AUSLEY & MCMULLEN

ATTORNEYS AND COUNSELORS AT LAW

227 SOUTH CALHOUN STREET
P.O. BOX 391 (ZIP 32302)
TALLAHASSEE, FLORIDA 32301
(850) 224-9115 FAX (850) 222-7560

August 28, 2009

HAND DELIVERED

Ms. Ann Cole, Director Division of Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Environmental Cost Recovery Clause

FPSC Docket No. 090007-EI

Dear Ms. Cole:

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

- 1. Petition of Tampa Electric Company.
- 2. Prepared Direct Testimony and Exhibit (HTB-3) of Howard T. Bryant.
- 3. Prepared Direct Testimony of Paul L. Carpinone.

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.

James D. Beasley

JDB/pp
Enclosures

CC: All

SSC
SGA

ADM

CLK

All Parties of Record (w/encls.)

DOCUMEN" NUMBER-DATE

08959 AUG 28 8

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FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental Cost)	
Recovery Clause.)	DOCKET NO. 090007-EI
•)	FILED: August 28, 2009

PETITION OF TAMPA ELECTRIC COMPANY

Tampa Electric Company ("Tampa Electric" or "the company"), hereby petitions the Commission for approval of the company's environmental cost recovery true-up and the cost recovery factor proposed for use during the period January 2010 through December 2010, and in support thereof, says:

Environmental Cost Recovery

- 1. Tampa Electric had a final true-up amount for the January 2008 through December 2008 period of an under-recovery amount of (\$8,112,993). [See Exhibit No. ____ (HTB-1), Document No. 1 (Schedule 42-1A).]
- 2. Tampa Electric projects an estimated/actual true-up amount for the January 2009 through December 2009 period, which is based on actual data for the period January 1, 2009 through June 30, 2009 and revised estimates for the period July 1, 2009 through December 31, 2009 to be an under-recovery of (\$9,279,129). [See Exhibit No. ____ (HTB-2), Document No. 1 (Schedule 42-1E), from the filing dated August 3, 2009.]
- 3. The company's projected environmental cost recovery for the period January 1, 2010 through December 31, 2010 total is \$92,897,275 when adjusted for taxes and, when spread over projected kilowatt hour sales for the period January 1, 2010 through December 31, 2010, produces an average environmental cost recovery factor for the new period of 0.485 cents per KWH after application of the factors which adjust for variations in line losses. This average environmental cost recovery factor is applicable pursuant to the Commission approved cost

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FPSC-COMMISSION CLERK

allocation methodology that became effective May 7, 2009 as a result of Tampa Electric's base rate case in Docket No. 080317-EI. [See Exhibit No. ____ (HTB-3), Document No. 7 (Schedule

42-7P).

4. The accompanying Prepared Direct Testimony and Exhibits of Paul L. Carpinone

and Howard T. Bryant present:

(a) A description of each of Tampa Electric's environmental compliance actions

for which cost recovery is sought; and

(b) The costs associated with each environmental compliance action.

5. For reasons more fully detailed in the Prepared Direct Testimony of witness

Howard T. Bryant, the environmental compliance costs sought to be approved for cost recovery

proposed in this petition are consistent with the provisions of Section 366.8255, Florida Statutes,

and with prior rulings by the Commission with respect to environmental compliance cost recovery

for Tampa Electric and other investor-owned utilities.

WHEREFORE, Tampa Electric Company requests this Commission's approval of the

company's prior period environmental cost recovery true-up calculations and projected

environmental cost recovery charges to be collected during the period January 1, 2010 through

December 31, 2010.

DATED this 28th day of August 2009.

Respectfully submitted,

LEE L. WILLIS

JAMES D. BEASLEY

Ausley & McMullen

Post Office Box 391

T II I

Tallahassee, FL 32302

(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition, filed on behalf of Tampa Electric Company, has been furnished by U. S. Mail or hand delivery (*) on this 28th day of August 2009 to the following:

Ms. Martha Carter Brown*
Office of General Counsel
Florida Public Service Commission
2540 Shumard Oak Boulevard
Room 370N – Gerald L. Gunter Building
Tallahassee, FL 32399-0850

Ms. Patricia Christensen Associate Public Counsel Office of Public Counsel 111 West Madison Street – Suite 812 Tallahassee, FL 32399-1400

Mr. John W. McWhirter, Jr. McWhirter Reeves & Davidson, P.A. Post Office Box 3350 Tampa, FL 33601-3350

Ms. Vicki Kaufman Mr. Jon C Moyle Keefe Anchors Gordon & Moyle, PA 118 N. Gadsden Street Tallahassee, FL 32301

Mr. John T. Butler Managing Attorney - Regulatory Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420

Mr. Wade Litchfield Florida Power & Light Company 215 South Monroe Street, Suite 810 Tallahassee, FL 32301-1859 Mr. Gary V. Perko Hopping Green & Sams, P.A. Post Office Box 6526 Tallahassee, FL 32314

Mr. John T. Burnett Associate General Counsel - Florida Mr. R. Alexander Glenn Deputy General Counsel - Florida Progress Energy Service Co., LLC Post Office Box 14042 St. Petersburg, FL 33733

Mr. Paul Lewis, Jr. Progress Energy Florida, Inc. 106 East College Avenue, Suite 800 Tallahassee, FL 32301-7740

Ms. Susan Ritenour Secretary and Treasurer Gulf Power Company One Energy Place Pensacola, FL 32520

Mr. Jeffrey A. Stone Mr. Russell A. Badders Mr. Steven R. Griffin Beggs and Lane Post Office Box 12950 Pensacola, FL 32591-2950

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BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 090007-EI

IN RE:

ENVIRONMENTAL COST RECOVERY FACTORS

PROJECTIONS

JANUARY 2010 THROUGH DECEMBER 2010

TESTIMONY AND EXHIBITS

OF

HOWARD T. BRYANT

1 BEFORE THE PUBLIC SERVICE COMMISSION PREPARED DIRECT TESTIMONY 2 3 OF HOWARD T. BRYANT 4 5 6 Q. Please state your name, address, occupation and employer. 7 My name is Howard T. Bryant. My business address is 702 8 9 North Franklin Street, Tampa, Florida 33602. employed by Tampa Electric Company ("Tampa Electric" or 10 "company") as Manager, Rates in the Regulatory Affairs 11 12 Department. 13 of vour educational Please provide a brief outline 14 Q. 15 background and business experience. 16 I graduated from the University of Florida in June 1973 17 Α. with Bachelor of Science degree in Business 18 а Administration. I have been employed at Tampa Electric 19 since 1981. My work has included various positions in 20 Customer Service, Energy Conservation Services, Demand 21 Side Management ("DSM") Planning, Energy Management and 22 Forecasting, and Regulatory Affairs. In my current 23 am responsible for the company's position I 24 Conservation Cost Recovery CCCVNECCRUMBER Chause. 25

08959 AUG 28 8

Environmental Cost Recovery Clause ("ECRC"), and retail rate design.

Q. Have you previously testified before the Florida Public Service Commission ("Commission")?

A. Yes. I have testified before this Commission on conservation and load management activities, DSM goals setting and DSM plan approval dockets, and other ECCR dockets since 1993, and ECRC activities since 2001.

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

A. The purpose of my testimony is to present, for Commission review and approval, the calculation of the revenue requirements and the projected ECRC factors for the period of January 2010 through December 2010. In support of the projected ECRC factors, my testimony identifies the capital and operating and maintenance ("O&M") costs associated with environmental compliance activities for the year 2010.

Q. Have you prepared an exhibit that shows the determination of recoverable environmental costs for the period of January 2010 through December 2010? A. Yes. Exhibit No. (HTB-3), containing seven documents, was prepared under my direction and supervision. Document Nos. 1 through 7 contain Forms 42-1P through 42-7P, which show the calculation and summary of O&M and capital expenditures that support the development of the environmental cost recovery factors for 2010.

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- 9 **Q.** Are you requesting Commission approval of the projected environmental cost recovery factors for the company's various rate schedules?
 - A. Yes. The ECRC factors, prepared under my direction and supervision, are provided in Exhibit No. ____ (HTB-3),

 Document No. 7, on Form 42-7P. These annualized factors will apply for the period January through December 2010.
 - Q. What has Tampa Electric calculated as the net true-up to be applied in the period January 2010 through December 2010?
 - A. The net true-up applicable for this period is an under-recovery of \$17,392,122. This consists of the final true-up under-recovery of \$8,112,993 for the period of January 2008 through December 2008 and an estimated true-

Q. What was the major contributing factor that created the net under-recovery to be applied to the company's ECRC rates for the period January 2010 through December 2010?

A. The major contributing factor that created the net under-recovery was the revenue shortfall that resulted from the significant market decline in SO_2 emission allowance prices.

Q. Will Tampa Electric propose any new environmental compliance projects for ECRC cost recovery for the period from January 2010 through December 2010?

A. No.

Q. What are the existing capital projects included in the calculation of the ECRC factors for 2010?

A. Tampa Electric proposes to include for ECRC recovery the

1	26 previously approved capital projects and their
2	projected costs in the calculation of the ECRC factors
3	for 2010. These projects are:
	101 2010. These projects are.
4	1) Die Dond Heit 3 Elva Con Donal Suvinstian (NDCDW)
5	1) Big Bend Unit 3 Flue Gas Desulfurization ("FGD")
6	Integration
7	2) Big Bend Units 1 and 2 Flue Gas Conditioning
8	3) Big Bend Unit 4 Continuous Emissions Monitors
9	4) Big Bend Fuel Oil Tank 1 Upgrade
10	5) Big Bend Fuel Oil Tank 2 Upgrade
11	6) Phillips Tank No. 1 Upgrade
12	7) Phillips Tank No. 4 Upgrade
13	8) Big Bend Unit 1 Classifier Replacement
14	9) Big Bend Unit 2 Classifier Replacement
15	10) Big Bend Section 114 Mercury Testing Platform
16	11) Big Bend Units 1 and 2 FGD
17	12) Big Bend FGD Optimization and Utilization
18	13) Big Bend NO _x Emissions Reduction
19	14) Big Bend Particulate Matter ("PM") Minimization and
20	Monitoring
21	15) Polk NO _x Emissions Reduction
22	16) Big Bend Unit 4 SOFA
23	17) Big Bend Unit 1 Pre-SCR
24	18) Big Bend Unit 2 Pre-SCR

19) Big Bend Unit 3 Pre-SCR

20) Big Bend Unit 1 SCR 1 21) Big Bend Unit 2 SCR 22) Big Bend Unit 3 SCR 3 23) Big Bend Unit 4 SCR 5 24) Big Bend FGD Reliability 25) Clean Air Mercury Rule 6 26) SO₂ Emission Allowances 7 8 9 Some of these projects are described in more detail in 10 the direct testimony of Tampa Electric Witness, Paul Carpinone. 11 12 Have you prepared schedules showing the calculation of 13 Q. the recoverable capital project costs for 2010? 14 15 Form 42-3P contained in Exhibit No. A. Yes. 16 17 summarizes the cost estimates projected for these 18 projects. Form 42-4P, pages 1 through 26, provides the calculations of the costs, which result in recoverable 19 20 jurisdictional capital costs of \$57,223,395. 21 22 Q. What are the existing O&M projects included the calculation of the ECRC factors for 2010? 23 24

Tampa Electric proposes to include for ECRC recovery the

```
20 previously approved O&M projects and their projected
1
          costs in the calculation of the ECRC factors for 2010.
2
          These projects are:
3
4
          1) Big Bend Unit 3 FGD Integration
5
          2) Big Bend Units 1 and 2 Flue Gas Conditioning
6
7
          3) SO<sub>2</sub> Emissions Allowances
          4) Big Bend Units 1 and 2 FGD
8
9
          5) Big Bend PM Minimization and Monitoring
          6) Big Bend NO<sub>x</sub> Emissions Reduction
10
11
          7) NPDES Annual Surveillance Fees
          8) Gannon Thermal Discharge Study
12
          9) Polk NO<sub>x</sub> Emissions Reduction
13
          10) Bayside SCR and Ammonia
14
          11) Big Bend Unit 4 SOFA
15
16
          12) Big Bend Unit 1 Pre-SCR
          13) Big Bend Unit 2 Pre-SCR
17
18
          14) Big Bend Unit 3 Pre-SCR
19
          15) Clean Water Act Section 316(b) Phase II Study
20
          16) Arsenic Groundwater Standard Program
21
          17) Big Bend Unit 4 SCR
          18) Big Bend Unit 3 SCR
22
          19) Big Bend Unit 2 SCR
23
```

20) Big Bend Unit 1 SCR

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Some of these projects are described in more detail in the direct testimony of Tampa Electric Witness, Paul Carpinone. Q. Have you prepared schedules showing the calculation of the recoverable O&M project costs for 2010? Form 42-2P contained in Exhibit No. summarizes the recoverable jurisdictional O&M costs for these projects which total \$18,214,920 for 2010. Q. Do you have a schedule providing the description and progress reports for all environmental compliance activities and projects? A. Yes. Project descriptions and progress reports, as well as the projected recoverable cost estimates, are provided in Form 42-5P, pages 1 through 31.

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Q. What are the total projected jurisdictional costs for environmental compliance in the year 2010?

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A. The total jurisdictional O&M and capital expenditures to be recovered through the ECRC are calculated on Form 42-1P. These expenditures total \$75,438,315.

- Q. How were environmental cost recovery factors calculated?
- The environmental cost recovery factors were calculated 3 4
 - shown on Schedules 42-6P and 42-7P. The allocation factors were calculated by determining the percentage each rate class contributes to the monthly system peaks and then adjusted for losses for each rate The energy allocation factors were determined by calculating the percentage that each rate class contributes to total MWH sales and then adjusted for losses for each rate class. This information was based on applying historical rate class load research to the 2010 projected forecast of system demand and energy. Form 42-7P presents the calculation of the proposed ECRC
- 14
- factors by rate class. 15

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- What are the ECRC billing factors by rate class for the Q. 17 period of January through December 2010 which 18 Electric is seeking approval? 19
 - The computation of the billing factors by metering Α. voltage level is shown in Exhibit No. (HTB-3)Document No. 7, Form 42-7P. In summary, the January through December 2010 proposed ECRC billing factors are as follows:

2		<u>I</u>	evel(¢/kWh)
3		RS Secondary	0.486
4		GS, TS Secondary	0.486
5		GSD, SBF	
6		Secondary	0.485
7	•	Primary	0.480
8		Transmission	0.475
9		IS	
10		Secondary	0.479
11		Primary	0.474
12		Transmission	0.469
13		LS1	0.484
14		Average Factor	0.485
15			
16	Q.	Please describe the changes to the	2010 ECRC factors
17		related to Tampa Electric's approve	ed rate design in
18		Docket No. 080317-EI.	
19			
20	A.	As a result of Tampa Electric's b	ase rate case the
21		Commission approved the consolidation	n of the company's
22		General Service - Demand ("GSD") and	General Service -
23		Large Demand ("GSLD") rate customers	into one new GSD
24		rate class. Additionally, the alloc	ation of production
25		demand costs was modified to the 12	Coincident Peak and
	,	1.0	

Factor by Voltage

Rate Class

better reflect 25 percent Average Demand to cost 1 2 causation. The new Commission approved methodology became effective for meter readings on May 7, 2009. 3 4 When does Tampa Electric propose to begin applying these 5 Q. environmental cost recovery factors? 6 7 The environmental cost recovery factors will be effective 8 A. concurrent with the first billing cycle for January 2010. 9 10 Are the costs Tampa Electric is requesting for recovery Q. 11 through the ECRC for the period January 2010 through 12 December 2010 consistent with criteria established for 13 ECRC recovery in Order No. PSC-94-0044-FOF-EI? 14 15 Α. Yes. The costs for which ECRC treatment is requested 16 meet the following criteria: 17 18 Such costs were prudently incurred after April 13, 1. 19 1993; 20 2. The activities are legally required to comply with a 21 22 governmentally imposed environmental regulation

enacted.

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became

which rates are based; and,

effective or

triggered after the company's last test year upon

effect

was

whose

3. Such costs are not recovered through some other cost recovery mechanism or through base rates.

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Q. Please summarize your testimony.

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A. My testimony supports the approval of a final average environmental billing factor credit of 0.485 cents per This includes the projected capital and O&M revenue requirements of \$75,438,315 associated with a total of 31 environmental projects and a true-up under-recovery provision of \$17,392,122 that is primarily driven by the revenue shortfall precipitated by a significant market decline in SO₂ emission allowance prices. My testimony also explains that the projected environmental expenditures for 2010 appropriate for are recovery through the ECRC.

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Q. Does this conclude your testimony?

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A. Yes, it does.

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INDEX

ENVIRONMENTAL COST RECOVERY COMMISSION FORMS

JANUARY 2010 THROUGH DECEMBER 2010

DOCUMENT NO.	<u>TITLE</u>	<u>PAGE</u>
1	Form 42-1P	14
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4	Form 42-4P	17
5	Form 42-5P	43
6	Form 42-6P	74
7	Form 42-7P	75

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

For the Projected Period January 2010 to December 2010

<u>Line</u>	Energy (\$)	Demand (\$)	Total (\$)
Total Jurisdictional Revenue Requirements for the projected period			
a. Projected O&M Activities (Form 42-2P, Lines 7, 8 & 9)	\$18,046,706	\$168,214	\$18,214,920
b. Projected Capital Projects (Form 42-3P, Lines 7, 8 & 9)	57,074,029	149,366	57,223,395
c. Total Jurisdictional Revenue Requirements for the projected period (Lines 1a + 1b)	75,120,735	317,580	75,438,315
2. True-up for Estimated Over/(Under) Recovery for the current period January 2009 to December 2009* (Form 42-2E, Line 5 + 6 + 10)	(9,193,784)	(85,345)	(9,279,129)
3. Final True-up for the period January 2008 to December 2008 (Form 42-1A, Line 3)	(7,994,185)	(118,808)	(8,112,993)
4. Total Jurisdictional Amount to Be Recovered/(Refunded) in the projection period January 2010 to December 2010 (Line 1 - Line 2- Line 3)	92,308,704	521,733	92,830,437
(Ellio I Ellio E Ellio o)		021,700	02,000,401
Total Projected Jurisdictional Amount Adjusted for Taxes (Line 4 x Revenue Tax Multiplier)	\$92,375,166	\$522,109	\$92.897.275
(Entert Actional Text Management)	402,010,100	ΨυΣΣ, 100	402,001,210

^{*} Allocation to energy and demand in each period is in proportion to the respective period split of costs indicated on Lines 7 and 8 of Forms 42-5 and 42-7 of the actuals and estimates.

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2010 to December 2010

O&M Activities (in Dollars)

Line		Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total	Method of Demand	Classification
1.	Description of O&M Activities					•										
	Die Gend Heit 2 Elee One Des Marines et al.	\$484 00B	4070.444					*								
	Big Bend Unit 3 Flue Gas Desulfurization Integration Big Bend Units 1 & 2 Flue Gas Conditioning	\$291,800 0	\$272,000 0	\$371,100 0	\$347,700	\$402,800	\$360,400	\$299,700	\$379,800	\$361,700	\$438,900	\$364,600	\$351,300	\$4,241,800		\$4,241,800
	c. SO ₂ Emissions Allowances	46,720	42,098	-	47.134	0 48,787	0 47.057	0	0	0	0	0	0	0		0
				46,759				48,742	48,742	47,056	48,796	45,037	46,636	563,564		563,564
	d. Big Bend Units 1 & 2 FGD (Less Gypsum Revenue) e. Big Bend PM Minimization and Monitoring	692,600 51,900	820,400 60,700	577,300 64,900	504,900 57,200	602,200 43,300	602,300	484,400	634,700	635,600	621,500	636,200	631,200	7,443,300		7,443,300
	f. Big Bend NO, Emissions Reduction	58,000	58,000	8,000	40,500		24,500	25,100	25,100	24,500	43,300	24,500	25,000	470,000		470,000
	NPDES Annual Surveillance Fees				40,500	115,500	28,000	8,000	8,000	8,000	8,000	28,000	28,000	396,000		396,000
	h. Gannon Thermal Discharge Study	34,500 n	0	10,000	n	40.000	0	0	0	0	0	0	0	34,500	34,500	
	i, Polk NO, Reduction	U	•		-	10,000	-	10,000	0	0		0	0	30,000	30,000	
	i. Bayside SCR and Ammonia	3,500	3,500	7,000	4,000	3,500	4,000	4,000	4,000	3,500	6,000	3,500	3,500	50,000		50,000
	j. Bayside SCR and Ammonia k. Big Bend Unit 4 SOFA	9,500	9,500 0	9,500 0	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	9,500	114,000		114,000
	I. Big Bend Unit 1 Pre-SCR	25,000	25.000	25.000	21,000	31,000	10,000	0	0	0	0	0	0	62,000		62,000
	m. Big Bend Unit 2 Pre-SCR	25,000	21,000	10,000	0	0	0	0	U	U N	0	0	ü	75,000		75,000
	n. Big Bend Unit 3 Pre-SCR	0	21,000	21,000	10.000	0	0	0	0	0	0	0	U	31,000 31,000		31,000
	o. Clean Water Act Section 316(b) Phase II Study	0	0	20,000	10,000	20,000	0	20.000	0	0	0	0	0	60,000	60,000	31,000
	p. Arsenic Groundwater Standard Program	0	0	7,000	0	20,000	7,000	10,000	0	13,000	0	0	13,000	50,000	50,000	
	g. Big Bend 1 SCR	ő	ő	000,1	n	202,100	115,000	118,400	117,600	115,100	102,600	112.900	117,900	1,001,600	50,000	1,001,600
	r. Big Bend 2 SCR	149,200	98,500	134,100	125,400	141,100	146,800	151,300	150,200	146,900	129.800	144,100	150,700	1,668,100		1,668,100
	s. Big Bend 3 SCR	149,700	115,000	124,500	126,800	143,100	148,800	153,300	152,200	148.900	109,300	145,000	151,500	1,668,100		1,668,100
	t. Big Bend 4 SCR	72,400	57,000	61,900	38,300	52,200	71,200	73,600	73,100	71,300	65,000	69,900	72.800	778,700		778,700
	u. Clean Air Mercury Rule	0	. 0	2,000	Ō	0	2,000	0	0	2,000	0	0	2.000	8.000		8,000
2.	Total of O&M Activities	1,584,820	1,582,698	1,500,059	1,332,434	1,825,087	1,576,557	1,416,042	1,602,942	1,587,056	1,582,696	1,583,237	1,603,036	18,776,664	174,500	18,602,164
3.	Recoverable Costs Allocated to Energy	1,550,320	1,582,698	1.463.059	1,332,434	1.795.087	1,569,557	1,376,042	1,602,942	1,574,056	1,582,696	1,583,237	1,590,036	18.602.164		
٠.	Recoverable Costs Allocated to Demand	34,500	1,502,000	37,000	1,532,454	30,000	7,000	40,000	1,002,542	13,000	1,502,696	0	13.000	174,500		
	Transferable design for the political of the property of the p	54,555	Ü	07,000	Ü	50,000	7,000	40,000	·	13,000	U	v	13,000	174,000		
5.	Retail Energy Jurisdictional Factor	0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374			
6.	Retail Demand Jurisdictional Factor	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735			
											0.0000.00	0,0000,00	0.00007.00			
7.	Jurisdictional Energy Recoverable Costs (A)	1,516,039	1,539,605	1,426,059	1,293,422	1,728,486	1,523,593	1,332,635	1,546,121	1,522,216	1,528,253	1.536.911	1,553,366	18,046,706		
8.	Jurisdictional Demand Recoverable Costs (B)	33,257	0	35,667	0	28,919	6,748	38,559	0	12,532	0	0	12,532	168,214		
				•												
9.	Total Jurisdictional Recoverable Costs for O&M															
	Activities (Lines 7 + 8)	\$1,549,296	\$1,539,605	\$1,461,726	\$1,293,422	\$1,757,405	\$1,530,341	\$1,371,194	\$1,546,121	\$1,534,748	\$1,528,253	\$1,536,911	\$1,565,898	\$18,214,920		

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

DOCKET NO. 090007-EI
ECRC 2010 PROJECTION FILING
EXHIBIT NO. HTB-3
DOCUMENT NO. 2

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2010 to December 2010

Capital Investment Projects-Recoverable Costs

(in Dollars)

														End of		
		Projected	Projected	Projected	Projected	Projected	Period	Method of C	lassification							
Line	Description (A)	January	February	March	April	May	June	July	August	September	October	November	December	Total	Demand	Energy
LINE	Description (A)	- odribally	1 Oblumy	1010101												-
1. a.	Big Bend Unit 3 Flue Gas Desulfurization Integration	\$64,538	\$64,385	\$64,232	\$64,079	\$63,925	\$63,771	\$63,619	\$63,465	\$63,312	\$63,158	\$63,005	\$62,852	\$764,341		\$764,341
1. a. b.	Big Bend Units 1 and 2 Flue Gas Conditioning	35.893	35,763	35,632	35,503	35,373	35,242	35,112	34,981	34,852	34.721	34,591	34,461	422,124		422,124
		6.623	6.609	6,594	6,579	6,565	6.550	6.535	6,520	6,506	6.491	6,476	6,462	78,510		78,510
c. d	Big Bend Unit 4 Continuous Emissions Monitors Big Bend Fuel Oil Tank # 1 Upgrade	4,480	4,471	4.460	4,450	4,439	4,428	4,418	4,408	4,397	4,387	4.376	4,365	53,079	\$ 53,079	
u.	Big Bend Fuel Oil Tank # 1 Opgrade	7,370	7,352	7,335	7.319	7,301	7,284	7,267	7.249	7,232	7,215	7.197	7,181	87,302	87,302	
e. 4	Phillips Upgrade Tank # 1 for FDEP	480	478	477	476	474	473	472	470	469	468	466	464	5,667	5,667	
1,	Phillips Upgrade Tank # 4 for FDEP	754	751	750	747	745	743	740	738	736	734	731	730	8,899	8,899	
9.	Big Bend Unit 1 Classifier Replacement	11,343	11.308	11.273	11,237	11,202	11,167	11,132	11,097	11,062	11,027	10,991	10,956	133,795		133,795
rı.	Big Bend Unit 2 Classifier Replacement	8,217	8,193	8.167	8.143	8,118	8.094	8,069	8.044	8,019	7.995	7.970	7,945	96,974		96,974
1.	Big Bend Section 114 Mercury Testing Platform	1,119	1,118	1,115	1,114	1,111	1,110	1,107	1,106	1,103	1,102	1,100	1,098	13,303		13,303
Į.	Big Bend Units 1 & 2 FGD (Less Gypsum Revenue)	736,939	737,118	737,289	735,721	741,734	739.684	737,635	735,585	733,536	731,487	729,437	727,387	8,823,552		8,823,552
Κ.	Big Bend FGD Optimization and Utilization	208,518	208,113	207,709	207,304	206,901	206,496	206,092	205,687	205,283	204,879	204,474	204,070	2,475,526		2,475,526
1,	Big Bend NO, Emissions Reduction	67,476	67,390	67,304	67,217	67,130	67.043	66,957	66,870	66,784	66,697	66,610	66,524	804,002		804,002
m.	2 .		-			89.046	88,843	88,640	88,437	88.234	88,032	87.829	87.626	1,064,831		1,064,831
n.	Big Bend PM Minimization and Monitoring	89,789	89,654	89,452	89,249			16,279	16,236	16,193	16,150	16,108	16,065	195,609		195,609
0.	Polk NO _x Emissions Reduction	16,537	16,494	16,451	16,408	16,365	16,323			26,373	26,323	26,274	26,223	317,962		317,962
p.	Big Bend Unit 4 SOFA	26,770	26,720	26,671	26,621	26,572	26,521	26,472	26,422		20,323	22,092	22,048	267.482		267,482
q.	Big Bend Unit 1 Pre-SCR	22,533	22,489	22,444	22,400	22,356	22,312	22,268	22,224	22,180		17,621	17,581	213,590		213,590
₹.	Big Bend Unit 2 Pre-SCR	18,017	17,978	17,938	17,898	17,859	17,819	17,779	17,740	17,700	17,660	30,324	30.268	366,931		366,931
s.	Big Bend Unit 3 Pre-SCR	30,888	30,832	30,774	30,718	30,662	30,606	30,550	30,493	30,436	30,380	1.175.670	1,173,167	9,152,077		9,152,077
t.	Big Bend Unit 1 SCR	0	0	0	0	889,336	1,186,187	1,185,685	1,183,181	1,180,677	1,178,174	1,079,840	1,077,568	13.080.679		13,080,679
U.	Big Bend Unit 2 SCR	1,102,544	1,100,274	1,098,003	1,095,733	1,093,462	1,091,192	1,088,921	1,086,651	1,084,381	1,082,110	885,750	884,130	10,716,474		10,716,474
V.	Big Bend Unit 3 SCR	901,949	900,329	898,710	897,090	895,469	893,849	892,230	890,610	888,989	887,369 667,732	666,544	665,356	8,062,688		8,062,688
w.	Big Bend Unit 4 SCR	678,425	677,237	676,049	674,861	673,673	672,485	671,297	670,109	668,920		148,369	150,094	1,624,618		1,624,618
x.	Big Bend FGD System Reliability	129,171	128,955	128,739	128,523	128,306	129,303	131,514	134,939	140,791	145,914	146,309	13,998	169,105		169.105
y.	Clean Air Mercury Rule	13,956	14,037	14,107	14,225	14,197	14,169	14,141	14,111	14,083	14,055			,		(4,516)
Z.	SO₂ Emissions Allowances (B)	(393)	(390)	(387)	(385)	(382)	(378)	(375)	(372)	(369)	(365)	(362)	(358)	(4,516)		(4,310)
															454047	e F0 000 657
	Total Investment Projects - Recoverable Costs	4,183,936	4,177,658	4,171,288	4,163,230	5,051,939	5,341,316	5,334,556	5,327,001	5,321,879	5,316,031	5,307,509	5,298,261	58,994,604	\$ 154,947	\$ 58,839,657
													5 pgr 504	FR 000 057		
3.	Recoverable Costs Allocated to Energy	4,170,852	4,164,606	4,158,266	4,150,238	5,038,980	5,328,388	5,321,659	5,314,136	5,309,045	5,303,227	5,294,739	5,285,521	58,839,657		
4.	Recoverable Costs Allocated to Demand	13,084	13,052	13,022	12,992	12,959	12,928	12,897	12,865	12,834	12,804	12,770	12,740	154,947		
													0.9769374			
5.	Retail Energy Jurisdictional Factor	0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400				
6.	Retail Demand Jurisdictional Factor	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735			
												5 400 045	F 450 603	E7 074 000		
7.	Jurisdictional Energy Recoverable Costs (C)	4,078,626	4,051,214	4,053,107	4,028,724	4,852,024	5,172,347	5,153,790	5 125 762	5,134,196	5,120,801	5,139,815	5,163,623 12,281	57 074 029 149 366		
8.	Jurisdictional Demand Recoverable Costs (D)	12,613	12,582	12,553	12,524	12,492	12,462	12,432	12,402	12,372	12,343	12,310	12,281	149,300		
9.	Total Jurisdictional Recoverable Costs for								AT 100 101	95 440 500	AT 400 444	PE 450 405	\$5,175,904	¢57 222 205		
	Investment Projects (Lines 7 + 8)	\$4,091,239	\$4,063,796	\$4,065,660	\$4,041,248	\$4,864,516	\$5,184,809	\$5,166,222	\$5,138,164	\$5,146,568	\$5,133,144	\$5,152,125	\$5,175,904	\$31,ZE3,393		

Notes:

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

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Tampa Electric Company nental Cost Recovery Clause

Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

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	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	O	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	D	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	\$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	\$8,239,658	\$8,239,658	\$8,239,658	
3.	Less: Accumulated Depreciation	(3,211,293)	(3,227,086)	(3,242,879)	(3,258,672)	(3,274,465)	(3,290,258)	(3,306,051)	(3,321,844)	(3,337,637)	(3,353,430)	(3,369,223)	(3,385,016)	(3,400,809)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0_	0	0	. 0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$5,028,365	5,012,572	4,996,779	4,980,986	4, 9 65,193	4,949,400	4,933,607	4,917,814	4,902,021	4,886,228	4,870,435	4,854,642	4,838,849	
6.	Average Net Investment		5,020,469	5,004,676	4,988,883	4,973,090	4,957,297	4,941,504	4,925,711	4,909,918	4,894,125	4,878,332	4,862,539	4,846,746	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	axes (B)	36,477	36,362	36,248	36,133	36,018	35,903	35,789	35,674	35,559	35,444	35,330	35,215	\$430,152
	b. Debt Component Grossed Up For Tax	es (F)	12,268	12,230	12,191	12,153	12,114	12,075	12,037	11,998	11,960	11,921	11,882	11,844	144,673
8.	Investment Expenses														
	a. Depreciation (C)		15,793	15,793	15,793	15,793	15,793	15,793	15,793	15,793	15,793	15,793	15,793	15,793	189,516
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	U	0
	e. Other		0	0	0	0	0	0	0	0		0	0		
9.	Total System Recoverable Expenses (Lin	ies 7 + 8)	64,538	64,385	64,232	64,079	63,925	63,771	63,619	63,465	63,312	63,158	63,005	62,852	764,341
	a. Recoverable Costs Allocated to Energ		64,538	64,385	64,232	64,079	63,925	63,771	63,619	63,465	63,312	63,158	63,005	62,852	764,341
	b. Recoverable Costs Allocated to Dema	ind	0	0	0	0	0	0	0	D	0	0	0	0	0
10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
12.	Retail Energy-Related Recoverable Costs	s (D)	63,111	62,632	62,608	62,203	61,553	61,903	61,612	61,215	61,227	60,985	61,161	61,402	741,612
13.	Retail Demand-Related Recoverable Cos		0	0	0	0	0	0	0	· o	0	0	0_	О	0_
14.	Total Jurisdictional Recoverable Costs (L		\$63,111	\$62,632	\$62,608	\$62,203	\$61,553	\$61,903	\$61,612	\$61,215	\$61,227	\$60,985	\$61,161	\$61,402	\$741,612

- (A) Applicable depreciable base for Big Bend; account 312.45 (\$8,239,658)
- (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 2.3%
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

<u>Tampa Electric Company</u> Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

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	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	\$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	\$5,017,734	\$5,017,734	
3.	Less: Accumulated Depreciation	(2,695,310)	(2,708,719)	(2,722,128)	(2,735,537)	(2,748,946)	(2,762,355)	(2,775,764)	(2,789,173)	(2,802,582)	(2,815,991)	(2,829,400)	(2,842,809)	(2,856,218)	
4.	CWIP - Non-Interest Bearing		0	0_	0	0	0	0	0	0	. 0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$2,322,424	2,309,015	2,295,606	2,282,197	2,268,788	2,255,379	2,241,970	2,228,561	2,215,152	2,201,743	2,188,334	2,174,925	2,161,51 <u>6</u>	
6.	Average Net Investment		2,315,720	2,302,311	2,288,902	2,275,493	2,262,084	2,248,675	2,235,266	2,221,857	2,208,448	2,195,039	2,181,630	2,168,221	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For 1	Гахеs (В)	16,825	16,728	16,630	16,533	16,436	16,338	16,241	16,143	16,046	15,948	15,851	15,754	\$195,473
	b. Debt Component Grossed Up For Ta	ixes (F)	5,659	5,626	5,593	5,561	5,528	5,495	5,462	5,429	5,397	5,364	5,331	5,298	65,743
8.	Investment Expenses														
	a Depreciation (C)		13,409	13,409	13,409	13,409	13,409	13,409	13,409	13,409	13,409	13,409	13,409	13,409	160,908
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0_	0	0	0	0	<u> </u>	
9.	Total System Recoverable Expenses (L	ines 7 + 8)	35,893	35,763	35,632	35,503	35,373	35,242	35,112	34,981	34,852	34,721	34,591	34,461	422,124
	a. Recoverable Costs Allocated to Ener		35,893	35,763	35,632	35,503	35,373	35,242	35,112	34,981	34,852	34,721	34,591	34,461	422,124
	b. Recoverable Costs Allocated to Dem	and	0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
12.	Retail Energy-Related Recoverable Cos	sts (D)	35,099	34,789	34,731	34,464	34,061	34,210	34,004	33,741	33,704	33,527	33,579	33,666	409,575
13.	Retail Demand-Related Recoverable Co		0	0	0	0	0	0	. 0	0	0	0	0	. 0	0
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)	\$35,099	\$34,789	\$34,731	\$34,464	\$34,061	\$34,210	\$34,004	\$33,741	\$33,704	\$33,527	\$33,579	\$33,666	\$409,575

- (A) Applicable depreciable base for Big Bend; accounts 312.41 (\$2,676,217) and 312.42 (\$2,341,517) (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490). (C) Applicable depreciation rates are 3.3% and 3.1%

- (D) Line 9a x Line 10 (E) Line 9b x Line 11 (F) Line 6 x 2.9324% x 1/12.

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Tampa Electric Company

Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 4 Continuous Emissions Monitors (in Dollars)

<u>!</u>	Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments														
		 a. Expenditures/Additions 		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		 b. Clearings to Plant 		0	0	0	0	0	0	0	0	0	0	0	0	
		c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
		d. Other		0	0	0	0	0	0	0	0	0	0	U	U	
	2.	Plant-in-Service/Depreciation Base (A)	\$866,211	\$866,211	\$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	(339,461)	(340,977)	(342,493)	(344,009)	(345,525)	(347,041)	(348,557)	(350,073)	(351,589)	(353,105)	(354,621)	(356,137)	(357,653)	
	4.	CWIP - Non-Interest Bearing	0	0	0	. 0	0	0	0	0	_ 0_	0	0_	0	0	
	5.	Net Investment (Lines 2 + 3 + 4)	\$526,750	525,234	523,718	522,202	520,686	519,170	517,654	516,138	514,622	513,106	511,590	510, <u>074</u>	508,558	
	6.	Average Net Investment		525,992	524,476	522,960	521,444	519,928	518,412	516,896	515,380	513,864	512,348	510,832	509,316	
	7.	Return on Average Net Investment														
		a. Equity Component Grossed Up For Ta	ixes (B)	3,822	3,811	3,800	3,789	3,778	3,767	3,756	3,745	3,734	3,723	3,712	3,701	\$45,138
		b. Debt Component Grossed Up For Tax	es (F)	1,285	1,282	1,278	1,274	1,271	1,267	1,263	1,259	1,256	1,252	1,248	1,245	15,180
4	8.	Investment Expenses														
5		a. Depreciation (C)		1,516	1,516	1,516	1,516	1,516	1,516	1,516	1,516	1,516	1,516	1,516	1,516	18,192
		b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
		d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	U
		e. Other		0	0	.0	0	0	0	0	0	0	0	0	0	
	9.	Total System Recoverable Expenses (Lin	es 7 + 8)	6,623	6,609	6,594	6,579	6,565	6,550	6,535	6,520	6,506	6,491	6,476	6,462	78,510
		a. Recoverable Costs Allocated to Energ		6,623	6,609	6,594	6,579	6,565	6,550	6,535	6,520	6,506	6,491	6,476	6,462	78,510
		b. Recoverable Costs Allocated to Dema	nd	0	0	0	0	0	0	0	0	0	0	0	0	0
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	12.	Retail Energy-Related Recoverable Costs	s (D)	6,477	6,429	6,427	6,386	6,321	6,358	6,329	6,289	6,292	6,268	6,287	6,313	76,176
	13.	Retail Demand-Related Recoverable Cos		0,	0	0	0	0	0	0	0	0	0	0	0	0
	14.	Total Jurisdictional Recoverable Costs (L		\$6,477	\$6,429	\$6,427	\$6,386	\$6,321	\$6,358	\$6,329	\$6,289	\$6,292	\$6,268	\$6,287	\$6,313	\$76,176

- Notes:
 (A) Applicable depreciable base for Big Bend; account 315.44 (\$866,211)
 - (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
 - (C) Applicable depreciation rate is 2.1%
 - (D) Line 9a x Line 10
 - (E) Line 9b x Line 11
 - (F) Line 6 x 2.9324% x 1/12.

Tampa Electric Company Environmental Cost Recovery Clause (ECRC)

Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Fuel Oil Tank # 1 Upgrade (in Dollars)

Line	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1	1. Investments													
	a. Expenditures/Additions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant	0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements	0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other	0	0	0	0	0	0	U	0	0	0	U	v	
2	Plant-in-Service/Depreciation Base (A) \$497,578	\$497,578	\$497,578	\$497,578	\$497,578	\$497,578	\$497,578	\$497,578	\$497,578	\$497,578	\$497,578	\$497,578	\$497,578	
3	3. Less: Accumulated Depreciation (146,560)	(147,638)	(148,716)	(149,794)	(150,872)	(151,950)	(153,028)	(154,106)	(155,184)	(156,262)	(157,340)	(158,418)	(159,496)	
4	4. CWIP - Non-Interest Bearing 0	0	0	0	0	0	0	0	. 0	0	0	0_	0	
5	5. Net Investment (Lines 2 + 3 + 4) \$351,018	349,940	348,862	347,784	346,706	345,628	344,550	343,472	342,394	341,316	340,238	339,160	338,082	
6	6. Average Net Investment	350,479	349,401	348,323	347,245	346,167	345,089	344,011	342,933	341,855	340,777	339,699	338,621	
7	7. Return on Average Net Investment													
	a. Equity Component Grossed Up For Taxes (B)	2,546	2,539	2,531	2,523	2,515	2,507	2,499	2,492	2,484	2,476	2,468	2,460	\$30,040
	b. Debt Component Grossed Up For Taxes (F)	856	854	851	849	846	843	841	838	835	833	830	827	10,103
) ,	8. Investment Expenses													
`	a. Depreciation (C)	1.078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	1,078	12,936
,	b. Amortization	0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement	0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes	0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other	0	0	0	0	0	0	0	0	0	. 0	0	0	
	9. Total System Recoverable Expenses (Lines 7 + 8)	4,480	4,471	4,460	4,450	4,439	4,428	4,418	4.408	4,397	4,387	4,376	4,365	53,079
•	a. Recoverable Costs Allocated to Energy	0	0	0	0	. 0	. 0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand	4,480	4,471	4,460	4,450	4,439	4,428	4,418	4,408	4,397	4,387	4,376	4,365	53,079
	10. Energy Jurisdictional Factor	0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11. Demand Jurisdictional Factor	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
,	T. Domand sunsdictional Factor	0.0000700	5.0000100	5.55557 50	1.0000,00	2.0000.00		_,						
1	12. Retail Energy-Related Recoverable Costs (D)	0	0	0	0	0	0	0	0	0	0	0	0	0
1	13. Retail Demand-Related Recoverable Costs (E)	4,319	4,310	4,299	4,290	4,279	4,268	4,259	4,249	4,239	4,229	4,218	4,208	51,167
1	14. Total Jurisdictional Recoverable Costs (Lines 12 + 13)	\$4,319	\$4,310	\$4,299	\$4,290	\$4,279	\$4,268	\$4,259	\$4,249	\$4,239	\$4,229	\$4,218	\$4,208	\$51,167

- (A) Applicable depreciable base for Big Bend; account 312.40 (\$497,578)
- (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 2.6%
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

DOCKET NO. 090007-EI ECRC 2010 PROJECTION FILING EXHIBIT NO. HTB-3, PAGES 1 - 26 DOCUMENT NO. 4

<u>Tampa Electric Company</u> Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Fuel Oil Tank # 2 Upgrade (in Dollars)

	Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments														
		a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
		c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
		d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
	2.	Plant-in-Service/Depreciation Base (A)	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	\$818,401	
	3.	Less: Accumulated Depreciation	(241,072)	(242,845)	(244,618)	(246,391)	(248,164)	(249,937)	(251,710)	(253,483)	(255,256)	(257,029)	(258,802)	(260,575)	(262,348)	
	4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5.	Net Investment (Lines 2 + 3 + 4)	\$577,329	575,556	573,783	572,010	570,237	568,464	566,691	564,918	563,145	561,372	559,599	557,826	556,053	
	6.	Average Net Investment		576,443	574,670	572,897	571,124	569,351	567,578	565,805	564,032	562,259	560,486	558,713	556,940	
	7.	Return on Average Net Investment														
		a. Equity Component Grossed Up For Ta		4,188	4,175	4,162	4,150	4,137	4,124	4,111	4,098	4,085	4,072	4,059	4,047	\$49,408
		 b. Debt Component Grossed Up For Taxe 	es (F)	1,40 9	1,404	1,400	1,396	1,391	1,387	1,383	1,378	1,374	1,370	1,365	1,361	16,618
3	8.	Investment Expenses														
	0.	a. Depreciation (C)		1,773	1,773	1.773	1,773	1,773	1,773	1,773	1,773	1,773	1,773	1,773	1,773	21,276
_		b. Amortization		1,713	1,110	1,770	1,770	(,0	0	1,770	0	,,	0	0	0	0
		c. Dismantlement		ő	Ö	ñ	ő	ō	Ö	Ö	0	ō	0	Ō	0	0
		d. Property Taxes		0	ō	ō	ő	0	Ō	Ö	0	Ó	0	0	0	0
		e. Other		0	0	0	0	0	0	0	0	0	0	0	. 0	0_
	9.	Total System Recoverable Expenses (Line	00.7 (9)	7.370	7,352	7,335	7,319	7,301	7,284	7,267	7.249	7,232	7.215	7,197	7,181	87,302
	9.	a. Recoverable Costs Allocated to Energy		7,370	7,332	7,555 N	7,513	7,561	7,204	0	7,240	0	0,2.0	0	0	0
		b. Recoverable Costs Allocated to Demai		7.370	7,352	7.335	7.319	7.301	7,284	7,267	7,249	7,232	7,215	7,197	7,181	87,302
		E. Hoberolabio occio, mocales is Solita		,,,,,	.,,	.,	.,	.,	•	•	•					
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	12.	Retail Energy-Related Recoverable Costs	(D)	0	0	0	0	0	0	0	0	0	0	0	0	0
	13.	Retail Demand-Related Recoverable Cost		7,104	7,087	7,071	7,055	7,038	7,022	7,005	6,988	6,971	6,955	6,938	6,922	84,156
	14.	Total Jurisdictional Recoverable Costs (Li	nes 12 + 13)	\$7,104	\$7,087	\$7,071	\$7,055	\$7,038	\$7,022	\$7,005	\$6,988	\$6,971	\$6,955	\$6,938	\$6,922	\$84,156

- (A) Applicable depreciable base for Big Bend; account 312.40 (\$818,401)
- (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 2.6%
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

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January 2010 to December 2

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Phillips Upgrade Tank # 1 for FDEP (in Dollars)

	Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments														••
		 a. Expenditures/Additions 		\$0	\$0	\$0	\$0	\$0	\$ 0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		 b. Clearings to Plant 		0	0	0	0	0	0	0	0	0	0	0	0	
		c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
		d. Other		0	0	0	0	0	0	0	0	0	0	0	U	
	2.	Plant-in-Service/Depreciation Base (A)	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	\$57,277	
	3.	Less: Accumulated Depreciation	(22,536)	(22,679)	(22,822)	(22,965)	(23,108)	(23,251)	(23,394)	(23,537)	(23,680)	(23,823)		(24,109)	(24,252)	
	4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0		0	0	
	5.	Net Investment (Lines 2 + 3 + 4)	\$34,741	34,598	34,455	34,312	34,169	34,026	33,883	33,740	33,597	_33,454	33,311	33,168	33,025	
	6.	Average Net Investment		34,670	34,527	34,384	34,241	34,098	33,955	33,812	33,669	33,526	33,383	33,240	33,097	
	7.	Return on Average Net Investment														
		a. Equity Component Grossed Up For Ta	ixes (B)	252	251	250	249	248	247	246	245	244	243	242	240	\$2,957
		b. Debt Component Grossed Up For Tax	es (F)	85	84	84	84	83	83	83	82	82	82	81	81	994
3	8.	Investment Expenses														
Š	0.	a. Depreciation (C)		143	143	143	143	143	143	143	143	143	143	143	143	1,716
9		b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
		d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
		e. Other		0	0	0	0	0	0	0	0	0	0	0	0	<u> </u>
	9.	Total System Recoverable Expenses (Lin	es 7 + 8)	480	478	477	476	474	473	472	470	469	468	466	464	5,667
	٥.	a. Recoverable Costs Allocated to Energ		0	0	0	0	0	0	0	0	0	0	0	0	0
		b. Recoverable Costs Allocated to Dema		480	478	477	476	474	473	472	470	469	468	466	464	5,667
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	12.	Retail Energy-Related Recoverable Costs	s (D)	0	0	0	0	0	0	0	0	0	0	0	0	0
	13.	Retail Demand-Related Recoverable Cos		463	461	460	459	457	456	455	453	452		449	447	5,463
	14.	Total Jurisdictional Recoverable Costs (L		\$463	\$461	\$460	\$459	\$457	\$456	\$455	\$453	\$452	\$451	\$449	\$447	\$5 <u>,</u> 463

- (A) Applicable depreciable base for Phillips; account 342.28 (\$57,277)
- (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 3.0%
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

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Tampa Electric Company

Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Phillips Upgrade Tank # 4 for FDEP (in Dollars)

Ţ	_ine	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments														
		a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
		c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
		d. Other		0	0	0	0	0	0	0	0	0	0	0	U	
	2.	Plant-in-Service/Depreciation Base (A)	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	\$90,472	
	3.	Less: Accumulated Depreciation	(36,011)	(36,237)	(36,463)	(36,689)	(36,915)	(37,141)	(37,367)	(37,593)	(37,819)	(38,045)	(38,271)	(38,497)	(38,723)	
	4.	CWIP - Non-Interest Bearing	. 0	0	0	0	0	0_	0	0	0	0	0	0	0	
	5.	Net Investment (Lines 2 + 3 + 4)	\$54,461	54,235	54,009	53,783	53,557	53,331	53,105	52,879	52,653	52,427	52,201	51,975	51,749	
	6.	Average Net Investment		54,348	54,122	53,896	53,670	53,444	53,218	52,992	52,766	52,540	52,314	52,088	51,862	
	7.	Return on Average Net Investment													077	64.000
		a. Equity Component Grossed Up For Ta	xes (B)	395	393	392	390	388	387	385	383	382	380	378	377	\$4,630 1,557
		b. Debt Component Grossed Up For Taxo	es (F)	133	132	132	131	131	130	129	129	128	128	127	127	1,557
)	8.	Investment Expenses														
1	-	a. Depreciation (C)		226	226	226	226	226	226	226	226	226	226	226	226	2,712
		b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
		d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
		e. Other		0	. 0	0	. 0	0	0	0	. 0	. 0	0	0	0	
	9.	Total System Recoverable Expenses (Lin	es 7 + 8)	754	751	750	747	745	743	740	738	736	734	731	730	8,899
	٠.	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
		b. Recoverable Costs Allocated to Demai		754	751	750	747	745	743	740	738	736	734	731	730	8,899
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	12.	Retail Energy-Related Recoverable Costs	s (D)	0	0	0	0	0	0	0	0	0	0	0	0	0
	13.	Retail Demand-Related Recoverable Cos		727	724	723	720	718	716	713	711	709	708_	705	704	8,578
	14.	Total Jurisdictional Recoverable Costs (Li		\$727	\$724	\$723	\$720	\$718	\$716	\$713	\$711	\$709	\$708	\$705	\$704	\$8,578

- (A) Applicable depreciable base for Phillips; account 342.28 (\$90,472)
- (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 3.0%
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

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<u>Tampa Electric Company</u> Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 1 Classifier Replacement (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1	Investments														
••	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$ 0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	a	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	\$1,316,257	
3.	Less: Accumulated Depreciation	(519,032)	(522,652)	(526,272)	(529,892)	(533,512)	(537,132)	(540,752)	(544,372)	(547,992)	(551,612)	(555,232)	(558,852)	(562,472)	
4.	Other	0	`` oʻ	` o	` 0	` o´	o o	0	0	0	. 0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$797,225	793,605	789,985	786,365	782,745	779,125	775,505	771,885	768,265	764,645	761,025	757,405	753,785	
6.	Average Net Investment		795,415	791,795	788,175	784,555	780,935	777,315	773,695	770,075	766,455	762,835	759,215	755,595	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For	Taxes (B)	5,779	5,753	5,727	5,700	5,674	5,648	5,621	5,595	5,569	5,543	5,516	5,490	\$67,615
	b. Debt Component Grossed Up For Ta	ixes (F)	1,944	1,935	1,926	1,917	1,908	1,899	1,891	1,882	1,873	1,864	1,855	1,846	22,740
8.	Investment Expenses														
٠.	a. Depreciation (C)		3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	43,440
	b. Amortization		0	. 0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other	-	0	0	0	0	0	0	0	0	0	0	0		
9.	Total System Recoverable Expenses (L	ines 7 + 8)	11.343	11,308	11,273	11,237	11,202	11,167	11,132	11,097	11,062	11,027	10,991	10,956	133,795
•	a. Recoverable Costs Allocated to Ene		11,343	11,308	11,273	11,237	11,202	11,167	11,132	11,097	11,062	11,027	10,991	10,956	133,795
	b. Recoverable Costs Allocated to Dem		0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
40	Batail Farmy Belated Banayasakia Car	oto (D)	11,092	11.000	10,988	10,908	10,786	10,840	10,781	10,704	10,698	10,648	10,669	10,703	129,817
12.	Retail Energy-Related Recoverable Cos Retail Demand-Related Recoverable Co		11,092	11,000	10,966	0.900	001,01	10,040	10,761	10,704	0,030	0	0	0	0
13.	Total Jurisdictional Recoverable Costs		\$11,092	\$11,000	\$10.988	\$10,908	\$10,786	\$10,840	\$10,781	\$10,704	\$10,698	\$10,648	\$10,669	\$10,703	\$129,817
14.	total julipulctional recoverable costs ((LEIGS 12 T 13)	ψ11,U3Z	Ψ:1,000	ψ.0,000	ψ,0,300	₩.0,700	4.0,040	Ţ,0,10		7.0,000	,			

Notes:

(A) Applicable depreciable base for Big Bend; account 312.41 (\$1,316,257)

- (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 3.3%

- (D) Line 9a x Line 10 (E) Line 9b x Line 11 (F) Line 6 x 2.9324% x 1/12.

<u>Tampa Electric Company</u> Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 2 Classifier Replacement (in Dollars)

<u>i</u>	_ine	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments														**
		a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
		 b. Clearings to Plant 		0	0	0	0	0	0	0	0	0	0	0	0 n	
		c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
		d. Other		0	0	0	0	0	0	C	0	U	U	υ	U	
	2.	Plant-in-Service/Depreciation Base (A)	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	\$984,794	
	3.	Less: Accumulated Depreciation	(399,222)	(401,766)	(404,310)	(406,854)	(409,398)	(411,942)	(414,486)	(417,030)	(419,574)	(422,118)	(424,662)	(427,206)	(429,750)	
	4.	Other	0	0	0	_0	0	0	0	_0	0	0	0	0	0	
	5.	Net Investment (Lines 2 + 3 + 4)	\$585,572	583,028	580,484	577,940	575,396	572,852	570,308	567,764	565,220	562,676	560,132	557 <u>,</u> 588	555,044	
	6.	Average Net Investment		584,300	581,756	579,212	576,668	574,124	571,580	569,036	566,492	563,948	561,404	558,860	556,316	
	7.	Return on Average Net Investment									4.440	4 007	4.079	4,060	4,042	\$49.722
		 a. Equity Component Grossed Up For Ta 		4,245	4,227	4,208	4,190	4,171	4,153	4,134	4,116	4,097 1,378	1,372	1,366	1,359	16,724
		b. Debt Component Grossed Up For Tax	es (F)	1,428	1,422	1,415	1,409	1,403	1,397	1,391	1,384	1,370	1,312	1,300	1,338	10,724
)	8.	Investment Expenses														
П		a. Depreciation (C)		2,544	2,544	2,544	2,544	2,544	2,544	2,544	2,544	2,544	2,544	2,544	2,544	30,528
•		b. Amortization		0	0	0	0	0	0	0	0	0	0.	0	0	0
		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	U
		d. Property Taxes		0	0	0	0	0	0	0	0	ō	0	0	U	U
		e. Other		0_	0_	0	0	0	0	0	0	0	0_	0	0	0
	9.	Total System Recoverable Expenses (Lin	es 7 + 8)	8,217	8,193	8,167	8,143	8,118	8,094	8,069	8,044	8,019	7,995	7,970	7,945	96,974
	٠.	a. Recoverable Costs Allocated to Energ		8,217	8,193	8,167	8,143	8,118	8,094	8,069	8,044	8,019	7,995	7,970	7,945	96,974
		b. Recoverable Costs Allocated to Dema		0	0	0	0	0	0	0	0	0	0	0	0	0
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	12.	Retail Energy-Related Recoverable Costs	s (D)	8,035	7,970	7,960	7,905	7,817	7,857	7,814	7,759	7,755	7,720	7,737	7,762	94,091
	13.	Retail Demand-Related Recoverable Cos		0	0	0	0	0	0	0	0	0	0	0	0	0
	14.	Total Jurisdictional Recoverable Costs (Li	ines 12 + 13)	\$8,035	\$7,970	\$7,960	\$7,905	\$7,817	\$7,857	\$7,814	\$7,759	\$7,755	\$7,720	\$7,737	\$ 7,7 <u>62</u>	\$94,091_
		•														

- (A) Applicable depreciable base for Big Bend; account 312.42 (\$984,794)
- (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 3.1%
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Section 114 Mercury Testing Platform (in Dollars)

<u>1</u>	Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments														
		a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$ O	\$0	\$0	\$0	\$0	\$0
		b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
		c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
		d. Other		0	0	0	0	0	0	0	0	0	0	0	U	
	2.	Plant-in-Service/Depreciation Base (A)	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	\$120,737	
	3.	Less: Accumulated Depreciation	(26,059)	(26,260)	(26,461)	(26,662)	(26,863)	(27,064)	(27,265)	(27,466)	(27,667)	(27,868)	(28,069)	(28,270)		
	4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5.	Net Investment (Lines 2 + 3 + 4)	\$94,678	94,477	94,276	94,075	93,874	93,673	93,472	93,271	93,070	92,869	92,668	92,467	92,266	
	6.	Average Net Investment		94,578	94,377	94,176	93,975	93,774	93,573	93,372	93,171	92,970	92,769	92,568	92,367	
	7.	Return on Average Net Investment														
	٠.	a. Equity Component Grossed Up For T	axes (B)	687	686	684	683	681	680	678	677	675	674	673	671	\$8,149
		b. Debt Component Grossed Up For Ta		231	231	230	230	229	229	228	228	227	227	226	226	2,742
	8.	Investment Expenses														
	0.	a. Depreciation (C)		201	201	201	201	201	201	201	201	201	201	201	201	2,412
		b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
		d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	Ü
		e. Other		0	0	0	0	0	0	0	0	0	0	. 0	0	
	9.	Total System Recoverable Expenses (Li	nes 7 + 8)	1,119	1,118	1,115	1,114	1,111	1,110	1,107	1,106	1,103	1,102	1,100	1,098	13,303
	v.	a. Recoverable Costs Allocated to Ener		1,119	1,118	1,115	1,114	1,111	1,110	1,107	1,106	1,103	1,102	1,100	1,098	13,303
		b. Recoverable Costs Allocated to Dem		0	0	0	0	0	0	0	0	0	0	0	0	0
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	40	Batall Faces Balated Bosovership Con	to (D)	1,094	1,088	1,087	1,081	1,070	1,077	1,072	1,067	1,067	1,064	1,068	1,073	12,908
	12. 13.	Retail Energy-Related Recoverable Cos Retail Demand-Related Recoverable Co		1,094	1,000 N	1,007	1,001	1,070	1,0,7	1,572	0	0	0	0	0	0
	14.	Total Jurisdictional Recoverable Costs (\$1,094	\$1,088	\$1,087	\$1,081	\$1,070	\$1,077	\$1,072	\$1,067	\$1,067	\$1,064	\$1,068	\$1,073_	\$12,908

- (A) Applicable depreciable base for Big Bend; account 311.40 (\$120,737)

 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 2.0%
 (D) Line 9a x Line 10
 (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

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<u>Tampa Electric Company</u> Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Units 1 and 2 FGD (Less Gypsum Revenue) (in Dollars)

Li	ine	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments a. Expenditures/Additions		\$82,824	\$360,416	\$81,000	\$2,026	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$526,266
		b. Clearings to Plant		0	0	0	3,316,137	0	0	0	0	0	0	0	0	3,316,137
		c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
		d. Other		. 0	0	0	0	0	0	0	0	0	U	U	U	
	2.	Plant-in-Service/Depreciation Base (A)	\$84,032,642	\$84,032,642	\$84,032,642	\$84,032,642	\$87,348,779	\$87,348,779	\$87,348,779	\$87,348,779	\$87,348,779	\$87,348,779	\$87,348,779	\$87,348,779	\$87,348,779	
	3.	Less: Accumulated Depreciation	(31,778,233)	(31,981,312)	(32,184,391)	(32,387,470)	(32,590,549)	(32,801,642)	(33,012,735)	(33,223,828)	(33,434,921)	(33,646,014)				
	4.	CWIP - Non-Interest Bearing	2,789,871	2,872,695	3,233,111	3,314,111	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	5.	Net Investment (Lines 2 + 3 + 4)	\$55,044,280	54,924,025	55,081,361	54,959,282	54,758,229	54,547,136	54,336,043	54,124,950	53,913,857	53,702,764	53,491,671	53,280,578	53,069,485	
	6.	Average Net Investment		54,984,152	55,002,693	55,020,322	54,858,756	54,652,683	54,441,590	54,230,497	54,019,404	53,808,311	53,597,218	53,386,125	53,175,032	
	7.	Return on Average Net Investment a. Equity Component Grossed Up For Ta		399,497	399,631	399,759	398,585	397,088	395,554	394,021	392,487	390,953	389,420	387,886 130,458	386,352 129,942	\$4,731,233 1,591,259
		b. Debt Component Grossed Up For Tax	es (F)	134,363	134,408	134,451	134,057	133,553	133,037	132,521	132,005	131,490	130,974	130,430	129,542	1,551,255
	8.	Investment Expenses														
		a. Depreciation (C)		203,079	203,079	203,079	203,079	211,093	211,093	211,093	211,093	211,093	211,093	211,093	211,093	2,501,060
)		b. Amortization		0	0	0	0	0	0	0	0	0	0	U	U	0
1		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
l		d. Property Taxes		0	0	0	0	0	0	0	U	0	0	0	0	n
		e. Other		0	0	0	U		<u> </u>	<u></u>			<u> </u>			
	9.	Total System Recoverable Expenses (Lin	es 7 + 8)	736,939	737,118	737,289	735,721	741,734	739,684	737,635	735,585	733,536	731,487	729,437	727,387	8,823,552
		a. Recoverable Costs Allocated to Energ	y	736,939	737,118	737,289	735,721	741,734	739,684	737,635	735,585	733,536	731,487	729,437	727,387	8,823,552
		b. Recoverable Costs Allocated to Dema	nd	0	0	0	0	0	0	0	0	0	0	0	0	О
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	12.	Retail Energy-Related Recoverable Costs	(D)	720,644	717,048	718,644	714,180	714,214	718,023	714,367	709,510	709,378	706,325	708,094	710,612	8,561,039
	13.	Retail Demand-Related Recoverable Cos		0	0	0	0	0	0	0	0	0	0	0	0	0
	14.	Total Jurisdictional Recoverable Costs (L		\$720,644	\$717,048	\$718,644	\$714,180	\$714,214	\$718,023	\$714,367	\$709,510	\$709,378	\$706,325	\$708,094	\$710,612	\$8,561,039

- Notes:

 (A) Applicable depreciable base for Big Bend; account 312.46 (\$87,348,776)

 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
 - (C) Applicable depreciation rates are 2.9%.
 (D) Line 9a x Line 10.

 - (E) Line 9b x Line 11
 - (F) Line 6 x 2.9324% x 1/12.

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Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend FGD Optimization and Utilization (in Dollars)

a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Demand 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	End of Period Total	Projected December	Projected November	Projected October	Projected September	Projected August	Projected July	Projected June	Projected May	Projected April	Projected March	Projected February	Projected January	Beginning of Period Amount	Description	Line
a. Expenditures/Additions b. Clearings to Plant c. Retirements d. O															Investments	1
C. Refirements C. Ref	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			•
C. Netments C. Other C. Netments C. Netment (Lines 2 + 3 + 4) S. 1,739,737 S. 1,739,		0	0	_	0	0	0	0	0	0	0	0	0		b. Clearings to Plant	
2. Planti-Service/Depreciation Base (A) \$21,739,737 \$2		0	0	_	0	0	-	v	-	0	0	0	0			
3. Less: Accumulated Depreciation (4,531,789) (4,573,431) (4,615,073) (4,656,715) (4,688,357) (4,739,999) (4,781,641) (4,823,283) (4,864,925) (4,906,567) (4,948,209) (4,989,851) (5,031,483] (4,000) (4,989,851) (5,031,483] (4,000) (5,000) (4,989,851) (5,000) (5,0		U	0	0	0	0	0	0	0	0	0	0	0		d. Other	
4. CWIP - Non-Interest Bearing 5. Net Investment (Lines 2 + 3 + 4) 5. Net Investment (Lines 2 + 3 + 4) 6. Average Net Investment 6. Average Net Investment 7. Return on Average Net Investment 8. Equity Component Grossed Up For Taxes (B) 9. Debt Component Grossed Up For Taxes (F) 124,876 124,573 124,271 123,968 124,673 124,271 123,968 123,666 123,363 123,061 122,758 122,758 122,455 122,153 121,850 121,548 124,642 124,6							\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	Plant-in-Service/Depreciation Base (A)	2.
5. Norl-inferest Beams 5. Norl-inferest 5.) (5,031,493)			(4,906,567)					(4,698,357)	(4,656,715)	(4,615,073)	(4,573,431)	(4,531,789)	Less: Accumulated Depreciation	3.
6. Average Net Investment 17, 187, 127 17, 145, 485 17, 103, 843 17, 062, 201 17, 020, 559 16, 978, 917 16, 937, 275 16, 895, 633 16, 853, 991 16, 812, 349 16, 770, 707 16, 729, 065 7. Return on Average Net Investment a. Equity Component Grossed Up For Taxes (B) 124, 876 124, 573 124, 271 123, 968 123, 666 123, 363 123, 061 122, 758 122, 455 122, 153 121, 850 121, 548 120, 669		16 709 244	<u></u>	~	0											4.
7. Return on Average Net Investment a. Equity Component Grossed Up For Taxes (B) b. Debt Component Grossed Up For Taxes (F) 42,000 41,898 41,796 41,694 41,694 41,593 41,491 41,389 41,287 41,186 41,642 41,6		10,700,244	10,749,000	16,791,526	16,833,170	16,874,812	16,916,454	16,958,096	16,999,738	17,041,380	17,083,022	17,124,664	17,166,306	\$17,207,948	Net Investment (Lines 2 + 3 + 4)	5.
a. Equity Component Grossed Up For Taxes (B) b. Debt Component Grossed Up For Taxes (F) 42,000 41,898 41,796 41,694 41,694 41,593 41,491 41,389 41,287 41,186 41,084 40,982 40,880 8. Investment Expenses a. Depreciation (C) 41,642 41		16,729,065	16,770,707	16,812,349	16,853,991	16,895,633	16,937,275	16,978,917	17,020,559	17,062,201	17,103,843	17,145,485	17,187,127		Average Net Investment	6.
b. Debt Component Grossed Up For Taxes (F) 42,000 41,898 41,796 41,694 41,693 41,491 41,389 41,287 41,186 41,084 40,982 40,880 8. Investment Expenses a. Depreciation (C) 41,642															Return on Average Net Investment	7.
8. Investment Expenses a. Depreciation (C) 41,642 4	\$1,478,542											124,573	124,876	axes (B)	a. Equity Component Grossed Up For Ta	
a. Depreciation (C) b. Amortization 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	497,280	40,880	40,982	41,084	41,186	41,287	41,389	41,491	41,593	41,694	41,796	41,898	42,000	es (F)	b. Debt Component Grossed Up For Tax	
b. Amortization 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0															Investment Expenses	8.
C. Dismantlement C. Dismantle	499,704	41,642	41,642	41,642	41,642	41,642	41,642	41,642	41,642	41,642	41,642	41,642	41,642		a. Depreciation (C)	
d. Property Taxes	0	0	0	0	0	0	0	0	0	0	0	0	0		b. Amortization	
e. Other e. Other 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	U	0	0	0	0	0	0	0	0	0	0	0	0		c. Dismantlement	
9. Total System Recoverable Expenses (Lines 7 + 8) 208,518 208,113 207,709 207,304 206,901 206,496 206,092 205,687 205,283 204,879 204,474 204,070 a. Recoverable Costs Allocated to Energy 208,518 208,113 207,709 207,304 206,901 206,496 206,092 205,687 205,283 204,879 204,474 204,070 b. Recoverable Costs Allocated to Demand 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0	0	U	0	0	0	0	0	0	0	0	0			
a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Demand 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							U		U	D	0	0	0		e. Other	
a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Demand 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2,475,526				205,283	205,687	206,092	206,496	206,901	207,304	207,709	208,113	208,518	nes 7 + 8)	Total System Recoverable Expenses (Lin	9.
10. Energy Jurisdictional Factor 0.9778879 0.9727724 0.9747108 0.9707213 0.9628980 0.9707152 0.9684555 0.9645523 0.9670659 0.9656009 0.9707400 0.9769374 11. Demand Jurisdictional Factor 0.9639735	2,475,526			204,879	205,283	205,687	206,092	206,496	206,901	207,304	207,709	208,113	208,518			
10. Energy Junisdictional Factor 0.9639735 0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	ind	b. Recoverable Costs Allocated to Dema	
11. Demand Jurisdictional Factor 0.9639735 0.9				0.9656009	0.9670659	0.9645523	0.9684555	0.9707152	0.9628980	0.9707213	0.9747108	0.9727724	0.9778879		Energy Jurisdictional Factor	10.
12. Retail Ellergy-Related Recoverable Costs (b) 205,507 202,441 202,450 201,254 105,220 204,110 105,220 204,110		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735				
	2,401,913	199,364	198,491	197,831	198,522	198,396	199,591	200,449	199,225	201,234	202,456	202.447	203.907	s (D)	Retail Energy-Related Recoverable Costs	12
	0								0	0	0	0	0		Retail Demand-Related Recoverable Cos	13.
14. Total Jurisdictional Recoverable Costs (Lines 12 + 13) \$203,907 \$202,447 \$202,456 \$201,234 \$199,225 \$200,449 \$199,591 \$198,396 \$198,522 \$197,831 \$198,491 \$199,364	\$2,401,913	\$199,364	\$198,491	\$197,831	\$198,522	\$198,396	\$199,591	\$200,449	\$199,225	\$201,234	\$202,456	\$202,447	\$203,907			

- Notes:
 (A) Applicable depreciable base for Big Bend; accounts 311.45 (\$39,818) and 312.45(\$21,699,919)
 - (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
 - (C) Applicable depreciation rates are 1.5% and 2.3%
 - (D) Line 9a x Line 10 (E) Line 9b x Line 11
 - (F) Line 6 x 2.9324% x 1/12.

<u>Tampa Electric Company</u> Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend NO_x Emissions Reduction (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	 b. Clearings to Plant 		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	\$3,461,303	
3.	Less: Accumulated Depreciation	2,573,615	2,564,690	2,555,765	2,546,840	2,537,915	2,528,990	2,520,065	2,511,140	2,502,215	2,493,290	2,484,365	2,475,440	2,466,515	
4.	CWIP - Non-Interest Bearing	0	. 0	0	0	0	0	. 0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$6,034,918	6,025,993	6,017,068	6,008,143	5,999,218	5,990,293	5,981,368	5,972,443	5,963,518	5,954,593	5,945,668	5,936,743	5,927,818	
6.	Average Net Investment		6,030,456	6,021,531	6,012,606	6,003,681	5,994,756	5,985,831	5,976,906	5,967,981	5,959,056	5,950,131	5,941,206	5,932,281	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For T	axes (B)	43,815	43,750	43,686	43,621	43,556	43,491	43,426	43,361	43,297	43,232	43,167	43,102	\$521,504
	b. Debt Component Grossed Up For Ta.	xes (F)	14,736	14,715	14,693	14,671	14,649	14,627	14,606	14,584	14,562	14,540	14,518	14,497	175,398
8.	Investment Expenses														
0.	a. Depreciation (C)		8,925	8,925	8,925	8.925	8,925	8,925	8,925	8,925	8,925	8,925	8,925	8,925	107,100
	b. Amortization		0,020	0,020	0,020	0,020	0,020	0,020	0,020	0,020	0,020	0	0	0	0
	c. Dismantlement		0	0	Ō	Ô	0	0	Ö	0	Ō	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lie	nes 7 + 8)	67,476	67,390	67,304	67,217	67,130	67.043	66,957	66.870	66,784	66,697	66,610	66,524	804,002
٥.	a. Recoverable Costs Allocated to Energ		67,476	67,390	67,304	67,217	67,130	67,043	66,957	66,870	66,784	66,697	66,610	66,524	804,002
	b. Recoverable Costs Allocated to Dema		0	0	0	0	0	0	0	0	0	0	0	0	0
10	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
										•					
12.	Retail Energy-Related Recoverable Cost		65,984	65,555	65,602	65,249	64,639	65,080	64,845	64,500	64,585	64,403	64,661	64,990	780,093
13.	Retail Demand-Related Recoverable Co.		0	0	0	0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (L	lines 12 + 13)	\$65,984	\$65,555	\$65,602	\$65,249	\$64,639	\$65,080	\$64,845	\$64,500	\$64,585	\$64, <u>403</u>	\$64,661	\$64,990	\$780,093

- otes:

 (A) Applicable depreciable base for Big Bend; accounts 312.41 (\$1,675,171), 312.42 (\$1,075,718), and 312.43 (\$710,414)

 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).

 (C) Applicable depreciation rates are 3.3%, 3.1%, and 2.5%

 (D) Line 9a x Line 10

 (E) Line 9b x Line 11

 (F) Line 6 x 2.9324% x 1/12.

Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: PM Minimization and Monitoring (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period _Total
1.	Investments														
	a. Expenditures/Additions		\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
	 b. Clearings to Plant 		10,000	0	0	0	0	0	0	0	0	0	0	0	10,000
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	\$8,319,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	\$8,329,636	
3.	Less: Accumulated Depreciation	(1,216,996)	(1,237,876)	(1,258,776)	(1,279,676)	(1,300,576)	(1,321,476)	(1,342,376)	(1,363,276)	(1,384,176)	(1,405,076)	(1,425,976)	(1,446,876)	(1,467,776)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$7,102,640	7,091,760	7,070,860	7,049,960	7,029,060	7,008,160	6,987,260	6,966,360	6,945,460	6,924,560	6,903,660	6,882,760	6,861,860	
6.	Average Net Investment		7,097,200	7,081,310	7,060,410	7,039,510	7,018,610	6,997,710	6,976,810	6,955,910	6,935,010	6,914,110	6,893,210	6,872,310	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	axes (B)	51,566	51,450	51,299	51,147	50,995	50,843	50,691	50,539	50,387	50,236	50,084	49,932	\$609,169
	b. Debt Component Grossed Up For Tax	(es (F)	17,343	17,304	17,253	17,202	17,151	17,100	17,049	16,998	16,947	16,896	16,845	16,794	204,882
8.	Investment Expenses														
•	a. Depreciation (C)		20,880	20,900	20,900	20,900	20,900	20,900	20,900	20,900	20,900	20,900	20,900	20,900	250,780
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other	-	0	0	0	0	0	0	0	0	0	0	0	0	
9.	Total System Recoverable Expenses (Lin	ies 7 + 8)	89,789	89,654	89,452	89,249	89,046	88,843	88,640	88,437	88,234	88.032	87,829	87,626	1,064,831
	a. Recoverable Costs Allocated to Energ	'	89,789	89,654	89,452	89,249	89,046	88,843	88,640	88,437	88,234	88,032	87,829	87,626	1,064,831
	 Recoverable Costs Allocated to Dema 	ınd	0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
12.	Retail Energy-Related Recoverable Costs	s (D)	87,804	87,213	87,190	86,636	85,742	86,241	85,844	85,302	85,328	85,004	85,259	85,605	1,033,168
13.	Retail Demand-Related Recoverable Cos		0	0	0	0	_ 0	0	0	0	0	_ 0 _	0	0	0_
14.	Total Jurisdictional Recoverable Costs (L	ines 12 + 13)	\$87,804	\$87,213	\$87,190	\$86,636	\$85,742	\$86,241	\$85,844	\$85,302	\$85,328	\$85,004	\$85,259	\$85,605	\$1,033,168

- (A) Applicable depreciable base for Big Bend; accounts 312.41 (\$1,513,263), 312.42 (\$5,153,072), 312.43 (\$955,619), 315.41 (\$17,504), 315.43 (\$338,584), and 315.44 (\$351,594) (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rates are 3.3%, 3.1%, 2.6%, 2.5%, 2.5%, and 2.1% (D) Line 9a x Line 10 (E) Line 9b x Line 11

- (F) Line 6 x 2.9324% x 1/12.

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Polk NO_x Emissions Reduction (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1,	Investments														
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	ō	0	0	·
	c. Retirements		0	0	0	0	0	0	0	0	0	Ō	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	\$1,561,473	\$1.561.473	\$1,561,473	\$1,561,473	\$1,561,473	\$1.561.473	\$1,561,473	\$1.561,473	\$1.561.473	\$1.561.473	\$1,561,473	\$1,561,473	\$1,561,473	
3.	Less: Accumulated Depreciation	(311,706)	(316,130)	(320,554)	(324,978)	(329,402)	(333,826)				(351,522)		(360,370)	(364,794)	
4.	CWIP - Non-Interest Bearing	o o	O O	o´	0	0	` o´	Ò) o	o´	` oʻ	` o´	Ò	o o	
5.	Net investment (Lines 2 + 3 + 4)	\$1,249,767	1,245,343	1,240,919	1,236,495	1,232,071	1,227,647	1,223,223	1,218,799	1,214,375	1,209,951	1,205,527	1,201,103	1,196,679	
6.	Average Net Investment		1,247,555	1,243,131	1,238,707	1,234,283	1,229,859	1,225,435	1,221,011	1,216,587	1,212,163	1,207,739	1,203,315	1,198,891	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	exes (B)	9,064	9,032	9,000	8,968	8,936	8,904	8,871	8,839	8,807	8,775	8,743	8,711	\$106,650
	b. Debt Component Grossed Up For Tax	es (F)	3,049	3,038	3,027	3,016	3,005	2,995	2,984	2,973	2,962	2,951	2,941	2,930	35,871
8.	Investment Expenses														
	a. Depreciation (C)		4,424	4,424	4,424	4,424	4,424	4.424	4.424	4,424	4,424	4,424	4.424	4,424	53,088
	b. Amortization		0	0	0	0	0	, 0	0	0	. 0	. 0	0	. 0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0_	. 0	0	0	0	0
9.	Total System Recoverable Expenses (Lin	ies 7 + 8)	16,537	16,494	16,451	16,408	16,365	16,323	16,279	16,236	16,193	16,150	16,108	16,065	195,609
	a. Recoverable Costs Allocated to Energ	y .	16,537	16,494	16,451	16,408	16,365	16,323	16,279	16,236	16,193	16,150	16,108	16,065	195,609
	b. Recoverable Costs Allocated to Dema	ind	0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
12.	Retail Energy-Related Recoverable Costs	s (D)	16,171	16,045	16,035	15,928	15,758	15,845	15,765	15,660	15,660	15,594	15,637	15,694	189,792
13.	Retail Demand-Related Recoverable Cos		0	0	0	O	0	0	0	0	0	0	0	0	. 0
14.	Total Jurisdictional Recoverable Costs (Li	ines 12 + 13)	\$16,171	\$16,045	\$16,035	\$15,928	\$15,758	\$15,845	\$15,765	\$15,660	\$15,660	\$15,594	\$15,637	\$15,694	\$189,792

- Notes:

 (A) Applicable depreciable base for Polk; account 342.81 (\$1,561,473)

 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
 - (C) Applicable depreciation rate is 3.4%
 (D) Line 9a x Line 10
 (E) Line 9b x Line 11
 (F) Line 6 x 2.9324% x 1/12.

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 4 SOFA (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														**
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	 b. Clearings to Plant 		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		. 0	0	0	0	0	U	0	U	U	U	U	· ·	
2.	Plant-in-Service/Depreciation Base (A)	\$2,558,730	\$2,558,730	\$2,558,730	\$2,558,730	\$2,558,730	\$2,558,730	\$2,558,730	\$2,558,730	\$2,558,730		\$2,558,730	\$2,558,730	\$2,558,730	
3.	Less: Accumulated Depreciation	(326,042)	(331,159)	(336,276)	(341,393)	(346,510)	(351,627)	(356,744)	(361,861)	(366,978)	(372,095)	(377,212)	(382,329)	(387,446)	
4.	CWIP - Non-Interest Bearing	0	0	0	. 0	0	0	0	0		0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$2,232,688	2,227,571	2,222,454	2,217,337	2,212,220	2,207,103	2,201,986	2,196,869	2,191,752	2,186,635	2,181,518	2,176,401	2,171,284	
6.	Average Net Investment		2,230,130	2,225,013	2,219,896	2,214,779	2,209,662	2,204,545	2,199,428	2,194,311	2,189,194	2,184,077	2,178,960	2,173,843	
7.	Return on Average Net Investment												4- 000	45.704	#404 BB6
	a. Equity Component Grossed Up For T	axes (B)	16,203	16,166	16,129	16,092	16,055	16,017	15,980	15,943	15,906	15,869	15,832	15,794	\$191,986
	 b. Debt Component Grossed Up For Tax 	xes (F)	5,450	5,437	5,425	5,412	5,400	5,387	5,375	5,362	5,350	5,337	5,325	5,312	64,572
8.	Investment Expenses														
	a. Depreciation (C)		5,117	5,117	5,117	5,117	5,117	5,117	5,117	5,117	5,117	5,117	5,117	5,117	61,404
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	Ü
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0	0		<u> </u>	<u>U</u>
9.	Total System Recoverable Expenses (Lin	nes 7 + 8)	26,770	26,720	26,671	26,621	26,572	26,521	26,472	26,422	26,373	26,323	26,274	26,223	317,962
•	a. Recoverable Costs Allocated to Energ		26,770	26,720	26,671	26,621	26,572	26,521	26,472	26,422	26,373	26,323	26,274	26,223	317,962
	b. Recoverable Costs Allocated to Demo		0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
40	D. A. M. Grander and D. Grander and	(D)	26,178	25,992	25,997	25,842	25.586	25,744	25,637	25,485	25,504	25,418	25,505	25,618	308,506
12.	Retail Energy-Related Recoverable Cost		26,178 0	25,992 N	25,997	25,642	25,566	23,744	25,037	25,465	25,304	20,410	20,000	0	0
13.	Retail Demand-Related Recoverable Co Total Jurisdictional Recoverable Costs (I		\$26,178	\$25,992	\$25,997	\$25,842	\$25,586	\$25,744	\$25,637	\$25,485	\$25,504	\$25,418	\$25,505	\$25,618	\$308,506
14.	Total Junsdictional Recoverable Costs (L	_iiies 12 + 13)	\$20,170	ΨZJ,59Z	Φ ∠∪,∂∂≀	ΨZJ,04Z	Ψ20,000	Ψ4.V, 1 TT	Ψ20,007	\$20,700	420,001	+=-,			

- (A) Applicable depreciable base for Big Bend; account 312.44 (\$2,558,730)
 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
 (C) Applicable depreciation rate is 2.4%
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11 (F) Line 6 x 2.9324% x 1/12.

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 1 Pre-SCR (in Dollars)

<u> </u>	ine	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments													••	t o
		a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 0	\$0 0	\$0
		b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0 0	0	0	
		c. Retirements		0	0	0	0	0	0	0	0	U	0	0	0	
		d. Other		0	0	0	0	0	0	U	U	U	U	v	Ü	
	2.	Plant-in-Service/Depreciation Base (A)	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	\$1,649,121	
	3.	Less: Accumulated Depreciation	(161,005)	(165,540)	(170,075)	(174,610)	(179,145)	(183,680)	(188,215)			(201,820)		(210,890)	(215,425)	
	4.	CWIP - Non-Interest Bearing	367,767	367,767	367,767	367,767	367,767	367,767	367,767	367,767	367,767	367,767	367,767	367,767	367,767	
	5.	Net Investment (Lines 2 + 3 + 4)	\$1,855,883	1,851,348	1,846,813	1,842,278	1,837,743	1,833,208	1,828,673	1,824,138	1,819,603	1,815,068	1,810,533	1,805,998	1,801,463	
	6.	Average Net Investment		1,853,616	1,849,081	1,844,546	1,840,011	1,835,476	1,830,941	1,826,406	1,821,871	1,817,336	1,812,801	1,808,266	1,803,731	
	7.	Return on Average Net Investment													40.455	0450 400
		a. Equity Component Grossed Up For Ta	axes (B)	13,468	13,435	13,402	13,369	13,336	13,303	13,270	13,237	13,204	13,171	13,138	13,105	\$159,438
		b. Debt Component Grossed Up For Tax	xes (F)	4,530	4,519	4,507	4,496	4,485	4,474	4,463	4,452	4,441	4,430	4,419	4,408	53,624
	g	Investment Expenses														
	0.	a. Depreciation (C)		4,535	4,535	4,535	4,535	4,535	4,535	4,535	4,535	4,535	4,535	4,535	4,535	54,420
)		b. Amortization		0	. 0	0	0	0	0	0	0	0	0	0	0	0
ì		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
		d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
		e. Other		0	0	0	0	0	0	0	. 0	0		0		
	^	Total System Recoverable Expenses (Lin	noc 7 ± 8)	22.533	22,489	22,444	22,400	22,356	22,312	22,268	22,224	22,180	22,136	22,092	22,048	267,482
	9.	a. Recoverable Costs Allocated to Energ		22,533	22,489	22,444	22,400	22,356	22,312	22,268	22,224	22,180	22,136	22,092	22,048	267,482
		b. Recoverable Costs Allocated to Dema		0	0	0	0	0	0	0	0	0	0	0	0	0
				0.0770070	0.0707704	0.0747400	0.0707949	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724 0.9639735	0.9747108 0.9639735	0.9707213 0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9039735	0.9039733	0.9039133	0.5005133	0.3033133	0.3003700	0.0000100	0.0000100	0.0000.00		
	12.	Retail Energy-Related Recoverable Cost	ts (D)	22,035	21,877	21,876	21,744	21,527	21,659	21,566	21,436	21,450	21,375	21,446	21,540	259,531
	13.	Retail Demand-Related Recoverable Co.		0	0	0	0	0	0	0	0	0	0	0_	0	0
	14.	Total Jurisdictional Recoverable Costs (L		\$22,035	\$21,877	\$21,876	\$21,744	\$21,527	\$21,659	\$21,566	\$21,436	\$21,450	\$21,375	\$21,446	\$21,540	\$259,531
			,							_						

- Notes:
 (A) Applicable depreciable base for Big Bend; account 312.41 (\$1,649,121)
 - (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
 - (C) Applicable depreciation rate is 3.3%
 (D) Line 9a x Line 10
 (E) Line 9b x Line 11
 (F) Line 6 x 2.9324% x 1/12.

Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 2 Pre-SCR (in Dollars)

	Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments		•	**		•	•		•					**	*0
		a. Expenditures/Additions b. Clearings to Plant		\$0	\$0 0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 n	\$0 0	\$0 0	\$0 0	\$0
		c. Retirements		0	0	0	0	0	U	0	U	0	0	0	0	
		d. Other		0	0	0	0	0	0	0	0	0	0	ñ	o o	
		d. 04(6)		o o	Ū	v	J	•	Ū	·	Ü	0	Ū	U	J	
	2.	Plant-in-Service/Depreciation Base (A)	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	\$1,581,887	
	3.	Less: Accumulated Depreciation	(145,088)	(149,175)	(153,262)	(157,349)	(161,436)	(165,523)	(169,610)	(173,697)	(177,784)	(181,871)	(185,958)	(190,045)	(194,132)	
	4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0_	
	5.	Net Investment (Lines 2 + 3 + 4)	\$1,436,799	1,432, <mark>712</mark>	1,428,625	1,424,538	1,420,451	1,416,364	1,412,277	1,408,190	1,404,103	1,400,016	1,395,929	1,391,842	1,387,755	
	6.	Average Net Investment		1,434,756	1,430,669	1,426,582	1,422,495	1,418,408	1,414,321	1,410,234	1,406,147	1,402,060	1,397,973	1,393,886	1,389,799	
	7.	Return on Average Net Investment a. Equity Component Grossed Up For Ta	wes (B)	10.424	10,395	10,365	10.335	10,306	10,276	10,246	10.217	10.187	10,157	10.128	10,098	\$123,134
		b. Debt Component Grossed Up For Tax		3,506	3,496	3,486	3,476	3,466	3,456	3,446	3,436	3,426	3,416	3,406	3,396	41,412
•	8.	Investment Expenses a. Depreciation (C)		4,087	4,087	4,087	4,087	4,087	4,087	4,087	4,087	4,087	4,087	4,087	4,087	49,044
,		b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
_		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
		d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
		e. Other		0	0	0	0	0	0	0	0	0	0_	0	0	0
	9.	Total System Recoverable Expenses (Lin a. Recoverable Costs Allocated to Energy		18,017 18,017	17,978 17,978	17,938 17,938	17,89 8 17,898	17,859 17,859	17,819 17,819	17,779 17,779	17,740 17,740	17,700 17,700	17,660 17,660	17,621 17,621	17,581 17,581	213,590 213,590
		b. Recoverable Costs Allocated to Dema		0	0	0	0.000	0	0	0	0	0	0	0	0	0
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	12.	Retail Energy-Related Recoverable Costs	(D)	17,619	17,489	17,484	17,374	17,196	17,297	17,218	17,111	17,117	17,053	17,105	17,176	207,239
	13.	Retail Demand-Related Recoverable Cos		0	0	0	0	0	00	0	0	0	0	0	0	0
	14.	Total Jurisdictional Recoverable Costs (Li	nes 12 + 13)	\$17, <mark>619</mark>	\$17,489	\$17,484	\$17,374	\$17,196	\$17,297	\$17,218	\$17,111	\$17,117	\$17,053	\$17,105	\$17,176	\$207,239

- (A) Applicable depreciable base for Big Bend; account 312.42 (\$1,581,887)
 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 3.1%
 (D) Line 9a x Line 10
 (E) Line 9b x Line 11
 (F) Line 6 x 2.9324% x 1/12.

Tampa Electric Company Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount

January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 3 Pre-SCR (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														40
	a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Retirements		0	0	0	0	0	0	0	0	0	U	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	U	U	U	
2.	Plant-in-Service/Depreciation Base (A)	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	\$2,706,507	
3.	Less: Accumulated Depreciation	(120,266)	(126,071)	(131,876)	(137,681)	(143,486)	(149,291)	(155,096)	(160,901)	(166,706)	(172,511)				
4.	CWIP - Non-Interest Bearing	0	0	0	0	0_	0	0	0	0	0	0_	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$2,586,241	2,580,436	2,574,631	2,568,826	2,563,021	2,557,216	2,551,411	2,545,606	2,539,801	2,533,996	2,528,191	2,522,386	2,516,581	
6.	Average Net Investment		2,583,339	2,577,534	2,571,729	2,565,924	2,560,119	2,554,314	2,548,509	2,542,704	2,536,899	2,531,094	2,525,289	2,519,484	
7.	Return on Average Net Investment														****
	a. Equity Component Grossed Up For T	Taxes (B)	18,770	18,728	18,685	18,643	18,601	18,559	18,517	18,474	18,432	18,390	18,348	18,306	\$222,453
	b. Debt Component Grossed Up For Ta	ixes (F)	6,313	6,299	6,284	6,270	6,256	6,242	6,228	6,214	6,199	6,185	6,171	6,157	74,818
8.	Investment Expenses														
٠.	a. Depreciation (C)		5,805	5,805	5,805	5,805	5,805	5,805	5,805	5,805	5,805	5,805	5,805	5,805	69,660
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Li	ines 7 + 8)	30,888	30,832	30,774	30,718	30,662	30,606	30,550	30,493	30,436	30,380	30,324	30,268	366,931
3.	a. Recoverable Costs Allocated to Ener		30,888	30,832	30,774	30,718	30,662	30,606	30,550	30,493	30,436	30,380	30,324	30,268	366,931
	b. Recoverable Costs Allocated to Dem		0	0	0	0	0	0	. 0	0	0	0	0	0	0
4.0	E L. S. Washanat Factor		A 0770070	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
10.	Energy Jurisdictional Factor		0.9778879 0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735		0.9639735		
11.	Demand Jurisdictional Factor		U.9039135	0.8038733	0.8008133	0.8038133	0.9009100	0.0000130	J.50037 00	3,0000100	3.3333730	3.0000.00			
12.	Retail Energy-Related Recoverable Cos	its (D)	30,205	29,993	29,996	29,819	29,524	29,710	29,586	29,412	29,434	29,335	29,437	29,570	356,021
13.	Retail Demand-Related Recoverable Co		0	0	0	0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)	\$30,205	\$29,993	\$29,996	\$29,819	\$29,524	\$29,710	\$29,586	\$29,412	\$29,434	\$29,335	\$29,437	\$29,570	\$356,021

- (A) Applicable depreciable base for Big Bend; account 312.43 (\$1,995,677) and 315.43 (\$710,830)
 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 2.6% and 2.5%
 (D) Line 9a x Line 10
 (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 1 SCR (in Dollars)

Line		Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	Period Total
1	Investments														
	a. Expenditures/Additions		\$7.027.032	\$4,910,234	\$1,815,814	\$1,552,189	\$262,711	\$262,710	\$0	\$0	\$0	\$0	\$0	\$0	\$15,830,690
	b. Clearings to Plant		0	0	0	0	95,683,666	262,710	0	0	0	0	0	О	\$95,946,376
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	Ō	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2	Plant-in-Service/Depreciation Base (A)	\$72,203,171	\$79,230,203	\$84,140,437	\$85,956,251	\$87,508,440	\$95,683,666	\$95,946,376	\$95,946,376	\$95,946,376	\$95,946,376	\$95,946,376	\$95,946,376	\$95,946,376	
3	Less: Accumulated Depreciation	0	0	0	0	0	0	(257,135)	(514,993)	(772,851)	(1,030,709)	(1,288,567)	(1,546,425)	(1,804,283)	
4	CWIP - Non-Interest Bearing	0	D	0	0	0	0	0	0	0	_ 0	0	0		
5.	Net Investment (Lines 2 + 3 + 4)	\$72,203,171	79,230,203	84,140,437	85,956,251	87,508,440	95,683,666	95,689,241	95,431,383	95,173,525	94,915,667	94,657,809	94,399,951	94,142,093	
6	Average Net Investment		75,716,687	81,685,320	85,048,344	86,732,345	91,596,053	95,686,453	95,560,312	95,302,454	95,044,596	94,786,738	94,528,880	94,271,022	
7.	Return on Average Net Investment													224.248	05 400 405
	a. Equity Component Grossed Up For Taxe	es (B)	0	0	0	0	665,506	695,226	694,309	692,436	690,562	688,689	686,815	684,942	\$5,498,485
	 b. Debt Component Grossed Up For Taxes 	s (F)	0	0	0	0	223,830	233,826	233,518	232,887	232,257	231,627	230,997	230,367	1,849,309
8.	Investment Expenses														
	a. Depreciation (C)		0	0	0	0	0	257,135	257,858	257,858	257,858	257,858	257,858	257,858	1,804,283
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	U
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	U	Ü	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0		. 0		
q	Total System Recoverable Expenses (Lines	s 7 + 8)	0	0	0	0	889,336	1,186,187	1,185,685	1,183,181	1,180,677	1,178,174	1,175,670	1,173,167	9,152,077
	a. Recoverable Costs Allocated to Energy	,	0	0	0	0	889,336	1,186,187	1,185,685	1,183,181	1,180,677	1,178,174	1,175,670	1,173,167	9,152,077
	b. Recoverable Costs Allocated to Demand	d d	0	0	0	0	0	0	0	0	0	0	0	0	0
10	. Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0,9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11			0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	. Denimia adviacionaria (actor		2.0300100	2.2300.00	2.2300100										0.004.400
12	. Retail Energy-Related Recoverable Costs (D)	0	0	0	0	856,340	1,151,450	1,148,283	1,141,240	1,141,792	1,137,646	1,141,270	1,146,111	8,864,132
13	. Retail Demand-Related Recoverable Costs		0	0	0	0	0	0	0	0	0	0	0	0	0 004 120
14	. Total Jurisdictional Recoverable Costs (Line	es 12 + 13) (G)	\$0	\$0	\$0	\$0	\$856,340	\$1,151,450	\$1,148,283	\$1,141,240	\$1,141,792	\$1,137,646	\$1,141,270	\$1,146,111	\$8,864,132

- (A) Applicable depreciable base for Big Bend; account 312.41 (\$86,954,400) and 315.41 (\$8,991,976).
 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate are 3.3% and 2.5%.
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.
- (G) FPSC ruling in Docket No. 980693-El does not allow for recovery of dollars associated with this project until placed in-service.

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 2 SCR (in Dollars)

						(in Dol	lars)								End of
		Beginning of	Projected	Projected	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	Period Total
Line	Description	Period Amount	January	February	Widi	7								**	\$0
						**	\$0	\$0	\$0	\$0	\$0	\$0	\$0 0	\$0 0	\$0
1	. Investments a. Expenditures/Additions		\$0	\$0	\$0	\$0 0	0	0	0	0	0	0	0	0	
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	Ö	0	0	0	0	U	•		
	d. Other		0	0	U	U						\$90,520,503	\$90,520,503	\$90,520,503	
	a, Other				\$90,520,503	\$90,520,503	\$90,520,503	\$90,520,503	\$90,520.503	\$90,520,503	\$90,520,503	(3,271,521)	(3,505,366)	(3,739,211)	
2	2. Plant-in-Service/Depreciation Base (A)	\$90,520,503	\$90,520,503	#30,0E0,000	(1,634,606)	(1,868,451)	(2,102,296)	(2,336,141)	(2,569,986)	(2,803,831)	(3,037.676)	{3,21,321,	0	0_	
2	3. Less: Accumulated Depreciation	(933,071)	(1,166,916)	(1,400,761)	(1,034,000)	0	0	0	0	0	87,482,827	87,248,982	87,015,137	86,781,292	
4	4. CWIP - Non-Interest Bearing	0	0	89,119,742	88.885.897	88,652,052	88,418,207	88,184,362	87,950,517	87,716,672	87,482,827	87,240,302	011011111		
-	5. Net Investment (Lines 2 + 3 + 4)	\$89,587,432	89,353,587	89,119,742	80,000,007	00,002,00				27 222 505	87,599,750	87,365,905	87,132,060	86,898,215	
•			00 470 540	89.236,665	89,002,820	88,768,975	88,535,130	88,301,285	88,067,440	87,833,595	01,555,100	01,000,000			
6	Average Net Investment		89,470,510	89,230,003	00,002,020	001: 007:									*= *** ***
,	•									638,170	636,471	634,772	633,073	631,373	\$7,688,621
7	 Return on Average Net Investment 	(0)	650,063	648,364	646,665	644,966	643,267	641,568	639,869 215,207	214,636	214,065	213,493	212,922	212,350	2,585,918
	a. Equity Component Grossed Up For T	axes (B)	218,636	218,065	217,493	216,922	216,350	215,779	215,207	214,000	,				
	b. Debt Component Grossed Up For Ta	xes (r)	210,000	210,000	•									*** ***	2,806,140
								000 045	233,845	233,845	233,845	233,845	233,845	233,845	2,806,140
	Investment Expenses		233,845	233,845	233,845	233,845	233,845	233,845	233,043	0	0	0	0	0	n
	 a. Depreciation (C) 		200,010	0	0	0	0	u	0	0	0	0	0	0	0
	b. Amortization		Ö	0	0	0	0	0	0	D	0	0	0	0	Õ
)	c. Dismantlement		0	0	0	0	0	0	n	0	. 0	0	0		
	d. Property Taxes		0	0	0	0	0						4 070 040	1.077,568	13,080,679
1	e. Other						1,093,462	1.091,192	1,088,921	1,086,651	1,084,381	1,082,110	1,079,840 1,079,840		13,080,679
	9. Total System Recoverable Expenses (L	ines 7 + 8)	1,102,544	1,100,274							1,084,381	1,082,110	040,610,1		a
	a. Recoverable Costs Allocated to Ene	rav	1,102,544			1,095,733		_	.,		0	0	U	_	
	b. Recoverable Costs Allocated to Den	and	0	. 0	. 0	U	, ,	_					0.9707400	0.9769374	
	b. Recoverable costs Allocated to San					0.9707213	0.9628980	0.9707152	0.968455		0.9670659		0.9639735		
	10. Energy Jurisdictional Factor		0.9778879							0.9639735	0.9639735	0.9639735	0,000100	0.00	
	- Luci-diational Factor		0.963973	0.9639735	0.9639735	0.9039130	0,3003700					1,044,886	1,048,244	1,052,716	12,691,713
	11. Demand Jurisdictional Factor				4 070 005	1.063,651	1,052,892	1,059,237	1,054,57				1,040,244	^	0
	12. Retail Energy-Related Recoverable Co	sts (D)	1,078,16			1,000,00		, ()	00			\$1,048,244	\$1,052,716	\$12,691,713
	An Datail Demand-Related Recoverable C	osts (E)		,				\$1,059,237	\$1,054,57	2 \$1,048,132	\$1,048,668	\$1,044,000	4 1,515,61		
	14. Total Jurisdictional Recoverable Costs	(Lines 12 + 13)	\$1,078,16	\$1,070,310	5 \$1,070,Z3	, 41,000,00	7.,00=								
	IT. I GIAI GUITGE														

- Notes:

 (A) Applicable depreciable base for Big Bend; account 312.42 (\$90,520,503)

 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).

 (C) Applicable depreciation rate is 3.1%

 - (D) Line 9a x Line 10

 - (E) Line 9b x Line 11 (F) Line 6 x 2.9324% x 1/12.

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 3 SCR (in Dollars)

Lîne	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Clearings to Plant		0 10		0	0	0	0	ő	ō	ō	0	0	0	0
	c. Retirements		Ö	ő	ő	Õ	ō	ō	0	0	0	0	0	0	
	d. Other		Ō	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	411				\$78,709,209	\$78,709,209	\$78,709,209	\$78,709,209	\$78,709,209	\$78,709,209	\$78,709,209	\$78,709,209 (4,750,314)	\$78,709,209 (4,917,162)	
3.	Less: Accumulated Depreciation	(2,914,986)	(3,081,834)	(3,248,682)	(3,415,530)	(3,582,378)	(3,749,226)	(3,916,074)	(4,082,922)	(4,249,770)	(4,416,618)	(4,583,466)	(4,750,514)	(4,917,102)	
4.	CWIP - Non-Interest Bearing	0	0	0	75,293,679	75,126,831	74,959,983	74,793,135	74,626,287	74,459,439	74,292,591	74,125,743	73,958,895	73,792,047	
5.	Net investment (Lines 2 + 3 + 4)	\$75,794,223	75,627,375	75,460,527	15,293,619	75,120,631	74,959,965	74,793,133	14,020,201	14,400,400	14,202,001	14,120,140	. 0,000,000		
6.	Average Net Investment		75,710,799	75,543,951	75,377,103	75,210,255	75,043,407	74,876,559	74,709,711	74,542,863	74,376,015	74,209,167	74,042,319	73,875,471	
7.	Return on Average Net Investment						545.040	544,000	542.816	541,604	540.391	539,179	537.967	536,755	\$6,521,064
	 a. Equity Component Grossed Up For T b. Debt Component Grossed Up For Tax 		550,089 185,012	548,877 184,604	547,665 184,197	546,453 183,789	545,240 183,381	544,028 182,973	182,566	182,158	181,750	181,342	180,935	180,527	2,193,234
	B. Bobt Component Grococc op . a. va.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	,	•	,									
8.	Investment Expenses		166,848	166,848	166,848	166,848	166,848	166,848	166,848	166,848	166,848	166,848	166,848	166,848	2,002,176
	Depreciation (C) Amortization		100,040	100,040	040,001	100,040 N	0-00,0	100,040	0	0	0	0	0	0	0
	c. Dismantlement		0	Ů	0	ŏ	ō	ō	ō	0	0	0	0	0	0
	d. Property Taxes		ő	Ö	Ō	ō	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0		0		0
9.	Total System Recoverable Expenses (Li	nes 7 + 8)	901,949	900,329	898,710	897,090	895,469	893,849	892,230	890,610	888,989	887,369	885,750	884,130	10,716,474
J.	a. Recoverable Costs Allocated to Energy		901,949	900,329	898,710	897,090	895,469	893,849	892,230	890,610	888,989	887,369	885,750	884,130	10,716,474
	b. Recoverable Costs Allocated to Demo		0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
12.	Retail Energy-Related Recoverable Cost	ts (D)	882.005	875,815	875.982	870,824	862,245	867,673	864,085	859,040	859,711	856,844	859,833	863,740	10,397,797
13.	Retail Demand-Related Recoverable Co		0	0	0	0	0_	0	0	0	0	0	0_	0	0
14.	Total Jurisdictional Recoverable Costs (I		\$882,005	\$875,815	\$875,982	\$870,824	\$862,245	\$867,673	\$864,085	\$859,040	\$859,711	\$856,844	\$859,833	\$863,740	\$10,397,797

Notes:

(A) Applicable depreciable base for Big Bend; account 311.43 (\$3,162,013) and 312.43 (\$75,547,196)

(B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).

(C) Applicable depreciation rates are 1.2% and 2.6%

(D) Line 9a x Line 10 (E) Line 6 x 2.9324% x 1/12.

Tampa Electric Company

Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 4 SCR (in Dollars)

<u>L</u>	ine	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
	1.	Investments													••	#0
		a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 0
		b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	U	U	U
		c. Retirements		0	0	0	0	0	0	0	0	U	0	0	0	
		d. Other		0	0	0	0	Û	0	Ü	0	0	U	U	U	
	2.	Plant-in-Service/Depreciation Base (A)	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	\$61,183,337	
	3.	Less: Accumulated Depreciation	(3,851,689)	(3,974,056)	(4,096,423)	(4,218,790)	(4,341,157)	(4,463,524)	(4,585,891)	(4,708,258)	(4,830,625)	(4,952,992)	(5,075,359)	(5,197,726)	(5,320,093)	
	4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	U 0	
	5.	Net Investment (Lines 2 + 3 + 4)	\$57,331,648	57,209,281	57,086,914	56,964,547	56,842,180	56,719,813	56,597,446	56,475,079	56,352,712	56,230,345	56,107,978	55,985,611	55,863,244	
	6.	Average Net Investment		57,270,465	57,148,098	57,025,731	56,903,364	56,780,997	56,658,630	56,536,263	56,413,896	56,291,529	56,169,162	56,046,795	55,924,428	
	7.	Return on Average Net Investment														
		a. Equity Component Grossed Up For Ta	axes (B)	416,108	415,219	414,330	413,441	412,552	411,663	410,774	409,885	408,995	408,106	407,217	406,328	\$4,934,618
		b. Debt Component Grossed Up For Tax	es (F)	139,950	139,651	139,352	139,053	138,754	138,455	138,156	137,857	137,558	137,259	136,960	136,661	1,659,666
	8.	Investment Expenses														
		a. Depreciation (C)		122,367	122,367	122,367	122,367	122,367	122,367	122,367	122,367	122,367	122,367	122,367	122,367	1,468,404
		b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	Ü	0	U
		d. Property Taxes		0	0	0	0	0	0	0	0	0	U 0	U	v	0
		e. Other	,	0	0	0	0	0	, b	0		0				
	9.	Total System Recoverable Expenses (Lin	nes 7 + 8)	678,425	677,237	676,049	674,861	673,673	672,485	671,297	670,109	668,920	667,732	666,544	665,356	8,062,688
	•	a. Recoverable Costs Allocated to Energ		678,425	677,237	676,049	674,861	673,673	672,485	671,297	670,109	668,920	667,732	666,544	665,356	8,062,688
		b. Recoverable Costs Allocated to Dema		0	0	0	0	0	0	0	0	0	0	. 0	0	-
	10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
	11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
	12.	Retail Energy-Related Recoverable Costs	s (D)	663,424	658.797	658,952	655,102	648,678	652,791	650,121	646,355	646,890	644,763	647,041	650,011	7,822,925
	13.	Retail Demand-Related Recoverable Cost		000,424	0.00,707	0	0	0	0	0	0	0	0	0	0	0
	14.	Total Jurisdictional Recoverable Costs (L		\$663,424	\$658,797	\$658,952	\$655,102	\$648,678	\$652,791	\$650,121	\$646,355	\$646,890	\$644,763	\$647,041	\$650,011	\$7,822,925

Notes:

- (A) Applicable depreciable base for Big Bend; account 312.44 (\$61,183,337)

 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 2.4%
- (D) Line 9a x Line 10 (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

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ECRC 2010 PROJECTION FILING
EXHIBIT NO. HTB-3, PAGES 1 - 26
DOCUMENT NO. 4

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend FGD System Reliability (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments												****	econ 000	£2 500 000
	 a. Expenditures/Additions 		\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000	\$500,000	\$750,000	\$350,000	\$200,000	\$200,000 0	\$2,500,000
	 b. Clearings to Plant 		0	0	0	0	0	0	0	0	0	U	0	0	U
	c. Retirements		0	0	0	0	0	0	0	U	0	0	0	n	
	d. Other		0	0	0	0	U	U	U	U	U	U	U	v	
2.	Plant-in-Service/Depreciation Base (A)	\$11,564,451	\$11,564,451	\$11,564,451	\$11,564,451	\$11,564,451	\$11,564,451	\$11,564,451	\$11,564,451	\$11,564,451	\$11,564,451	\$11,564,451	T		
3.	Less: Accumulated Depreciation	(560,953)	(583,239)	(605,525)	(627,811)	(650,097)	(672,383)	(694,669)		(739,241)	(761,527)	(783,813)	(806,099)	(828,385)	
4.	CWIP - Non-Interest Bearing	16,183	16,183	16,183	16,183	16,183	16,183	266,183	516,183	1,016,183	1,766,183	2,116,183	2,316,183	2,516,183	
5.	Net Investment (Lines 2 + 3 + 4)	\$11,019,681	10,997,395	10,975,109	10,952,823	10,930,537	10,908,251	11,135,965	11,363,679	11,841,393	12,569,107	12,896,821	13,074,535	13,252,249	
6.	Average Net Investment		11,008,538	10,986,252	10,963,966	10,941,680	10,919,394	11,022,108	11,249,822	11,602,536	12,205,250	12,732,964	12,985,678	13,163,392	
7.	Return on Average Net Investment														04 045 500
	 a. Equity Component Grossed Up For T 	axes (B)	79,984	79,822	79,661	79,4 9 9	79,337	80,083	81,737	84,300	88,679	92,513	94,350	95,641	\$1,015,606 341,580
	 b. Debt Component Grossed Up For Ta 	xes (F)	26,901	26,847	26,792	26,738	26,683	26,934	27,491	28,353	29,826	31,115	31,733	32,167	341,300
8.	Investment Expenses														
	a. Depreciation (C)		22,286	22,286	22,286	22,286	22,286	22,286	22,286	22,286	22,286	22,286	22,286	22,286	267,432
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	Ü	Ü	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	D O	U	Ü	u n
	e. Other		0	0	0	0	0	0	0	0	U	_0		<u>U</u>	
a	Total System Recoverable Expenses (Li	ines 7 + 8)	129,171	128,955	128,739	128,523	128,306	129,303	131,514	134,939	140,791	145,914	148,369	150,094	1,624,618
٥.	a. Recoverable Costs Allocated to Ener		129,171	128,955	128,739	128,523	128,306	129,303	131,514	134,939	140,791	145,914	148,369	150,094	1,624,618
	b. Recoverable Costs Allocated to Dem		0	0	0	0	0	. 0	0	0	0	0	0	0	0
40	Carrey hydralisticanal Exotor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
11.	Demand Jurisdictional Factor		6.8038133	0.3039133	0.0000100	0.0000100	3.5503700	5.0350750	5,2300700	2.2.2001.00					
12.	Retail Energy-Related Recoverable Cos	ts (D)	126,315	125,444	125,483	124,760	123,546	125,516	127,365	130,156	136,154	140,895	144,028	146,632	1,576,294
13.	Retail Demand-Related Recoverable Co		0	0	C	0	0	0	0	0	. 0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (I	Lines 12 + 13)	\$126,315	\$125,444	\$125,483	\$124,760	\$123,546	\$125,516	\$127,365	\$130,156	\$136,154	\$140,895	\$144,028	\$146,632	\$1,576,294

- (A) Applicable depreciable base for Big Bend; account 312.44 (\$1,456,209) and 312.45 (\$10,108,242)
 (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
 (C) Applicable depreciation rate is 2.4% and 2.3%
 (D) Line 9a x Line 10
 (E) Line 9b x Line 11

- (F) Line 6 x 2.9324% x 1/12.

End of

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Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

Return on Capital Investments, Depreciation and Taxes
For Project: Clean Air Mercury Rule
(in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	Period Total
1.	Investments														***
	a. Expenditures/Additions		\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000
	 b. Clearings to Plant 		0	0	20,000	0	0	0	0	0	0	0	0	0	\$20,000
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	Ü	0	0	
2.	Plant-in-Service/Depreciation Base (A)	\$1,153,186	\$1,153,186	\$1,153,186	\$1,173,186	\$1,173,186	\$1,173,186	\$1,173,186	\$1,173,186	\$1,173,186	\$1,173,186	\$1,173,186	\$1,173,186	\$1,173,186	
3.	Less: Accumulated Depreciation	(22,605)	(2,883)	(5,766)	(8,649)	(11,582)	(14,515)	(17,448)	(20,381)	(23,314)	(26,247)	(29,180)	(32,113)	(35,046)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	. 0	0	0	. 0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$1,130,581	1,150,303	1,147,420	1,164,537	1,161,604	1,158,671	1,155,738	1,152,805	1,149,872	1,146,939	1,144,006	1,141,073	1,138,140	
6.	Average Net Investment		1,140,442	1,148,862	1,155,979	1,163,071	1,160,138	1,157,205	1,154,272	1,151,339	1,148,406	1,145,473	1,142,540	1,139,607	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	ixes (B)	8,286	8,347	8,399	8,450	8,429	8,408	8,387	8,365	8,344	8,323	8,301	8,280	\$100,319
	b. Debt Component Grossed Up For Tax	es (F)	2,787	2,807	2,825	2,842	2,835	2,828	2,821	2,813	2,806	2,799	2,792	2,785	33,740
8.	Investment Expenses														
	a. Depreciation (C)		2,883	2,883	2,883	2,933	2,933	2,933	2,933	2,933	2,933	2,933	2,933	2,933	35,046
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	U
	e. Other		0	0	0	0	0	0	0	0	0	0_	0_	0	
9	Total System Recoverable Expenses (Lin	ies 7 + 8)	13.956	14,037	14,107	14,225	14,197	14,169	14,141	14,111	14,083	14,055	14,026	13,998	169,105
•	a. Recoverable Costs Allocated to Energ		13,956	14,037	14,107	14,225	14,197	14,169	14,141	14,111	14,083	14,055	14,026	13,998	169,105
	b. Recoverable Costs Allocated to Dema		0	0	0	0	D	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009	0.9707400	0.9769374	
11.	Demand Jurisdictional Factor		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	
40	Batall Farrage Polated Page vertile Contr	- (D)	13,647	13,655	13,750	13,809	13,670	13,754	13,695	13,611	13,619	13,572	13,616	13,675	164,073
12.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Costs		13,047	13,000	13,750	13,509	10,070	0	0	0	0,51.5	0	0	0	0
13. 14.	Total Jurisdictional Recoverable Costs (L	` '	\$13.647	\$13,655	\$13,750	\$13,809	\$13,670	\$13,754	\$13,695	\$13,611	\$13,619	\$13,572	\$13,616	\$13,675	\$164,073
14.	TOTAL PURISHICITORIAL RECOVERABLE CUSTS (L.	1103 12 7 10)	Ψ10,047	ψ10,000	₩ 10,7 00	\$ 10,000	\$10,010	4.01.01	- 7.0,000	T	,				

- (A) Applicable depreciable base for Big Bend and Polk; accounts 312.41, 312.43, 312.44, 315.40 (\$1,173,186) and 345.81
- (B) Line 6 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).
- (C) Applicable depreciation rate is 3.3%, 2.6%, 2.4%, 3.0%, and 3.1%
- (D) Line 9a x Line 10
- (E) Line 9b x Line 11
- (F) Line 6 x 2.9324% x 1/12.

Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2010 to December 2010

For Project: SO₂ Emissions Allowances (in Dollars)

Line Description	Beginning of Period Amount	Projected January 10	Projected February 10	Projected March 10	Projected April 10	Projected May 10	Projected June 10	Projected July 10	Projected August 10	Projected September 10	Projected October 10	Projected November 10	Projected December 10	End of Period Total
1. Investments									•-	•••	r.o.	\$0	\$0	\$0
a, Purchases/Transfers		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 0	\$0 0	≱0 0	φυ n	0
b. Sales/Transfers		0	0	0	0	0	0	0	0	U	0	0	0	ñ
c. Auction Proceeds/Other		0	0	0	0	0	0	บ	U	U	v	v	Ū	•
Working Capital Balance		_		_		_			0	0	0	a	n	
a. FERC 158.1 Allowance inventory	\$0	0	0	0	0	0	0	0	U	0	0	0	n	
 b. FERC 158.2 Allowances Withheld 	0	. 0	0	0	0	0	0	0	0	0	0	0	ñ	
c. FERC 182.3 Other Regl. Assets - Losses	0	0	0	(00 774)	0	0	-	(38,490)	(38,132)	(37,788)	(37,484)	(37,121)	(36,757)	
d. FERC 254.01 Regulatory Liabilities - Gains_	(40,594)	(40,314)	(40,012)	(39,771)	(39,504)	(39,191)	(38,848)	(\$38,490)	(\$38,132)	(\$37,788)	(\$37,484)	(\$37,121)	(\$36,757)	
Total Working Capital Balance	(\$40,594)	(\$40,314)	(\$40,012)	(\$39,771)	(\$39,504)	(\$39,191)	(\$30,040)	(\$30,490)	(\$30,132)	(301,164)	(451,164)	(401,121)	(400,70.7)	
4. Average Net Working Capital Balance		(\$40,454)	(\$40,163)	(\$39,891)	(\$39,638)	(\$39,348)	(\$39,019)	(\$38,669)	(\$38,311)	(\$37,960)	(\$37,636)	(\$37,303)	(\$36,939)	
5. Return on Average Net Working Capital Balan-	ce								4	.===:	(070)	(074)	(269)	(\$3,380)
 a. Equity Component Grossed Up For Taxes (A)	(294)		(290)	(288)	(286)	(283)	(281)	(278)		(273)		(268) (90)	(\$1,136)
 b. b. Debt Component Grossed Up For Taxes 	(E) _	(99)		(97)	(97)	(96)	(95)	(94)	(94)	(93)	(92)		(358)	(\$4,516)
Total Return Component		(393)	(390)	(387)	(385)	(382)	(378)	(375)	(372)	(369)	(365)	(302)	(330)	(44,510)
· · · ·														
7. Expenses:		0	0	0	0	0	o	0	0	0	0	0	0	0
a. Gains		0	Ô	0	0	D	0	ű	ū	ō	0	0	0	0
b. Losses		46.720	42,098	46,759	47,134	48.787	47,057	48,742	48,742	47,056	48,796	45,037	46,636	563,564
c. SO ₂ Allowance Expense	-	46,720	42,098	46,759	47,134	48,787	47,057	48,742	48,742	47.056	48,796	45.037	46,636	563,564
8. Net Expenses (B)		46,720	42,090	40,759	47,134	40,707	47,031	40,142	40,742	47,000	10,100		,	
9. Total System Recoverable Expenses (Lines 6	± 7)	\$46,327	\$41,708	\$46,372	\$46,749	\$48,405	\$46,679	\$48.367	\$48,370	\$46,687	\$48,431	\$44,675	\$46,278	\$559,048
a. Recoverable Costs Allocated to Energy	+1)	46.327	41,708	46,372	46,749	48,405	46,679	48,367	48,370	46,687	48,431	44,675	46,278	559,048
Recoverable Costs Allocated to Demand Recoverable Costs Allocated to Demand		10,021	-1,730	70,512	-0,7 40 D	10,700	0	0	0	0	0	0	0	0
p. Recoverable costs Allocated to Demand		U	•	· ·	·	ŭ	Ū							
10. Energy Jurisdictional Factor		0.9778879	0.9727724	0.9747108	0.9707213	0.9628980	0.9707152	0.9684555	0.9645523	0.9670659	0.9656009		0.9769374	0.9702548
11. Demand Jurisdictional Factor		0.9639735		0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735	0.9639735
The Demond of Indicator of Tables														
12. Retail Energy-Related Recoverable Costs (C)		45,303	40,572	45,199	45,380	46,609	45,312	46,841	46,655	45,149	46,765		45,211	542,364
13. Retail Demand-Related Recoverable Costs (D)	0	0	0	0	0	0_	0	0	0	0	0	0_	0_
14. Total Juris. Recoverable Costs (Lines 12 + 13		\$45,303	\$40,572	\$45,199	\$45,380	\$46,609	\$45,312	\$46,841	\$46,655	\$45,149	\$46,765	\$43,368	\$45,211	\$542,364
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Notes:

(A) Line 4 x 8.7188% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.63490).

(B) Line 8 is reported on Schedule 2P

(C) Line 9 ax Line 10

⁽D) Line 9b x Line 11 (E) Line 4 x 2.9324% x 1/12.

Project Title:

Big Bend Unit 3 Flue Gas Desulfurization Integration

Project Description:

This project involved the integration of Big Bend Unit 3 flue gases into the Big Bend Unit 4 Flue Gas Desulfurization ("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:

Fiscal Expenditures:

The actual/estimated depreciation plus return for the period January 2009 through December 2009, is \$786,289 compared to the original projection of \$786,042, resulting in an insignificant variance.

The actual/estimated O&M expense for the period January 2009 through December 2009 is \$3,351,790 compared to the original projection of \$3,658,000 representing a variance of 8.4 percent. This variance is due to a lower cost of consumables for gypsum production as well as a decrease in maintenance costs.

Progress Summary:

The project is complete and in-service.

Projections:

Estimated depreciation plus return for the period January 2010 through

December 2010, is expected to be \$764,341.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$4,241,800.

Project Title:

Big Bend Units 1 & 2 Flue Gas Conditioning

Project Description:

The existing electrostatic precipitators were not designed for the range of fuels needed for compliance with the Clean Air Act Amendments ("CAAA"). Flue gas conditioning was required to assure operation of the generating units in accordance with applicable permits and regulations. This equipment is still required to ensure compliance with the CAAA in the event the FGD system on Units 1 & 2 is not operating.

The project involved the addition of molten 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:

Fiscal Expenditures:

The actual/estimated depreciation plus return for the period January 2009 through December 2009 is \$440,808 compared to the original projection of \$440,693, resulting in an insignificant variance.

The actual/estimated O&M expense for this project for the period January 2009 through December 2009 is \$0 and did not vary from the original

projection.

Progress Summary:

The project is complete and in-service.

Projections:

Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$422,124.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$0.

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 to 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:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$80,611 compared to the original projection of

\$80,584, resulting in an insignificant variance.

Progress Summary: The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$78,510.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010 Description and Progress Report for

Environmental Compliance Activities and Projects

Project Title:

Big Bend Unit 1 Classifier Replacement

Project Description:

The boiler modifications at Big Bend Unit 1 are part of Tampa Electric's NO_X compliance strategy for Phase II of the CAAA. The classifier replacements will optimize coal fineness by providing a 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 levels.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$138,835 compared to the original projection of

\$138,796, resulting in an insignificant variance.

Progress Summary: The project was placed in-service December 1998.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$133,795.

Project Title:

Big Bend Unit 2 Classifier Replacement

Project Description:

The boiler modifications at Big Bend Unit 2 are part of Tampa Electric's NO_X compliance strategy for Phase II of the 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 levels.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$100,518 compared to the original projection of

\$100,489 representing no variance.

Progress Summary: The project was placed in-service May 1998.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$96,974.

Project Title:

Big Bend Units 1 & 2 FGD

Project Description:

The Big Bend Units 1 & 2 FGD system consists of equipment capable of removing SO₂ from the flue gas generated by the combustion of coal. The FGD was installed in order to comply with Phase II of the CAAA. Compliance with Phase II is required by January 1, 2000. The CAAA impose SO₂ emission limits on existing steam electric units with an output capacity of greater than 25 megawatts and all new utility units. Tampa Electric conducted an exhaustive analysis of options to comply with Phase II of the CAAA that culminated in the selection of the FGD project to serve Big Bend Units 1 & 2.

In Docket No. 980693-EI, Order No. PSC-99-0075-FOF-EI, issued January 11, 1999, the Commission found that the FGD project was the most cost-effective alternative for compliance with the SO₂ requirements of Phase II of the CAAA.

Project Accomplishments:

Fiscal Expenditures:

The actual/estimated depreciation plus return for the period January 2009 through December 2009 is \$8,921,117 compared to the original projection of \$8,960,005, representing an insignificant variance.

The actual/estimated O&M expense for the period January 2009 through December 2009 is \$8,386,537 as compared to the original estimate of \$7,482,800 resulting in a variance of 12.1 percent. This variance is primarily due to the re-allocation of 2008 maintenance activities with the scheduled

outages for 2009.

Progress Summary:

The project was placed in-service in December 1999.

Projections:

Estimated depreciation plus return for the period January 2010 through December 2010 is expected to be \$8,823,552.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$7,443,300.

Project Title:

Big Bend Section 114 Mercury Testing Platform

Project Description:

The Mercury Emissions Information Collection Effort is mandated by the EPA. The EPA asserts that Section 114 of the CAAA grants to the EPA the authority to request the collection of information necessary for it to study whether it is appropriate and necessary to develop performance or emission standards for electric utility steam generating units.

In a letter dated November 25, 1998, Tampa Electric was notified by the EPA that, pursuant to Section 114 of the CAAA, the company was required to periodically sample and analyze coal shipments for mercury and chlorine content during the period January 1, 1999 through December 31, 1999.

In addition to coal sampling, stack testing and analyses are also required. Tampa Electric received a second letter from EPA, dated March 11, 1999, requiring Tampa Electric to perform specialized mercury testing of the inlet and outlet of the last emission control device installed for Big Bend Units 1, 2 or 3, and Polk Unit 1 as part of the mercury data collection. Part of the cost incurred to perform the stack testing is due to the need to construct special test facilities at the Big Bend stack testing location to meet EPA's testing requirements.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009, is \$13,584 compared to the original projection of

\$13,577, representing an insignificant variance.

Progress Summary: The project was placed in-service in December 1999 and was completed in

May 2000.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is expected to be \$13,303.

Project Title:

Big Bend FGD Optimization and Utilization

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric was required to optimize the SO₂ removal efficiency and operations of the Big Bend Units 1, 2 and 3 FGD systems. Tampa Electric performed activities in three key areas to improve the performance and reliability of the Big Bend Units 1, 2 and 3 FGD systems. The majority of the improvements required on the Unit 3 tower module included the tower piping, nozzle and internal improvements, ductwork improvements, electrical system reliability improvements, tower control improvements, dibasic acid system improvements, booster fan reliability, absorber system improvements, quencher system improvements, and tower demister improvements. Big Bend Units 1 and 2 FGD system improvements included additional preventative maintenance, oxidation air control improvements, and tower water, air reagent and start-up piping upgrades. In order to ensure reliability of the FGD systems, improvements to the common limestone supply, gypsum de-watering stack reliability and wastewater treatment plant were also being performed.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$2,533,290 compared to the original projection of

\$2,532,454, representing an insignificant variance.

Progress Summary: The project was placed in-service in January 2002.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is expected to be \$2,475,526.

Project Title:

Big Bend PM Minimization and Monitoring

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to develop a Best Operational Practices ("BOP") study to minimize emissions from each electrostatic precipitator ("ESP") at Big Bend, as well as perform a best available control technology ("BACT") analysis for the upgrade of each existing ESP. The company is also required to install and operate particulate matter continuous emission monitors on Big Bend Units 1, 2 and 3 FGD systems. Tampa Electric has identified improvements that are necessary to optimize ESP performance such as modifications to the turning vanes and precipitator distribution plates, and upgrades to the controls and software system of the precipitators. Tampa Electric has incurred costs associated with the recommendations of the BOP study and the BACT analysis in 2001 and will continue to experience O&M and capital expenditures during 2002 and beyond.

Project Accomplishments:

Fiscal Expenditures:

The actual/estimated depreciation plus return for the period January 2009 through December 2009 is \$1,086,037 as compared to the original projection

of \$1,124,629 resulting in an insignificant variance.

The actual/estimated O&M expense the period January 2009 through December 2009 is \$467,907 as compared to the original projection of

\$455,000, representing an insignificant variance.

Progress Summary:

This project was placed in-service July 2005.

Projections:

Estimated depreciation plus return for the period January 2010 through

December 2010 is expected to be \$1,064,831.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$470,000.

Project Title:

Big Bend NO_x Emissions Reduction

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to spend up to \$3 million with the goal to reduce NO_x emissions at Big Bend Station. The Consent Decree requires that by December 31, 2002, the company must achieve at least a 30 percent reduction beyond 1998 levels for Big Bend Units 1 and 2 and at least a 15 percent reduction in NO_x emissions from Big Bend Unit 3. Tampa Electric has identified projects that are the first steps to decrease NO_x emissions in these units such as burner and windbox modifications and the installation of a neural network system on each of the Big Bend units.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$802,153 as compared to the original projection of

\$793,965 resulting in an insignificant variance.

The actual/estimated O&M expense the period January 2009 through December 2009 is \$361,773 as compared to the original projection of

\$358,000, representing an insignificant variance.

Progress Summary: The project was placed in-service January 2006.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is expected to be \$804,002.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$396,000.

Project Title:

Big Bend Fuel Oil Tank No. 1 Upgrade

Project Description:

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

The scope of work for this project included cleaning and inspecting the tank in accordance with API 653 specifications, coating the internal floor plus 30 inches up the tank wall, installing an AEI Segundo bottom to the tank as well as 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, and conducting a tank closure assessment.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$54,575 compared to the original projection of

\$54,560, representing an insignificant variance.

Progress Summary: The project was placed in-service October 1998.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$53,079.

Project Title:

Big Bend Fuel Oil Tank No. 2 Upgrade

Project Description:

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

The scope of work for this project included cleaning and inspecting the tank in accordance with API 653 specifications, coating the internal floor plus 30 inches up the tank wall, installing an AEI Segundo bottom to the tank as well as 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, and conducting a tank closure assessment.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$89,767 compared to the original projection of

\$89,738, representing an insignificant variance.

Progress Summary: The project was placed in-service December 1998.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$87,302.

Project Title:

Phillips Oil Tank No. 1 Upgrade

Project Description:

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

The scope of work for this project included cleaning and inspecting the tank in accordance with API 653 specifications, coating the internal floor plus 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, and conducting a tank closure assessment.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009, is \$5,862 compared to the original projection of

\$5,859, representing an insignificant variance.

Progress Summary: The project is complete and was placed in-service October 1998.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$5,667.

Project Title:

Phillips Oil Tank No. 4 Upgrade

Project Description:

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

The scope of work for this project included cleaning and inspecting the tank in accordance with API 653 specifications, coating the internal floor plus 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, and conducting a tank closure assessment.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$9,215 compared to the original projection of

\$9,211, representing an insignificant variance.

Progress Summary: The project is complete and was placed in-service October 1998.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$8,899.

Project Title:

SO₂ Emission Allowances

Project Description:

The acid rain control title of the CAAA sets forth a comprehensive regulatory mechanism designed to control acid rain by limiting sulfur dioxide emissions by electric utilities. The CAAA requires reductions in SO₂ 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 some 40 jurisdictional utility systems that are expected to reduce annual SO₂ emissions by as much as 4.5 million tons. Phase II began 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 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 SO₂) equal to the number of tons of SO₂ emissions authorized by the CAAA. EPA does not assess a charge for the allowances it awards.

Project Accomplishments:

Fiscal Expenditures:

The actual/estimated return on average net working capital for the period January 2009 through December 2009 is (\$5,037) compared to the original projection of (\$1,669) representing a 201.8 percent variance. The variance is due to the sale of SO₂ allowances originally projected to occur in 2009 but transpired throughout 2008.

The actual/estimated O&M for the period January 2009 through December 2009 is \$377,496 compared to the original projection of (\$12,123,542) representing a variance of 103.1 percent. The significant variance is driven by the revenue shortfall precipitated by a significant market decline in SO₂ emission allowance prices.

Progress Summary:

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

Project Projections:

Estimated return on average net working capital for the period January 2010 through December 2010 is projected to be (\$4,516).

Estimated O&M costs for the period January 2010 through December 2010 are projected to be \$563,564.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010 Description and Progress Report for

Environmental Compliance Activities and Projects

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 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, Hookers Point, Polk Power and Gannon Stations are affected by this rule.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated O&M expense for the period January 2009 through

December 2009 is \$34,500 compared to the original projection of \$34,500

representing no variance.

Progress Summary: NPDES Surveillance fees are paid annually for the prior year.

Projections: Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$34,500.

Project Title: Gannon Thermal Discharge Study

Project Description:

This project is a direct requirement from the FDEP in conjunction with the renewal of Tampa Electric's Industrial Wastewater Facility Permit under the provisions of Chapter 403, Florida Statutes, and applicable rules of the Florida Administrative Code, which constitute authorization for the company's Gannon Station facility to discharge to waters of the State under the NPDES. The FDEP permit is Permit No. FL0000809. Specifically, Tampa Electric is required to perform a 316(a) determination for Gannon Station to ensure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife with in the primary area of study. The project will have two facets: 1) develop the plan of study and identify the thermal plume, and 2) implement the plan of study through appropriate sampling to make the determination if any adverse impacts are occurring.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated O&M expense for the period January 2009 through

December 2009 is \$194,066 compared to the original projection of \$50,000, which represents a variance of 288.1 percent. The variance is due to the

delayed invoicing from contractors.

Progress Summary: This project was approved by the Commission in Docket No. 010593-El on

September 4, 2001. The project is expected to continue through at least 2010.

Projections: Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$30,000.

Project Title:

Polk NO_x Emissions Reduction

Project Description:

This project is designed to meet a lower NO_x emissions limit established by the FDEP for Polk Unit 1 by July 1, 2005. The lower limit of 15 parts per million by volume dry basis at 15 percent O_2 is specified in FDEP Permit No. PSD-FL-194F issued February 5, 2002. The project will consist of two phases: 1) the humidification of syngas through the installation of a syngas saturator; and 2) the modification of controls and the installation of additional guide vanes to the diluent nitrogen compressor.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$201,759 as compared to the original projection of

\$201,701, representing an insignificant variance.

The actual/estimated O&M for the period January 2009 through December 2009 is \$49,036 compared to the original projection of \$75,000, which represents a variance of 34.6 percent. The variance is due to the need for less

maintenance than originally anticipated.

Progress Summary: The project was placed in-service January 2005.

Project Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$195,609.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$50,000.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010

Description and Progress Report for Environmental Compliance Activities and Projects

Project Title:

Bayside SCR Consumables

Project Description:

This project is necessary to achieve the NO_x emissions limit of 3.5 parts per million established by the FDEP Consent Final Judgment and the EPA Consent Decree for the natural gas-fired Bayside Power Station. To achieve this NO_x limit, the installation of selective catalytic reduction (SCR) systems is required. An SCR system requires consumable goods – primarily anhydrous ammonia – to be injected into the catalyst bed in order to achieve the required NO_x emissions limit. Principally, the project is designed to capture the cost of consumable goods necessary to operate the SCR systems.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated O&M expense for the period January 2009 through

December 2009 is \$122,057 compared to the original projection of \$82,000 resulting in a variance of 48.9 percent. The variance is due to the increase in

price and consumption of ammonia.

Progress Summary: This project was approved by the Commission in Docket No. 021255-EI, Order

No. PSC-03-0469-PAA-EI, issued April 4, 2003. As an O&M project,

expenses are ongoing annually.

Projections: Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$114,000.

Project Title:

Big Bend Unit 4 Separated Overfire Air ("SOFA")

Project Description:

This project is necessary to assist in achieving the NO_x emissions limit established by the FDEP Consent Final Judgment and the EPA Consent Decree for Big Bend Unit 4. A SOFA system stages secondary combustion air to prevent NO_x formation that would otherwise require removal by post-combustion technology. In-furnace combustion control through a SOFA system is the most cost-effective means to reduce NO_x emissions prior to the application of these technologies. Costs associated with the SOFA system will entail capital expenditures for equipment installation and subsequent annual maintenance.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$325,057 compared to the original projection of

\$324,949, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2009 through December 2009 is \$25,718 compared to the original projection of \$50,000, which represents a variance of 48.6 percent. This variance is due to a correction made to the General Ledger for a cost inadvertently booked against the

project.

Progress Summary: The project was placed in-service November 2004.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$317,962.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$62,000.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010 Description and Progress Report for

Environmental Compliance Activities and Projects

Project Title:

Big Bend Unit 1 Pre-SCR

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2010 through 2010. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal which will necessitate the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. Therefore, this project is a necessary precursor to an SCR system designed to reduce inlet NO_x concentrations to the SCR system thereby mitigating overall capital and O&M costs. The Big Bend Unit 1 Pre-SCR technologies include a neural network system, secondary air controls and windbox modifications.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$273,776 compared to the original projection of

\$279,459, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2009 through December 2009 is \$77,000 compared to the original projection of \$77,000 representing

no variance.

Progress Summary: This project was approved by the Commission in Docket No. 040750-EI, Order

No. PSC-04-1080-CO-EI, issued November 4, 2004.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$267,482.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$75,000.

Project Title:

Big Bend Unit 2 Pre-SCR

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2010 through 2010. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal which will necessitate the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. Therefore, this project is a necessary precursor to an SCR system designed to reduce inlet NO_x concentrations to the SCR system thereby mitigating overall capital and O&M costs. The Big Bend Unit 2 Pre-SCR technologies include secondary air controls and windbox modifications.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$219,267 compared to the original projection of

\$219,196, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2009 through December 2009 is \$67,722 compared to the original projection of \$77,000, which represents a variance of 12.0 percent. This variance is due to the delay of the

in-service date for the capital project.

Progress Summary: This project was approved by the Commission in Docket No. 040750-El, Order

No. PSC-04-1080-CO-EI, issued November 4, 2004.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$213,590.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$31,000.

Project Title:

Big Bend Unit 3 Pre-SCR

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2010 through 2010. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal, which will necessitate the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. Therefore, this project is a necessary precursor to an SCR system designed to reduce inlet NO_x concentrations to the SCR system thereby mitigating overall capital and O_x costs. The Big Bend Unit 3 Pre-SCR technologies include a neutral network system, secondary air controls, windbox modifications and primary coal/air flow controls.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$378,117 compared to the original projection of

\$279,459, resulting in an insignificant variance.

No O&M costs are anticipated for the period January 2009 through December

2009.

Progress Summary: This project was approved by the Commission in Docket No. 040750-El, Order

No. PSC-04-1080-CO-EI, issued November 4, 2004.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$366,931.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$31,000.

Project Title:

Clean Water Act Section 316(b) Phase II Study

Project Description:

This project is a direct requirement from the EPA to reduce impingement and entrainment of aquatic organisms related to the withdrawal of waters for cooling purposes through cooling water intake structures. The Phase II Rule requires that power plants meeting certain criteria to comply with national performance standards for impingement and entrainment. Accordingly, Tampa Electric must develop its compliance strategies for its H. L. Culbreath Bayside Power and the Big Bend Power Stations and then submit these strategies for approval through a Comprehensive Demonstration Study to the FDEP.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated O&M for the period January 2009 through December

2009 is \$47,240 compared to the original projection of \$150,000, which represents a variance of 68.5 percent. This variance is due to the decrease in

contractor costs to complete the impingement study reports.

Progress Summary: This project was approved by the Commission in Docket No. 041300-El, Order

No. PSC-05-0164-PAA-EI, issued February 10, 2005.

Projections: Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$60,000.

Project Title:

Big Bend Unit 1 SCR

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2010 through 2010. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal, which will necessitate the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. This project is associated with the installation of an SCR system on Big Bend Unit 1 and is scheduled to go in-service May 2010.

Project Accomplishments:

Fiscal Expenditures: Based on the Commission's previous ruling in Docket No. 980693-EI, Tampa

Electric will not seek ECRC recovery of capital costs for this project until May 2010, the expected in-service date for the project. At that time, the associated depreciation expense and allowance for funds used during construction will be

requested for ECRC recovery.

Progress Summary: This project was approved by the Commission in Docket No. 041376-EI, Order

No. PSC-05-0616-CO-EI, issued June 3, 2005.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$9,152,077.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$1,001,600.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010 Description and Progress Report for Environmental Compliance Activities and Projects

Project Title:

Big Bend Unit 2 SCR

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2010 through 2010. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal, which will necessitate the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. This project is associated with the installation of an SCR system on Big Bend Unit 2 and is scheduled to go in-service April 2010.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$4,884,018 compared to the original projection of \$8,618,125, which represents variance of 43.3 percent. This variance is due

to the delay in commercial operation.

The actual/estimated O&M for the period January 2009 through December 2009 is \$728,900 compared to the original projection of \$1,807,700 representing a variance of 59.7 percent. The variance is due to the delay in

commercial operation.

Progress Summary: This project was approved by the Commission in Docket No. 041376-EI, Order

No. PSC-05-0616-CO-EI, issued June 3, 2005.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$13,080,679.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$1,668,100.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010 Description and Progress Report for Environmental Compliance Activities and Projects

Project Title:

Big Bend Unit 3 SCR

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2010 through 2010. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal which will necessitate the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. This project is associated with the installation of an SCR system on Big Bend Unit 3 and is scheduled to go in-service May 2010.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$10,944,895 compared to the original projection of

\$11,145,102, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2009 through December 2009 is \$1,437,288 compared to the original projection of \$2,204,900 representing a variance of 34.8 percent. The variance is due to less ammonia

used than originally anticipated.

Progress Summary: This project was approved by the Commission in Docket No. 041376-El, Order

No. PSC-05-0616-CO-EI, issued June 3, 2005.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$10,716,474.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$1,668,100.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010 Description and Progress Report for

Environmental Compliance Activities and Projects

Project Title:

Big Bend Unit 4 SCR

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric is required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2010 through 2010. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal which will necessitate the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. This project is associated with the installation of an SCR system on Big Bend Unit 4 and is scheduled to go in-service June 2010.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$8,232,257 compared to the original projection of

\$8,232,074, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2009 through December 2009 is \$678,922 compared to the original projection of \$1,252,800 representing a variance of 45.8 percent. The variance is due to the decreased

usage of ammonia.

Progress Summary: This project went in to service in May 2007.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$8,062,688.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$778,700.

Tampa Electric Company

Environmental Cost Recovery Clause
January 2010 through December 2010
Description and Progress Report for
Environmental Compliance Activities and Projects

Project Title: Arsenic Groundwater Standard Program

Project Description:

The Arsenic Groundwater Standard Program that is required by the Environmental Protection Agency and the Department of Environmental Protection became effective January 1, 2005. It requires regulated entities of the State of Florida to monitor the drinking water and groundwater Maximum Contaminant Level ("MCL") for arsenic under the federal rule known as the Safe Drinking Water Act.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated O&M for the period January 2009 through December

2009 is \$115,846 compared to the original projection of \$114,000, resulting in

an insignificant variance.

Progress Summary: In Docket No. 050683-EI, Order No. PSC-06-0138-PAA-EI, issued February

23, 2006, the Commission granted Tampa Electric cost recovery approval for

prudent costs associated with this project.

Projections: Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$50,000.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010 Description and Progress Report for Environmental Compliance Activities and Projects

Project Title: Big Bend Flue Gas Desulfurization ("FGD") System Reliability

Project Description:

The Big Bend FGD Reliability project is necessary to maintain the FGD system operations that are required by the Consent Decree. Tampa Electric is required to operate the FGD systems at Big Bend Station whenever coal is combusted in the units with few exceptions. The compliance dates for the strictest operational characteristics are January 1, 2010 for Big Bend Unit 3 and January 1, 2013 for Big Bend Units 1 and 2.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$1,566,595 compared to the original projection of

\$1,587,494, resulting in an insignificant variance.

Progress Summary: In Docket No. 050598-EI, Order No. PSC-06-0602-PAA-EI, issued July 10,

2006, the Commission granted cost recovery approval for prudent costs

associated with this project.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$1,624,618.

Tampa Electric Company Environmental Cost Recovery Clause January 2010 through December 2010 Description and Progress Report for Environmental Compliance Activities and Projects

Project Title:

Clean Air Mercury Rule ("CAMR")

Project Description:

The EPA established standards of performance for mercury for new and existing coal-fired electric utility steam generating units as defined in the federal CAA Section 111, effective January 2009. CAMR will permanently cap and reduce mercury emissions nation-wide in two phases: Phase I cap is 38 tons per year with a compliance date of 2010 and Phase II cap is 15 tons per year with a compliance date of 2018. Tampa Electric's Big Bend and Polk Power Stations will be affected by the nation-wide mercury emissions reduction rule. According to Rule, the company must install emission-monitoring systems that sample mercury found in flue gas on Big Bend Units 1 through 4 and Polk Unit 1.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2009

through December 2009 is \$151,020 compared to the original projection of \$110,652, which represents a variance of 36.5 percent. The variance is due to the installation of the equipment to collect baseline data in preparation for rule

changes.

Progress Summary: A petition was filed on August 30, 2006 seeking Commission approval of cost

recovery through the ECRC for the new CAMR program.

Projections: Estimated depreciation plus return for the period January 2010 through

December 2010 is projected to be \$169,105.

Estimated O&M costs for the period January 2010 through December 2010 are

projected to be \$8,000.

Tampa Electric Company

Environmental Cost Recovery Clause (ECRC) Calculation of the Energy & Demand Allocation % By Rate Class January 2010 to December 2010

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Rate Class	Average 12 CP Load Factor at Meter (%)	Projected Sales at Meter (MWh)	Effective Sales at Secondary Level (MWh)	Projected Avg 12 CP at Meter (MW)	Demand Loss Expansion Factor	Energy Loss Expansion Factor	Projected Sales at Generation (MWh)	Projected Avg 12 CP at Generation (MW)	Percentage of MWh Sales at Generation (%)	Percentage of 12 CP Demand at Generation (%)	12 CP & 25% Allocation Factor (%)
RS	52.81%	8,824,328	8,824,328	1,908	1.08536	1.05482	9,308,101	2,070	46.17%	54.81%	52.65%
GS, TS	54.51%	1,030,757	1,030,757	216	1.08536	1.05482	1,087,266	234	5.39%	6.20%	6.00%
GSD, SBF	74.30%	8,039,231	8,026,251	1,204	1.08085	1.05106	8,449,676	1,302	41.92%	34.47%	36.33%
IS	75.80%	1,061,694	1,043,681	160	1.03968	1.02124	1,084,239	166	5.38%	4.40%	4.65%
LS1	498.93%	218,062	218,062	5	1.08536	1.05482	230,017	5	1.14%	0.13%	0.38%
TOTAL *		19,174,072	19,143,079	3,493			20,159,299	3,777	100.00%	100.00%	100.00%

- Notes: (1) Average 12 CP load factor based on 2009 projected calendar data
 - (2) Projected MWh sales for the period January 2010 to December 2010
 - (3) Effective sales at secondary level for the period January 2010 to December 2010.
 - (4) Based on 12 months average CP at meter
 - (5) Based on 2009 proposed load research data
 - (6) Average 12 CP load factor based on 2009 proposed load research data
 - (7) Projected MWh sales for the period January 2010 to December 2010
 - (8) Column 4 x Column 5
 - (9) Based on 2009 proposed load research data
 - (10) Column 8 / Total Column 8
 - (11) Column 9 x 0.25 + Column 10 x 0.75

^{*} Totals on this schedule may not foot due to rounding

DOCKET NO. 090007-EI ECRC 2010 PROJECTION FILING EXHIBIT NO. HTB-3 DOCUMENT NO. 7

Tampa Electric Company

Environmental Cost Recovery Clause (ECRC) Calculation of the Energy & Demand Allocation % By Rate Class January 2010 to December 2010

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Rate Class	Percentage of MWh Sales at Generation (%)	12 CP & 25% Allocation Factor (%)	Energy- Related Costs (\$)	Demand- Related Costs (\$)	Total Environmental Costs (\$)	Projected Sales at Meter (MWh)	Effective Sales at Secondary Level (MWh)	Environmental Cost Recovery Factors (¢/kWh)	
RS	46.170%	52.65%	42,649,614	274,890	42,924,504	8,824,328	8,824,328	0.486	
GS, TS	5.390%	6.00%	4,979,021	31,313	5,010,334	1,030,757	1,030,757	0.486	
GSD, SBF Secondary Primary Transmission	41.920%	36.33%	38,723,670	189,695	38,913,365	8,039,231	8,026,251	0.485 0.480 0.475	
IS Secondary Primary Transmission	5.380%	4.65%	4,969,784	24,252	4,994,036	1,061,694	1,043,681	0.479 0.474 0.469	
LS1	1.140%	0.38%	1,053,077	1,997	1,055,074	218,062	218,062	0.484	
TOTAL *	100.00%	100.00%	92,375,166	522,109	92,897,275	19,174,072	19,143,079	0.485	

^{*} Totals on this schedule may not foot due to rounding

Notes:

- (1) From Form 42-6P, Column 9
- (2) From Form 42-6P, Column 11
- (3) Column 1 x Total Energy Jurisdictional Dollars from Form 42-1P, line 5
- (4) Column 2 x Total Demand Jurisdictional Dollars from Form 42-1P, line 5
- (5) Column 3 + Column 4
- (6) From Form 42-6P, Column 2
- (7) From Form 42-6P, Column 3
- (8) Column 5 / Column 7 x 100



BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 090007-EI

IN RE:

ENVIRONMENTAL COST RECOVERY FACTORS

PROJECTIONS

JANUARY 2010 THROUGH DECEMBER 2010

DIRECT TESTIMONY

OF

PAUL L. CARPINONE

1 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION PREPARED DIRECT TESTIMONY 2 OF 3 PAUL CARPINONE 5 Please state your name, address, occupation and employer. 6 Q. 7 8 Α. My name is Paul Carpinone. My business address is 702 9 North Franklin Street, Tampa, Florida 33602. Ι 10 employed by Tampa Electric Company ("Tampa Electric" or 11 "company") as Director, Environmental Health & Safety in the Environmental Health and Safety Department. 12 13 14 Q. Please provide a brief outline of your educational background and business experience. 15 16 received a Bachelor of Science 17 degree in Resources Engineering Technology from the Pennsylvania 18 State University in 1978. 19 I have been a Registered 20 Professional Engineer in the State of Florida and Pennsylvania since 1984. 21 Prior to joining Tampa 22 Electric, I worked for Seminole Electric Cooperative as a Civil Engineer in various positions and in environmental 23 consulting. In February 1988, I joined Tampa Electric as 24 25 a Principal Engineer, and I have primarily worked in the

area of Environmental Health and Safety. In 2006, became Director, Environmental Health and Safety. Му development and the include responsibilities administration of the company's environmental, health and I am also responsible for safety policies and goals. ensuring resources, procedures and programs surpass compliance with applicable environmental, health and safety requirements, and that rules and policies are in place and functioning appropriately and consistently throughout the company.

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

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The purpose of my testimony is to demonstrate that the activities for which Tampa Electric seeks cost recovery through the Environmental Cost Recovery Clause ("ECRC") for the January 2010 through December 2010 projection period are activities necessary for the company to comply with various environmental requirements. Specifically, I will describe the ongoing activities that are associated with the Consent Final Judgment ("CFJ") entered into with the Florida Department οf Environmental Protection ("FDEP") and the Consent Decree ("CD") lodged with the U.S. Environmental Protection Agency ("EPA") and the Department οf Justice. I will also discuss other

programs previously approved by the Commission for recovery through the ECRC as well as the suspension of the Clean Water Act Section 316(b) Phase II Study and the vacatur of the Clean Air Mercury Rule.

Q. Please provide an overview of the ongoing environmental compliance requirements that are the result of the CFJ and the CD ("the Orders").

A. The general ongoing requirements of the Orders provide for further reductions of sulfur dioxide (" SO_2 "), particulate matter ("PM") and nitrogen oxides (" NO_x ") emissions at Big Bend Station.

Q. What do the Orders require for SO₂ emission reductions?

A. The Orders require Tampa Electric to create a plan for optimizing the availability and removal efficiency of the flue gas desulfurization systems ("FGD" or "scrubbers"). The plans were submitted to the EPA in two phases, and were approved in July 2000, and February 2001, respectively.

Phase I required Tampa Electric to work scrubber outages around the clock and to utilize contract labor, when

necessary, to speed the return of a malfunctioning scrubber to service. In addition, Phase I required Tampa Electric to review all critical scrubber spare parts and increase the number and availability of spare parts to ensure a speedy return to service of a malfunctioning scrubber.

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Phase II outlined capital projects Tampa Electric was to perform to upgrade each scrubber at Big Bend Station. Ιt also addressed the use of environmental dispatching in the event of a scrubber outage. All of the preliminary emission reduction projects have been completed. However, additional work will occur in 2010 associated with the Big Bend Units 1 and 2 FGD and Big Bend FGD Reliability comply with the programs to elimination of the allowed scrubber outage days for 2010 and 2013.

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Q. What do the Orders require for PM emission reductions?

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Orders Tampa Electric develop Α. The require to implement a best operational practices ("BOP") study to from minimize emissions electrostatic PMeach precipitator ("ESP") and complete and implement a best available control technology ("BACT") analysis of the

The Orders also require the ESPs at Big Bend Station. company to demonstrate the operation of a PM continuous emission monitoring system ("CEM") on Big Bend Units 3 and 4 and demonstrate the operation of a second PM CEM on Pursuant to the Orders, another Big Bend unit. installation of the second PM CEM was required on or before May 1, 2007, if the first PM CEM had been shown to feasible and remained in operation and if Tampa Electric advised the EPA that it had elected to continue to combust coal in Big Bend Units 1, 2 and 3. The first PM CEM was installed in February 2002. The installation of the second PM CEM was completed in July 2009 and is the final stages of certification.

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Q. Please describe the Big Bend PM Minimization and Monitoring program activities and provide the estimated capital and O&M expenditures for the period of January 2010 through December 2010.

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A. The Big Bend PM Minimization and Monitoring program was approved by the Commission in Docket No. 001186-EI, Order No. PSC-00-2104-PAA-EI, issued November 6, 2000. In the Order, the Commission found that the program met the requirements for recovery through the ECRC. Tampa Electric had previously identified various projects to

improve precipitator performance and reduce PM emissions as required by the Orders. In 2010, there will be capital associated with the installation expenditures replacement PM CEM, O&M expenses associated with existing and recently installed BOP and BACT equipment continued implementation of the BOP procedures. Moving forward with the replacement PM CEM project can improve availability by providing real time PMgeneration emissions data. These activities are expected to result in approximately \$10,000 of capital and \$470,000 of O&M expenses.

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Q. What do the Orders require for NO_x reductions?

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The Orders require Tampa Electric to perform NOx emission reductions projects on Big Bend Units 1, 2 and 3 and pursuant to an amendment, for Big Bend Unit 4 projects to be substituted for Big Bend Unit 3 projects. The NO_x emission reductions use the 1998 NO_x emissions as the baseline year for determining the level of reduction achieved. Tampa Electric was also required by the Orders demonstrate to innovative technologies orprovide additional NO_x technologies beyond those required by the early NO_x emission reduction activities.

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Q. Please describe the Big Bend NO_x Emission Reduction program activities and provide the estimated capital and O&M expenses for the period of January 2010 through December 2010.

A. The Big Bend NO_x Emission Reduction program was approved by the Commission in Docket No. 001186-EI, Order No. PSC-00-2104-PAA-EI, issued November 6, 2000. In the Order, the Commission found that the program met the requirements for recovery through the ECRC. In 2010, Tampa Electric will perform maintenance on the previously approved and installed NO_x Reduction equipment. This activity is expected to result in approximately \$396,000 of O&M expenses.

Q. Please describe long-term $NO_{\rm x}$ requirements associated with the Orders and Tampa Electric's efforts to comply with the requirements.

A. The Orders require Big Bend Unit 4 to begin operating with a Selective Catalytic Reduction ("SCR") system or other NO_x control technology, be repowered, or shut down and scheduled for dismantlement by June 1, 2007. Big Bend Units 3, 2 and/or 1 must either begin operating with an SCR system or other NO_x control technology, be repowered,

or be shut down and scheduled for dismantlement one unit per year by May 1, 2008, May 1, 2009 and May 1, 2010, respectively.

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In order to meet the NO_x emission rates and timing requirements of the Orders, Tampa Electric engaged an experienced consulting firm, Sargent and Lundy, to assist with the performance of a comprehensive study designed to identify the long-range plans for the generating units at The results of the study clearly Big Bend Station. indicated that the option to remain coal-fired at Big Bend Station and install the necessary NO_x reduction technologies is the most cost-effective alternative to satisfy the NO_x emission reductions required by Orders. This decision was communicated to the EPA and Tampa Electric also apprised the FDEP in August 2004. Commission of this decision in its filing made in Docket No. 040750-EI in August 2004.

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Q. Please describe the Big Bend Units 1 through 3 Pre-SCR and the Big Bend Units 1 through 4 SCR projects and provide estimated capital and O&M expenditures for the period of January 2010 through December 2010.

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A. In Docket No. 040750-EI, Order No. PSC-04-0986-PAA-EI,

issued October 11, 2004, the Commission approved cost recovery of the Big Bend Units 1 through 3 Pre-SCR and the Big Bend Unit 4 SCR projects. The Big Bend Units 1 through 3 SCR projects were approved by the Commission in 041376-EI, Order No. PSC-05-0502-PAA-EI, Docket No. 9, 2005. The purpose of the Pre-SCR issued May technologies is to reduce inlet NOx concentrations to the SCR systems, thereby mitigating overall SCR capital and O&M costs. These Pre-SCR technologies include neural networks, windbox modifications, secondary air controls and coal/air flow controls. The SCR projects at Big Bend Units 1 through 4 encompass the design, procurement, installation and annual O&M expenses associated with an SCR system for each unit.

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The projected costs for the period of January 2010 through December 2010 for which Tampa Electric is seeking ECRC recovery are for the Big Bend Units 1 through 3 Pre-SCR and Big Bend Units 2, 3 and 4 SCR capital and O&M expenditures associated with the engineering, procurement, construction, start-up, tuning, operation and ongoing maintenance for the projects. No capital expenditures are anticipated for Big Bend Units 1 through 3 Pre-SCR for 2010. O&M expenses for Big Bend Units 1 through 3 Pre-SCR projects are \$75,000 for Unit 1, \$31,000 for Unit 2 and

\$31,000 for Unit 3. Big Bend Unit 3 SCR was placed inservice July 2008. Therefore, there are no anticipated capital expenditures for 2010; however, expenditures for the project are anticipated \$1,668,100. Big Bend Unit 4 SCR was placed in-service May 2007, therefore there anticipated are no expenditures for 2010. The O&M expenses for this project are anticipated to be \$778,700. Big Bend Unit 2 SCR was placed in-service June 2009 and will have no anticipated capital costs but O&M costs of \$1,668,100 for 2010.

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Big Bend Unit 1 SCR is expected to be placed in-service May 2010 and will have anticipated capital costs of \$15,830,690 and O&M costs of \$1,001,600.

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Q. Please identify and describe the other Commission approved programs you will discuss.

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The programs previously approved by the Commission that I will discuss include:

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- 1) Big Bend Unit 3 FGD Integration
- 2) Big Bend Units 1 and 2 FGD
 - 3) Gannon Thermal Discharge Study
 - 4) Bayside SCR Consumables

- 5) Big Bend Unit 4 Separated Over-fired Air ("SOFA")
- 6) Clean Water Act Section 316(b) Phase II Study
- 7) Big Bend FGD Reliability
- 8) Arsenic Groundwater Standard
- 9) Clean Air Mercury Rule ("CAMR")

Q. Please describe the Big Bend Unit 3 FGD Integration and the Big Bend Units 1 and 2 FGD activities and provide the estimated capital and O&M expenditures for the period of January 2010 through December 2010.

by the Commission in Docket No. 960688-EI, Order No. PSC-96-1048-FOF-EI, issued August 14, 1996. The Big Bend Units 1 and 2 FGD program was approved by the Commission in Docket No. 980693-EI, Order No. PSC-99-0075-FOF-EI, issued January 11, 1999. In those Orders, the Commission found that the programs met the requirements for recovery through the ECRC. The programs were implemented to meet the SO₂ emission requirements of the Phase I and II Clean Air Act Amendments ("CAAA") of 1990.

The projected January 2010 through December 2010, O&M expenses for the Big Bend Unit 3 FGD Integration project are \$4,241,800. No capital expenditures are anticipated

for this project. The projected capital and O&M expenditures for the Big Bend Units 1 and 2 FGD Integration project for January 2010 through December 2010 are \$526,266 and \$7,443,300, respectively.

Q. Please describe the Gannon Thermal Discharge Study program activities and provide the estimated capital and O&M expenditures for the period of January 2010 through December 2010.

A. The Gannon Thermal Discharge Study program was approved by the Commission in Docket No. 010593-EI, Order No. PSC-01-1847-PAA-EI, issued September 14, 2001. In that Order, the Commission found that the program met the requirements for recovery through the ECRC. For the period of January 2010 through December 2010, there will be no capital expenditures for this program. Tampa Electric anticipates O&M expenses will be approximately \$30,000 for the period.

Q. Please describe the Bayside SCR Consumables program activities and provide the estimated capital and O&M expenditures for the period of January 2010 through December 2010.

A. The Bayside SCR Consumables program was approved by the

Commission in Docket No. 021255-EI, Order No. PSC-03-0469-PAA-EI, issued April 4, 2003. For the period of January 2010 through December 2010, there will be no capital expenditures for this program. Tampa Electric anticipates O&M expenses associated with the consumable goods (primarily anhydrous ammonia) will be approximately \$114,000 for the period.

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Q. Please describe the Big Bend Unit 4 SOFA program activities and provide the capital and O&M expenditures for the period of January 2010 through December 2010.

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Big Bend Unit SOFA program was approved Α. 4 Commission for ECRC recovery in Docket No. 030226-EI, PSC-03-0684-PAA-EI, issued June 6, 2003. that Order, the Commission found that the program met the requirements for recovery through the ECRC contingent upon Big Bend Unit 4 remaining coal fired. On August 19, Tampa Electric submitted a letter to the 2004, EPA declaring the intent for Big Bend Units 1 through 4 to remain coal fired and, such, complied with as the applicable provisions of the CD associated with the decision. The SOFA project was completed in 2004. For the period of January 2010 through December 2010, there will be no capital expenditures for this program. Tampa

Electric anticipates O&M expenses will be approximately \$62,000 for the period.

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Please describe the Clean Water Act Section 316(b) Phase II Study program activities and provide the estimated capital and O&M expenditures for the period of January 2010 through December 2010.

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The Clean Water Act Section 316(b) Phase II Study program was approved by the Commission in Docket No. 041300-EI, Order No. PSC-05-0164-PAA-EI, issued February 10, 2005. For the period of January 2010 through December 2010, there will be no capital expenditures for this program. EPA announced on March 20, 2007, that the rule adopted pursuant to Section 316(b) be considered suspended. suspension of the final rule was made on July 9, 2007. Tampa Electric believes that the work will continue to be useful for purposes related to the Phase II Rule and does not intend to suspend the work because it would not be cost-effective or appropriate to do so. Therefore, Tampa Electric anticipates O&M expenses associated with the sampling and study activities will be approximately \$60,000 for the period.

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Please describe the Big Bend FGD System Reliability Q.

program activities and provide the estimated capital and O&M expenses for the period of January 2010 through December 2010.

A. Tampa Electric's Big Bend FGD System Reliability program was approved by the Commission in Docket No. 050598-EI, Order No. PSC-06-0602-PAA-EI, issued July 10, 2006. The Commission granted cost recovery approval for prudent costs associated with this project. The Big Bend FGD System Reliability project will run concurrently with the installation of SCR systems on the generating units.

For the period of January 2010 through December 2010, the anticipated capital expenditures will be \$2,500,000 however, no O&M expenditures are anticipated for this project.

Q. Please describe the Arsenic Groundwater Standard program activities and provide the estimated capital and O&M expenditures for the period of January 2010 through December 2010.

A. The Arsenic Groundwater Standard program was approved by the Commission in Docket No. 050683-EI, Order No. PSC-06-0138-PAA-EI, issued February 23, 2006. In that Order, the

Commission found that the program met the requirements for recovery through the ECRC and granted Tampa Electric cost recovery approval for prudently incurred costs. The new groundwater standard applies to Tampa Electric's H.L. Culbreath Bayside, Big Bend and Polk Power Stations.

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For the period of January 2010 through December there will be no capital expenditures for this program; however, Tampa Electric anticipates M&O expenses associated with the sampling activities will be approximately \$50,000.

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Q. Please describe the CAMR program activities and provide the estimated capital and O&M expenditures for the period of January 2010 through December 2010.

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No. 060583-EI, Order No. PSC-06-0926-PAA-EI, issued November 6, 2006. In that Order, the Commission found that the program met the requirements for recovery through the ECRC and granted Tampa Electric cost recovery approval for prudently incurred costs.

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On February 8, 2008, the Washington D.C. Circuit Court vacated EPA's rule removing power plants from the Clean

Air Act list of regulated sources of hazardous air pollutants under section 112. At the same time, the Court vacated the Clean Air Mercury Rule. reviewing the Court's decisions and evaluating its impacts. Currently, the FDEP has begun rulemaking this year that will likely have monitoring requirements comparable to CAMR.

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Given the vacatur, capital spending for this program is anticipated to be complete in 2010 with monitoring to commence thereafter, using company resources. For the period of January 2010 through December 2010, the capital expenditures are anticipated to be \$20,000 and the O&M expenditures to be \$8,000.

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Q. What is the impact of the recent vacatur of the CAIR and CAMR rules on Tampa Electric's ECRC projects?

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A. The vacatur of CAIR should have minimal impact on Tampa Electric's ECRC projects associated with NO_x and SO_2 abatement. These projects were initiated as a result of the CD signed between EPA and Tampa Electric therefore, the company anticipates continuing its efforts to complete and maintain the projects.

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The vacatur of CAMR occurred after Tampa Electric had begun the procurement of equipment necessary to meet the intent of the original rule; however, the company was able to stop a significant portion of the total equipment purchase.

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Tampa Electric anticipates a replacement to the CAMR rule to become effective in the near future therefore, during this time of review, the company plans to utilize the resources already secured to establish a baseline of mercury emissions.

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Q. Please summarize your testimony.

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A. Tampa Electric's settlement agreements with FDEP and EPA require significant reductions in emissions from Tampa Electric's Big Bend and Gannon Stations. The Orders established definite requirements and time frames which air quality improvements must be made and result in reasonable and fair outcomes for Tampa Electric, community and customers, and the environmental agencies. My testimony identified projects that required by these Orders. I described the progress Tampa Electric has made to achieve the more stringent environmental standards. I have identified estimated

costs, by project, which the company expects to incur in 2010. Additionally, my testimony identified other projects that are required for Tampa Electric to meet the environmental requirements and I provided the associated 2010 activities and projected expenditures.

Does this conclude your testimony? Q.

Yes it does. A.