conta (C)		0	i		•		•	•	•	•	•	•	•	•
14. Total Janisdictional	(Standermilde Costs (Liber 12 + 15)		\$17,271	307	\$17,866	\$17,500	\$14,518	\$16,60	\$16,746	\$16,670	\$16,912	\$17,253	\$11,319	817,943	\$200,000

Notes:
(L. Lians de 2 2220 for a 1912. Bauel on BLOE of 11,75% and weighted become has not of 34,575% (expension factor of 1,428022)
(G) Lian-for Like 19
(C) Lian-for Like 19
(C) Lian-for Like 11

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Tenns Decitic Commerc Environments Con Tacevery Cleane (ECRC) Celculation of the Projected Period Amount January 1999 in December 1999

Return on Capital Investments, Degree For Project. Big Bend Unit 2 Chemit

Libs Description	Beginning of Period Attacent	Projected of Jen-19	Projected Fish-99	Projected Mar 19	Projected Age-89	Projected May-79	Projected Jun-89	Projected Jul-99	Projected Ang-PS	Projected Sep-89	Projected Oct./79	Projected Nov-89	Projected Dec-89	End of Period Amount
1 Investments a Exemiliaria Addition			5	5				5		1		1		
h. Chestage to Plant			•			•	•	•						
c. Sationnests		•	•	•	•	•	•	•	•	•	•	•	•	
4 Offer		•	•		•	•	•	•	•	•	•	•	•	
Plan-is-ServiceDepreciation Base Lone: Accumulated Depreciation	9195,879 (11,817)	D 1985,679			\$1825,679 (22,255)	SPELCY	\$345,679 (37,579)	\$985,678 (36,286)	1005,070	2565,679	SWELCTO CHLMET)	(40,714)		
4. CVIP-Near-bearest Bearing 5. Nex brootmest (Lines 2+3+4)	67,159	3 579,676	962,599	961.99	962,745	940,118	957,491	954,884	9 133.337	948,510	944,963	\$60,356	\$41,729	
6. Assuige Not Investment		817.548	00'06	966,696	964,659	94,412	\$58,805	856,178	182,891	958,959	146,397	945,679	943,843	
	Thomas (A)	2,87	THE STREET	1,100	97	1,000	9	1001	1913	5	5	5	5	10.00
A. Deft Companied (Law 6 s 1824 s VII)	t Mari	2,284	77	171	236	223	228	130	1311	1100	2,230	THE STATE OF	2,216	27,001
4. Investment Department a. Department		1,627	2627	167	101	2,627	167	2,677	1487	2677	147	101	167	10,534
b. Americation		•	•	•	•	•	•	•	•	•	•	•	•	•
c. Discrattenest		•	•	•	•	•	•	•	•		•	•	•	•
4. Property Teams a. Other		•••	••	••	••	• •	•••	••	••	••	••	••	•	•••
9. Total System Recoverable Expenses (L.	Bes 7 + 10	12,659	12.633	13,667	11.982	11.9%	11,938	11.985	11,890	11.894	11.038	11.885	11.777	143,013
s. Exercemble Costs Allocated to East		12.658	12,633	12,007	11,982	11,5%	11,930	11,965	11,889	1,1854	11,828	11,803	11,777	143,013
5. Becoverable Costs Allocand to Den	and a	•	•	•	•	•	•	•	•	•	•	•	•	•
OD 14. Elempy Installational Pactor 11. Demand ParistEntional Pactor		8DK114.0 8D6086.0	6.970269	0.0505000	6.9584885	0.9078627	6.9161713	0.5227257 0.9167634	0.9367397	0.9353884	0.9569203	0.9628788	0.90071894	
	sto (II)	11,717	11,63	11,410	11,485	10,055	10,939	18,985	18,939	11,000	11.318	1130	11,391	\$135,155
13. Batel Denoyed-Rationd Recoverable Costs (C)	College (C)	•	•	•	•	•	•	•	•	•	•		•	•
14. Total Jurisdictional Recoverable Claim (Linus 12 + 13)	o (Linux 12 + 15)	\$11.717	811.679	\$11,410	311,485	\$10,655	\$18,500	\$10,965	\$19,939	\$11,600	\$11,310	111303	111.301	\$138,155

Notes:
(4) Lines 6-2.8.2395.s. V/2. Burnd on ROE of 11.795, and weighted become tax rate of 38.5795, (exp.
(5) Line for 1 Line 19.
(C) Line for 1 Line 11.

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Intere Bestrik Competer
Con Receivery Clear (ECR.C) on of the Projected Period Amoust erry 1999 to December 1999

praciation and Taxon Offer Additions

(A) Lines 6 x 2.2229% s 1/12. Densel on BCOE of 11.79% s (D) Lines 8 x 12.1219% s 1/12. Densel on BCOE of 11.79% s (C) Lines 99 x Lines 19 but rms of 38.575% (supersion factor of 1.620002)

6

= =

mt (Lines 2 + 3 + 4)

1217.007

1,298,167 1,796,695 (SKZ38)

129030

SET BELT

1,385,935

HOTEL

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רצט'ענו

1,368,719

1,364,415

1,300,111

(255,807

125

9087K

\$51,648

164,649

(Jar 20)

(12,257)

(196,87)

(KLYTel) 896'665'15

(M.75)

(Serves)

(187,785)

3,951

1,007

100

1,00

2404

1,002

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HH.

. 10.10

. 66

16,637

NON MAN

MUNICAL SECTION

16.74

. 66

NO YEAR MOY THE

813,940

\$100,000

Description

Projected Feb-99

Projected May-99

Projected Jgn-89

Projected Jul-99

Projected Aug-99

Projected Sep-89

Projected Oct-99

Projected Nov-99

Projected Doc-99

End of Putied Amount

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reset Chiese 6 x 1.82% x 1723

12 Sand D. Sand H. Total

reenbla Coeta (C) skin Coeta (Linus 12 + 13)

FORM 42

TAMPA ELECTRIC COMPANY DOCKET NO. 980007-E1 EXHIBIT NO.

Issae Becirk Conper-rounestal Cost Recovery Clean (BCRC) relation of the Projected Period Associat January 1999 in December 1999

Return on Capital Investments, Depreciation and Taxes
For Project: Gasson 6 Classifier Additions

Projected 3rd-89	Projected Projec
	Projected Sep-29

	(T						F
 Ratell Streegy-Radged Second Ratell December Radged Record 	18. Shangy Periodic load Factor 11. Decembed Participations of Factor	 Total System Recoverable Expenses (Line) Recoverable Costs Allocated to Energy Recoverable Costs Allocated to Deep 	1. Immunosi Eppera 2. Depositation 1. Association 1. Association 2. Despoin Tues 4. Properly Tues 5. Ottar	Batters on Average Net Sweet Equity Compensed Charte Date Compensed (Line 6)	6. Awergs Not Investment	1 Past b Serios Dynasida 1 Les Accumited Dynasid 4 CVIP. Non-Stewn Basing 3 Not brenttenn (Line 2+3+	1. Investments a. Expension: VAdditions b. Chesings to Plant c. Religionate d. Other	
od Stanowardšila Casta (S) ted Stanowardšila Casta (C)		promo (Jan 7 + 1) of to Borgs of to Denoral		estimate and the For Tume (A) of a 122% a 142)		. 11		Description
			1			0.25		Period Amount
. 6	0.9717435	.88		5 X	69,758	KN . s		Projected Jan-99
. #	0.5702409	.88		E S	67.99	8 . H.S	a	Projected Feb-89
ı il	0.3703000	- 22		3 8	74,158	24,175 26,175 20 0 20	**************************************	Projected Mar-99
. I	0.5084805	.88		#8	200.00	27,748 e 80 27,748 e 80	erun Gerun	Projected Age-29
ESPY.	8.9075817	.66		E GE	811,568	riestal riestal	\$1,007,020	Projected May-99
MAIN.	0.5161713	100 100 100 100 100 100 100 100 100 100		7.80 1887	PHYSICI	1786/128 (1781) 21785/112	94,7213	Projected Jun-99
H.JH	0.5227257	3011	8	2 E	FREIGH	179671 6 (13967) 17667249	1000	Projected July 99
17,550	0.5057597	31,716 31,716		CH CLUS	1,786,792	17,2278.0 (12,127.0) 17,227.00	107.00	Projected Aug-99
M-ess	0.5/53006	21,897		Old II	1,756,225	\$1,755,003 (17,423) 0	8	Projected Sep-99
BACK	0.0560505	, 22 22 M M .	Nei	11811	1,715,000	6 (3743) 8123799		Projected Oct-99
20,900	08030363	METE METE	g	613	1,786,815	0 (coruz) 17.22700		Projected New-99
21,012	8.967389 8.967389	pri pri	9	can if an	L'MUSIO	SL791,003 (TL889) SL791,003		Projected Dec-89
IIV)HIS		10,50	EST, COM	31,00				Sad of Period Amount

FORM 42-4P

6th Code (Liber 12 + 13)

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Period Amount mber 1999 Chase (ECRC)

n on Capital Investments, Depositation and Taxon For Project: Osennos Unit 5 Start Extension

Description

Projected Feb-99

Projected May-99

Projected Apr-99

Projected May-99

Projected Jun-99

Projected Hd-99

Projected Aug-99

Projected Sep-11

Projected Oct-89

Projected Have-99

Projected Dec-99

Rad of Period Assesses

rigo Nel Investment

41,196

CLAN

215,365

SEC'619

58

SUTOR SUTUR

\$17,710

. 44

test (Line 4 x 1.82% x 1/12)

(To Liber 16 x Liber 16	I A Large a in management with the process of the 27th and weighted sectors that time of 26.377th (expension factor of 2.638002)	721 1 hour d w 6 674501 x 1-07 Change on 8-00 - 2-11 hour

Radeed Recoverable Costs (C) med Recoverable Costs (Linus 12 • 15)

entitle Costs Allocated to Steregy entitle Costs Allocated to Deimed

d	•	7	Þ	И	B	O.	į

1	
	AGE 8 of 15
FUN	DOCUMENT
BER 5, 1998	TLED: OCT
	(I-ZOX
	" ZUA
CTRIC COMPANY	LVMPA ELE
13-70008e,	DOCKET NO
	ON TIBIHXS

Tenner Brichts, Company
Environmental Cost Recovery Cleane (ECRIC)
Culculation of the Projected Period Associate
Jaconsty 1999 to December 1999

Return on Capital Investments, Depreciation For Project. Osmann Unit 6 Stark Ext

Lise Description	Indicating of	Projected Jen-79	Projected Feb-99	Projected Mar-99	Projected Age-19	Projected May-79	Projected Jun-89	Projected Jul-99	Projected Ang-P9	Projected Sep-99	Projected Oct-99	Projected New-59	Projected Dec-89	End of Period Amount
1. Investments e. Exemblement Additions		993	6903	811	9,713	99 65		-			1	1	- 1	
b. Chesings to Plant		•	•	•				•						
c. Entirements		•		•	•	•	•							
4 other		•	•	•	•	•	•	•		•	•	•		
2. Plans in-Samios-Dependation, Bare	2	2	2	2		8	2		2	2	2	8	133,659	
3. Lew. Acrosophind Depreciation	•	•		•	•	•	•	•	•	•	•	•	5	
4. CVD-Non-brown Dearby	200	25,890	35,688	27,639	20,430	38.750	22.530	33,470	33,690	33,490	11.579	11.570	•	1
		ALEN	-	00000	200	NAM.	MASK	37,670	23,674	23,69	33.578	33,579	73,600	
4. Average Not Investment		25,378	34,250	24,845	27,748	28,780	31,740	13,000	33,499	33,496	33,530	11,579	33,385	
7. Retent on America Net Investment a. Earth-Comproses Consort Up For Town (A)		1	E	E	J		E	5	3	3	5	3	1	1
b. Delte Compensest (Line 6 x 1829s x 1913)		8	g	0	8	2	F	F					R	2
1 Instantityon								7.0						
b. Assetjation						• •	•		•	•		• •	R *	
c. Dismarilanses		•	•	•	•				•	•		•	•	•
4. Property Tares		•	•	•	•	•	•	•	•	•	•	•		•
a Other		•	•		•	•	•	•	-	-	•	٥	•	•
9. Total System Seconomide Engasters (Lines 7 + E)		Ŕ	a	R	R	H	N	ш	B	R	338	338	H	3636
8		247	255	R	200	R	366	121	113	M.	336	128	250	3,626
milb. b. Recommittle Costs Allocated to Dentand		•	•	•	•	•	•	•	•	•	•	•	•	•
O in Bargy Julisholand Pater		8.9717438		4800368.9	0.9594985	0.9979817	0.9161713	4.9227287	0.9207997	ANNEXES O	6.5569203	0.9030700	8 PCT3884	
11. Demend Julidinformi Patter		6 9940421	0.9945425	6.8955745.8	8.9911748	0.99512en	6,9164773	6.5167634	0.9167349	0.9213212	TETTING	0.9031302	6.900/189	
12. Retail Storigs-Beliated Recoverable custs (8)		36	30	K	ñ	X	200	X	562	M	313	314	384	53,436
13. Ratell Demand-Related Encoverebbs Costs (C)		•	•	•	•	•	•	•	•	•	•	•	•	•
 Total Juribilishmal Faceworkship Costs (Lines 12 + 13) 		8349	1367	\$347	8538	1361	5363	1004	1231	1965	1913	1314	8364	13,434

Notice (A) Udens 6 x 8.020076 x 1/12. Bu (B) Line Po x Line 11 (C) Line Fb x Line 11

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Zannes Electric Communication Environmental Cost Recovery Clause (ECEC) Culculation of the Projected Pariod Assesset Assusery 1999) in December 1999

Line Description	Puriod Asinosett	Projected Jun-99	Fab-99	Projected Mar-99	Apr.79	May-79	Projected Jess-89	Projected Jul-19	Ang-99	Projected Sep-89	Projected Oct-79	Projected New-89	Projected Dec-99	End of Period Amount
1. Investments a. Expendienwickelli-ra		\$695,618	869/618	2196,618	SPACES	3496,618	8197698	\$19,618	2	8	2	8	s	
b. Chambags to Plant		•	•		•	•	•	0	•	•	•		•	
c. References		•	•	•	•	•	•	•	•	•		•	•	
4. Other		•	•	•	•	•	•	•	•	•	۰	•	•	
2. Plans do Servico Depositation Base	3		2	2	2	2	8	\$4,094,002	\$4,064,002	\$4,004,002	34.864.882	\$4,044,062	\$4.064.002	
3. Lant. Assumulated Depreciation		•	•	•	•	•	•	(4,004)	(19,812)	(33,630)	(44,738)	(38,436)	(72.644)	
4. CVSP. Non-license Bearing	708	1,094,294	1,500,912	2,077,530	2,574,148	3,679,766	3,347,394	•	•	•	•	•	•	
5. Nut Investigate (Lines 2 + 3 + 4)	À	1,004,794	1,988,912	1,677,530	25% 148	3,078,746	3,947,984	4,457,398	4,884,199	4,659,962	4,017,734	4,894,966	3,991,338	
6. Average Not Seminant		803,985	1,332,669	1,629,221	1,325,039	2,822,457	STRUCK.	3,012,911	4,050,794	4477,586	4,894,378	4,011,179	3,997,942	
7 Estants on Average Fits beceditsons					1	-			į	1				
b. Dobt Component class of 2.87% a 3/12		1,945	3,132	(29	3,686	4(53)	1,88	1,000	9,315	1,48	1,417	9,426	1,000	1367,652
4. Investment Exponent														
a. Depreschaton		•	•	•	•	•	•	4,604	13,388	13,200	13,200	13,300	13,288	\$77,644
b. Assettiesfan			•	•	•	•	•	•	•	•	•	•	•	•
c. Diamendonism		•	•	•	•	•	•	•	•	•	•	•	•	•
d. Property Tuess		•	•	•	•	•		•	•	•	•	•	•	•
4. Other		•		•	•		•			•	•	•	-	
9. Total System Recoverable Engueses (Lines 7 + 2)		6,112	12,931	17,750	22,508	22,387	32,386	41.96	52,515	52,385	13,257	20.00	33,801	425.033
e. Theseworkle Osts Albosted to linegy		6,112	12,931	17,730	11,500	27,387	33,206	43,596	52,513	52,365	10,257	NAME	23,001	425,835
led b. Recoverable Costs Albotted to Desney		•	•	-	•	•	•	•	•	•	•	•	•	•
2.9 10 Daving Jesiedictimal Pater		0.9717435	6.9793409	0.9503009	0.9594985	0.5970317	6.9161713	0.9222257	0.9207397	93333804	0.9549203	0.54236789	0.9671894	
11. Demand Paris/Litimal Parisr		8.9000421	0.9945425	6.8955745	0.9011748	0.5051249	6.9164773	6,5167534	0.5160310	6.9213313	4457116.0	0.5031382	0.9007129	
13. Retail Energy-Related Recoverable Costs (S)		7,883	13.546	16,843	21,631	34,860	29,594	40,227	44,352	49,500	900'00	58,165	30,395	\$401.341
13. Rated Distress-Published Recoverable Conta (C)		•	•	•	•		•	•	•	•	•	•	•	•
 Total Zezindictional Recoverable Cests (Lines 12 + 13) 		\$7,883	\$12,544	\$14,865	131.631	\$34,164	\$22,306	\$40,227	\$48,352	\$49,600	\$59,006	\$50,183	154,295	\$401,361

Notice (4) Libers 6 x 8.52200x s 1/12. Dassed on BOE of 11 79% and weighted ine (5) Liber 5 x Libes 10 (5) Liber 96 x Libes 11

4	Deniption	Period Assessed	Projected less-89	Patental Februaria	Projected Mar-99	Appr. 29	Projected May-79	Prespected Jun-79	Projected Nd-99	Ang-79	Trajected Sap-79	Projected Ons-99	Projected Nov-79	Projected Dec-99	End of Period Ameran
	1. Investments		1	,	,	1		1	1		1	,	1	14	
	A EXPONENTIAL AND		2 '	t *		k *	4 *	R *	8	a ·	R '	2	2	2 '	
	a Change to Farm							•	•		•	•	•	•	
	c. Regressents		•		•	•	•	•	•	•	•	•	•	•	
	4.00m		•		•	•	•	•	•	•	•	•	•	•	
	The Back Confestioned State Bar	100 100	************		*******	445 965	-	***************************************	***************************************	-	-	***************************************	*******	-	
	3 Law Accountated Durwolation	CH 415			C27 160	CHART	C11 8001	CHART	CARRO	CACTOR	C10 600	420 4001	(4) (47)	244.4900	
	4. Other (A)	(366, 800)		(284,090)	(344,000)	(364,000)	CSHLBBBS	CHALBORY	(365,888)	CHARMO	(264,696)	(206,800)	(264,888)	(204,000)	
	5. Nic Savatnains (Lines 2+3+4)	362.157	300,429	П	英英	294,609	25,712	298,835	206,918	387,001	285.694	283.167	31,29	179,103	
	6. Joseph No. Sensitions		301,379	299,662	207,945	295,628	28,711	20,74	TE,085	287,768	286,843	284,136	20,200	286,392	
	7. Bates on Average Net breatment a. Egalty Component Occased Up For Town (B)		317	136	3	17	108	258	9	THE STATE OF	2,10	1100	E.	2,962	13,60
	8. COM Component (Late 6.3 LATA E VIL)		1	ē	633	6	8	8	•	611	812		68	638	5
	8. Incomest Dynamics a. Dynamisten		1307	1912	1907	461	1983	95	1987	660	1917	1912	1911	1917	123,004
	b Americation		•	•	•	•	•		•	•	•	•	•	•	
	c. Dismediament		•	•	•	•	•	•	•	•	•	•	•	•	
	6. Property Teans		•	•	•	•	•	•	•	•	•	•	•	•	
	r. Other		•			•	•		•	•	•	•	•		
	9. Total Spiners Rocoversible Expenses (Lince 7 + 8)		4,861	(123)	4,804	478	4,307	438	4.730	4711	4,692	KEN	4,675	4,637	96.80
	a. Bassverable Creta Allectael to Dwegy		•	•	•	•	•	•	•	•	•	•	•	•	
1	b. Rannwerdilla Creitz Alboriteis to Dumand		(3)	453	400	CM	4,387	428	4,730	£711	4483	19	4,655	687	8%
	10. Energy Amindictional Factor 11. Denomi Periodictional Parter		0.9717435	0.9703409	0.9503009 0.952698.0	0.9594805	0.5079827	0.536(73) 6.516(73)	CETTIFE &	0.9307397	0.9753886 0.9753886	C. 9349203	0.9426789 0.91282	8.9473894 8.9067389	
	13. Rendi Storgy * dated Recoverable Cone (C)		•		•	•	•	•	•		•	•	•	•	
1	13. Entil Demand-Rabbel Basewardle Costs (D)		4,376	4363	4,302	4313	4313	4,352	4,334	4313	4,323	4381	4200	4177	31.6
*	M. Total Resistinfactional Recoverable Costs (Lines 13 + 13)		\$4,376	\$4,963	84,362	\$4,313	\$4,315	\$4,512	\$4.336	\$4,315	M,325	84,361	34,384	34,177	151,437

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Entition Description of Computer Channel (ECSIC Culculation of the Projected Period Assessory 1999 to December 1999)

Menus on Capital Investments, Depositions and Taxos For Project. Big Bond Fast Of Test #1 Upgrade (in Deleva)

Line Description	Period Amount Jes-19	Jan 13	Feb-39	Mar-99	Var.99	May-79	7an-89	341.99	Ang-PP	Sep. 89	Oct-89	New-39	Dec-99	Period Amount
Department Expertment Addition Cartigute Pere Existence Cartigute Pere Cartigue Pere		2 * * *	2	2	****	••••	****		****	••••		•	4	
2 Plate de Sarvior Deposition Bres 3 Law Accommisse Deposition 4. CPD* New Jones Bresting 4. CPD* New Jones Bresting	PICTO OF THE PICTOR	5443,000 5443,000 (3,074) (3,100)	\$403,000 (4,942)	SMC,800 (A.D)	MALON (MLZ)	MCT (CLA)	SACLING PLEASE	CLICA)	\$44,000 (18,140)	1443,600 (11,380)	\$40,000 (12,010)	Net,000 (13,440)	\$441,000 (14,403)	
5. Not kreatment (Lines 2+3+4)	904 Map	439,892	П	П	436,798	П	49,72	411,480	49709	40109	40,98	429,953	428.518	
6. Average Not becomes		445,409	478,373	MON	491,307	406.773	403,239	604,285	433,171	et un	401,183	6000	500,603	
7. Jenkus on Average Nei Jenemboust s. Equity Compound County Up For Tame (A) b. Delt Compound (Live 6 a LED's 2 172)	2	3,238	1231	99	20	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	89	2,000 1,000 1,000	3,18	85	373	2002	1,135	1238
1 Invations Dipense 1 Deposition		1,634	1897	189	100	89	1697	1497	1697	NAT .	1634	100	201	81.40
b Americales		•	• •	• •	•	•	•	•	•	•	•	•	•	0
d. Property Team		• •	•	• •	• •	• •	• •	• •		• •	• •	• •	• •	
* Obe		•	•	•	•	•	•	•	•	•	•	•	•	
9. Total System Recoveredib Exposess (Lines 7+1		1307		1337	523	1307	1227	5307	5,237	1,228	5,317	5,387	5,197	61,0
Recoverable Control Receipt to Beegg Recoverable Control Receipt to Demand		3,397	- 15	e di	9778	· M	. 123	130	. 101	• 17	e tres	5,287	9,197	0,00
G1 It. Design halfolicional Fusion 11. Demand halfolicional Fusion		6.9517435	6.970,360	6.9500009 0.8975765	8.51194.8 8.51194.8	0.9078817	0.916713	1272729 0 1272729 0	00E2016'9	SHEETER &	0.5500000	4 MOUTH	8.5471894 0.9007189	
12 Batel Brage-Raland Bacoweelile Cotts (8)		•		•	٠	•	•	•	•	•	•	•	•	
13. Earth Durrand-Robind Burnwerthin Code (C)		4.78	4.792	623	4736	4.767	CIB	4,810	4.797	4,817	4737	4,709	4,481	10,73
 Total Judselletjonal Ractivership Contr (Librar 12 + 13) 		pt,798		M,735	\$4,756	34,367	\$4,838	\$4,930	14,797	\$4,817	\$4.737	\$4,763	14,681	\$57,2

Abens 6.8 BEEDEN x 1/12. Turned on BOE of 11.79% and weighted become tax rate of 28.579% (expension factor of 1.620002) to be a time to

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Insign Bletcht, Cempary Invipremental Cost Recovery Cheer (ECRC) Calculation of the Projected Period Amount January 1999 to December 1999

Paters on Capital Investments, Dependation and Tases For Project: Big Bend Fuel OS Tesh #2 Upgraft (in Delher)

4	Description	Period Amount	las-19	F4-89	Mar-69	Apr.M	May 99	10.00	20.00	Aug. PP	Sep-89	64-99	Nov-99	Dec-M
L brondense 1 Espendin 1 Chestops 2 Contract 2 Other	wor's Additions to Plant no		****		****	••••	****	g		****	g	4	****	
2 Part-botton 3 Lose Accom 4 CVBr. Nov. 5 No Perestra	invitor/Cognition flow condition Dependence so know Desiry more (Line 2 + 3 + 4)	90,718 6×50 9 0,718	(CLMS3) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(4,773) (4,773) (13,728	66,481) 6,481)	(4.590) (4.590) (4.590)	(18,699) (18,699) (187,501	9118,090 (112,600) 0 0 0	(34,300 (34,307) 861,483	10,236) (14,236) 0 0 0 0 0 0 0 0	(18,260 (18,23) (18,260)	3818,600 (26,984) 6 6 781,936	01.953) (21.953) 9	報名 を
6. Average Not become	The same of		834,092	BAIR	812.278	816,365	200,450	100,547	807148	842,739	800,000	00	197,662	
1. Remarks 4. September 5. Sept	in at Averyp Net Invalence spilly Corporate Chouse! Ny For Tone (A) Ode Component (Like 6 x 2 87% x 173)		198	2051	55	55	35	55	55	8.5	35	man man	8 5	
a breathand B	1.		5	957	-	95	8	857	85	95	5	9	857	
b Amortine			• •	• •	• •	• •	••	••	•	••	•	• •	• •	
4. Property	11		• •		• •		• •	• •	• •	• •	•		• •	
e Other			•	•	-	•	•	-	-	-	-	•	•	1
9. Total System.	Recoverable Dynama (Liess 7 + 8)		1,628	9,009	8,791	17.8	9,734	1,738	9,717	1,011	8073	9,004	3,642	
A. Bacewell	Recoverable Costs Albotted to Stergy Recoverable Costs Albotted to Densed		- 827	. 68	. H.	• E.	1,73	8,736	8,717	· M	9,670	1,661	9,842	
9 11. Downed Strinkfolmed Parker	Below Pates delense Pates		0.971703	0.9782489	6.9787889 6.8978783	8.9594885 4.9011748	0.9078817	6.916713	0.9103114	4 9287997 9 9148268	0.9353886	6.9589383 6.91,17577	6 9428798 6 9438788	* *
Classificación Classi	Exergy-Raband Recoverable Conta (8)		•	•	•	•	•	•	•	•	٠	•	•	
13 had Dene	stall Demand-Robbind Recoverable Costs (C)		8,885	8,873	8,709	1000	623	6922	6,900	6.004	858	1,1898	2	1
PA. STORE ARRESTS	COLUMN TRACTORISMO COMO (LLOSS 12 + 13)		NA. MES	CLEAN.	D ti	24,800	No.	ROZZ	34,702	20,000	\$6,910	32,800	Fil	

114,718 . 114,718

ithdees (A) Elbesté stillittéha a VII. Dessé en ROS ef 11.75% end (C) Liber film alles 10 (C) Liber film film stilles 11

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Tenne Dectific Connects
Environments Cont Recovery Chane (ECEIC)
Culculation of the Projected Period Amount
January 1999 to December 1999

Return on Capital Investments, Depreciation and Taxes For Project Phillips Upgrade Test 81 for FDEP

5	4	Description	Regiming of Projected Period Amount Jun-99	Projected Jee-79	Projected Feb-99	Payers Inches	Projected Age-89	Projected May-89	Projected Jee-19	Palestel.	Projected Aug. 79	Projected Sep-89	Projected Oct-89	Projected Non-89	Projected Dec-59	End of Period Assesses
	1. Investments	Afficient				1				1	1	1	1		1	
	b. Cheerings to Plans	1		*										*		
	c. Rativements			•	•		•	•	•	•	•		•	•		
	d. Other			•	•	•	•	•	•	•	•	•	•	•	•	
	2 Plats do-ServineD	Depreciation Base	EN.500	836,980	\$36,500	134,500	806,300	\$34,500	\$34,500	\$36,500	136,500	\$34.500	106,500	136,500	136,500	
	3 Last Accounts	of Deposition	8	(130)	(962)	(666)	(m)	(0)	(136)	(0,00)	(996)	(1,162)	(U.SHE)	(1,394)	(1,490)	
		ment (Liber 1+3+4)	N,442	N.15	M,216	36,694	35,978	35,662	35,346	25,630	35.514	24,398	N.SE	34,166	31,650	
	4. Average 194 baveaness	1		34,384	жэк	34,152	NA.ES	35,538	35,884	33,500	TALAN.	35/12	31,340	MEM	35,100	
	7. Battern en Acremgo Net Broad a. Enalty Consument Common	s on Average Not Invadients. After Communic Commit Up For Tame (1)		9	ş	3	5	1	9	9	9	9	1	!	2	
	4. Delt Companie	56 Component (Line 6 x 2 82% x 1/12)		×	2	n	B	H	I	=	=	2	=		8	1,009
	4. Investment Dyes															
	a Depreciation			Ħ.	11	# *	# *	M.	≝ *	# .	11	# *	H.		Ħ.	31,362
	- Dimentioned					• •	•	• •	•			• •	• •		•	Southern
	d. Percenty Team					•	•		• •		•		•	•	•	
	. Other			-	-	•	•	•	•		-	•	•	-		
	*	Son. Berrurdik Espense (Line 7 + 0)		E	9	199	284	3	99	40	#	8	8		453	1.19
1		e. Receiverable Cents Alborated to Energy		•	•	•	•	•	•	•	•	•	•	•	•	
10		lets Albrosed to Demand		8	468	134		**	99	403	9	\$	6	8	457	8,586
7	10. Dwerzy Jacksfürland Pater 11. Dwerzod Jacksfürland Pario	mail Pater lensi Pater		6.9772428 0.9848421	0.9003409	0.9503000	6.9590001 0.751500.0	4.9478817 6.9451280	6.5148713 6.514873	4.9127225	0.9307397	8.9353886 0.9253253	6.95687223	0.9428790 0.9537390	4.9671894 0.3067189	Ţ,
	12. Rend Bowgs-Robs	segy-Rebine Recoverable Costs (B)		•	•	•	•	•	•	•	•	٠	٠	•	•	
	a	tall Demand-Ralated Bacoveridds Comp (C)		63	63	411	8	8	404	0	8	10	411	414	413	
	14. Total Autholicitional	Hell Auth-Britisms Tacovership Costs (Lieus 12 + 17)		1425	9423	9418	604	100	808	1031	COM	1031	9410	9636	BAIS	85,045

Notes:
(State & Martin a VIII Beamed on BIOE of 11.79% and weight Like the Killer to
(C) Like the Killer to
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Zempa Becthic Competer Environmental Coel Recovery Clease (ECE Calculation of the Projected Period Amore January 1999 to December 1999

4	Description	Engineering of Projected Period Amount Jee-99	Projected Jee-89	Projected Feb-19	Projected Mar-89	Projected Age-89	Projected May-89	Projected Jess-89	Projected Jul-99	Projected Aug-89	Projected Sign 19	Projected Cos.89	Projected New-29	Projected Dec-59	Los of Period Assesses
1 breaking	Addison		8	2	2	8		3	8	2		8	8	5	
A. Chesings to Plea	1			•	•	•	•	•	•	•	•	•			
c. Referensia			•	•	•	•	•	•	•	•	•	•	•	•	
4.004			•	•	•	•	•	•	•	•	•	•	•	•	
2. Plate-to-Scribari	Depreciation there	8097288	197,400	887,468	\$87,480	887,400	\$87,400	\$87,400	\$87,400	\$81,400	\$87,400	\$87,400	\$27,400	287,400	
3. Leut. Acrumalis	ad Degradation	(000)	(415)	(\$49.2)	(theta)	(1,346)	(1,523)	(1,800)	Carm	(3,354)	(3.631)	(3,908)	(3,185)	(3,462)	
4 CWP-Not-box	ned Boaring	-					0					0	•	-	
3. Net desurtament (HIR (LISSE 2 + 3 + 4)	17,362	68,983	M. 700	M.01	86.134	11373	83,600	4000	17,005	84,769	1447	M213	87,938	
6. Aretys NA brestons	-		10,134	16,947	BK578	84,293	84,016	85,739	294/2	18,105	84,908	1079	BL38	110,487	
7. Return on Average Not Investmen	s Not Ignostinant			1		1				1	ŧ	- 1	1		
b. Dale Compan	Debt Companion (Line 6 x 2 x74 x 172)		R	M	R	R	H	H	H	8 8	S R	1 1	E	E	2.08
8. Investment Trave															
a. Depraciation			12	11	1	111	E	E	##	442	F	111	277	111	15,730
b. Amendasion			•	•	•	•	•	•	•	•	•	•		•	•
c. Dismardianes			•	•	•		•	•	•	•	•	•	•	•	
4. Property Tues			•	•	•	•	•	•	•	•	•	•	•	•	
e Other			•	*	-	-	•	•	-	-	-	-	-		•
9. Total System Recoverable Days	coverable Expenses (Likson 7 + 8)		1,133	1,120	1117	1,115	rm	1,188	1,186	1,303	UNI	1,018	1,099	1,693	13,290
a. Paceverable C.	a. Enceverable Costs Albertal to Energy		•	•	•	•		•	•	•	•	•	•	•	
Joh h faceworks	h. Raceverelde Cent: rijoosted to Densend		TID.	1,128	4117	1,115	III7	1,100	1,196	1789	1,161	1,000	1,095	1,883	13,290
(A) 14. Emergy harbifurious Factor 11. Designed Jurisdictions Factor	med Partne doed Partne		0.9540425	0.9792459 0.9845425	0.998988	0.9594965	0.9073017	6.9161713	152,072.6 B	0.9107987	0.9353886	0.91(7383	0.9626780	0.5477254	
12. Ratel Beegy-Ref	ergy-Belsted Recoversible Costs (B)		•	•	•	•	٠	•	•	•	•	٠	•		2
13. Bood Dunsel-Rt.	and Dumand-Rahmal Sacovereith Costs (C)		1,015	1,613	1,000	1,865	1,004	1,615	1,634	1,010	1,014	1,001	989	-	12,666
14. Tread Assistation	14. Total StatesBullimid Teconomistic Cents (Lines 12 + 17)	•	\$1,615	\$1,613	\$1,000	\$11,885	\$1,006	\$1,615	\$1,834	\$1,415	51,034	\$1,661	6863	1991	\$12,666

Notice (s) Lines 6 of EXIDE's 1/72. Search on ROE of 11.79% and weighted to (S) Line No.1 Line 19 (C) Line 96 s Line 11

FORM 42-5P

Project Title: Big Bend Unit 3 Flue Gas Desulfurization Integration

Project Description:

The existing FGD system on Big Bend Unit 4 was tested and found to be capable of cleaning the flue gases from Unit 3 at a fraction of the cost of adding a new FGD system for this purpose.

This project involved the integration of Big Bend Unit 3 flue gases into the Big Bend Unit 4 FGD system. The integration was accomplished by installing interconnecting ductwork between Unit 3 precipitator outlet ducts and the Unit 4 FGD inlet duct. The Unit 4 FGD outlet duct was interconnected with the Unit 3 chimney via new ductwork and a new stack breaching. New ductwork, linings, isolation dampers, support steel, and stack annulus pressurization fans were procured and installed. Modifications to the materials handling systems and controls were also necessary.

Project Accomplishments:

Project Fiscal Expenditures:

The actual/estimated depreciation plus return for the period April 1998 through September 1998 was \$555,373 compared to the original projection of \$555,373, representing a variance of 0%.

The actual/estimated O & M expense for the period April 1998 through September 1998 was \$571,608 compared to the original projection of \$652,493, representing a variance of 12.39%.

Project Progress Summary:

The project is complete and in service.

Project Projections:

Estimated depreciation plus return for the period October 1998 through December 1998 is expected to be \$275,168. Estimated O & M costs for the period October 1998 to December 1998 are projected to be \$420,017.

Estimated depreciation plus return for the period January 1999 through December 1999 is expected to be \$1,083,883. Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$1,429,470.

Tampa Electric Company

Environmental Cost Recovery Clause (ECRC)
January 1999 Through December 1999
Description and Progress Report for
Environmental Compliance Activities and Projects

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FORM 42-5P

Project Title: Big Bend Units 1 and 2 Flue Gas Conditioning

Project Description:

The existing electrostatic precipitators were not designed for the range of fuels needed for compliance with the CAAA. Flue gas conditioning was required to assure operation of the generating units in accordance with applicable permits and regulations.

The project involved the addition of liquid sulfur unloading, storage and conveying to sulfur burners and catalytic converters where SO₂ is converted to SO₃. The control and injection system then injects this into the ductwork ahead of the electrostatic precipitators.

Project Accomplishments:

Project Fiscal Expenditures:

The actual/estimated depreciation plus return for the period April 1998 through September 1998 was \$335,436 compared to the original projection of \$335,436, representing a variance of 0%.

The actual/estimated O & M for the period April 1998 through September 1998 was \$14,874 compared to the original projection of \$16,500, representing a variance of (9.85%).

Project Progress Summary:

The project is complete and in service

Project Projections:

Estimated depreciation plus return for the period October 1998 through December 1998 is projected to be \$165,936. Estimated O & M costs for the period October 1998 through December 1998 are projected to be \$9,345.

Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$651,873. Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$41,376.

FORM 42-5P

Project Title: Big Bend Unit 4 Continuous Emissions Monitors

Project Description:

Continuous emissions monitors (CEMs) were installed on the flue gas inlet and outlet of Big Bend Unit 4 monitor compliance with the CAAA requirements. The monitors are capable of measuring, recording and electronically reporting SO₂, NO_x and volumetric gas flow out of the stack. The project consisted of monitors, a CEM building, the CEMs control and power cables to supply a complete system.

40 CFR Part 75 includes the general requirements for the installation, certification, operation and maintenance of CEMs and specific requirements for the monitoring of pollutants, opacity and volumetric flow. These regulations are very comprehensive and specific as to the requirements for CEMs, and in essence, they define the components needed and their configuration.

Project Accomplishment:

Project Fiscal Expenditures:

The actual/estimated depreciation plus return for the period April 1998 through September 1998 was \$42,892 compared to the original projection of \$42,892, representing a variance of 0%.

The actual/estimated O & M expense for the period April 1998 through September 1998 was \$0 compared to the original projection of \$0, representing a variance of 0%.

Project Progress Summary:

The project is complete and in service

Project Projections:

Estimated depreciation plus return for the period October 1998 through December 1998 is projected to be \$21,200. Estimated O & M costs for the period October 1998 through December 1998 are projected to be \$0.

Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$109,539. Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$0.

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FORM 42-5P

Project Title: SO, Emission Allowances

Project Description:

The acid rain control title of the Clean Air Act Amendments (CAAA) of 1990 sets forth a comprehensive regulatory mechanism designed to control acid rain by limiting sulfur dioxide emissions by electric utilities. The CAAA require reductions in sulfur dioxide emissions in two phases. Phase I began on January 1, 1995, and applies to 110 mostly coal-fired utility plants containing about 260 generating units. These plants are owned by about 40 jurisdictional utility systems that are expected to reduce annual sulfur dioxide emissions by as much as 4.5 million tons. Phase II begins on January 1, 2000, and applies to virtually all existing steam-electric generating utility units with capacity exceeding 25 megawatts and to new generating utility units of any size. The Environmentally Protection Agency (EPA) issues to the owners of generating units allowances (defined as an authorization to emit, during or after a specified calendar year, one ton of sulfur dioxide) equal to the number of tons of sulfur dioxide emissions authorized by the CAAA. EPA does not assess a charge for the allowances it awards.

Project Accomplishments:

Project Fiscal Expenditures:

The actual/estimated depreciation plus return for the period April 1998 through September 1998 is \$0, compared to the original projection of \$0, representing a variance of 0%.

The actual/estimated O & M for the period April 1998 through September 1998 is \$1,183,763 compared to the original projection of \$1,431,093, representing a variance of (17.28%).

The SO2 emission allowance credit from the Florida Municipal Power Agency (FMPA) wholesale sale was \$15,759 for the period April 1998 through September 1998 compared to the original projection of \$20,000, representing a variance of (21.2%).

Project Summary:

SO₂ Emission Allowances are being used by Tampa Electric to meet compliance standards for Phase I of the CAAA.

Project Projections:

Estimated O & M costs for the period October 1998 through December 1998 are projected to be (\$531,857).

Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$1,760,766.

FORM 42-5P

Project Title: Big Bend Unit 1 Classifier Replacement

Project Description:

The boiler modifications at Big Bend Unit 1 are part of Tampa Electric's Nitrous Oxide (NO_X) compliance strategy for Phase II of the Clean Air Act Amendments of 1990 (CAAA). The classifier replacements will optimize coal fineness by providing a more uniform particle size. This finer classification, combined with the equalized distribution of coal to outlet pipes and furnaces, will enable a uniform, staged combustion. As a result, firing systems will operate at lower NO_X values.

Project Accomplishments:

Project Fiscal Expenditures: N/A.

Progress Summary:

The Big Bend Unit 1 Classifier Replacement will be used by Tampa Electric to

meet NOx compliance standards for Phase II of the CAAA.

Big Bend Unit 1 Classifier Replacement is scheduled to go into service in

December 1998.

Project Projections:

Estimated depreciation plus return for the period January 1999 through

December 1999 is projected to be \$217,337.

Estimated O & M costs for the period January 1999 through December 1999

are projected to be \$0.

FORM 42-5P

Project Title: Big Bend Unit 2 Classifier Replacement

Project Description:

The boiler modifications at Big Bend Unit 2 are part of Tampa Electric's Nitrous Oxide (NO_X) compliance strategy for Phase II of the Clean Air Act Amendments of 1990 (CAAA). The classifier replacements will optimize coal fineness by providing a more uniform particle size. This finer classification, combined with the equalized distribution of coal to outlet pipes and furnaces, will enable a uniform, staged combustion. As a result, firing systems will operate at lower NO_X values.

Project Accomplishments:

Project Fiscal Expenditures: N/A.

Progress Summary:

The Big Bend Unit 2 Classifier Replacement will be used by Tampa Electric to meet NO_x compliance standards for Phase II of the CAAA. The Big Bend Unit 2

Classifier Project is complete and in service as of May 1998.

Project Projections:

Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$143,013.

Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$0.

FORM 42-5P

Project Title: Gannon Unit 5 Classifier Addition

Project Description:

The boiler modifications at Gannon Unit 5 are part of Tampa Electric's Nitrous Oxide (NO_X) compliance strategy for Phase II of the Clean Air Act Amendments of 1990 (CAAA). The classifier replacements will optimize coal fineness by providing a more uniform particle size. This finer classification, combined with the equalized distribution of coal to outlet pipes and furnaces, will enable a uniform, staged combustion. As a result, firing systems will operate at lower NO_X values.

Project Accomplishments:

Project Fiscal Expenditures: N/A.

Progress Summary: The Gannon Unit 5 Classifier Addition will be used by Tampa Electric to meet NO_X

compliance standards for Phase II of the CAAA. The Gannon Unit 5 Classifier Project is

complete and in service as of December 1997.

Project Projections: Estimated depreciation plus return for the period January 1999 through December 1999

is projected to be \$200,626.

Estimated O & M costs for the period January 1999 through December 1999 are

projected to be \$0.

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FORM 42-5P

Project Title: Gannon Unit 6 Classifier Addition

Project Description:

The boiler modifications at Gannon Unit 6 are part of Tampa Electric's Nitrous Oxide (NO_x) compliance strategy for Phase II of the Clean Air Act Amendments of 1990 (CAAA). The classifier replacements will optimize co. fineness by providing a more uniform particle size. This finer classification, combined with the equalized distribution of coal to outlet pipes and furnaces, will enable a uniform, staged combustion. As a result, firing systems will operate at lower NO_x values.

Project Accomplishments:

Project Fiscal Expenditures: N/A.

Progress Summary: The Gannon Unit 6 Classifier Addition will be used by Tampa Electric to meet NO_X

compliance standards for Phase II of the CAAA. The Gannon Unit 6 Classifier Project is

complete and in service as of December 1997.

Project Projections: Estimated depreciation plus return for the period January 1999 through December 1999

is projected to be \$153,551.

Estimated O & M costs for the period January 1999 through December 1999 are

projected to be \$0.

Tampa Electric Company

Environmental Cost Recovery Clause (ECRC)
January 1999 Through December 1999
Description and Progress Report for
Environmental Compliance Activities and Projects

FORM 42-5P

Project Title: Gannon Coal Crushers

Project Description:

Two Gannon Coal Crushers will be used in conjunction with the boiler modifications at Gannon as part of Tampa Electric's Nitrous Oxide (NO_X) compliance strategy for Phase II of the Clean Air Act Amendments of 1990 (CAAA). The coal crushers will assist in achieving compliance by providing a more uniform particle size. The finer coal particles, combined with the equalized distribution of coal to outlet pipes and furnaces, will enable a uniform, staged combustion. As a result, firing systems will operate at lower NO_X values.

Project Accomplishments:

Project Fiscal Expenditures:

N/A.

Progress Summary:

The Gannon Coal Crushers will be used by Tampa Electric to meet NO_X compliance standards for Phase II of the CAAA. The Gannon Coal Crusher

Project is scheduled to go into service July 1999.

Project Projections:

Estimated depreciation plus return for the period January 1999 through

December 1999 is projected to be \$425,835.

Estimated O & M costs for the period January 1999 through December 1999

are projected to be \$0.

FORM 42-5P

Project Title: Gannon Unit 5 Stack Extension

Project Description:

In accordance with the CAAA, Tampa Electric is pursuing a Title V Operation Permit for Gannon Station. During the permitting process it was determined by FDEP that our current station cap of 2.4 lbs. of SO₂/MMBtu results in modeled exceedances of the National Ambient Air Quality Standards (NAAQS) for SO₂. As such, Tampa Electric would be required to reduce SO₂ emissions at Gannon Station by approximately 50% in the new Title V permit.

Alternatively, Tampa Electric has completed revised dispersion modeling for Gannon Station under many different scenarios using more updated meteorological data, increased stack heights, and various SO₂ emission sets, (e.g., various sulfur content fuels consistent with the overall Acid Rain fuel strategy). It was determined that by increasing Gannon Unit 5 stack to 110 meters and limiting the Station to an SO₂ cap of 1.9 lb./MMBtu, the Station can demonstrate compliance with the air dispersion modeling.

Project Accomplishments:

Project Fiscal Expenditures: N/A.

Progress Summary: The Gannon Unit 5 Stack Extension will also be used by Tampa Electric to meet

SO₂ compliance standards for Phase II of the CAAA. The Gannon Unit 5 Stack

Extension Project is scheduled to go into service December 2000.

Project Projections: Estimated __preciation plus return for the period January 1999 through December

1999 is projected to be \$16,407.

Estimated O & M costs for the period January 1999 through December 1999 are

projected to be \$0.

FORM 42-5P

Project Title: Gannon Unit 6 Stack Extension

Project Description:

In accordance with the CAAA Tampa Electric is pursuing a Title V Operation Permit for Gannon Station. During the permitting process it was determined by FDEP that our current station cap of 2.4 lbs. of SO₂/MMBtu results in modeled exceedances of the National Ambient Air Quality Standards (NAAQS) for SO₂. As such, Tampa Electric would be required to reduce SO₂ emissions at Gannon Station by approximately 50% in the new Title V permit.

Alternatively, Tampa Electric has completed revised dispersion modeling for Gannon Station under many different scenarios using more updated meteorological data, increased stack heights, and various SO₂ emission sets, (e.g., various sulfur content fuels consistent with the overall Acid Rain fuel strategy). It was determined that by increasing Gannon Unit 6 stack to 110 meters and limiting the Station to an SO₂ cap of 1.9 lb./MMBtu, the Station can demonstrate compliance with the air dispersion modeling.

Project Accomplishments:

Project Fiscal Expenditures: N/A.

Progress Summary: The Gannon Unit 6 Stack Extension will be used by Tampa Electric to meet SO₂

compliance standards for Phase II of the CAAA. The Gannon Unit 6 Stack

Extension Project is scheduled to go into service December 1999.

Project Projections: Estimated depreciation plus return for the period January 1999 through

December 1999 is projected to be \$3,626.

Estimated O & M costs for the period January 1999 through December 1999

are projected to be \$0.

FORM 42-5P

Project Title: Big Bend Fuel Oil Tank No. 1 Upgrade

Project Description:

The Big Bend Oil Storage Tank No. 1 is a 500,000 gallon field erected fuel storage tank that is required to meet the requirements of DEP Rule 62-762 as an existing field erected above ground storage tank containing a regulated pollutant (diesel fuel). The rule requires various modifications and a complete internal inspection by the end of 1999.

Present scope of work for this project includes:

- Cleaning and inspecting the tank in accordance with API 653 specifications
- Applying a coating to the internal floor and 30 inches up the tank wall. Installing an "El Segundo" bottom to the tank, including installing a leak detection system.
- Installing a spill containment for piping fittings and valves surrounding the tank.
- Installing a new truck unloading facility and spill containment for the truck unloading facility.
- Installing level instrumentation for overfill protection.
- Installing secondary containment for below ground piping or reroute to above ground.
- Conducting a tank closure assessment.

Project Accomplishments:

- Project Fiscal Expenditures: The actual/estimated depreciation plus return for the period April 1998 through
 - September 1998 was \$928 compared to an original projection of \$16,807,
 - representing a variance of (94%).
- Project Progress Summary: The project is scheduled to go into service December 1998.
- Project Projections: Estimated depreciation plus return for the period October 1998 through

 December 1998 is projected to be \$11,150. Estimated O & M costs for the
 period October 1998 through December 1998 are projected to be \$0
 - Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$63,027. Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$0.

FORM 42-5P

Project Title: Big Bend Fuel Oil Tank No. 2 Upgrade

Project Description:

The Big Bend Oil Storage Tank No. 2 is a 4,200,000 gallon field erected fuel storage tank that is required to meet the requirements of DEP Rule 62-762 as an existing field erected above ground storage tank containing a regulated pollutant (diesel fuel). The rule requires various modifications and a complete internal inspection by the end of 1999.

Present scope of work for this project includes:

- Cleaning and inspecting the tank in accordance with API 653 specifications
- Applying a coating to the internal floor and 30 inches up the tank wall. Installing an "El Segundo" bottom to the tank, including installing a leak detection system.
- Installing a spill containment for piping fittings and valves surrounding the tank.
- Installing a new truck unloading facility and spill containment for the truck unloading facility.
- Installing level instrumentation for overfill protection.
- Installing secondary containment for below ground piping or reroute to above ground.
- Conducting a tank closure assessment.

Project Accomplishments:

Project Fiscal Expenditures: The actual/estimated depreciation plus return for the period April 1998

through September 1998 was \$616 compared to an original projection of

\$35,341, representing a variance of (98%).

Project Progress Summary: The project is complete and in service as of January 1998.

Project Projections: Estimated depreciation plus return for the period October 1998 through

December 1998 is projected to be \$14,682. Estimated O & M costs for the period October 1998 through December 1998 are projected to be \$0.

Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$116,710. Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$0.

FORM 42-5P

Project Title: Phillips Oil Tank No. 1 Upgrade

Project Description:

The Phillips Oil Storage Tank No. 1 is a 1,300,000 gallon field erected fuel storage tank that is required to meet the requirements of DEP Rule 62-762 as an existing field erected above ground storage tank containing a regulated pollutant (diesel fuel). The rule requires various modifications and a complete internal inspection by the end of 1999.

Present scope of work for this project includes:

- Cleaning and inspecting the tank in accordance with API 653 specifications
- Applying a coating to the internal floor and 30 inches up the tank wall.
- Installing a spill containment for piping fittings and valves surrounding the tank.
- Installing level instrumentation for overfill protection.
- Installing secondary containment for below ground piping or reroute to above ground.
- Conducting a tank closure assessment.

Project Accomplishments:

Project Fiscal Expenditures: The actual/estimated depreciation plus return for the period April 1998 through

September 1998 was \$145 compared to an original projection of \$1,041,

representing a variance of (86%).

Project Progress Summary: The project is complete and in service as of January 1998.

Project Projections: Estimated depreciation plus return for the period October 1998 through

December 1998 is projected to be \$623. Estimated O & M costs for the period

October 1998 through December 1998 are projected to be \$0.

Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$5,556. Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$0.

FORM 42-5P

Project Title: Phillips Oil Tank No. 4 Upgrade

Project Description:

The Phillips Oil Storage Tank No. 4 is a 57,000 gallon field erected fuel storage tank that is required to meet the requirements of DEP Rule 62-762 as an existing field erected above ground storage tank containing a regulated pollutant (diesel fuel). The rule requires various modifications and a complete internal inspection by the end of 1999.

Present scope of work for this project includes:

- Cleaning and inspecting the tank in accordance with API 653 specifications
- Applying a coating to the internal floor and 30 inches up the tank wall.
- Installing a spill containment for piping fittings and valves surrounding the tank.
- Installing level instrumentation for overfill protection.
- Installing secondary containment for below ground piping or reroute to above ground.
- Conducting a tank closure assessment.

Project Accomplishments:

Project Fiscal Expenditures: The actual/estimated depreciation plus return for the period April 1998 through

September 1998 was \$69 compared to an original projection of \$1383,

representing a variance of (95%).

Project Progress Summary: The project is complete and in service as of January 1998.

Project Projections: Estimated depreciation plus return for the period October 1998 through

December 1998 is projected to be \$1,022. Estimated O & M costs for the

period October 1998 through December 1998 are projected to be \$0.

Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$13,290. Estimated O & M costs for the period October 1998 through December 1998 are projected to be \$0.

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FORM 42-5P

Tampa Electric Company Environmental Cost Recovery Clause (ECRC) January 1999 Through December 1999 Description and Progress Report for **Environmental Compliance Activities and Projects**

Project Title: Gannon Ignition Oil Tank Upgrade

Project Description:

The Gannon Ignition Oil Storage Tank is a 300,000 gallon field erected fuel storage tank that is required to meet the requirements of DEP Rule 62-762 as an existing field erected above ground storage tank containing a regulated pollutant (diesel fuel). The rule requires various modifications and a complete internal inspection by the end of 1999.

Present scope of work for this project includes:

Cleaning and inspecting the tank in accordance with API 653 specifications

Applying a coating to the internal floor and 30 inches up the tank wall. nstalling an "El Segundo" bottom to the tank, including installing a leak detection system.

Installing a spill containment for piping fittings and valves surrounding the tank.

Installing a new truck unloading facility and spill containment for the truck unloading facility.

Installing level instrumentation for overfill protection.

Installing secondary containment for below ground piping or reroute to above ground.

Conducting a tank closure assessment.

Project Accomplishments:

This project is in the construction stage.

The actual/estimated depreciation plus return for the period April 1998 through Project Fiscal Expenditures:

September 1998 was \$29,276 compared to an original projection of \$19,789,

representing a variance of 48%.

The project is complete and in service as of December 1997. Project Progress Summary:

Estimated depreciation plus return for the period October 1998 through Project Projections: December 1998 is projected to be \$14,635. Estimated O & M costs for the period October 1998 through December 1998 are projected to be \$0.

> Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$56,869. Estimated O & M costs for the period January 1999 through December 1999 are projected to be \$0.

FORM 42-5P

Project Title: National Pollutant Discharge Elimination System (NPDES) Annual Surveillance Fees

Project Description:

Chapter 62-4.052, Florida Administrative Code (F. A. C.), implements the annual regulatory program and surveillance fees (annual fees) for wastewater permits. These fees are in addition to the application fees described in Rule 62-4.050, F. A. C. Tampa Electric's Big Bend, Gannon, Hookers Point and Sebring Stations are affected by this rule.

Project Accomplishments:

Project Fiscal Expenditures: N/A.

Project Summary:

NPDES Surveillance fees are paid annually for the prior year.

Project Projections:

Estimated depreciation plus return for the period January 1999 through December 1999 is projected to be \$0. Estimated O & M costs for the period

January 1999 through December 1999 are projected to be \$55,200.

Calculation of the Energy & Demand Allocation % By Rate Class Lampa Electric Company Environmental Cost Recovery Clause (ECRC) January 1999 to December 1999

	ε	(2)	(3)	(4)	(2)	(9)	€	(9)	(6)	(10)
State Class	Average 12 CP Load Factor at Meter (%)	Projected Sales at Meter (KWh)	Projected Avg 12 CP at Meter (kW)	Demand Loss Expansion Factor	Energy Loss Expansion Factor	Projected Sales at Generation (AWh)	Projected Avg 12 CP at Generation (AW)	Percentage of kWh Sales at Generation (%)	Percentage of 12 CP Demand at Generation (%)	12 CP & 1/13 Allocation Factor (%)
RS, RST	52.72205%	7,046,663,000	1,525,763	1.061628	1.062297	7,485,648,965	1,619,793	4434%	59.53%	58.37%
68, 651, 13	63.62289%	951,325,000	172,327	1.061896	1.062297	1,010,653,431	182,993	5,99%	6.72%	N99'9
osp, dspr	78.23957%	4,303,305,000	627,873	1.060330	1.061240	4,566,839,398	665,753	27.06%	24.47%	24.67%
OSLD, GSLDT, SBF, SBFT	86.12625%	1,779,258,000	235,830	1.045147	1.645213	1,859,703,592	246,477	11.02%	9.06%	9.219
151, 15T1, 58M, 58IT1, 153, 15T3, 5BI3,5BI	101.56414%	1,742,961,000	0	1.020766	1.021211	1,779,930,946		10.54%	0.00%	V18.0
20/01	329.52368%	166,532,000	8,769	1.058824	1,062295	176,906,111	6,108	1.05%	0.22%	0.28%
TOTAL		15,990,104,000	2,567,562			16,879,682,443	2,721,124	100.00%	100.00%	100.00%

Notes:

(1) Average 12 CP load flotter based on actual 1997 bad research data
(2) Projected MWh sales for the period January 1999 to December 1999
(3) Calculated. (Collumn 2) / (8,760 hours X Column 1)
(4) Based on actual 1997 bad research data
(5) Based on actual 1997 bad research data
(6) Column 2 X Column 4
(7) Column 3 X Column 4
(8) Column 6 / Total Column 6
(9) Column 6 / Total Column 7
(10) Column 8 X V Column 9

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FORM 42-6P

Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Energy & Demand Allocation % By Rate Class January 1999 to December 1999

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Rate Class	Percentage of kWh Sales at Generation (%)	12 CP & 1/13 Allocation Factor (%)	Energy- Related Costs (\$)	Demand- Related Costs (\$)	Total Environmental Costs (\$)	Projected Sales at Meter (kWh)	Environmental Cost Recovery Factors (#/kWh)
RS, RST	44.34%	58.37%	1,917,344	114,043	2,031,387	7,046,663,000	0.029
GS, GST, TS	5.99%	6.66%	259,019	13,012	272,031	951,385,000	0.029
GSD, GSDT	27.06%	24.67%	1,170,124	48,200	1,218,324	4,303,305,000	0.028
GSLD, GSLDT, SBF, SBFT	11.02%	9.21%	476,525	17,994	494,519	1,779,258,000	0.028
1S1, 1ST1, SB(1, 1S3, 1ST3, SB(3	10.54%	0.81%	455,769	1,583	457,352	1,742,961,000	0.026
SLOL	1.05%	0.28%	45,404	547	45,951	166,532,000	0.028
TOTAL	100.00%	100.00%	4,324,185	195,379	4,519,564	15,990,104,000	

Notes:

- (1) From Form 42-6P, Column 8
- (2) From Form 42-6P, Column 10
- (3) Column 1 x Total Jurisdictional Energy Dollars from Form 42-1P, line 5
- (4) Column 2 x Total Jurisdictional Demand Dollars from Form 42-1P, line 5
- (5) Column 3 + Column 4
- (6) Projected KWH sales for the period January 1999 to December 1999
- (7) Column 5 / Column 6 x 100

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Tampa Electric Company

Form 42 - 1E

Environmental Cost Recovery Clause (ECRC)

Calculation of the Current (Actual/Estimated) Period True-Up

April 1998 to December 1998

(in Dollars)	Apr-98 - Sep-98	Oct-98 - Dec-98
Line	Period Amount	Period A nount
Over/(Under) Recovery for the current period (Form 42-2E, Line 5)	\$371,903	\$857,329
2. Interest Provision (Form 42-2E, Line 6)	14,842	15,521
3. Sum of Current Period Adjustments (Form 42-2E, Line 10)	0	0
 Current Period True-Up Amount to be refunded/(recovered) in the projection period January 1999 to December 1999 (Lines 1 + 2 + 3) 	\$386,745	\$872,850

FORM 42-1E

Tanna Electric Commun: Environmental Cost Recovery Clause (ECRC) Calculation of the Actual/Estimated Period True-Up Amount April 1998 to December 1998

Current Period Trus-Up Amount (in Dollars)

							Apr-98 - Sep-96 End of			-1	Oct-98 - Dec-96 End of
	Age-98	Actual May-98	Actual Jun-98	Actual Jul-98	Actuel Aug-98	Extimated Sep-98	Period Total	Estimated Oct-98	Estimated Nov-98	Estimated Dec-98	Period
1. ECRC Revenues (not of Revenue Texas) 2. Tree-Up Provision	380,177	\$394,696	12,927	5523,379	\$496,174	\$407,148	\$2,786,305	\$40,723	\$382,211	\$388,521	51,213,455
3. ECRC Revenues Applicable to Period (Lines 1 + 2)	403,104	417,623	\$17,658	546,306	\$19,101	\$20,076	2,923,868	460,836	400,324	406,634	1,367,794
4. Anniedictional ECRC Conts a. Od. M. Activities (From 42-5E, Line 9) b. Capital Liverstrant Projects (From 42-7E, Line 9)	238,671	238,462	321,539	354,389	298,158	197,804 132,815	1,649,023	(53,547)	161,573	(180,819)	(72,793)
c. Total Arrisdictional ECR.C.Conta	391,099	389,587	470,269	669'606	447,532	349,819	2,551,965	104,032	121,592	(17,159)	410,46
5. Own/Under Recovery (Line 3 - Line 4c)	12,005	28,036	47,389	12,617	11,569	170,257	371,903	356,834	76,732	423,793	857,329
6. Interest Provision (Form 42-35, Line 10)	2,235	2222	2,316	2,439	2,593	3,037	14,842	4,192	5,121	6,208	15,527
7. Segistating Balance True-Up & Interest Provision Professoral Years St. Ress. Oct. p. 1997 5-16-4, 1999	137,563	128,876	136,207	162,985	185,144	236,379	137,563	271,700	614,583	678,323	271,700
(Order No. PSC-98-0408-FOF-ES) and	351,717	351,717	351,717	351,717	351,717	351,717	351,717	474,234	474,224	474,224	474,224
8. True-Up Collected/(Refunded) (see Line 2)	(72,927)	(22,927)	(22,927)	(22,927)	(22,927)	(22,928)	(137,563)	ORLIN	(18,113)	(18,113)	(54,339)
9. End of Period Total True-Up (Lines $5+6+7+7s+8$)	480,593	487,924	514,702	198'965	588,096	738,462	738,462	1,088,807	1,152,547	1,564,435	1,964,03
10. Adjustment to Period True-Up Including Interest	0	0	0	0	0	0	0	0	0	0	

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FORM 42-2E

\$1,564,435

\$1,564,435

\$1,152,547

\$1,088,007

\$738,462

\$738,462

\$588,096

\$536,861

\$514,702

\$487,924

\$480,593

11. End of Period Total Net True-Up (Lines 9 + 10)

Lembe Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Actual/Estimated Period True-Up
April 1998 to December 1998

Interest Provision (in Dollars)

						₹]	Apr.98 - Sep.98			•	Oct-98 - Dec-98
	Actual Apr-98	Actual May-98	Actual Jun-91	Actual Jul-98	Aug-98	Estimated Sep-98	Period Amount	Estimated Oct-98	Estimated Nov-98	Estimated Dec-98	Period
resing Balance Trans-Up Amount (Ferm 43-15, Line 7+7s+10)	\$489,280	\$480,593	\$487,924	\$514,702	\$536,861	\$581,096		\$745,924	\$1,088,807	11,152,547	
ng True-Up Amount Before Interest	47038	485,702	512,386	534422	\$85,503	735,425		1,084,615	1,147,426	1,558,227	
i of Beginning & Ending True-Up (Lines 1 & 2)	\$63,638	966,295	1,000,310	1,049,124	1,122,364	1,323,521		1,830,539	2,236,233	2,710,774	
age True-Up Amount (Line 3 x 1/2)	483,819	483,148	\$00,155	524,562	561,182	192,168		915,270	1,118,117	1,355,387	
est Rate (First Day of Reporting Business Month)	5.55%	\$53%	\$30%	3.60%	\$36%	\$525		\$ 50%	\$ 50%	5.50%	
est Rate (First Day of Subsequent Business Month)	\$53%	\$ 500%	\$6095	\$36%	\$52%	5.50%		\$ 50%	5.50%	\$ 50%	
i of Beginning & Ending Interest Rates (Lines 5 & 6)	11:08%	11 03%	11.10%	11.16%	11.05%	11.02%		11 00%	11.00%	11 00%	
age Interest Rate (Line 7 x $1/2$)	5.540%	\$515%	5.550%	5.580%	5.540%	5.510%		5.500%	5.500%	5.500%	
thly Average Interest Rate (Line S x 1/12)	0.462%	0.460%	9463970	0.465%	9.46294	0.459%		0.458%	0.458%	0.458%	
est Provision for the Meeth (Line 4 x Line 9)	\$2,235	22,22	\$2,316	\$2,439	\$2,593	13,037	\$14,842	\$4,192	\$5,121	\$6,208	115,512

FORM 42-3E

Environmental Cost Recovery Clause (ECRC)

Calculation of the Current Period Actual/Estimated Amount
April 1998 to December 1998

Variance Report of O & M Activities (In Dollars)

> Line No.

43.7% 43.7% 0.0% -2.1% 0.0% 0.0% 0.0% 9600 9600 65.9% 21.2% Variance (4,241) (\$1,302,574) (\$1,302,574) (\$531) (\$1,317,828) \$20.028 (20,000)\$2,977,483 \$2,977,483 24,750 2,001,134 8971,599 (15,759) \$1,683,391 \$1,683,391 24,219 683,306 \$591,625 Actual la Big Bend Unit 3 Flue Gas Desulfurization Integration Ic Big Bend Unit 4 Continuous Emissions Monitors Big Bend Units 1 and 2 Flue Gas Conditioning 2. Total Investment Projects - Recoverable Costs Big Bend Fuel Oil Tank #2 Upgrade to Big Bend Fuel Oil Tank #1 Upgrade Phillips Upgrade Tank #1 for FDEP Phillips Upgrade Tank #4 for FDEP 4. Recoverable Costs Allocated to Demand 3. Recoverable Costs Allocated to Energy Description of Investment Projects SO2 Emissions Allowances 1d Gannon Ignition Oil Tenk SO2 Credit - FMPA

Notes

Column (1) is the End of Period Totals on Form 42-5E (sum Apr-98-Sep-98 and Oct-98-Dec-98)

Column (2) is the approved Projected amount in accordance with FPSC Order No. PSC-98-0408-FOF-EI

and Order No. PSC-98-1224-FOF-EI (sum Apr-98-Sep-98 and Oct-98-Dec-98)

Column (3) = Column (1) - Column (2)

Column (4) = Column (3) / Column (2)

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TAMPA ELECTRIC COMPANY
(KOZ-1)
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FORM 42-4E

Insuse Electric Company
Environmental Cost Recovery Classe (ECRC)
Calculation of the Cuerent Period Actual Estimated Amount
April 1998 to December 1998

O&M Activities (in Dollars)

Oct.98 - Dec.98	End of Method of Classification		200000	\$13.00	R	22 22		0 2	0	0 2	(5.50E,157)	•	(18,785) \$8	(18,785)	•			(72,783)		•	
		Deciti	E178.040	3,113	•	0			0		(23/423)	•	(190,388)	(199,298)	0	0.95813995	A.9932033	(188,819)	•	•	
	Projected	Nov-88	201318	MIS			0		•	•	(41,611)	•	166,769	146,740		0.9009500	0.9052523	161,573	•	•	
	Projected	Oct-Mg	504.73	AIIS	•	•	•	•	•	•	(153,094)	•	(55,256)	(35,256)	•	0.30096.0	6.9147813	COLSED	•		
P. No. 549-50	End of Period	Total	2571.688	21474	2	8	2	2	2	2	11,191,453	(\$15,739)	1,742,186	1,362,386	•			1,647,372	1,881		
8	Estimated	n de	384630	3,115		•				•	131,085	•	208,830	208,830	•	0.9471090	0.9151953	197,804		•	
	Actual	Aug-98	89198	5,052	0			0	0	•	217,038	•	320,025	339,025	•	9013166.0	0.9229481	298,150	•	•	
	Actual	20,00	\$180,702	0			•	0	•	•	169'002	•	381,993	341,993	•	0.9387895	0.9203090	354,389	•	•	
	Actual	Jun-98	\$6.78	4452	•	•	•	0	•	•	827,772	•	348,653	38,63	•	0.9727623	0.9347896	321,539	•	•	
	Actual	May-98	101.684		9	0	•	0	0	•	221,850	•	253,534	253,534	•	0.9425529	0.9076-899	238,462	•		
	Actual	Apr-98	516612	2,235	0	0	0	0	•	6	153,354	(15,759)	165,731	149,731	•	0 9-48:3018	0.9063993	136,879	1,801	•	

16 life Bend Unid 19 Plac Cas Described to life Bend Unid - Considerate Le life Bend Unid - Considerate Besindan 14 Consent Species CO Task 18 Big Dend Vind CO Task 21 Ulgrade 18 Big Dend Vind CO Task 21 Ulgrade 18 Big Dend Fool CO Task 21 Ulgrade 18 Big Bend Fool CO Task 21 Ulgrade 18 Big Dend Fool CO Task 21 Ulgrade 18 Big Dend Fool CO Task 21 Ulgrade 18 Big Dend Fool CO Task 21 Ulgrade 19 Big Dend Fool See FOEP 18 SOZ Emissions Allerwavers U. SOZ Emissions Allerwavers U. SOZ Emissions Allerwavers U. SOZ Emissions Allerwavers U. SOZ Coulle - PARTA.

Description of O&M Activities

FORM 42-5E

Notes (A) Line 3 x Line 5 (B) Line 4 x Line 6

42

9. Total Assistintional Reco Activities (Lines 7 + E)

mble Costs for O&M

Autodisticnal Energy Recoverable Cents (A)
 Add back FMFALAK Eness Entissiess Abcert
 Autodisticned Demand Recoverable Cents (B)

3. Recoverable Costs Allocated to Energy 4. Reserventtle Costs Allocated to Deman

5. Retail Energy Jeriodictional Factor 6. Retail Densard Incirclicities Factor

Tampa Electric Company

Calculation of the Current Period Actual/Estimated Amount Environmental Cost Recovery Clause (ECRC)

April 1998 to December 1998

Variance Report of Capital Investment Projects - Recoverable Costs

(In Dollars)

No.

	(1) Actual/	(2) Original	(3) Varia	(4) nce
	Estimated	Projection	Amount	Percent
1. Description of Investment Projects				
In Big Bend Unit 3 Flue Gas Desulfurization Integration	\$830,541	\$830,541	80	9600
1b Big Bend Units 1 and 2 Flue Gas Conditioning	\$501,372	501,372	\$0	960'0
1c Big Bend Unit 4 Continuous Emissions Monitors	\$64,092	64,092	80	960'0
1d Gannon Ignition Oil Tenk	\$43,911	35,308	\$8,603	24.4%
1e Big Bend Fuel Oil Ta. #1 Upgrade	\$12,078	26,601	(\$14,523)	-54.6%
If Big Bend Fuel Oil Tenk #2 Upgrude	\$15,298	. 50,559	(\$35,261)	-69.7%
1g Phillips Upgrade Tank #1 for FDEP	\$768	2,538	(\$1,770)	-69.7%
1h Phillips Upgrade Tank #4 for FDEP	160'15	2,997	(\$1,906)	-63.6%
2. Total Investment Projects - Recoverable Costs	1,469,151	1,514,008	(44,857)	-3.0%
Recoverable Costs Allocated to Energy Recoverable Costs Allocated to Demand	1,396,005	\$118,003	(\$44,857)	38.0%

FORM 42-6E

Column (2) is the approved Projected amount in accordance with FPSC Order No. PSC-98-0408-FOF-E1 and Order No. PSC-98-1224-FOF-EI

Notes: Column (1) is the End of Period Totals on Form 42-7E.

Column (3) = Column (1) - Column (2) Column (4) = Column (3) / Column (2)

t b

(A) Each project's Total System I (B) Line 3 x Line 5 (C) Line 4 x Line 6

ble Expenses on Form 43-RE, Line 9

Er.														IF
9. Total Astindictional Recoverable Costs for breastment Projects (Liess 7 + 1)	Nuisdictional Energy Recoverable Costs (B) Nuisdictional Demand Recoverable Costs (C)	Retail Energy Justicificational Factor Retail Demand Justicificational Factor	3. Recoverable Corts Allocated to Energy 4. Recoverable Corts Allocated to Denned	Total Investment Projects - Europeanitis Costs	Its Phillips Upgrade Tests 64 fter FUEP	ig Philips Upgrade Took #1 for FDEP	If Big Big of Fact Oil Tests #2 Upgrade	In Big Stend Fast Oil Tank #1 Upgrade	1d Gastern Spellon Of Tarit	To Big Brend Unit 4 Constitutous Emissions Moraltons	19 Sig Stend Utsits 1 and 2 Plus Gas Cossistioning	In Big Bend Unit 3 Flor Gas Desufficionien Integration	Description of Investment Projects (A)	1
8157,438	145,451	0.5403018	1,40	100,001	,	3	12	17	100,	7,194	34,236	207,028		Actual Apr-98
\$151,125	14(34)	0.9403529	4711	160,540	,		26	y.	4,648	7,176	36,104	297,842		Actual May-98
\$140,730	10,750	0.9727622	11675	161,161	7		8	38	5,369	7,158	35,972	\$63,538		Actual Jun-98
arteis	14Q87 4983	0.5287805	155,440	160,740	,	×	2		101'S	GPT.	55,840	592,469		Actual 3sl-98
118,374	1967 116781	0.9316796	BACK IIITSGI	160,379	13	4	113	ŭ	4933	7,121	35,398	28776S		Aug-88
\$150,015	107 14730	0.9471090	154,775	160,784	IX.	¥	300	36	4915	7,103	35,576	\$92,096		Estimated Sep-M
Definal	ELVW2		21,751 10,715	964,735	9	SHE	9198	2070	279,276	243,592	8335,406	\$555,375		Total .
\$157,578	816'L 199'ari	8.9690670	154'08 80'151	163,092	61	=	1,739	1,809	4,597	7,685	55,444	201,500		Projected Oct-98
\$162,619	14,719	0.0000000	MAN INCOME	162,131	219	1%	4,744	4,812	CIN CIN	7,067	25,317	\$91,723		Projected Nov-III
\$143,600	1758	6.502362 \$462365.0	150,761	177,193	742	359	66T'8	5,360	4,800	7,648	25,170	905,148		Projected Dec-98
\$40,2%	31,166		OTH MACES	917/16	1,622	5623	234,602	SELLER	SHARE	821,390	905/2913	\$275,168		Total .
				111705	1,911	83	14,682	11,150						Method of Chr Demand
				\$402,704						21,380	165,036	2775,160		Topic Control

tal Cost Recovery Clause (ECRC)

FORM 42-7E

PAGE 1 of 1

TAMPA ELECTRIC COMPA:

TAMPA ELE

Lienta Electric Composer
Environmental Celt Recovery Classe (ECRC)
Calculation of the Actual Entirested Amount for the Period
April 1995 to December 1999

Return on Capital Investments, Depreciation and Taxes For Project. Big Bend Usin's Pho Gas Desuffationiscon Integral (in Dollars)

2	Liee Description	Beginning of Period Amount	Actual Apr-98	Actual May-98	Actual Aun-98	Authori Jul-98	Actual Ang-98	Estimated Sop-98	Estimated Oct-98	Entimeted New-98	Extirnated Dec-98	End of Period Amount
	1. Inventments a. Expenditures/Additions		2	8	8	8	8	9	8	s	s	
	b. Chesings to Plant			•	0	•	•					
	c. Ardiements		•			•	•	•		۰		
	d Other		•			•		•	•	•		
	2. Plant-in-Service/Depreciation Base	857,952,98	8,339,658	8,239,438	8,339,652	85796278	8739,658	8,239,638	8,239,638	8,339,658	8,139,638	
	3. Less: Accumulated Depositation 4. CWP - Non-Johnson Baseline	(624,615)	(643,241)	(962,467)	(1897)	(700,919)	(730,145)	(170,977)	(738,597)	(000,000)	(141,049)	
	5. Net havestment (Lines 2 + 3 + 4)	\$7,613,643	1,996,417	161,772,191	1,557,965	1,538,739	7,519,513	1,500,187	1,481,061	1,461,835	1,42,609	
	6. Average Net Investment		7,606,530	7,986,804	7,567,578	158351	1,539,136	7,599,900	1,690,574	347,445	7,69,77	
	7. Return on Average Not Investment a. Equity Compount Geoseal Up For Towns (A)		35.928	24.30	31,646	31.504	8530	arms	55.000	907	14.75	
	b. Debt Composent (Line 6 x 2.82% x 172)		17,874	17,829	17,784	17,739	17,603	17,688	17,603	17,558	17,513	159,241
	£ Investment Expenses a. Detrocialies		19.236	10.236	16 736	16.236	10 236	10.736	200	20.00	10.00	200
	b. Amortization		0		•	•	•					
	c. Diemerthement		0	•	•	•	•	•	•	•	0	•
	d. Property Taxes		0 0		0 0		• •		• •	0 (
		,										-
	•		93,028	92,842	92,656	97,469	91,282	92,096	91,909	91,723	91,536	115'062
4	 Assoverable Costs Advented to Emergy Recoverable Costs Afforshed to Demand 		0 0	0	92,036	0	0	97,090	000716	0,77	81,514	0 0
2	10. Energy Jurindictional Pactor 11. Demand Jurindictional Pactor		0.9483018	0.9405529	0.9727K3	069C9C6 0	0.9316706	0601704.0	0.9690679	0.9020200	0.9902395	
	12. Rathil Energy-Rahated Recoverable Costs (8)		167,337	87,333	85,499	12,877	81,976	81,215	89,886	873,88	196'981	785,000
	 Rathal Dennand-Ralated Recoverable Coets (C) Total Junisfictional Recoverable Coets (Lines 12 + 13) 	1	\$100,000	0 40	0 607 1333	0 254.677	800 000	0 542.498	0 250 668	ACT SEE	enc on	0 384 040

Notice (A) Lines in REZUN's v 1/12. Based on R.M. of 11.79% and weighted income tax rate of M 579% (expansion factor of 1 62004).

(C) Line Su v Line 10

(C) Line Sh v Line 11

EXHIBIT NO. DOCKET NO. 980007-E1
TAMPA ELECTRIC COMPAN
(KOZ-1) FILED: OCTOBER 5, 1998 DOCUMENT NO. 15 PAGE 1 of 8

FORM 42-8E

Temps Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Actual/Estimated Amount for the Period April 1998 to December 1998

Return on Capital Investments, Depreciation and Taxes For Project. Big Bend Units 1 and 2 Five Gas Conditioning (in Dollars)

21	Line Description	Beginning of Period Amount	Actual Apr-98	Actual May-98	Actual Jun-98	Actual Jul-98	Actual Aug-98	Estimated Sep-98	Estimated Oct-98	Estimated Nov-98	Estimated Dec-98	End of Period Amount
	1. Investments											
	 Expenditures/Additions 		8	S.	Q	8	a	\$	2	80	20	
	 Chestings to Plant 		0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	
	d Other		0	0	0	0	0	0	0	0	0	
	2. Plant-in-Service/Depreciation Base	\$5,017,734	5,017,734	5,017,734	5,017,734	5,017,734	5,017,734	5.017.734	5,017,734	5.017.734	\$ 017.734	
	3 Less: Accumulated Depreciation 4 CWP - Non-Interest Bearing	(617,258)	(630,862)	(644,466)	(658,070)	(671,674)	(872,278)	(691,112)	(712,486)	(726,090)	(198/894)	
	5. Net Investment (Lines 2+3+4)	\$4,400,476	4,386,872	4,373,268	4,359,664	4,346,060	4332,456	4,318,852	4,305,248	4.291,644	4,278,040	
	6. Average Net Investment		4,393,674	4,380,070	4,366,466	4,352,862	4,339,258	4325,654	4312,050	4,298,446	4,284,842	
	7. Return on Average Net Investment a. Essabe Component Ownered Un See Tenne (3)		101 101	10.00		20000	11 000			-	-	
	b. Debt Component (Line 6 x 28294 x 1/12)	,	10,325	10,293	10,261	10,229	10,197	10,165	10,133	10,101	10,069	91,73
	8. Investment Expenses											
	a. Depreciation		13,604	13,604	13,604	13,604	13,604	13,604	13,604	13,504	13,604	122,436
	b. Amortization		0	0	0	0	0	0	0	0	0	0
	c. Dismurtlement		0	0	0	0	0	0	0	0	0	•
	d. Property Texas		0	0	0	0	0	0	0	0	0	•
4	e. Other	1	0	0	0	0	0	0	0	0	0	0
16	6	6	\$6,236	56,104	55,972	55,840	55,708	55,576	55,444	58,312	55,180	501,372
;	•		\$6,236	56,104	55,972	55,840	55,706	55,576	55,444	55,312	55,180	561,372
	 Recoverable Costs Allocated to Demand 		0	0	0	0	0	0	0	0	0	0
	10. Energy Jurisdictional Factor		0.9485018	0.9405529	0.9227622	0.9287895	0.9316706	0.9471090	0.9690670	0.9689580	0.9502395	
	11. Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9151953	0.9147815	0.9052523	0.9032033	
	12 Retail Energy-Related Recoverable Costs (B)		53,340	52,769	\$1,649	51,859	\$1,902	52,637	53,729	\$13.595	52,434	473,914
	13. Retail Demand-Related Recoverable Costs (C)		0	0	0	0	0	0	0	0	0	0
	14 Total Davisdictional Recoverable Costs (Lines 12 + 13)	12+13)	\$53,340	\$52,769	\$51,649	\$51,859	\$51,902	\$52,637	\$53,729	\$53,595	\$52,434	\$473,914

FORM 42-8E

(A) Lines 6 x 8 8239% x 1/12 Based on ROE of 11 75% and weighted income tax inte of 34 575% (expension factor of 1 628002)
(B) Line 9x Line 10
(C) Line 9x Line 11

Environmental Cost Recovery Cleane (ECRC)
Calculation of the Actual Estimated Amount for the Period
April 1998 to December 1998

Return on Capital Investments, Depositation and Taxes For Project. Big Bend Utelt 4 Contissous Emissions Monifors (in Dellars)

5	Lien Description	Beginning of Period Amount	Apr-78	Actual May-98	Actual Jun-98	Actoni Jul-98	Aug-98	Estimated Sep-98	Estimated Oct-98	Estimated Nov-98	Estimated Dec-98	End of Period Amount
	1. Investments a. Expenditures/Additors		2	2	a	s	8	8	8	8	S	
	b. Charings to Plant		•	•	0	0	•					
	c. Anthonorth		•	۰	•	•	•	0	•	•		
	4.004		•	•	•		•	•	•		•	
	2. Plant in Service Depreciation Base	111995		866,211	866,211	866,211	\$66,211	110,000	866,211	866,211	866.313	
	3. Lens. Accusmilated Depreciation	(80)886)		(04,442)	(06,519)	(88,396)	(60,273)	(92,150)	(94,827)	(93,504)	(97,781)	
	5. Not Incompant (Lines 2+3+4)	\$348,915	\$47,638	545,161	18,184	\$41,467	239,530	537,633	847,888	533,899	532,672	
	6. Average Net Eurestment		547,977	346,100	34,00	54,746	540,469	538,597	\$10,713	534,838	532,961	
	7. Return on Avenge Not Investment v. Entity Conscious Greated the For Tune (B)			***			707					
	b. Dellet Component (Line 6 x 2 82% x 1/12)		200	1,383	15	1233	173	1,366	178	1,55	1,35	11,01
	t. Innettent Dyenses - Demoiston						ļ	!	!			5
	h. Amortimien											and a
	e. Dismandement		•	•	•	•	•	•	•			
	d. Property Tunes		•	•	•	•	•	•	•	•	•	
12	4. Other		•	-	•	•	•	•		•	0	
4"	9. Total System Exceverable Expenses (Lines 7+8)		7,194	7,176	7,138	7,148	1,121	1,103	7,085	7,067	7,848	3
7	a. Recoverable Costs Allocated to Exergy		7,194	7,176	1,150	7,140	7,121	7,103	7,085	7,867	7,048	64,092
	5. Recoverable Costs Allocated to Demand		•	•	•	•	•	•	•	•	۰	
	10. Energy Assistational Partur		0.9487018	0.9405529	0.9227622	6.9787995	0.9316796	0.9471090	0.9690670	0.9689380	0.9502307	
	11. Demand harindictional Factor		0.9963903	0.9076499	0.9247896	0.9263690	0.9729481	0.9151953	6.9147815	0.9052523	0.9032033	
	12. Ratual Energy-Radated Encoverable Conts (C)		6,E34	6,789	6,605	6,631	163,0	6,727	4,944	9479	1450	185,00
	13. Renal Demond-Related Recoverable Costs (D)		0	•		0	0	0		•	•	
	14. Total Jurisdictional Recommissis Costs (Linus 12 + 13)	-	\$4,824	94,749	\$4,665	\$6,631	\$5,634	14,727	\$14,800	84,848	\$6,697	196,961

Notes:

(A) Expressents the Not Book Vulne of the replaced Big Band Unit 4 CEMs which is currently recovered through base rates.

(B) Lines 6 x EA2895 x 1/12 Bread on EOE of 11 75% and weighted income tax rate of 36 575% (expression factor of 1.639043).

(C) Line 9s x Line 10

(D) Line 9s x Line 11

FORM 42-8E

Form 42 -46 Page 4 of 8

Insupa Electric Company
Environmental Cost Recovery Clease (ECRC)
Calculation of the Actual Estimated Amount for the Foolod April 1998 to December 1998

Return on Capital Investments, Depreciation and Taxes For Project Garmen Ignition OS Teck

ine Description	Period Amount	Apr-98	May-98	Actual Ann-98	Nd-98	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Period Amount
1. Investments a. Expressioners/Addition		G39,897)	88.679		(17,000)			s	s	8	
b. Chestrags to Plant		0	•	•	•	•	•				
c. Entirements		•	•	•	•	•		•			
& Other		•	•	•	•	•	• `	•	•	•	
2. Plant-lo-Service-Depreciation Dose	\$577,520	STARTS	612,732	612.752	588.752	589.752	28.782	200.000	90.70	01.00	
3 Laux Accusoidated Depreciation	(400)	(6,034)	(7,885)	(9/8/6)	(908,11)	(13,747)	(13,668)	(17,981)	(19,490)	CLASS	
4 CWP - Non-latered Bearing	•	•	•	•	•	•	•	•	•	•	
5. Not Investment (Lines 2+3+4)	\$100,000	341,769	338,867	336,838	311,922	310,000	(200,000)	(366,000)	(266,800)	Calif.000)	
6. Average Net Errestanent		100,277	296,3118	ETRETE.	10,099	310,964	200,000	367,136	305,313	361,096	
Return on Average Net Investment Equity Component Greasel Up For Taxes (II)		2,002	2,035	1,64	280	17	5	128	2360	2130	196.063
b. Delst Component (Line 6 x 232% x 1/12)		3	200	194	254	102	20	B	111	E .	6,487
1. Investment Expenses		1.00			1			1			
b. Ameritation			•			5*	5	5	150	1,517	721,71
e. Diensenflement											9 0
d. Property Taxes			•	•	•	•	•	•			
e Other	1	•	•	•	•	•	•	•	•		•
9. Total System Ransvendils Expenses (Liens 7 + E)		4400	26.0	5,369	1,101	4,933	4,915	(A)	5	4,000	0.911
a. Recoverable Costs Allocated to Energy		•	•	•	•			•	•	•	•
b. Recoverable Costs Allocated to Demand		4,408	458	3,389	2001	4035	4,915	4,897	15	4,000	11600
18. Energy Josishelowsi Partor		81003063	0.9425239	0.932763	6.9387095	0.9316706	0.9473090	0.5690070	0.9489500	0.6502305	
11. Demand Turisdictional Fartor		0.9963903	0.9076499	0.9347896	0.9263690	0.9229481	0.9151953	6.9147815	6,3052523	0.9032033	
12. Retail Energy-Rabbied Recoverable Ct. ts (C)		•	•	•	•	•	•	•	۰	•	٠
13. Refull Demand-Rubated Recoverable Costs (D)		3,995	4319	CLD?	(12)	4,555	107	4,600	4,416	4390	40,151
14. Total Justs-Sectional Recoverable Costs (Linus 12 + 13)		\$1,995	\$4,219	\$4,873	\$4,725	\$4,535	\$4,600	\$4,480	\$4,416	\$4,390	\$40,151

FORM 42-8E

Notes:

(4) Represents the Capital Crots of De General Spoion Oil Tank currently recovered through bese retea.

(5) Libra 6 x 8.82305 x 1/12. Based on ROE of 11.75% and weighted become tax rate of 38.575% (copes (C) Liter for x Line 10

Interest Electric Comments Environmental Cost Incovery Chance (ECRC) Calculation of the Artsat/Entimated Amount for the Period April 1998 to December 1998

Return on Capital Investments, Depreciation and Taxes For Project. Big Bend Fud Oil Tunk #1 Upgrade

Live Description	Beginning of Period Amount	Age 98	Acted May-4	Actual Jun-98	Actual Jul-98	Aug-98	Estimated Sep-98	Estimated Oct-98	Estimated Nov-98	Extinated Dec-99	End of Period Americal
- 8											
e. Expresditures/Additions		12,522	TLUIS .	21,272	\$3,002	\$11,452	\$74,395	\$135,696	1202.342	87.972	
B. Contrags to Flant		•	•		•		•	•	•	•	
c. Rethermorits		•	•	•	•	•	•	•	•	•	
4.00m		•	•		•	•	•	•		•	
2. Plant-in-Service/Departuation Base	2			•	•	•		232.679	405001	40,760	
3. Lens: Accountlated Depreciation	•	•		•	•	•	•	CTI	O 8500	07870	
A. CWTP - Non-Interest Bearing	100	1,004	4176	6,054	11,136	21,588	08676	•			
5. Not linestment (Lines 1+3+4)	\$416	3,004	4136	6,054	11,136	11,98	86,983	232,408	11610	46,936	
6. Average Net breestment		1,716	3,590	SUL	1,000	14,802	587,95	164,695	333,189	407,68	
7. Return on Average Not Investment											
a. Equity Composes Grosses Up For Home (A)		0	R.	H :	8		9		2,458	3,217	21,982
B. LOOK COMPONER (LANG & X 2 A275 X 7/12)		•			2	Q	97	202	710	1,028	1,402
8. Investment Expenses											
a. Depreciation			•	•	•	•	•	171	t.	1,034	2,874
h Americanian		•	•	•	•	•	•	•	•	٠	•
4. Dientersfamment		•		•	•	•	0	•	•	•	•
6. Property Taxas		•	•	•	•	•	۰	•	•	0	•
* OB#	1	•	•	•	0	•	•	•	0	•	
P. Total System Recoverable Expenses (Liber 7 +5)		11	×	8	8	2	98	1,869	4,013	3,389	13,878
			•	0	•	0	•	•	0	•	•
b. Recentishle Costs Allocated to Demand		13	×	R	8	¥	8	1,869	4,012	5,269	11,078
10. Energy helodictional Pactur		8100396 0	0.9405529	0.9227623	6.9287995	8,9316786	0.9471090	0.9690670	0.9025389	0.9901395	
11. Demand hailadirtemal Factor		0.9963903	0.9076499	0.9247896	0.9263690	0.9729481	0.9151953	0.9147815	0.9052523	0.9032033	
12. Retail Energy-Related Recoverable Costs (II)		•	•			•	•	•	•	۰	۰
13. Retail Demand-Related Recoverable Costs (C)		13	и	*	F	131	531	1,710	3,632	4,739	22.6.04
14. Total Insististional Euroversible Costs (Librar 13 + 13)		\$11\$	ig	T.	148	\$151	\$531	\$1,710	23,622	\$4,750	

(A) Lines 6 at 843,99% a 1/12. Based on i,OE of 11.7% and weighted income tax rate of 26.57% (requession factor of 1 429104).
(3) Line 9a. Line 19
(C) Line 9b. Line 11

FORM 42-8E

Form 42 - BE Page 6 of B

Innea Electric Censes: Environmental Cost Recovery Clease (ECR.C.) Calculation of the Actual/Estimated Amount for the P

Return c - Capital Investments, Dependation and Tax For Project. Big Bend Fuel Oil Task #2 Upgade (in Dellan)

Expendiment Addition Expendiment Addition Consign to Plant Existences	Perio	Period Amount	Apr-98	May-98	Actes. Jen-98	Actual Jul-98	Ang-98	Sep-18	Cot/98	Estenated Nov-98	Estimated Dec-fit	End of Period Amount
b. Charings to Plant c. Entirements												
c. Retirements			\$1,530	11,902	82,296	53,920	84,189	\$43,022	\$244,649	\$374,617	\$141,799	
C. Bazon Calcolina								•		•	•	
				•	•		•	•	•	0	•	
- COM			•		•	•	•				•	
2. Plant-to-Savice/Depreciation Blue		8	•	•	•	•	•	•	•	•	218,000	
3. Lent. Accumulated Depreciation					•		•				450	
4 CWP - Nuo-Interest Beeding		4116	1,946	3,500	5,804	9,734	13,913	36.535	30,50	676,301		
5. Not Investment (Liber 2+3+4)		\$416	1,946	1,500	1,804	9,734	13913	\$6,935	301,984	676,301	817,646	
6. Average Not Investment			157	1,770	4636	1,384	11,519	15,604	179,360	488,393	148,624	
1. Rotum on Average Not Investment												
h. Dold Compound of he & + 696 w 1771	Water Control			R	X :			2	1,318	3,595	3,480	\$10,870
A COLD A WASHINGTON TO A COLD A	Chief.		•	•			R	8	Ü	1,149	1,785	3,674
8. Investment Expenses												
a. Depreciation.			•	•	•	•	•	•	•	•	958	954
b. Amortanion			•	•	•	•	•	•	•	•	•	•
c. Diemontfernent			0	•	•	•	•	•	•	•	•	•
d. Property Taxes			•	0	•	•	•	•	•	0	•	•
e. Other			•			0		0	0	0	٠	•
9. Total System Recoverable Enguraes (Libras 7+E)	Libras 7 + E)		11	×	TQ	r	III	90	1,739	4,744	L199	15.298
a. Recoverable Costs Allocated to Energy	AT.		•	•		•		•	•	•	•	•
 Euroversible Costis Albrested to Demand 	pose		13	A	Đ	r	113	30	1,739	4,744	8,199	13,238
10. Energy Jurisdictional Parter			0.9405018	6.9425329	6,9277623	6.9287995	0.9316706	0.9473090	0.9690670	0.9629590	0.992395	
11. Demand Autodictional Factor			0 9063903	0.9075499	0.9247996	0.9263690	0.9229dfl	6.9151953	0.9147815	0.9952523	6.9632633	
12 Estal Energy-Related Resoverable Corts (9)	(6)		•	•	•		•	•	0	•	۰	•
13. Refull Demand-Related Receverable Costs (C)	(C) gan	1	=	n	0	8	100	314	1651	560	1,485	13,857
 Total Juris-Serianal Recoverable Costs (Liens 12 + 13) 	(Lines 12 + 13)		111	134	205	898	\$100	\$314	145,11	14,395	\$17,4855	\$13,657

Notice:
(A) Lines 6 at \$1230% at 1/12 Based on ROE of 11 79% and weighted income tax rate of 36 575% (expension factor of 1 428042)
(C) Line for a Line 10
(C) Line for a Line 11

FORM 42-8E

Lienza Electric Communication Environmental Cost Recovery Clause (ECR.C.)
Calculation of the Actual Estimated Amount for the Period
Agett 1998 to December 1998

Return on Capital Investments, Depreciation and Tanss For Project. Philips Upgrade Tank #1 for FDEP (in Dollars)

Description	Period Amount	Apr-98	May-98	Actual Jun-98	Actual Jul-98	Aug-98	Estimated Sep-78	Cot-98	Enfanated Nov-98	Entimated Dec-98	End of Period Amount
1. Investments a. Expenditures/Additores		829	2	\$1,019	52.219	SUS	11,000	21,000	615,000	50000	
A. Clourings to Plant		•	•	•	•	•	•	0		0	
c. Retirements		•	•	•	•	•		•	•		
d. Other		•	•	•	•	•	•	•	•	•	
2. Plant-in-Service/Depreciation Dave	8	•	•	•	•	•	•	•		3K 500	
3. Lent. Accumulated Dependation.	•		•	•		•	•			Cap	
4. CWIP - Non-britted Bearing	0	570	339	1,500	3,000	1611	7,644	10,644	25,644	0	
3. Net investment (Lines 2 + 3 + 4)	2	570	570	1,580	1,000	464	7,644	10,644	25,644	36,442	
6. Average Not Investment		382	8	1,039	2,698	4238	634	9,140	18,146	31,040	
7. Relatin on Average Net Investment											
a. Equity Component Grossed Up For Taxes (A)			*		R	31	9	19	133	22	
b. Debt Component (Line 6 x 2.87% x 1/12)		1		•	•	91	7	H	9	t.	
R. Investment Expenses											
s. Depreciation		0		•	•	•	0	•	•	BR	
h. Americation		•	•	•	•	•	0	•	•	•	
c. Distrantisesoms		0	0	•	•	•	•	•	•	•	
d. Property Terms		•	0	•	•	•		•	•	•	
e Other		•		•	•	0	0	•	•	0	
9. Total Systems Recoverable Engenses (Liens 7 + 6)		•	•	п	×	4	8	8	176	359	
e. Renovership Costs Allocated to Energy		0	•	•		•	0	•	•	•	
 Rooteverable Cash Albertald to Demand 		•	3	=	×	=	8	8	138	339	
10. Energy Arrindscional Puotor		0.9483919	0.9405529	0.9727622	0.9387095	0.9316796	0.9471090	0.9090679	0.9489780	0.9902395	
11. Demand Junisdictional Factor		0.9963903	6-9016499	0.9247996	0.9363630	0.9239401	0.9151953	6.9147815	0.9052523	0.9632033	
12. Retail Energy-Related Recoverable Costs (B)		•	•	•	•	•	•	•	•	•	
13. Rathai Dennand-Rabbeld Renoverable Corts (C)	,	1	*	01	7.	R	×	=	139	MA	
14. Total Autodictional Parcentrible Costs (Lines 12 + 13)		a	22	\$10	101	803	254	100	\$159	1334	2688

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sted income tax rate of 38.579% (enquession factor of 1.629002) Notes:
(A) Lines 6 x B.R239% x 1/12. Based on ROE of 11.79% and weigh
(B) Line %x Line 19
(C) Line %x Line 11
* Enfourted Expenditure

Actual Ac												
SS71	be Destriction	Deginning of Period Amount	Apr-98	Actual May-98	Actual Jun-98	Actual 345-98	Actael Aug-88	Entimated Sep-91	Estimeted Oct-98	Estimated Nov-98	Estimated Dec-78	End of Period Amount
10	1. Investments											
10			123	2 °		2163		13,000	81,000	529,933	\$30,000	
7) 7) 7) 7) 7) 7) 7) 7) 7) 7)	c. References		•		•			. 0				
10	4 00m		•	•	•	•	•		•		•	
1	2. Plant-in-Service-Depreciation Burn	8	•	•	•	•	•	•		•	67.500	
1,007 1,007 1,007 1,007 1,007 1,007 1,007	3 Less: Aeramslated Depreciation	•		•							GRU	
1,007 1,00	4. CWTP - Nan-Unbroot Bearing	•	571	m ,	2	11011	1,007	4007	7,807	37,400		
A3	5. Not Enventment (Linus 2 + 3 + 4)	2	571	23	24	1,911	1,807	(1007)	1887	37,400	87,362	
7 10 24 10 2	6. Average Not Invastment		H	E	911	85	1,409	1307	6,007	12,684	6231	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7. Return on Average Not beentiment		•									
(f) (g) (g) (g) (g) (g) (g) (g) (g) (g) (g	 Debt Component (Line 6 x 2 k2); x 1/13 			-		,	2 -	× *	* =	8 0	B 3	1111
6) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					Sales .		•		2	2	8	
(f) 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	2. Investment Expenses											
6) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	A. Depression		0 1	•		•	•	•	•	•	136	
(f) (g) (g) (g) (g) (g) (g) (g) (g) (g) (g	P. Accountages		0 (•			•	0	•	•	•	
(f) 3 5 7 9 13 72 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	A Breast Trees				0	•	0	0	•	0	•	
(f) 3 5 7 9 13 31 31 31 31 31 31 31 31 31 31 31 31	C. rroping same				00	•	0	•	•	•	•	
6) 5 5 7 9 13 31 0 0 0 0 0 3 5 7 9 13 13 5 0 0 0 0 0 0 0 0 13 51 0 0 0 0 0 0 0 0 0	a Colonia		•	0	0		0	•	0	0	0	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	9. Total System Encovership Equansus (Lines 7+8)		•	•	1	•	O	H	19	119	201	1,001
0.5483018 0.5483023 0.0227022 0.0287085 0.9316704 0.6471000 0.9002903 0.0754099 0.9247186 0.9283609 0.0228481 0.9151953 0.0151	a. Recoverable Costs Allocated to Energy		•	•	•	•	•	•	0	•	•	•
0.9482018 0.9482529 0.8227422 0.9287895 0.9316794 0.9419999 0.9287895 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287899 0.9287889 0.928789 0.928789 0.928789 0.928789 0.928789 0.928789 0.9287889 0.928789 0.928789 0.928789 0.928789 0.928789 0.928789 0.9287889 0.928789 0.928789 0.928789 0.928789 0.928789 0.928789 0.92878	b. Recoverable Costs Allocated to Demand		•	\$	+	•	0	H	3	219	70	
0.9063963 0.9074899 0.9243896 0.9225481 0.9151953 0.9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10. Energy Junisdictional Partur		810529-60	0.9405529	2237276.0	0.9387885	89316786	0.9471090	0.9690570	0.9089599	0.9502385	
3 5 6 8 13 3 5 6 8 13 3 15 56 8 13	11. Demand Institutional Factor		0.9063993	0.9076499	0.9247996	0.9763690	0.9229481	0.9151953	0.9147815	0.9052523	0.9032033	
3 5 6 8 12 2+17) 53 15 56 58 512	12 Rehall Energy-Related Recoverable Costs (4)			•	•	•		•	•	•	•	
13 11 26 28 111	13 Entail Dumand-Related Recoverable Costs (C)		•	3	•	•		R	×	138	679	
	 Total Jutterfactional Recoverable Costs (Lines 12 + 13) 	•	13	2	*	22	\$12	623	953	\$198	25.35	19987

Notes:
(A) Lines 6 z 8 £236% x 1/12. Based on ROE of 11 75% and weighted income tax rate of 36 575% (expression Schor of 1 628002)
(B) Line Sh x Line 10
(C) Line Fb x Line 11

* Externing Expenditure:

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FORM 42-8E

EXHIBIT NO. DOCKET NO. 980007-EI
TAMPA ELECTRIC COMPANY
(KOZ-1)
FILED 10/05/98
DOCUMENT NO. 16
PAGE 1 OF 1

Tampa Electric Company Fuel Group Adjustment Factors For Variation In Losses

Line No.		1997 Actual Sales In MWh (1)	Expansion Factor (2)	Generation In MWh (3)	Loss Factor	Fuel Recovery Loss Multiplier (5)
-	Group A			6 700 605		
1	RS	6,392,399		6,790,625		
2	GS & TS	856,276		909,619		
3	Group A1 SL & OL	147,218		156,389		
4	Total	7,395,893	1.0622967	7,856,633	0.9413566	1.0071
	Group B					
5	GSD	3,987,533		4,231,728		
6	GSLD & SBF	1,671,142		1,746,700		
7	Total	5,658,675	1.0565067	5,978,428	0.9465155	1.0016
8	Group C IS & SBI	1,927,984	1.0212113	1,968,879	0.9792293	0.9681
11	Total Retail	14,982,552	1.0548230	15,803,940	0.9480264	1.0000

FPSC Jurisdictional Loss Multiplier

Line No.		1997 Actual Sales In MWh (1)	Expansion Factor (2)	Generation In MWh (3)	Loss Factor	Jurisdictional Loss Multiplier (5)
1	Total Retail	14,982,552	1.0548230	15,803,940	0.9480264	1.00068
2	Total FERC AR-1 Tariff	285,540	1.0166780	290,302	0.9835956	
3	Total System	15,268,092	1.0541096	16,094,242	0.9486680	