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RECORDS AND REPORTING

April 1, 1999

HAND DELIVERED

ORIGINAL

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

Re: Environmental Cost Recovery Clause
FPSC Docket No. 990007-EI

Dear Ms. Bayo:

Enclosed for filing in the above docket on behalf of Tampa Electric Company are the original and ten (10) copies of Prepared Testimony and Exhibit (KOZ-1) of Karen O. Zwolak regarding Environmental Cost Recovery Final True-Ups for the period April 1998 through September 1998 and October 1998 through December 1998.

Please acknowledge receipt and filing of the above by stamping the duplicate copy of this letter and returning same to this writer.

Thank you for your assistance in connection with this matter.

Sincerely,


James D. Beasley

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04204 APR-1 99

FPSC-RECORDS/REPORTING

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Testimony and Exhibit, filed on behalf of Tampa Electric, has been furnished by U. S. Mail or hand delivery (*) on this 1st day of April 1999 to the following:

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ATTORNEY

ORIGINAL

**TAMPA ELECTRIC COMPANY
DOCKET NO. 990007-EI
FILED: APRIL 1, 1999**

**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION
TAMPA ELECTRIC COMPANY
DOCKET NO. 990007-EI
ENVIRONMENTAL COST RECOVERY
FINAL TRUE-UPS
APRIL 1998 - SEPTEMBER 1998
and
OCTOBER 1998 - DECEMBER 1998
TESTIMONY AND EXHIBIT OF
KAREN O. ZWOLAK**

DOCUMENT NUMBER-DATE

04204 APR-1999

FPSC-RECORDS/REPORTING

1 BEFORE THE PUBLIC SERVICE COMMISSION

2 PREPARED DIRECT TESTIMONY

3 OF

4 KAREN O. ZWOLAK

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

7
8 A. 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 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.

1 In 1990, I joined Tampa Electric Company as an engineer in
2 the Environmental Planning Department and was responsible
3 for permitting and compliance issues relating to wastewater
4 treatment and disposal. In 1995, I transferred to Tampa
5 Electric's Energy Supply Department and assumed the duties
6 of the plant chemical engineer at the F. J. Gannon Station.
7 In this position, I was responsible for boiler chemistry,
8 water management, and maintenance of environmental
9 equipment and general engineering support. In 1997, I was
10 promoted to Manager, Energy Issues in the Electric
11 Regulatory Affairs Department. My present responsibilities
12 include the areas of fuel adjustment, capacity cost
13 recovery, environmental filings and rate design.

14
15 Q. What is the purpose of your testimony in this proceeding?

16
17 A. The purpose of my testimony is to present, for Commission
18 review and approval, the actual true-up amount and the
19 calculations thereof, associated with the environmental
20 compliance activities for the periods April 1998 through
21 September 1998, and October 1998 through December 1998.

22
23

1 Q. Do you wish to sponsor exhibits in support of your
2 testimony?

3
4 A. Yes. My Exhibit No. ___ (KOZ-1) consists of eight forms
5 prepared under my direction and supervision. Form 42-1A
6 presents the final true-up for the April 1998 through
7 September 1998 period and also for the October 1998 through
8 December 1998 period; Form 42-2A provides the detailed
9 calculation of the final true-up for both periods; Form 42-
10 3A details the calculation of the interest provision for
11 the two periods; Form 42-4A reflects the calculation of
12 variances between actual and actual/estimated costs for
13 O & M activities; Form 42-5A provides a summary of actual
14 monthly O & M activity costs for the two periods; Form 42-
15 6A provides details of the calculation of variances between
16 actual and actual/estimated costs for capital investment
17 projects; Form 42-7A presents a summary of actual monthly
18 costs for capital investment projects for both periods and,
19 finally, Form 42-8A, pages 1 through 8, consists of the
20 calculation of depreciation expense and return on capital
21 investment for each project.

22
23

1 Q. What is the source of the data which you will present by
2 way of testimony or exhibits in this process?

3

4 A. Unless otherwise indicated, the actual data is taken from
5 the books and records of Tampa Electric Company. The books
6 and records are kept in the regular course of our business
7 in accordance with generally accepted accounting principles
8 and practices, and provisions of the Uniform System of
9 Accounts as prescribed by this Commission.

10

11 Q. What is the actual true-up amount which Tampa Electric is
12 requesting for the six-month period April 1998 through
13 September 1998 and the three-month period October 1998
14 through December 1998?

15

16 A. Tampa Electric has calculated and is requesting approval of
17 an over-recovery of \$287,647 as the actual true-up amount
18 for the nine-month period April 1998 through December 1998.
19 This is comprised of the actual true-up amount of an over-
20 recovery of \$299,097 for the six-month period April 1998
21 through September 1998 and the actual true-up amount of an
22 under-recovery of \$11,450 for the three-month period
23 October 1998 through December 1998.

1 Q. What is the adjusted net true-up amount which Tampa
2 Electric is requesting for the April 1998 through December
3 1998 period which is to be carried over and refunded/
4 recovered in the next projection period?

5
6 A. Tampa Electric has calculated and is requesting approval of
7 an under-recovery of \$1,053,356 reflected on Form 42-1A, as
8 the adjusted net true-up amount for the combined six-month
9 period, April 1998 through September 1998 and the three-
10 month period, October 1998 through December 1998. This
11 adjusted net true-up amount is the difference between the
12 sum of the actual over and under recoveries for the
13 combined periods April 1998 through September 1998 and
14 October 1998 through December 1998 as depicted on Form 42-
15 1A. The actual true-up amount for the period April 1998
16 through September 1998 is an over-recovery of \$299,097 as
17 compared to the \$386,745 actual/estimated over-recovery
18 amount approved in FPSC Order No. PSC-98-0408-FOF-EI. The
19 actual true-up amount for the period October 1998 through
20 December 1998 is an under-recovery of \$11,450 as compared
21 to the actual/estimated true-up amount of an over-recovery
22 of \$954,258 approved in FPSC Order No. PSC-98-1224-FOF-EI.

23

1 Q. Is this true-up calculation consistent with the true-up
2 methodology used for other cost recovery clauses?

3

4 A. Yes, it is. The calculation of the true-up amount follows
5 the procedures established by this Commission as set forth
6 on FPSC Schedule A-2 "Calculation of True-Up and Interest
7 Provision for the Fuel Cost Recovery Clause."

8

9 Q. Are all costs listed in Forms 42-4A through 42-8A
10 attributable to environmental compliance projects approved
11 by the Commission?

12

13 A. Yes, they are.

14

15 Q. How did actual expenditures for the period April 1998
16 through December 1998 compare with Tampa Electric's
17 actual/estimated projections as presented in previous
18 testimony and exhibits?

19

20 A. As shown on Form 42-4A, total O & M costs were \$1,183,745,
21 or 70%, higher than actual/estimated projections. Form 42-
22 6A shows the total capital investment costs were \$12,769,
23 or 1% lower, than actual/estimated projections. O & M and

1 capital investment project variances that were greater than
2 10% of the actual/estimated costs are explained below.

3
4 O & M Variances:

5
6 **SO₂ Allowance Costs:** SO₂ allowance expense was
7 \$1,210,262 or 177% greater than projected. SO₂ allowance
8 costs were greater in the last quarter of 1998 for two
9 primary reasons. First, Tampa Electric experienced a
10 temporary shortage of medium sulfur coal due to shipping
11 delays and had to utilize a higher sulfur replacement coal.
12 This caused the company to consume additional SO₂
13 allowances. Second, economy sales, which help to off-set
14 SO₂ allowances costs for the retail customers, were lower
15 than anticipated due to milder weather conditions for the
16 last quarter of 1998. These two events resulted in an
17 overall increase in SO₂ allowance costs.

18
19 **Big Bend Units 1 & 2 Flue Gas Conditioning Project:** Actual
20 project expenditures were \$2,707, or 11% greater than the
21 actual/estimated expenditures. This variance is due to the
22 timing of sulfur deliveries in the month of December. The
23 company made an effort to maximize on-site sulfur storage

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in anticipation of higher usage during the winter months.

Capital Investment Variances:

1. **Upgrades for Big Bend Fuel Oil Tank #1:** The return on investment and depreciation for the Big Bend Fuel Oil Tank #1 were \$5,793 or 48% lower than actual/estimated projections. Project construction costs were less than estimated. Also, project delays affected the timing of cash flows which contributed to the variance.

2. **Upgrades for Big Bend Fuel Oil Tank #2:** The return on investment and depreciation for the Big Bend Fuel Oil Tank #2 were \$6,861, or 45%, lower than the actual/estimated projections. Delays in the project's schedule affected the timing of cash flows which contributed to the variance. reflected on Form 42-6A.

3. **Upgrades for Phillips Tank #4:** The return on investment and depreciation for the Phillips tank project were \$86, or 11%, lower than estimated for the October 1998 through December 1998 period. This variance is primarily due to project delays and timing of cash flows.

1 Q. Does this conclude your testimony?

2

3 A. Yes, it does.

4

5

6

**TAMPA ELECTRIC COMPANY
DOCKET NO. 990007-EI
FILED: APRIL 1, 1999**

FINAL TRUE - UP

ENVIRONMENTAL COST RECOVERY

COMMISSION FORMS 42-1A THROUGH 42-8A

APRIL 1998 - SEPTEMBER 1998

and

OCTOBER 1998 - DECEMBER 1998

TAMPA ELECTRIC COMPANY
DOCKET NO. 990007-EI
FILED: APRIL 1, 1999

FINAL TRUE UP
ENVIRONMENTAL COST RECOVERY
COMMISSION FORMS 42-1A THROUGH 42-8A
APRIL 1998 - SEPTEMBER 1998
and
OCTOBER 1998 - DECEMBER 1998

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8	Form 42-8A	8

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Final True-Up Amount for the Period
April 1998 to December 1998

<u>Line</u>	<u>Period Amount</u>
1a End of Period Actual True-Up for the Period April 1998 to September 1998 (Form 42-2A, Lines 5 + 6 +10)	\$299,097
1b End of Period Actual True-Up for the Period October 1998 to December 1998 (Form 42-2A, Lines 5 + 6 +10)	(\$11,450)
1c Total End of Period Actual True-Up (1a + 1b)	287,647
2a Estimated/Actual True-Up Amount approved for the Period April 1998 to September 1998 (Order No. PSC-98-0408-FOF-EI)	386,745
2b Estimated/Actual True-Up Amount approved for the Period October 1998 to December 1998 (Order No. PSC-98-1224-FOF-EI)	954,258
2c Total Estimated/Actual True-Up Amount approved for the Period April 1998 to December 1998 (2a + 2b)	1,341,003
3 Final True-Up Amount to be refunded/(recovered) in the projection period January 1999 to December 1999 (Lines 1a + 1b) - (Lines 2a + 2b)	<u>(\$1,053,356)</u>

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() Reflects Underrecovery

EXHIBIT NO. _____
DOCKET NO. 990007-EI
TAMPA ELECTRIC COMPANY
(KOZ-1)
DOCUMENT NO. 1
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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Final True-Up Amount for the Period
April 1998 to December 1998

End-of-Period True-Up Amount
(in Dollars)

Line	Actual							End	Actual			End of
	April-98	May-98	June-98	July-98	August-98	September-98	Apr 98 - Sep 98 Period Total	October-98	November-98	December-98	Period Total	
1	ECRC Revenues (net of Revenue Taxes)	\$380,177	\$394,696	\$494,731	\$523,379	\$496,174	\$504,457	\$2,793,614	\$470,863	\$411,620	\$412,330	\$1,294,813
2	True-Up Provision (a)	22,927	22,927	22,927	22,927	22,927	22,928	137,563	45,283	45,283	45,284	\$135,850
3	ECRC Revenues Applicable to Period (Lines 1 + 2)	403,104	417,623	517,658	546,306	519,101	527,385	2,931,177	516,146	456,903	457,614	1,430,663
4	Jurisdictional ECRC Costs											
a.	O & M Activities (Form 42-5A, Line 9)	238,671	238,462	321,539	354,389	298,158	291,443	\$1,742,662	290,982	338,741	345,869	\$975,592
b.	Capital Investment Projects (Form 42-7A, Line 9)	152,428	151,125	148,730	149,270	149,374	153,065	\$903,992	153,472	158,113	162,988	\$474,573
c.	Total Jurisdictional ECRC Costs	391,099	389,587	470,269	503,659	447,532	444,508	2,646,654	444,454	496,854	508,857	1,450,165
5	Over/Under Recovery (Line 3 - Line 4c)	12,005	28,036	47,389	42,647	71,569	82,877	284,523	71,692	(39,951)	(51,243)	(19,502)
6	Interest Provision (Form 42-3A, Line 10)	2,235	2,222	2,316	2,439	2,593	2,769	\$14,574	2,855	2,818	2,379	8,052
7	Beginning Balance True-Up & Interest Provision	137,563	128,876	136,207	162,985	185,144	236,379	137,563	271,700	300,964	218,547	271,700
a.	Deferred True-Up from October 1997 to March 1998 (Order No. PSC-98-0408-FOF-EI)	351,717	351,717	351,717	351,717	351,717	351,717	351,717	379,114	379,114	379,114	379,114
b.	Deferred True-Up from April 1998 to December 1998 (Order No. PSC-98-1224-FOF-EI)											
8	True-Up Collected/(Refunded) (see Line 2)	(22,927)	(22,927)	(22,927)	(22,927)	(22,927)	(22,928)	(137,563)	(45,283)	(45,283)	(45,284)	(135,850)
9	End of Period Total True-Up (Lines 5+6+7+7a+8)	480,593	487,924	514,702	\$36,861	588,096	650,814	650,814	680,078	597,662	503,513	503,514
10	Adjustments to Period Total True-Up Including Interest	0	0	0	0	0	0	0	0	0	0	0
11	End of Period Total True-Up (Lines 9 + 10)	\$480,593	\$487,924	\$514,702	\$36,861	\$588,096	\$650,814	\$650,814	\$680,078	\$597,662	\$503,513	\$503,514

Page 2

(a). True-up provision for April 1998 through September 1998 per Commission Order No. PSC-98-0408-FOF-EI;
True-up provision for October 1998 through December 1998 per Commission Order No. PSC-98-1224-FOF-EI.

EXHIBIT NO. _____
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TAMPA ELECTRIC COMPANY
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Tampa Electric Company
 Environmental Cost Recovery Clause (ECRC)
 Calculation of the Final True-Up Amount for the Period
 April 1998 to December 1998

Interest Provision
 (in Dollars)

Line	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Total
1 Beginning True-Up Amount (Form 42-2A, Line 7 + 7a + 10)	\$489,280	\$480,593	\$487,924	\$514,702	\$536,861	\$588,096	\$650,814	\$680,078	\$597,662	
2 Ending True-Up Amount Before Interest (Line 1 + Form 42-2A, Lines 5 + 8)	478,358	485,702	512,386	534,422	585,503	648,045	677,223	594,844	501,135	
3 Total of Beginning & Ending True-Up (Lines 1 + 2)	967,638	966,295	1,000,310	1,049,124	1,122,364	1,236,141	1,328,037	1,274,922	1,098,797	
4 Average True-Up Amount (Line 3 x 1/2)	483,819	483,148	500,155	524,562	561,182	618,071	664,019	637,461	549,399	
5 Interest Rate (First Day of Reporting Business Month)	5.55%	5.53%	5.50%	5.60%	5.56%	5.52%	5.22%	5.10%	5.50%	
6 Interest Rate (First Day of Subsequent Business Month)	5.53%	5.50%	5.60%	5.56%	5.52%	5.22%	5.10%	5.50%	4.90%	
7 Total of Beginning & Ending Interest Rates (Lines 5 + 6)	11.08%	11.03%	11.10%	11.16%	11.08%	10.74%	10.32%	10.60%	10.40%	
8 Average Interest Rate (Line 7 x 1/2)	5.540%	5.515%	5.550%	5.580%	5.540%	5.370%	5.160%	5.300%	5.200%	
9 Monthly Average Interest Rate (Line 8 x 1/12)	0.462%	0.460%	0.463%	0.465%	0.462%	0.448%	0.430%	0.442%	0.433%	
10 Interest Provision for the Month (Line 4 x Line 9)	\$2,235	\$2,222	\$2,316	\$2,439	\$2,593	\$2,769	\$2,855	\$2,818	\$2,379	\$22,626

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EXHIBIT NO. _____
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 TAMPA ELECTRIC COMPANY
 (KOZ-1)
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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Final True-Up Amount for the Period
April 1998 to December 1998

Variance Report of O&M Activities
(in Dollars)

Line	(1)	(2)	(3)	(4)
	Actual	Actual Estimated	Variance Amount	Percent
1 Description of O&M Activities				
1. Big Bend Unit 3 Flue Gas Desulfurization Integration	\$962,401	\$991,625	(\$29,224)	-3%
2. Big Bend Units 1 & 2 Flue Gas Conditioning	26,926	24,219	2,707	11%
3. Big Bend Unit 4 Continuous Emissions Monitors	0	0	0	0%
4. Gannon Ignition Oil Tank	0	0	0	0%
5. Big Bend Fuel Oil Tank #1 Upgrade	0	0	0	0%
6. Big Bend Fuel Oil Tank #2 Upgrade	0	0	0	0%
7. Phillips Upgrade Tank #1 for FDEP	0	0	0	0%
8. Phillips Upgrade Tank #4 for FDEP	0	0	0	0%
9. SO2 Emissions Allowances (includes Economy Sales SO2 Credit)	1,893,568	683,306	1,210,262	177%
10. SO2 Credit - FMPA	(15,759)	(15,759)	0	0%
2 Total O&M Activities	\$2,867,136	\$1,683,391	\$1,183,745	70%
3 Recoverable Costs Allocated to Energy	\$2,867,136	\$1,683,391	\$1,183,745	70%
4 Recoverable Costs Allocated to Demand	\$0	\$0	\$0	0%

Notes:

Column(1) is the End of Period Totals on Form 42-5A.

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

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

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

EXHIBIT NO. _____
DOCKET NO. 990007-EI
TAMPA ELECTRIC COMPANY
(KOZ-1)
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FILED: APRIL 1, 1999

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

O&M Activities
(in Dollars)

Line	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	End of	Method of Classification		
	Apr-98	May-98	Jun-98	Jul-98	Aug-98	Sep-98	Oct-98	Nov-98	Dec-98	Period Total	Demand	Energy	
1. Description of O&M Activities													
1a	Big Bend Unit 3 Flue Gas Desulfurization Integration	\$109,879	\$31,684	\$66,748	\$180,702	\$97,945	\$79,458	\$94,362	\$122,863	\$178,760	\$962,401	\$962,401	
1b	Big Bend Units 1 and 2 Flue Gas Conditioning	2,255	0	4,452	0	5,052	5,083	2,210	0	7,874	\$26,926	26,926	
1c	Big Bend Unit 4 Continuous Emissions Monitors	0	0	0	0	0	0	0	0	0	\$0	0	
1d	Gannon Ignition Oil Tank	0	0	0	0	0	0	0	0	0	\$0	\$0	
1e	Big Bend Fuel Oil Tank #1 Upgrade	0	0	0	0	0	0	0	0	0	\$0	0	
1f	Big Bend Fuel Oil Tank #2 Upgrade	0	0	0	0	0	0	0	0	0	\$0	0	
1g	Phillips Upgrade Tank #1 for FDEP	0	0	0	0	0	0	0	0	0	\$0	0	
1h	Phillips Upgrade Tank #4 for FDEP	0	0	0	0	0	0	0	0	0	\$0	0	
1i	SO2 Emissions Allowances	153,356	221,850	277,253	200,891	217,028	220,566	207,953	225,347	169,324	\$1,893,568	1,893,568	
1j	SO2 Credit - FMPA	(15,759)	0	0	0	0	0	0	0	0	(15,759)	(15,759)	
2.	Total of O&M Activities	249,731	253,534	348,453	381,593	320,025	305,107	304,525	348,210	355,958	2,867,136	0	2,867,136
3.	Recoverable Costs Allocated to Energy	249,731	253,534	348,453	381,593	320,025	305,107	304,525	348,210	355,958	2,867,136		
4.	Recoverable Costs Allocated to Demand	0	0	0	0	0	0	0	0	0	0		
5.	Detail Energy Jurisdictional Factor	0.9485018	0.9405529	0.9227622	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581			
6.	Detail Demand Jurisdictional Factor	0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070			
7.	Jurisdictional Energy Recoverable Costs (A)	236,870	238,462	321,539	354,389	298,158	291,443	290,982	338,741	345,869	2,716,453		
7a	Add back FMPA/LAK Excess Emissions Allocation	1,801	0	0	0	0	0	0	0	0	1,801		
8.	Jurisdictional Demand Recoverable Costs (B)	0	0	0	0	0	0	0	0	0	0		
9.	Total Jurisdictional Recoverable Costs for O&M Activities (Lines 7 + 8)	\$238,671	\$238,462	\$321,539	\$354,389	\$298,158	\$291,443	\$290,982	\$338,741	\$345,869	\$2,718,254		

Notes:

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

Tampa Electric Company
Environmental Cost Recovery Clause
Calculation of the Final True-Up Amount for the Period
April 1998 to December 1998

Form 42-6A

Variance Report of Capital Investment Projects - Recoverable Costs
(in Dollars)

Line	(1)	(2)	(3) (4)	
	Actual	Actual Estimated	Amount	Percent
1 Description of Investment Projects				
1. Big Bend Unit 3 Flue Gas Desulfurization Integration	\$830,541	\$830,541	\$0	0%
2. Big Bend Units 1 & 2 Flue Gas Conditioning	501,372	501,372	0	0%
3. Big Bend Unit 4 Continuous Emissions Monitors	64,092	64,092	0	0%
4. Gannon Ignition Oil Tank	43,911	43,911	0	0%
5. Big Bend Fuel Oil Tank #1 Upgrade	6,285	12,078	(5,793)	-48%
6. Big Bend Fuel Oil Tank #2 Upgrade	8,437	15,298	(6,861)	-45%
7. Phillips Upgrade Tank #1 for FDEP	682	768	(86)	-11%
8. Phillips Upgrade Tank #4 for FDEP	1,062	1,091	(29)	-3%
2 Total Investment Projects - Recoverable Costs	<u>\$1,456,382</u>	<u>\$1,469,151</u>	<u>(\$12,769)</u>	<u>-1%</u>
3 Recoverable Costs Allocated to Energy	\$1,396,005	\$1,396,005	\$0	0%
4 Recoverable Costs Allocated to Demand	\$60,377	\$73,146	(\$12,769)	-17%

Notes:

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

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

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

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

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TAMPA ELECTRIC COMPANY
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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Actual Period Amount
April 1998 to December 1998

Capital Investment Projects-Recoverable Costs
(in Dollars)

Line	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Total
1 Description of Investment Projects (A)										
1a Big Bend Unit 3 Flue Gas Desulfurization Integration	\$93,028	\$92,842	\$92,656	\$92,469	\$92,282	\$92,096	\$91,909	\$91,723	\$91,536	\$830,541
1b Big Bend Units 1 and 2 Flue Gas Conditioning	56,236	56,104	55,972	55,840	55,708	55,576	55,444	55,312	55,180	\$501,372
1c Big Bend Unit 4 Continuous Emissions Monitors	7,194	7,176	7,158	7,140	7,121	7,103	7,085	7,067	7,048	\$64,092
1d Gannon Ignition Oil Tank	4,408	4,648	5,269	5,101	4,935	4,915	4,897	4,878	4,860	\$43,911
1e Big Bend Fuel Oil Tank #1 Upgrade	17	34	50	83	164	365	805	1,780	2,987	\$6,285
1f Big Bend Fuel Oil Tank #2 Upgrade	12	26	45	75	115	273	552	1,390	5,949	\$8,437
1g Phillips Upgrade Tank #1 for FDEP	3	5	11	26	41	53	90	142	311	\$682
1h Phillips Upgrade Tank #4 for FDEP	3	5	7	9	13	28	67	207	723	\$1,062
2 Total Investment Projects - Recoverable Costs	160,901	160,840	161,168	160,743	160,379	160,409	160,849	162,499	168,594	1,456,382
3 Recoverable Costs Allocated to Energy	156,458	156,122	155,786	155,449	155,111	154,775	154,438	154,102	153,764	1,396,005
4 Recoverable Costs Allocated to Demand	4,443	4,718	5,382	5,294	5,268	5,634	6,411	8,397	14,830	60,377
5 Retail Energy Jurisdictional Factor	0.9485018	0.9405529	0.9227622	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
6 Retail Demand Jurisdictional Factor	0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
Jurisdictional Energy Recoverable Costs (B)	148,401	146,841	143,753	144,367	144,512	147,843	147,570	149,912	149,406	1,322,605
Jurisdictional Demand Recoverable Costs (C)	4,027	4,284	4,977	4,903	4,862	5,222	5,902	8,201	13,582	55,960
9 Total Jurisdictional Recoverable Costs for Investment Projects (Lines 7 + 8)	\$152,428	\$151,125	\$148,730	\$149,270	\$149,374	\$153,065	\$153,472	\$158,113	\$162,988	\$1,378,565

Notes:

- (A) Each project's Total System Recoverable Expenses on Form 42-8A, Line 9
- (B) Line 3 x Line 5
- (C) Line 4 x Line 6

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Tampa 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 Unit 3 Flue Gas Desulfurization Integration
(in Dollars)

Line	Description	Beginning of Period Amount	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Amount
1.	Investments											
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
b.	Clearings 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	\$8,239,658	\$8,239,658	\$8,239,658	\$8,239,658	\$8,239,658	\$8,239,658	\$8,239,658	\$8,239,658	\$8,239,658	\$8,239,658	
3.	Less: Accumulated Depreciation	(624,015)	(643,241)	(662,467)	(681,693)	(700,919)	(720,145)	(739,371)	(758,597)	(777,823)	(797,049)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$7,615,643	7,596,417	7,577,191	7,557,965	7,538,739	7,519,513	7,500,287	7,481,061	7,461,835	7,442,609	
6.	Average Net Investment		7,606,030	7,586,804	7,567,578	7,548,352	7,529,126	7,509,900	7,490,674	7,471,448	7,452,222	
7.	Return on Average Net Investment											
a.	Equity Component Grossed Up For Taxes (A)		55,928	55,787	55,646	55,504	55,363	55,222	55,080	54,939	54,797	\$498,266
b.	Debt Component (Line 6 x 2.82% x 1/12)		17,874	17,829	17,784	17,739	17,693	17,648	17,603	17,558	17,513	159,241
8.	Investment Expenses											
a.	Depreciation		19,226	19,226	19,226	19,226	19,226	19,226	19,226	19,226	19,226	173,034
b.	Amortization		0	0	0	0	0	0	0	0	0	0
c.	Dismantlement		0	0	0	0	0	0	0	0	0	0
d.	Property Taxes		0	0	0	0	0	0	0	0	0	0
e.	Other		0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 +8)		93,028	92,842	92,656	92,469	92,282	92,096	91,909	91,723	91,536	830,541
a.	Recoverable Costs Allocated to Energy		93,028	92,842	92,656	92,469	92,282	92,096	91,909	91,723	91,536	830,541
b.	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	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
11.	Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
12.	Retail Energy-Related Recoverable Costs (B)		88,237	87,323	85,499	85,877	85,976	87,971	87,822	89,229	88,942	786,876
13.	Retail Demand-Related Recoverable Costs (C)		0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$88,237	\$87,323	\$85,499	\$85,877	\$85,976	\$87,971	\$87,822	\$89,229	\$88,942	\$786,876

Notes:
(A) Line 6 x 8.8238% x 1/12. Based on ROE of 11.75% and weighted income tax rate of 38.575% (expansion factor of 1.628002)
(B) Line 9a x Line 10
(C) Line 9b x Line 11

EXHIBIT NO. _____
DOCKET NO. 990007-EI
TAMPA ELECTRIC COMPANY
(KOZ-1)
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Tampa 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 Flue Gas Conditioning
(in Dollars)

Line	Description	Beginning of Period Amount	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Amount
1.	Investments											
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0
d.	Other		0	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	\$5,017,734	\$5,017,734
3.	Less: Accumulated Depreciation	(617,258)	(630,862)	(644,466)	(658,070)	(671,674)	(685,278)	(698,882)	(712,486)	(726,090)	(739,694)	(739,694)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$4,400,476	\$4,386,872	\$4,373,268	\$4,359,664	\$4,346,060	\$4,332,456	\$4,318,852	\$4,305,248	\$4,291,644	\$4,278,040	\$4,278,040
6.	Average Net Investment		4,393,674	4,380,070	4,366,466	4,352,862	4,339,258	4,325,654	4,312,050	4,298,446	4,284,842	4,284,842
7.	Return on Average Net Investment											
a.	Equity Component Grossed Up For Taxes (A)		32,307	32,207	32,107	32,007	31,907	31,807	31,707	31,607	31,507	\$287,163
b.	Debt Component (Line 6 x 2.82% x 1/12)		10,325	10,293	10,261	10,229	10,197	10,165	10,133	10,101	10,069	91,773
8.	Investment Expenses											
a.	Depreciation		13,604	13,604	13,604	13,604	13,604	13,604	13,604	13,604	13,604	122,436
b.	Amortization		0	0	0	0	0	0	0	0	0	0
c.	Dismantlement		0	0	0	0	0	0	0	0	0	0
d.	Property Taxes		0	0	0	0	0	0	0	0	0	0
e.	Other		0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 + 8)		56,236	56,104	55,972	55,840	55,708	55,576	55,444	55,312	55,180	501,372
a.	Recoverable Costs Allocated to Energy		56,236	56,104	55,972	55,840	55,708	55,576	55,444	55,312	55,180	501,372
b.	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	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
11.	Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
12.	Retail Energy-Related Recoverable Costs (B)		53,340	52,769	51,649	51,859	51,902	53,087	52,978	53,808	53,616	475,008
13.	Retail Demand-Related Recoverable Costs (C)		0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$53,340	\$52,769	\$51,649	\$51,859	\$51,902	\$53,087	\$52,978	\$53,808	\$53,616	\$475,008

Notes:

- (A) Line 6 x 8.8238% x 1/12. Based on ROE of 11.75% and weighted income tax rate of 38.575% (expansion factor of 1.628002)
- (B) Line 9a x Line 10
- (C) Line 9b x Line 11

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 TAMPA ELECTRIC COMPANY
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Tampa 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 Unit 4 Continuous Emissions Monitors
(in Dollars)

Line	Description	Beginning of Period Amount	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Amount
1.	Investments											
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0
d.	Other		0	0	0	0	0	0	0	0	0	0
2.	Plant-in-Service/Depreciation Base	\$866,211	\$866,211	\$866,211	\$866,211	\$866,211	\$866,211	\$866,211	\$866,211	\$866,211	\$866,211	\$866,211
3.	Less: Accumulated Depreciation	(80,888)	(82,765)	(84,642)	(86,519)	(88,396)	(90,273)	(92,150)	(94,027)	(95,904)	(97,781)	(97,781)
4.	Other (A)	(236,408)	(236,408)	(236,408)	(236,408)	(236,408)	(236,408)	(236,408)	(236,408)	(236,408)	(236,408)	(236,408)
5.	Net Investment (Lines 2 + 3 + 4)	\$548,915	\$547,038	\$545,161	\$543,284	\$541,407	\$539,530	\$537,653	\$535,776	\$533,899	\$532,022	\$532,022
6.	Average Net Investment		547,977	546,100	544,223	542,346	540,469	538,592	536,715	534,838	532,961	
7.	Return on Average Net Investment											
a.	Equity Component Grossed Up For Taxes (B)		4,029	4,016	4,002	3,988	3,974	3,960	3,947	3,933	3,919	\$35,768
b.	Debt Component (Line 6 x 2.82% x 1/12)		1,288	1,283	1,279	1,275	1,270	1,266	1,261	1,257	1,252	11,431
8.	Investment Expenses											
a.	Depreciation		1,877	1,877	1,877	1,877	1,877	1,877	1,877	1,877	1,877	16,893
b.	Amortization		0	0	0	0	0	0	0	0	0	0
c.	Dismantlement		0	0	0	0	0	0	0	0	0	0
d.	Property Taxes		0	0	0	0	0	0	0	0	0	0
e.	Other		0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 +8)		7,194	7,176	7,158	7,140	7,121	7,103	7,085	7,067	7,048	64,092
a.	Recoverable Costs Allocated to Energy		7,194	7,176	7,158	7,140	7,121	7,103	7,085	7,067	7,048	64,092
b.	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	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
11.	Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
12.	Retail Energy-Related Recoverable Costs (C)		6,824	6,749	6,605	6,631	6,634	6,785	6,770	6,875	6,848	60,721
13.	Retail Demand-Related Recoverable Costs (D)		0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$6,824	\$6,749	\$6,605	\$6,631	\$6,634	\$6,785	\$6,770	\$6,875	\$6,848	\$60,721

Notes:

- (A) Represents the Net Book Value of the Big Bend Unit 4 CEMs which is currently recovered through base rates.
(B) Lines 6 x 8.8238% x 1/12. Based on ROE of 11.75% and weighted income tax rate of 38.575% (expansion factor of 1.628002)
(C) Line 9a x Line 10
(D) Line 9b x Line 11

Tampa 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: Gannon Ignition Oil Tank
(in Dollars)

Line	Description	Beginning of Period Amount	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Amount
1.	Investments											
a.	Expenditures/Additions		(\$59,097)	\$98,929	\$0	(\$23,000)	\$0	\$0	\$0	\$0	\$0	
b.	Clearings 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	\$572,920	\$513,823	\$612,752	\$612,752	\$589,752	\$589,752	\$589,752	\$589,752	\$589,752	\$589,752	
3.	Less: Accumulated Depreciation	(4,288)	(6,054)	(7,885)	(9,876)	(11,830)	(13,747)	(15,664)	(17,581)	(19,498)	(21,415)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	
4a.	Other (A)	(266,000)	(266,000)	(266,000)	(266,000)	(266,000)	(266,000)	(266,000)	(266,000)	(266,000)	(266,000)	
5.	Net Investment (Lines 2 + 3 + 4)	\$302,632	\$241,769	\$338,867	\$336,876	\$311,922	\$310,005	\$308,088	\$306,171	\$304,254	\$302,337	
6.	Average Net Investment		272,201	290,318	337,872	324,399	310,964	309,047	307,130	305,213	303,296	
7.	Return on Average Net Investment											
7a.	Equity Component Grossed Up For Taxes (B)		2,002	2,135	2,484	2,385	2,287	2,272	2,258	2,244	2,230	\$20,297
7b.	Debt Component (Line 6 x 2.82% x 1/12)		640	682	794	762	731	726	722	717	713	6,487
8.	Investment Expenses											
a.	Depreciation		1,766	1,831	1,991	1,954	1,917	1,917	1,917	1,917	1,917	17,127
b.	Amortization		0	0	0	0	0	0	0	0	0	0
c.	Dismantlement		0	0	0	0	0	0	0	0	0	0
d.	Property Taxes		0	0	0	0	0	0	0	0	0	0
e.	Other		0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 + 8)		4,408	4,648	5,269	5,101	4,935	4,915	4,897	4,878	4,860	43,911
a.	Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0
b.	Recoverable Costs Allocated to Demand		4,408	4,648	5,269	5,101	4,935	4,915	4,897	4,878	4,860	43,911
10.	Energy Jurisdictional Factor		0.9485018	0.9405529	0.9227622	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
11.	Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
12.	Retail Energy-Related Recoverable Costs (C)		0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (D)		3,995	4,219	4,873	4,725	4,555	4,556	4,508	4,764	4,451	40,646
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$3,995	\$4,219	\$4,873	\$4,725	\$4,555	\$4,556	\$4,508	\$4,764	\$4,451	\$40,646

Notes:

- (A) Represents the Net Book Value of the Gannon Ignition Oil Tank which is currently recovered through base rates.
- (B) Lines 6 x 8.8238% x 1/12. Based on ROE of 11.75% and weighted income tax rate of 38.575% (expansion factor of 1.628002)
- (C) Line 9a x Line 10
- (D) Line 9b x Line 11

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Tampa 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 Fuel Oil Tank #1 Upgrade
 (in Dollars)

Line	Description	Beginning of Period Amount	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Amount
1.	Investments											
a.	Expenditures/Additions		\$2,588	\$1,172	\$1,878	\$5,082	\$11,452	\$30,048	\$38,796	\$113,400	\$87,845	
b.	Clearings 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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$91,432	\$204,832	\$292,677	
3.	Less: Accumulated Depreciation	0	0	0	0	0	0	0	(107)	(453)	(1,033)	
4.	CWIP - Non-Interest Bearing	416	3,004	4,176	6,054	11,136	22,588	52,636	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$416	\$3,004	\$4,176	\$6,054	\$11,136	\$22,588	\$52,636	\$91,325	\$204,379	\$291,644	
6.	Average Net Investment		1,710	3,590	5,115	8,595	16,862	37,612	71,981	147,852	248,012	
7.	Return on Average Net Investment											
a.	Equity Component Grossed Up For Taxes (A)		13	26	38	63	124	277	529	1,087	1,824	\$3,981
b.	Debt Component (Line 6 x 2.82% x 1/12)		4	8	12	20	40	88	169	347	583	1,271
8.	Investment Expenses											
a.	Depreciation		0	0	0	0	0	0	107	346	580	1,033
b.	Amortization		0	0	0	0	0	0	0	0	0	0
c.	Dismantlement		0	0	0	0	0	0	0	0	0	0
d.	Property Taxes		0	0	0	0	0	0	0	0	0	0
e.	Other		0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 + 8)		17	34	50	83	164	365	805	1,780	2,987	6,285
a.	Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0
b.	Recoverable Costs Allocated to Demand		17	34	50	83	164	365	805	1,780	2,987	6,285
10.	Energy Jurisdictional Factor		0.9485018	0.9405529	0.9227622	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
11.	Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
12.	Retail Energy-Related Recoverable Costs (B)		0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (C)		15	31	46	77	151	338	741	1,738	2,736	5,873
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$15	\$31	\$46	\$77	\$151	\$338	\$741	\$1,738	\$2,736	\$5,873

Notes:

- (A) Line 6 x 8.8238% x 1/12. Based on ROE of 11.75% and weighted income tax rate of 38.575% (expansion factor of 1.628002)
- (B) Line 9a x Line 10
- (C) Line 9b x Line 11

EXHIBIT NO. _____
 DOCKET NO. 990007-EI
 TAMPA ELECTRIC COMPANY
 (K02-1)
 DOCUMENT NO. 8
 PAGE 5 OF 8
 FILED: APRIL 1, 1999

TAMPA 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 Fuel Oil Tank #2 Upgrade
(in Dollars)

Line	Description	Beginning of Period Amount	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Amount
1.	Investments											
a.	Expenditures/Additions		\$1,530	\$1,562	\$2,296	\$3,920	\$4,189	\$28,361	\$29,213	\$143,549	\$601,011	
b.	Clearings 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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$816,047	
3.	Less: Accumulated Depreciation	0	0	0	0	0	0	0	0	0	(952)	
4.	CWIP - Non-Interest Bearing	416	1,946	3,508	5,804	9,724	13,913	42,274	71,487	215,036	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$416	\$1,946	\$3,508	\$5,804	\$9,724	\$13,913	\$42,274	\$71,487	\$215,036	\$815,095	
6.	Average Net Investment		1,181	2,727	4,656	7,764	11,819	28,094	56,881	143,262	515,066	
7.	Return on Average Net Investment											
a.	Equity Component Grossed Up For Taxes (A)		9	20	34	57	87	207	418	1,053	3,787	\$5,672
b.	Debt Component (Line 6 x 2.82% x 1/12)		3	6	11	18	28	66	134	337	1,210	1,813
8.	Investment Expenses											
a.	Depreciation		0	0	0	0	0	0	0	0	952	952
b.	Amortization		0	0	0	0	0	0	0	0	0	0
c.	Dismantlement		0	0	0	0	0	0	0	0	0	0
d.	Property Taxes		0	0	0	0	0	0	0	0	0	0
e.	Other		0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 +8)		12	26	45	75	115	273	552	1,390	5,949	8,437
a.	Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0
b.	Recoverable Costs Allocated to Demand		12	26	45	75	115	273	552	1,390	5,949	8,437
10.	Energy Jurisdictional Factor		0.9485018	0.9405529	0.9227622	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
11.	Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
12.	Retail Energy-Related Recoverable Costs (B)		0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (C)		11	24	42	69	106	253	508	1,358	5,448	7,819
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$11	\$24	\$42	\$69	\$106	\$253	\$508	\$1,358	\$5,448	\$7,819

Notes:

- (A) Line 6 x 8.8238% x 1/12. Based on ROE of 11.75% and weighted income tax rate of 38.575% (expansion factor of 1.628002)
- (B) Line 9a x Line 10
- (C) Line 9b x Line 11

EXHIBIT NO. _____
 DOCKET NO. 990007-EI
 TAMPA ELECTRIC COMPANY
 (K02-1)
 DOCUMENT NO. 8
 PAGE 6 OF 8
 FILED: APRIL 1, 1999

Tampa 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: Phillips Upgrade Tank #1 for FDEP
(in Dollars)

Line	Description	Beginning of Period Amount	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Amount
1.	Investments											
a.	Expenditures/Additions		\$570	\$0	\$1,019	\$2,219	\$836	\$1,684	\$2,878	\$3,616	\$22,679	
b.	Clearings 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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,206	\$12,822	\$35,501	
3.	Less: Accumulated Depreciation	0	0	0	0	0	0	0	(15)	(50)	(127)	
4.	CWIP - Non-Interest Bearing	0	570	570	1,589	3,808	4,644	6,328	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$0	\$570	\$570	\$1,589	\$3,808	\$4,644	\$6,328	\$9,191	\$12,772	\$35,374	
6.	Average Net Investment		285	570	1,080	2,699	4,226	5,486	7,760	10,982	24,073	
7.	Return on Average Net Investment											
7a.	Equity Component Grossed Up For Taxes (A)		2	4	8	20	31	40	57	81	177	\$420
7b.	Debt Component (Line 6 x 2.82% x 1/12)		1	1	3	6	10	13	18	26	57	135
8.	Investment Expenses											
8a.	Depreciation		0	0	0	0	0	0	15	35	77	127
b.	Amortization		0	0	0	0	0	0	0	0	0	0
c.	Dismantlement		0	0	0	0	0	0	0	0	0	0
d.	Property Taxes		0	0	0	0	0	0	0	0	0	0
e.	Other		0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 + 8)		3	5	11	26	41	53	90	142	311	682
a.	Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0
b.	Recoverable Costs Allocated to Demand		3	5	11	26	41	53	90	142	311	682
10.	Energy Jurisdictional Factor		0.9485018	0.9405529	0.9227622	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
11.	Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
12.	Retail Energy-Related Recoverable Costs (B)		0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (C)		3	5	10	24	38	49	83	139	285	636
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$3	\$5	\$10	\$24	\$38	\$49	\$83	\$139	\$285	\$636

Notes:

- (A) Line 6 x 8.8238% x 1/12. Based on ROE of 11.75% and weighted income tax rate of 38.575% (expansion factor of 1.628002)
- (B) Line 9a x Line 10
- (C) Line 9b x Line 11

Tampa 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: Phillips Upgrade Tank #4 for FDEP
(in Dollars)

Line	Description	Beginning of Period Amount	Actual April-98	Actual May-98	Actual June-98	Actual July-98	Actual August-98	Actual September-98	Actual October-98	Actual November-98	Actual December-98	End of Period Amount
1.	Investments											
a.	Expenditures/Additions		\$571	\$0	\$277	\$163	\$796	\$2,052	\$3,696	\$17,170	\$63,214	
b.	Clearings 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	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,555	\$24,725	\$87,939	
3.	Less: Accumulated Depreciation	0	0	0	0	0	0	0	(12)	(63)	(241)	
4.	CWIP - Non-Interest Bearing	0	571	571	848	1,011	1,807	3,859	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$0	\$571	\$571	\$848	\$1,011	\$1,807	\$3,859	\$7,543	\$24,662	\$87,698	
6.	Average Net Investment		286	571	710	930	1,409	2,833	5,701	16,103	56,180	
7.	Return on Average Net Investment											
a.	Equity Component Grossed Up For Taxes (A)		2	4	5	7	10	21	42	118	413	\$622
b.	Debt Component (Line 6 x 2.82% x 1/12)		1	1	2	2	3	7	13	38	132	199
8.	Investment Expenses											
a.	Depreciation		0	0	0	0	0	0	12	51	178	241
b.	Amortization		0	0	0	0	0	0	0	0	0	0
c.	Dismantlement		0	0	0	0	0	0	0	0	0	0
d.	Property Taxes		0	0	0	0	0	0	0	0	0	0
e.	Other		0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 +8)		3	5	7	9	13	28	67	207	723	1,062
a.	Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0
b.	Recoverable Costs Allocated to Demand		3	5	7	9	13	28	67	207	723	1,062
10.	Energy Jurisdictional Factor		0.9485018	0.9405529	0.9227622	0.9287095	0.9316706	0.9552151	0.9555280	0.9728060	0.9716581	
11.	Demand Jurisdictional Factor		0.9063903	0.9076499	0.9247896	0.9263690	0.9229481	0.9268748	0.9205512	0.9766484	0.9158070	
12.	Retail Energy-Related Recoverable Costs (B)		0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (C)		3	5	6	8	12	26	62	202	662	986
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$3	\$5	\$6	\$8	\$12	\$26	\$62	\$202	\$662	\$986

Notes:

- (A) Line 6 x 8.8238% x 1/12. Based on ROE of 11.75% and weighted income tax rate of 38.575% (expansion factor of 1.628002)
(B) Line 9a x Line 10
(C) Line 9b x Line 11