AUSLEY & MCMULLEN

ATTORNEYS AND COUNSELORS AT LAW

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

August 30, 2012

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. 120007-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.

Sincerely,

James D. Beasley

APA JDB/pp **ECO** Enclosures ENG GCL All Parties of Record (w/enc.) cc: IDM TEL

DOCUMENT NUMBER - DATE

05922 AUG 30 º

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition and Testimonies, filed on behalf of Tampa Electric Company, has been furnished by U. S. Mail or hand delivery (*) on this day of August 2012 to the following:

Mr. Charles W. Murphy*
Senior Attorney
Office of the General Counsel
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

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

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. Kenneth Hoffman 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

Samuel Miller, Capt., USAF USAF/AFLOA/JACL/ULFSC 139 Barnes Drive, Suite 1 Tyndall AFB, FL 32403-5319 Mr. John T. Burnett Ms. Dianne Triplett Progress Energy Service Co., LLC Post Office Box 14042 St. Petersburg, FL 33733-4042

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

Mr. James W. Brew Mr. F. Alvin Taylor Brickfield, Burchette, Ritts & Stone, P.C. 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, D.C. 20007-5201

ATTORNEY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental Cost)	DOCKET NO. 120007-EI
Recovery Clause.)	
•	.)	FILED: August 30, 2012

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 2013 through December 2013, and in support thereof, says:

Environmental Cost Recovery

- 1. Tampa Electric had a final true-up amount for the January 2011 through December 2011 period of an under-recovery amount of \$3,232,451. [See Exhibit No. ____ (HTB-1), Document No. 1 (Schedule 42-1A).]
- 2. Tampa Electric projects an estimated/actual true-up amount for the January 2012 through December 2012 period, which is based on actual data for the period January 1, 2012 through June 30, 2012 and revised estimates for the period July 1, 2012 through December 31, 2012, to be an under-recovery of \$11,754,826. [See Exhibit No. _____ (HTB-2), Document No. 1 (Schedule 42-1E), from the filing dated August 1, 2012.]
- 3. The company's projected environmental cost recovery for the period January 1, 2013 through December 31, 2013 total is \$101,085,751 when adjusted for taxes and, when spread over projected kilowatt hour sales for the period January 1, 2013 through December 31, 2013, produces an average environmental cost recovery factor for the new period of 0.556 cents per KWH after application of the factors which adjust for variations in line losses. [See Exhibit No. ______ (HTB-3), Document No. 7 (Schedule 42-7P).

DOCUMENT NUMBER-BATE

05922 AUG 30 º

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, 2013 through

December 31, 2013.

DATED this 30th day of August 2012.

Respectfully submitted,

IAMES D. BEASLEY

J. JEFFRY WAHLEN

Ausley & McMullen

Post Office Box 391

Tallahassee, FL 32302

(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

-2-

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 30th day of August 2012 to the following:

Mr. Charles W. Murphy*
Senior Attorney
Office of the General Counsel
Florida Public Service Commission
2540 Shumard Oak Boulevard
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Mr. James W. Brew Mr. F. Alvin Taylor Brickfield, Burchette, Ritts & Stone, P.C. 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, D.C. 20007-5201

ATTORNEY



BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 120007-EI
ENVIRONMENTAL COST RECOVERY FACTORS

PROJECTIONS

JANUARY 2013 THROUGH DECEMBER 2013

TESTIMONY AND EXHIBITS
OF

HOWARD T. BRYANT

FILED: AUGUST 30, 2012

DOCUMENT NUMBER - DATE

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

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 2013 through December 2013. 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 2013.

Q. Have you prepared an exhibit that shows the determination of recoverable environmental costs for the period of January 2013 through December 2013?

(HTB-3), containing Α. Yes. Exhibit eight No. under my direction documents, was prepared and supervision. Document Nos. 1 through 8 contain Forms 42-1P through 42-8P, which show the calculation and summary of M&O and capital expenditures that support the development of the environmental cost recovery factors for 2013.

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- 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 2013.
 - Q. What has Tampa Electric calculated as the net true-up to be applied in the period January 2013 through December 2013?
 - A. The net true-up applicable for this period is an under-recovery of \$14,987,277. This consists of the final true-up under-recovery of \$3,232,451 for the period of January 2011 through December 2011 and an estimated true-

Q. What were the major contributing factors that created the net under-recovery to be applied to the company's ECRC rates for the period January 2013 through December 2013?

A. There were two major contributing factors that created the net under-recovery. First, the increased O&M expense associated with the management of the gypsum production at Big Bend Station. Second, capital costs increased due to the use of newly approved depreciation rates for several projects.

Q. Will Tampa Electric include any new environmental compliance projects for ECRC cost recovery for the period from January 2013 through December 2013?

A. No, Tampa Electric is not including any new environmental compliance projects for ECRC cost recovery during 2013.

Q. What are the existing capital projects included in the

1		calculation of the ECRC factors for 2013?
2		
3	A.	Tampa Electric proposes to include for ECRC recovery the
4		24 previously approved capital projects and their
5		projected costs in the calculation of the ECRC factors
6		for 2013. These projects are:
7		
8		1) Big Bend Unit 3 Flue Gas Desulfurization ("FGD")
9		Integration
10		2) Big Bend Units 1 and 2 Flue Gas Conditioning
11		3) Big Bend Unit 4 Continuous Emissions Monitors
12		4) Big Bend Fuel Oil Tank 1 Upgrade
13		5) Big Bend Fuel Oil Tank 2 Upgrade
14		6) Big Bend Unit 1 Classifier Replacement
15		7) Big Bend Unit 2 Classifier Replacement
16		8) Big Bend Section 114 Mercury Testing Platform
17		9) Big Bend Units 1 and 2 FGD
18		10) Big Bend FGD Optimization and Utilization
19		11) Big Bend NO_x Emissions Reduction
20		12) Big Bend Particulate Matter ("PM") Minimization and
21		Monitoring
22		13) Polk NO_x Emissions Reduction
23		14) Big Bend Unit 4 SOFA
24		15) Big Bend Unit 1 Pre-SCR
25		16) Big Bend Unit 2 Pre-SCR

1		17) Big Bend Unit 3 Pre-SCR
2		18) Big Bend Unit 1 SCR
3		19) Big Bend Unit 2 SCR
4		20) Big Bend Unit 3 SCR
5		21) Big Bend Unit 4 SCR
6		22) Big Bend FGD Reliability
7		23) Clean Air Mercury Rule
8		24) SO ₂ Emission Allowances
9		
10		Some of these projects are described in more detail in
11		the direct testimony of Tampa Electric Witness, Paul
12		Carpinone.
13		
14	Q.	Have you prepared schedules showing the calculation of
15		the recoverable capital project costs for 2013?
16		
17	A.	Yes. Form 42-3P contained in Exhibit No (HTB-3)
18		summarizes the cost estimates projected for these
19		projects. Form 42-4P, pages 1 through 26, provides the
20		calculations of the costs, which result in recoverable
21		jurisdictional capital costs of \$60,257,233.
22		
23	Q.	What are the existing O&M projects included in the
24		calculation of the ECRC factors for 2013?

1	A.	Tampa Electric proposes to include for ECRC recovery the
2		22 previously approved O&M projects and their projected
3		costs in the calculation of the ECRC factors for 2013.
4		These projects are:
5		
6		1) Big Bend Unit 3 FGD Integration
7		2) Big Bend Units 1 and 2 Flue Gas Conditioning
8		3) SO ₂ Emissions Allowances
9		4) Big Bend Units 1 and 2 FGD
10		5) Big Bend PM Minimization and Monitoring
11		6) Big Bend NO_x Emissions Reduction
12		7) NPDES Annual Surveillance Fees
13		8) Gannon Thermal Discharge Study
14		9) Polk NO_x Emissions Reduction
15		10) Bayside SCR and Ammonia
16		11) Big Bend Unit 4 SOFA
17		12) Big Bend Unit 1 Pre-SCR
18		13) Big Bend Unit 2 Pre-SCR
19		14) Big Bend Unit 3 Pre-SCR
20		15) Clean Water Act Section 316(b) Phase II Study
21		16) Arsenic Groundwater Standard Program
22		17) Big Bend Unit 1 SCR
23		18) Big Bend Unit 2 SCR
24		19) Big Bend Unit 3 SCR
25		20) Big Bend Unit 4 SCR

1		21) Clean Air Mercury Rule
2		22) Greenhouse Gas Reduction Program
3		
4		Some of these projects are described in more detail in
5		the direct testimony of Tampa Electric Witness, Paul
6		Carpinone.
7		
8	Q.	Have you prepared schedules showing the calculation of
9		the recoverable O&M project costs for 2013?
10		
11	A.	Yes. Form 42-2P contained in Exhibit No (HTB-3)
12		summarizes the recoverable jurisdictional O&M costs for
13		these projects which total \$25,768,511 for 2013.
14		
15	Q.	Do you have a schedule providing the description and
16		progress reports for all environmental compliance
17		activities and projects?
18		
19	A.	Yes. Project descriptions and progress reports, as well
20		as the projected recoverable cost estimates, are provided
21		in Form 42-5P, pages 1 through 32.
22		
23	Q.	What are the total projected jurisdictional costs for
24		environmental compliance in the year 2013?
25		

A. The total jurisdictional O&M and capital expenditures to be recovered through the ECRC are calculated on Form 42-1P. These expenditures total \$86,025,744.

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Q. How were environmental cost recovery factors calculated?

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A. The environmental cost recovery factors were calculated 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 class. calculating percentage each rate class the that contributes to total MWH sales and then adjusted for This information was based losses for each rate class. on applying historical rate class load research to the 2013 projected forecast of system demand and energy. Form 42-7P presents the calculation of the proposed ECRC factors by rate class.

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Q. What are the ECRC billing factors by rate class for the period of January through December 2013 which Tampa Electric is seeking approval?

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A. The computation of the billing factors by metering

1		voltage level is shown in Exhibit No (HTB-3)
2		Document No. 7, Form 42-7P. In summary, the January
3		through December 2013 proposed ECRC billing factors are
4		as follows:
5		
6		Rate Class Factor by Voltage
7		Level(¢/kWh)
8		RS Secondary 0.558
9		GS, TS Secondary 0.557
10		GSD, SBF
11		Secondary 0.555
12		Primary 0.550
13		Transmission 0.544
14		IS
15		Secondary 0.545
16		Primary 0.540
17		Transmission 0.534
18		LS1 0.553
19		Average Factor 0.556
20		
21	Q.	When does Tampa Electric propose to begin applying these
22		environmental cost recovery factors?
23		
24	A.	The environmental cost recovery factors will be effective
25		concurrent with the first billing cycle for January 2013.

Q. What capital structure, components and cost rates did

Tampa Electric rely on to calculate the revenue

requirement rate of return for January 2013 through

December 2013?

.9

- A. Tampa Electric relied upon the weighted average cost of capital methodology approved by the Commission in Order No.: PSC-12-0425-PAA-EU, to calculate the revenue requirement rate of return found on Form 42-8P.
 - Q. Are the costs Tampa Electric is requesting for recovery through the ECRC for the period January 2013 through December 2013 consistent with criteria established for ECRC recovery in Order No. PSC-94-0044-FOF-EI?
 - A. Yes. The costs for which ECRC treatment is requested meet the following criteria:
 - Such costs were prudently incurred after April 13, 1993;
 - 2. The activities are legally required to comply with a governmentally imposed environmental regulation enacted, became effective or whose effect was triggered after the company's last test year upon which rates are based; and,

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 0.556 cents per This includes the projected capital and O&M revenue requirements of \$86,025,744 associated with a total of 30 environmental projects and а true-up under-recovery provision of \$14,987,277 that is primarily driven by the combination of O&M and capital expenditures being greater than anticipated while ECRC revenue was less than expected. My testimony also explains that the projected environmental expenditures for 2013 are appropriate for 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 2013 THROUGH DECEMBER 2013

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14

DOCKET NO. 120007-EI ECRC 2013 PROJECTION FILING EXHIBIT NO. HTB-3 DOCUMENT NO. 1

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

For the Projected Period January 2013 to December 2013

<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) b. Projected Capital Projects (Form 42-3P, Lines 7, 8 & 9) c. Total Jurisdictional Revenue Requirements for the Projected period (Lines 1a + 	\$24,994,511 60,128,229 85,122,740	\$774,000 129,004 903,004	\$25,768,511 60,257,233 86,025,744
 True-up for Estimated Over/(Under) Recovery for the current period January 2012 to December 2012 (Form 42-2E, Line 5 + 6 + 10) 	(11,705,941)	(48,885)	(11,754,826)
3. Final True-up for the period January 2011 to December 2011 (Form 42-1A, Line 3)	(3,217,929)	(14,522)	(3,232,451)
 Total Jurisdictional Amount to Be Recovered/(Refunded) in the projection period January 2013 to December 2013 (Line 1 - Line 2- Line 3) 	100,046,610	966,411	101,013,021
Total Projected Jurisdictional Amount Adjusted for Taxes (Line 4 x Revenue Tax Multiplier)	\$100,118,644	\$967,107	\$101,085,751

Notes 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.

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 Energy
1.	Description of O&M Activities															
	a. Big Bend Unit 3 Flue Gas Desulfurization Integration	\$416,800	\$393,800	\$499,300	\$557,300	\$428,300	\$451,300	\$462,800	\$462,800	\$439,800	\$557,300	\$416,800	\$439,800	\$5,526,100		\$5,526,100
	 Big Bend Units 1 & 2 Flue Gas Conditioning 	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	 SO₂ Emissions Allowances 	1,905	1,930	1,928	1,934	1,915	1,905	1,902	1,901	1,908	1,912	1,922	1,918	22,980		22,980
	d. Big Bend Units 1 & 2 FGD	850,000	1,055,000	820,000	895,000	860,000	910,000	945,000	945,000	895,000	900,000	1,100,000	905,000	11,080,000		11,080,000
	e. Big Bend PM Minimization and Monitoring	35,000	30,000	35,000	30,000	35,000	30,000	35,000	30,000	35,000	30,000	35,000	30,000	390,000		390,000
	f. Big Bend NO _x Emissions Reduction	25,000	25,000	25,000	25,000	25,000	25,000	50,000	25,000	50,000	25,000	50,000	25,000	375,000		375,000
	g. NPDES Annual Surveillance Fees (BB+BS+PK)	34,500	0	0	0	0	0	0	0	0	0	0	0	34,500	34,500	
	h. Gannon Thermal Discharge Study	0	0	0	0	0	0	0	2,500	2,500	2,500	2,500	2,500	12,500	12,500	
	i. Polk NO _x Reduction	2,000	2,000	2,000	3,500	3,500	2,000	2,000	2,000	2,000	3,500	2,000	2,000	28,500		28,500
	j. Bayside SCR and Ammonia	8,000	8,000	10,500	8,000	8,000	10,500	8,000	8,000	10,500	8,000	8,000	10,500	106,000		106,000
	k. Big Bend Unit 4 SOFA	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	l. Big Bend Unit 1 Pre-SCR	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	m. Big Bend Unit 2 Pre-SCR	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	n. Big Bend Unit 3 Pre-SCR	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	 Clean Water Act Section 316(b) Phase II Study 	0	0	0	0	0	0	0	0	0	20,000	20,000	20,000	60,000	60,000	
	p. Arsenic Groundwater Standard Program	25,000	25,000	175,000	142,000	150,000	50,000	0	80,000	10,000	0	10,000		667,000	667,000	
	q. Big Bend 1 SCR	186,390	141,267	201,219	188,107	224,386	216,314	198,776	186,300	178,769	183,979	189,783	164,528	2,259,818		2,259,818
	r. Big Bend 2 SCR	200,753	201,851	230,545	196,969	229,612	204,193	244,823	213,776	172,324	215,069	215,345	181,149	2,506,409		2,506,409
	s. Big Bend 3 SCR	124,084	117,411	84,731	83,253	116,775	150,923	153,367	151,432	144,457	123,359	156,038	142,798	1,548,628		1,548,628
	t. Big Bend 4 SCR	87,122	69,319	76,814	89,990	89,973	95,019	95,501	88,627	86,735	101,783	77,428	82,765	1,041,076		1,041,076
	u. Clean Air Mercury Rule	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,667	1,666	1,666	1,666	1,666	20,000		20,000
	v. Greenhouse Gas Reduction Program	90,000		0	0	0	0	0	0	0	0	0	0	90,000	-	90,000
2.	Total of O&M Activities'	2,088,221	2,072,245	2,163,704	2,222,720	2,174,128	2,148,821	2,198,836	2,199,003	2,030,659	2,174,068	2,286,482	2,009,624	25,768,511	\$774,000	\$24,994,511
3.	Recoverable Costs Allocated to Energy	2,028,721	2.047,245	1.988.704	2,080,720	2,024,128	2,098,821	2,198,836	2,116,503	2,018,159	2,151,568	2,253,982	1,987,124	24,994,511		
4.	Recoverable Costs Allocated to Demand	59,500	25,000	175,000	142,000	150,000	50,000	0	82,500	12,500	22,500	32,500	22,500	774,000		
5.	Retail Energy Jurisdictional Factor	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000			
6.	Retail Demand Jurisdictional Factor	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000			
7.	Jurisdictional Energy Recoverable Costs (A) 1	2,028,721	2,047,245	1,988,704	2,080,720	2,024,128	2,098,821	2,198,836	2,116,503	2,018,159	2,151,568	2,253,982	1,987,124	24,994,511		
8.	Junsdictional Demand Recoverable Costs (B) 1	59,500	25,000	175,000	142,000	150,000	50,000	0	82,500	12,500	22,500	32,500	22,500	774,000		
9.	Total Jurisdictional Recoverable Costs for O&M															
	Activities (Lines 7 + 8) '	\$2,088,221	\$2,072,245	\$2,163,704	\$2,222,720	\$2,174,128	\$2,148,821	\$2,198,836	\$2,199,003	\$2,030,659	\$2,174,068	\$2,286,482	\$2,009,624	\$25,768,511		

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

Capital Investment Projects-Recoverable Costs

(in Dollars)

				_ `												
Line	Description (A)	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	Method of Demand	Classification Energy
Line	Description (A)	January	rectually	Walcii	April	IVIAY	Julie	July	August	September	October	November	December	1 Otal	Demand	Ellergy
1.	a. Big Bend Unit 3 Flue Gas Desulfurization Integration	\$56,441	\$56,289	\$56,137	\$55,985	\$80,001	\$116,023	\$117,198	\$117,561	\$117,303	\$117,046	\$116,788	\$116,532	\$1,123,304		\$1,123,304
	b Big Bend Units 1 and 2 Flue Gas Conditioning	32,072	31,930	31,786	31,643	31,500	31,357	31,214	31,071	30,929	30,786	30,643	30,500	375,431		375,431
	 Big Bend Unit 4 Continuous Emissions Monitors 	6,397	6,376	6,356	6,336	6,315	6,295	6,274	6,254	6,233	6,213	6,193	6,172	75,414		75,414
	d. Big Bend Fuel Oil Tank # 1 Upgrade	4,134	4,121	4,108	4,096	4,084	4,071	4,058	4,046	4,034	4,021	4,008	3,996	48,777	\$ 48,777	
	e. Big Bend Fuel Oil Tank # 2 Upgrade	6,799	6,778	6,757	6,737	6,716	6,696	6,676	6,654	6,634	6,614	6,593	6,573	80,227	80,227	
	f. Big Bend Unit 1 Classifier Replacement	10,194	10,155	10,115	10,076	10,037	9,999	9,960	9,921	9,882	9,844	9,805	9,766	119,754		119,754
	g. Big Bend Unit 2 Classifier Replacement	7,345	7,318	7,291	7,264	7,237	7,210	7,184	7,157	7,131	7,104	7,077	7,050	86,368		86,368
	h. Big Bend Section 114 Mercury Testing Platform	1,055	1,052	1,050	1,048	1,045	1,043	1,040	1,037	1,035	1,032	1,029	1,027	12,493		12,493
	i. Big Bend Units 1 & 2 FGD	684,205	682,029	679,852	677,676	675,499	673,324	671,147	669,414	668,123	674,809	686,506	686,342	8,128,926		8,128,926
	j. Big Bend FGD Optimization and Utilization	183,809	183,407	183,007	182,606	182,205	181,804	181,403	181,002	180,601	180,200	179,799	179,399	2,179,242		2,179,242
	k. Big Bend NO _x Emissions Reduction	60,388	60,298	60,208	60,117	60,027	59,938	59,847	59,757	59,666	59,576	59,487	59,396	718,705		718,705
	I. Big Bend PM Minimization and Monitoring	99,603	109,231	124,497	139,762	153,920	187,270	188,137	188,392	188,674	188,907	189,324	189,957	1.947.674		1,947,674
	m. Polk NO _x Emissions Reduction	14,062	14,023	13,984	13,945	13,906	13,867	13,827	13,788	13,749	13,710	13,671	13,632	166,164		166,164
	n. Big Bend Unit 4 SOFA	24,375	24,318	24,261	24,205	24,148	24,091	24,035	23,978	23,921	23,864	23,808	23,751	288,755		288,755
	o. Big Bend Unit 1 Pre-SCR	17,103	17,055	17,006	16,957	16,909	16,860	16,812	16,763	16,714	16,666	16,617	16,568	202,030		202,030
	p. Big Bend Unit 2 Pre-SCR	16,193	16,150	16,106	16,063	16,020	15,977	15,934	15,890	15,847	15,804	15,761	15,718	191,463		191,463
	q. Big Bend Unit 3 Pre-SCR	28,743	28,672	28,602	28,532	28,462	28,391	28,320	28,250	28,180	28,109	28,039	27,969	340,269		340,269
	r, Big Bend Unit 1 SCR	954,784	952,097	949,411	946,724	946,252	945,779	943,092	942,619	942,147	939,460	938,988	940,730	11,342,083		11,342,083
	s. Big Bend Unit 2 SCR	1,024,957	1,022,264	1,019,571	1,016,878	1,014,184	1,011,491	1,008,798	1,006,105	1,003,413	1,000,720	998,027	995,334	12,121,742		12,121,742
	t Big Bend Unit 3 SCR	843,459	841,265	839,071	836,877	834,682	832,489	830,294	828,100	825,907	823,712	821,518	819,324	9,976,698		9,976,698
	v. Big Bend FGD System Reliability	633,551 259,180	631,957 258,715	630,363	628,769	627,176	625,582	623,988	622,394	620,800	619,206	617,613	616,019	7,497,418		7,497,418
	w Clean Air Mercury Rule	259,180 13,403	13,371	258,250 13,339	257,785 13,307	257,321	256,856	256,391	255,927	255,462	254,998	254,533	254,068	3,079,486 158,728		3,079,486
	x. SO ₂ Emissions Allowances (B)	(331)	(330)	(329)	(328)	13,275 (328)	13,243 (327)	13,211 (326)	13,180 (325)	13,148 (324)	13,115	13,084	13,052			158,728
	x. SO ₂ Emissions Allowances (b)	(331)	(330)	(329)	(326)	(328)	(327)	(326)	(325)	(324)	(324)	(323)	(323)	(3,918)		(3,918)
2.	Total Investment Projects - Recoverable Costs	4,981,921	4,978,541	4,980,799	4,983,060	5,010,593	5,069,329	5,058,514	5,048,935	5,039,209	5,035,192	5,038,588	5,032,552	60,257,233	\$ 129,004	\$ 60,128,229
3.	Recoverable Costs Allocated to Energy	4,970,988	4.967.642	4.969.934	4,972,227	4.999.793	5,058,562	5.047.780	5,038,235	5,028,541	5,024,557	5,027,987	5.021,983	60,128,229		60,128,229
4.	Recoverable Costs Allocated to Demand	10.933	10,899	10.865	10.833	10.800	10.767	10.734	10,700	10.668	10.635	10,601	10,569	129,004	129.004	00,120,220
		10,000	,	,	10,000	10,000	10,101	,	10,100	10,000	10,000	10,001	10,000	120,004	120,004	
5.	Retail Energy Jurisdictional Factor	1.0000000	1.0000000	1.0000000	1 0000000	1 0000000	1 000000C	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000			
6.	Retail Demand Jurisdictional Factor	1.0000000	1.0000000	1.0000000	1.0000000	1,0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1 0000000	1.0000000			
1																
7.	Jurisdictional Energy Recoverable Costs (C)	4,970,988	4,967,642	4,969,934	4,972,227	4,999,793	5,058,562	5,047,780	5.038,235	5,028,541	5.024,557	5,027,987	5,021,983	60,128,229		
8.	Jurisdictional Demand Recoverable Costs (D)	10,933	10,899	10,865	10,833	10,800	10,767	10,734	10,700	10,668	10,635	10,601	10,569	129,004		
9.	Total Jurisdictional Recoverable Costs for															
	Investment Projects (Lines 7 + 8)	\$4,981,921	\$4,978,541	\$4,980,799	\$4,983,060	\$5,010,593	\$5,069,329	\$5,058,514	\$5,048,935	\$5,039,209	\$5,035,192	\$5,038,588	\$5,032,552	\$60,257,233		

Notes:

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

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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 b. Clearings to Plant c. Retirements d. Other - (G)		\$0 0 0 645,960	\$0 0 0 725,000	\$0 0 0 725,000	\$0 0 0 725,000	436,324 5,457,756 0 0	\$155,000 155,000 0	\$95,000 95,000 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$686,324 \$5,707,756 \$2,820,960
2. 3. 4.	Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing	\$8,239,658 (3,796,317) 0	\$8,239,658 (3,813,483) 0	\$8,239,658 (3,830,649) 0	\$8,239,658 (3,847,815) 0	\$8,239,658 (3,864,981) 0	\$13,697,414 (3,882,147) 0	\$13,852,414 (3,910,683) 0	\$13,947,414 (3,939,542) 0	\$13,947,414 (3,968,599) 0	\$13,947,414 (3,997,656) 0	\$13,947,414 (4,026,713) 0	\$13,947,414 (4,055,770) 0	\$13,947,414 (4,084,827) 0	
5.	Net Investment (Lines 2 + 3 + 4)	\$4,443,341	4,426,175	4,409,009	4,391,843	4,374,677	9,815,267	9,941,731	10,007,872	9,978,815	9,949,758	9,920,701	9,891,644	9,862,587	
6.	Average Net Investment		4,434,758	4,417,592	4,400,426	4,383,260	7,094,972	9,878,499	9,974,802	9,993,344	9,964,287	9,935,230	9,906,173	9,877,116	
7.	Return on Average Net Investment a. Equity Component Grossed Up For Taxes (B) b. Debt Component Grossed Up For Taxes (C)		29,0 8 2 10,193	28,969 10,154	28,857 10,114	28,744 10,075	46,527 16,308	64,781 22,706	65,412 22,927	65,534 22,970	65,343 22,903	65,153 22,836	64,962 22,769	64,772 22,703	\$618,136 216,658
8.	Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other		17,166 0 0 0	17,166 0 0 0	17,166 0 0 0	17,166 0 0 0	17,166 0 0 0	28,536 0 0 0	28,859 0 0 0	29,057 0 0 0	29,057 0 0 0	29,057 0 0 0	29,057 0 0 0	29,057 0 0 0	288,510 0 0 0
9.	Total System Recoverable Expenses (Line a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Deman	,	56,441 56,441 0	56,289 56,289 0	56,137 56,137 0	55,985 55,985 0	80,001 80,001 0	116,023 116,023 0	117,198 117,198 0	117,561 117,561 0	117,303 117,303 0	117,046 117,046 0	116,788 116,788 0	116,532 116,532 0	1,123,304 1,123,304 0
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	
12. 13. 14.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Cost Total Jurisdictional Recoverable Costs (Lir	s (F)	56,441 0 \$56,441	56,289 0 \$56,289	56,137 0 \$56,137	55,985 0 \$55,985	80,001 0 \$80,001	116,023 0 \$116,023	117,198 0 \$117,198	117,561 0 \$117,561	117,303 0 \$117,303	117,046 0 \$117,046	116,788 0 \$116,788	116,532 0 \$116,532	1,123,304 0 \$1,123,304

- Notes:

 (A) Applicable depreciable base for Big Bend; account 312.45

 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11,25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).

 - (C) Line 6 x 2.7582% x 1/12. (D) Applicable depreciation rate is 2.5%
 - (E) Line 9a x Line 10
 - (F) Line 9b x Line 11
 - (G) Line 1d Expenditures include AFUDC and are for tracking purposes only. Depreciation and Return are not calculated until the project goes in-service.

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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	Q	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		Ü	0	0	0	0	O	U	U	0	U	U	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	(3,210,818)	(3,226,959)	(3,243,100)	(3,259,241)	(3,275,382)	(3,291,523)	(3,307,664)	(3,323,805)	(3,339,946)	(3,356,087)	(3,372,228)	(3,388,369)	(3,404,510)	
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)	\$1,806,916	1,790,775	1,774,634	1,758,493	1,742,352	1,726,211	1,710,070	1,693,929	1,677,788	1,661,647	1,645,506	1,629,365	1,613,224	
6.	Average Net Investment		1,798,846	1,782,705	1,766,564	1,750,423	1,734,282	1,718,141	1,702,000	1,685,859	1,669,718	1,653,577	1,637,436	1,621,295	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	xes (8)	11,796	11,691	11,585	11,479	11,373	11,267	11,161	11,055	10,950	10,844	10,738	10,632	\$134,571
	b. Debt Component Grossed Up For Tax	es (C)	4,135	4,098	4,060	4,023	3,986	3,949	3,912	3,875	3,838	3,801	3,764	3,727	47,168
8.	Investment Expenses														
Ψ.	a. Depreciation (D)		16,141	16,141	16.141	16,141	16,141	16.141	16,141	16,141	16,141	16.141	16,141	16,141	193,692
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	Ō	0	0	Ö	0	0	0	Ō	Ö	Ö	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	es 7 + 8\	32,072	31,930	31,786	31,643	31,500	31,357	31,214	31,071	30,929	30,786	30.643	30,500	375,431
٠.	a. Recoverable Costs Allocated to Energ		32,072	31,930	31,786	31,643	31,500	31,357	31,214	31,071	30,929	30,786	30,643	30,500	375,431
	b. Recoverable Costs Allocated to Dema		0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
12.	Retail Energy-Related Recoverable Costs	(E)	32,072	31,930	31,786	31,643	31,500	31,357	31,214	31,071	30,929	30,786	30,643	30,500	375,431
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	nes 12 + 13)	\$32,072	\$31,930	\$31,786	\$31,643	\$31,500	\$31,357	\$31,214	\$31,071	\$30,929	\$30,786	\$30,643	\$30,500	\$375,431

Notes:

- (A) Applicable depreciable base for Big Bend; accounts 312.41 (\$2,676,217) and 312.42 (\$2,341,517)
- (R) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002). (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rates are 4.0% and 3.7%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

Tampa Electric Company

Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2013 to December 2013

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

End of Beginning of Projected Period March November Line Description Period Amount February April May July September October December Total January June August Investments a. Expenditures/Additions \$0 80 \$0 \$0 ቋስ 80 \$0 \$0 \$0 \$0 \$0 \$0 \$0 b. Clearings to Plant 0 0 0 0 0 0 0 0 0 0 0 c. Retirements 0 0 0 0 0 0 0 0 0 0 O 0 d. Other 0 0 0 0 ٥ 0 0 0 0 0 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 Less: Accumulated Depreciation (403,565)(405,875)(408, 185)(410,495)(412,805)(415,115) (417, 425)(419,735)(422,045)(424, 355)(426,665)(428, 975)(431, 285)CWIP - Non-Interest Bearing ٥ 0 0 ٥ 0 0 0 Net Investment (Lines 2 + 3 + 4) \$462,646 460,336 458,026 455,716 453,406 451,096 448,786 446,476 444,166 441,856 439,546 437,236 434,926 Average Net Investment 461,491 459,181 456,871 454,561 452,251 449,941 447,631 445,321 443,011 440,701 438,391 436,081 Return on Average Net Investment a. Equity Component Grossed Up For Taxes (B) 3,026 3,011 2,996 2,981 2,966 2,951 2,935 2,920 2,905 2,890 2,875 2,860 \$35,316 b. Debt Component Grossed Up For Taxes (C) 1,061 1,055 1,050 1,045 1,039 1,034 1,029 1,024 1.018 1.013 1,008 1,002 12,378 8. Investment Expenses a. Depreciation (D) 2,310 2,310 2,310 2,310 2.310 2,310 2.310 2,310 2,310 2.310 2.310 2,310 27,720 b. Amortization 0 0 0 O 0 0 0 0 0 0 0 c. Dismantlement 0 0 0 0 0 0 0 0 0 0 Ω 0 0 d. Property Taxes 0 0 0 0 0 0 0 0 0 0 0 0 0 e Other 0 0 0 n n n 0 0 n 6,397 6.376 9. Total System Recoverable Expenses (Lines 7 + 8) 6.356 6.336 6.315 6.274 6,254 6,233 6,213 6,172 6,295 6,193 75,414 Recoverable Costs Allocated to Energy 6,397 6,376 6.356 6,336 6,315 6,295 6.274 6.254 6,233 6,213 6,193 6,172 75,414 b. Recoverable Costs Allocated to Demand 0 0 0 0 0 0 0 0 0 0 0 0 0 10. Energy Jurisdictional Factor 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 Demand Jurisdictional Factor 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 1,0000000 1.0000000 1.0000000 1.0000000 1.0000000 1.0000000 12. Retail Energy-Related Recoverable Costs (E) 6,397 6,376 6,356 6,336 6,315 6,295 6,274 6,254 6,233 6,213 6,193 6,172 75,414 Retail Demand-Related Recoverable Costs (F)

Notes:

(A) Applicable depreciable base for Big Bend; account 315.44

Total Jurisdictional Recoverable Costs (Lines 12 + 13)

(B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).

\$6,397

\$6,376

\$6,356

\$6,336

\$6,315

\$6,295

\$6,274

\$6,254

\$6,233

\$6,213

\$6,193

- (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rate is 3.2%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

\$75,414

\$6,172

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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

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

Line	Description	Beginning of Period Amount	Projected Janaury	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)	\$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.	Less: Accumulated Depreciation	(189,352)	(190,762)	(192,172)	(193,582)	(194,992)	(196,402)	(197,812)	(199,222)	(200,632)	(202,042)	(203,452)	(204,862)	(206, 272)	
4.	CWIP - Non-Interest Bearing	0	0	0	O	o o	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$308,226	306,816	305,406	303,996	302,586	301,176	299,766	298,356	296,946	295,536	294,126	292,716	291,306	
6.	Average Net Investment		307,521	306,111	304,701	303,291	301,881	300,471	299,061	297,651	296,241	294,831	293,421	292,011	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	ixes (B)	2,017	2,007	1,998	1,989	1,980	1,970	1,961	1,952	1,943	1,933	1,924	1,915	\$23,589
	b. Debt Component Grossed Up For Tax	es (C)	707	704	700	697	694	691	687	684	681	678	674	671	8,268
8.	Investment Expenses														
	a. Depreciation (D)		1.410	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410	16,920
	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)	4.134	4,121	4,108	4,096	4,084	4,071	4,058	4,046	4,034	4,021	4,008	3,996	48,777
	a. Recoverable Costs Allocated to Energ	y .	0	0	O	0	0	0	0	0	0	o o	Ò	0	0
	b. Recoverable Costs Allocated to Dema	ind	4,134	4,121	4,108	4,096	4,084	4,071	4,058	4,046	4,034	4,021	4,008	3,996	48,777
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1,0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1,0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
12.	Retail Energy-Related Recoverable Cost:	s (F)	0	0	0	0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Cos		4,134	4,121	4.108	4,096	4.084	4,071	4.058	4.046	4.034	4.021	4,008	3,996	48,777
14.	Total Jurisdictional Recoverable Costs (L		\$4,134	\$4,121	\$4,108	\$4,096	\$4,084	\$4,071	\$4,058	\$4,046	\$4,034	\$4,021	\$4,008	\$3,996	\$48,777

- Notes:

 (A) Applicable depreciable base for Big Bend; account 312.40

 Rosed on ROE of 11.25% and we (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
 - (C) Line 6 x 2.7582% x 1/12.
 - (D) Applicable depreciation rate is 3.4%
 - (E) Line 9a x Line 10
 - (F) Line 9b x Line 11

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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

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 M ay	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	investments a. Expenditures/Additions b. Clearings to Plant		\$0 0	\$0											
	c. Retirements d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2. 3. 4.	Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing	\$818,401 (311,452) 0	\$818,401 (313,771) 0	\$818,401 (316,090) 0	\$818,401 (318,409) 0	\$818,401 (320,728) 0	\$818,401 (323,047) 0	\$818,401 (325,366) 0	\$818,401 (327,685) 0	\$818,401 (330,004) 0	\$818,401 (332,323) 0	\$818,401 (334,642) 0	\$818,401 (336,961) 0	\$818,401 (339,280) 0	
5,	Net Investment (Lines 2 + 3 + 4)	\$506,949	504,630	502,311	499,992	497,673	495,354	493,035	490,716	488,397	486,078	483,759	481,440	479,121	
6.	Average Net Investment		505,790	503,471	501,152	498,833	496,514	494,195	491,876	489,557	487,238	484,919	482,600	480,281	
7.	Return on Average Net Investment a. Equity Component Grossed Up For Ta b. Debt Component Grossed Up For Tax		3,317 1,163	3,302 1,157	3,2 8 6 1,152	3,271 1,147	3,256 1,141	3,241 1,136	3,226 1,131	3,210 1,125	3,195 1,120	3,180 1,115	3,165 1,109	3,150 1,104	\$38,799 13,600
8.	Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other		2,319 0 0 0 0	2,319 0 0 0 0	2,319 0 0 0 0	2,319 0 0 0	2,319 0 0 0 0	27,828 0 0 0 0							
9.	Total System Recoverable Expenses (Lin a. Recoverable Costs Allocated to Energ b. Recoverable Costs Allocated to Dema	y	6,799 0 6,799	6,778 0 6,778	6,757 0 6,757	6,737 0 6,737	6,716 0 6,716	6,696 0 6,696	6,676 0 6,676	6,654 0 6,654	6,634 0 6,634	6,614 0 6,614	6,593 0 6,593	6,573 0 6,573	80,227 0 80,227
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000	1,0000000 1.0000000											
12. 13. 14.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Cost Total Jurisdictional Recoverable Costs (L	ts (F)	0 6,799 \$6,799	0 6,778 \$6,778	0 6,757 \$6,757	0 6,737 \$6,737	0 6,716 \$6,716	0 6,696 \$6,696	0 6,676 \$6,676	0 6,654 \$6,654	0 6,634 \$6,634	0 6,614 \$6,614	0 6,593 \$6,593	0 6,573 \$6,573	0 80,227 \$80,227

Notes:

- (A) Applicable depreciable base for Big Bend; account 312.40
 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
- (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rate is 3.4%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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	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)	\$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	(658,568)	(662,956)	(667,344)	(671,732)	(676,120)	(680,508)	(684,896)	(689,284)	(693,672)	(698,060)	(702,448)	(706,836)	(711,224)	
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)	\$657,689	653,301	648,913	644,525	640,137	635,749	631,361	626,973	622,585	618,197	613,809	609,421	605,033	
6.	Average Net Investment		655,495	651,107	646,719	642,331	637,943	633,555	629,167	624,779	620,391	616,003	611,615	607,227	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Tax	xes (B)	4,299	4,270	4,241	4,212	4,183	4,155	4,126	4,097	4,068	4,040	4,011	3,982	\$49,684
	b. Debt Component Grossed Up For Taxe	es (C)	1,507	1,497	1,486	1,476	1,466	1,456	1,446	1,436	1,426	1,416	1,406	1,396	17,414
8.	Investment Expenses														
٥.	a. Depreciation (D)		4.388	4.388	4,388	4,388	4,388	4.388	4,388	4,388	4,388	4,388	4.388	4,388	52,656
	b. Amortization		0	0	0	0	0	0	0	0	,,,,,,	0	0	0	0
	c. Dismantlement		0	0	0	Ö	0	Ō	Ō	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	00
9.	Total System Recoverable Expenses (Line	es 7 + 8)	10,194	10,155	10.115	10.076	10.037	9,999	9.960	9,921	9,882	9.844	9,805	9,766	119,754
	a. Recoverable Costs Allocated to Energy		10,194	10,155	10,115	10,076	10,037	9,999	9,960	9,921	9,882	9,844	9,805	9,766	119,754
	b. Recoverable Costs Allocated to Demai	nd	0	Ô	Ó	0	´ 0	´ 0	0	0	, <u> </u>	0	0	O	0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
12.	Retail Energy-Related Recoverable Costs	(E)	10,194	10,155	10,115	10,076	10,037	9,999	9,960	9,921	9,882	9,844	9,805	9,766	119,754
13.	Retail Demand-Related Recoverable Cost	s (F)	0	0	0	0	0	0	0	0	0	O	0	0	0
14.	Total Jurisdictional Recoverable Costs (Li	nes 12 + 13)	\$10,194	\$10,155	\$10,115	\$10,076	\$10,037	\$9,999	\$9,960	\$9,921	\$9,882	\$9,844	\$9,805	\$9,766	\$119,754

Notes:

- (A) Applicable depreciable base for Big Bend; account 312.41
- (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
- (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rate is 4.0%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 2 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	О	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)	\$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	(496,710)	(499,746)	(502,782)	(505,818)	(508,854)	(511,890)	(514,926)	(517,962)	(520,998)	(524,034)	(527,070)	(530,106)	(533,142)	
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)	\$488,084	485,048	482,012	478,976	475,940	472,904	469,868	466,832	463,796	460,760	457,724	454,688	451,652	
6.	Average Net Investment		486,566	483,530	480,494	477,458	474,422	471,386	468,350	465,314	462,278	459,242	456,206	453,170	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	ixes (B)	3,191	3,171	3,151	3,131	3,111	3,091	3,071	3,051	3,032	3,012	2,992	2,972	\$36,976
	 b. Debt Component Grossed Up For Tax 	es (C)	1,118	1,111	1,104	1,097	1,090	1,083	1,077	1,070	1,063	1,056	1,049	1,042	12,960
8.	Investment Expenses														
٠.	a. Depreciation (D)		3.036	3.036	3,036	3,036	3.036	3,036	3.036	3,036	3.036	3.036	3.036	3.036	36,432
	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	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	00
9.	Total System Recoverable Expenses (Lin	es 7 + 8)	7,345	7,318	7,291	7,264	7,237	7,210	7,184	7,157	7,131	7,104	7,077	7,050	86,368
	a. Recoverable Costs Allocated to Energ		7,345	7,318	7,291	7,264	7,237	7,210	7,184	7,157	7,131	7,104	7,077	7,050	86,368
	b. Recoverable Costs Allocated to Dema	ind	0	0	0	. 0	O	Ō	0	0	0	0	O	0	0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
40	Date (I France) Date (I France) 1 C /	· (E)	7.045	7.040	7.00	7.00	7.007	7000	7.464	~ 4 ~~	7 444	7.45	7 0	7.050	80 000
12. 13.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Cost		7,345 0	7,318 0	7,291 0	7,264	7,237	7,210 0	7,184 0	7,157 0	7,131 0	7,104	7,077 0	7,050	86,368
13. 14.	Total Jurisdictional Recoverable Costs (L		\$7,345	\$7,318	\$7,291	\$7,264	\$7,237	\$7,210	\$7,184	\$7,157	\$7,131	\$7,104	\$7.077	\$7,050	\$86.368
14.	TOTAL JULISUICHORIAL RECOVERABLE COSTS (L.	RIESIZ TIO)	φ/ ₁ 340	a/,310	Φ/,Z91	₩1,204	Φ1,Z31	æ/,∠10	Ψ/,104	47,107	\$7,131	φ/,1U4	Ψ/,0//	₽7,050	\$00,300

- Notes:

 (A) Applicable depreciable base for Big Bend; account 312.42

 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
 - (C) Line 6 x 2.7582% x 1/12.
 - (D) Applicable depreciation rate is 3.7%
 - (E) Line 9a x Line 10
 - (F) Line 9b x Line 11

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Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Section 114 Mercury Testing Platform (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 b. Clearings to Plant c. Retirements d. Other		\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0 0	\$0 0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0
2. 3. 4. 5.	Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing Net Investment (Lines 2 + 3 + 4)	\$120,737 (34,387) 0 \$86,350	\$120,737 (34,679) 0 86,058	\$120,737 (34,971) 0 85,766	\$120,737 (35,263) 0 85,474	\$120,737 (35,555) 0 85,182	\$120,737 (35,847) 0 84,890	\$120,737 (36,139) 0 84,598	\$120,737 (36,431) 0 84,306	\$120,737 (36,723) 0 84,014	\$120,737 (37,015) 0 83,722	\$120,737 (37,307) 0 83,430	\$120,737 (37,599) 0 83,138	\$120,737 (37,891) 0 82,846	
6.	Average Net Investment		86,204	85,912	85,620	85,328	85,036	84,744	84,452	84,160	83,868	83,576	83,284	82,992	
7,	Return on Average Net Investment a. Equity Component Grossed Up For Tax b. Debt Component Grossed Up For Tax		565 198	563 197	561 197	560 196	558 195	556 195	554 194	552 193	550 193	548 192	546 191	544 191	\$6,657 2,332
8.	Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other		292 0 0 0	3,504 0 0 0											
9.	Total System Recoverable Expenses (Lin a. Recoverable Costs Allocated to Energ b. Recoverable Costs Allocated to Dema	у	1,055 1,055 0	1,052 1,052 0	1,050 1,050 0	1,048 1,048 0	1,045 1,045 0	1,043 1,043 0	1,040 1,040 0	1,037 1,037 0	1,035 1,035 0	1,032 1,032 0	1,029 1,029 0	1,027 1,027 0	12,493 12,493 0
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000												
12. 13. 14.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Cost Total Jurisdictional Recoverable Costs (Li	ts (F)	1,055 0 \$1,055	1,052 0 \$1,052	1,050 0 \$1,050	1,048 0 \$1,048	1,045 0 \$1,045	1,043 0 \$1,043	1,040 0 \$1,040	1,037 0 \$1,037	1,035 0 \$1,035	1,032 0 \$1,032	1,029 0 \$1,029	1,027 0 \$1,027	12,493 0 \$12,493

Notes:

- (A) Applicable depreciable base for Big Bend; account 311.40
- (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002). (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rate is 2.9% (E) Line 9a x Line 10
- (F) Line 9b x Line 11

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Units 1 and 2 FGD (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	\$100,000	\$100,000	\$150,000	\$118,135	\$180,000	\$648,135
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	1,801,284	18,135	734,693	2,554,112
	c. Retirements		0	0	0	0	0	0	0	0	0	0		0	
	d. Other - (G)		\$0	\$0	\$0	\$0	\$10,000	\$50,000	\$350,000	\$350,000	\$371,558	\$53,135	\$80,000	\$2,615	1,267,308
2.	Plant-in-Service/Depreciation Base (A)	\$89.357,235	\$89,357,235	\$89,357,235	\$89.357.235	\$89.357.235	\$89,357,235	\$89.357.235	\$89.357.235	\$89.357.235	\$89.357.235	\$91,158,519	\$91,176,654	\$91.911.347	
3.	Less: Accumulated Depreciation	(39,724,383)				(40,707,311)	(40,953,043)	(41,198,775)	(41,444,507)	(41,690,239)			(42,432,389)	(42,683,125)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	100,000	200,000	300,000	400,000	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$49,632,852	49,387,120	49,141,388	48,895,656	48,649,924	48,404,192	48,158,460	47,912,728	47,766,996	47,621,264	49,276,816	49,144,265	49,228,222	
6.	Average Net Investment		49,509,986	49,264,254	49,018,522	48,772,790	48,527,058	48,281,326	48,035,594	47,839,862	47,694,130	48,449,040	49,210,541	49,186,244	
7.	Return on Average Net Investment														
• • •	a. Equity Component Grossed Up For Ta	xes (B)	324,674	323,063	321,451	319,840	318,228	316,617	315.005	313,722	312,766	317.717	322,710	322,551	\$3.828,344
	b. Debt Component Grossed Up For Taxe		113,799	113,234	112,669	112,104	111,539	110,975	110,410	109,960	109,625	111,360	113,110	113,055	1,341,840
8	Investment Expenses														
٥.	a. Depreciation (D)		245,732	245,732	245,732	245.732	245,732	245,732	245,732	245,732	245,732	245,732	250.686	250,736	2,958,742
	b. Amortization		243,732	243,132	240,732	240,102	245,732	245,752	245,732	245,752	245,752	243,732	230,000	230,730	2,930,742
	c. Dismantlement		ñ	o o	Õ	ŏ	0	n	ŏ	ň	ŏ	ñ	Ů	Ô	ŏ
	d. Property Taxes		ŏ	ŏ	ő	ŏ	ŏ	ő	ŏ	ő	o o	ŏ	ő	ő	ŏ
	e. Other		ō	Ō	Ö	ō	ō	ō	ō	Ō	ō	ō	ō	Ō	Ō
_	Total Control Description Francisco (I in		204.005		070.050	077.070	075 460	070 004	074 447	000 111	000 100	074000	600 500	000 0 10	0.400.000
9.	Total System Recoverable Expenses (Line a. Recoverable Costs Allocated to Energy		684,205 684,205	682,029 682,029	679,852 679,852	677,676 677,676	675,499 675,499	673,324 673,324	671,147 671,147	669,414 669,414	668,123 668,123	674,809 674,809	686,506 686,506	686,342 686,342	8,128,926 8,128,926
	b. Recoverable Costs Allocated to Energy		004,205	002,029	079,002	0//,0/0	0/3,499	073,324	6/1,14/	009,414	000,123	074,009	000,000	000,342	0,120,920
	b. Treestellable obside Allocated to Dolling	iu.	v	Ū	·	v	v	·	Ū	Ū	U	v	·	J	·
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
12.	Retail Energy-Related Recoverable Costs	(F)	684,205	682,029	679,852	677,676	675,499	673,324	671,147	669,414	668,123	674,809	686,506	686,342	8,128,926
13.	Retail Demand-Related Recoverable Costs		004,203 n	002,029 N	079,032	0,1,00	073,499	073,324	0/1,14/	009,414	000,123	074,005	000,000	000,342	0,120,920
14.	Total Jurisdictional Recoverable Costs (Li		\$684,205	\$682,029	\$679,852	\$677.676	\$675,499	\$673,324	\$671,147	\$669,414	\$668,123	\$674,809	\$686.506	\$686,342	\$8,128,926
•															

Notes:

- (A) Applicable depreciable base for Big Bend; account 312.46
 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
- (C) Line 6 x 2.7582% x 1/12. (D) Applicable depreciation rates are 3.3%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11
- (G) Line 1d Expenditures include AFUDC and are for tracking purposes only. Depreciation and Return are not calculated until the project goes in-service,

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Return on Capital Investments, Depreciation and Taxes For Project: Big Bend FGD Optimization and Utilization (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		ő	ő	ő	ő	ő	Õ	ő	ő	ő	ő	ő	ő	••
	c. Retirements		0	0	0	Ö	0	0	Ō	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)	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	\$21,739,737	
3.	Less: Accumulated Depreciation	(6,074,485)	(6,119,759)	(6,165,033)	(6,210,307)	(6,255,581)	(6,300,855)	(6,346,129)	(6,391,403)	(6,436,677)	(6,481,951)	(6,527,225)	(6,572,499)	(6,617,773)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0		0	0	0	0	00	
5.	Net Investment (Lines 2 + 3 + 4)	\$15,665,252	15,619,978	15,574,704	15,529,430	15,484,156	15,438,882	15,393,608	15,348,334	15,303,060	15,257,786	15,212,512	15,167,238	15,121,964	
6.	Average Net Investment		15,642,615	15,597,341	15,552,067	15,506,793	15,461,519	15,416,245	15,370,971	15,325,697	15,280,423	15,235,149	15,189,875	15,144,601	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta		102,580	102,283	101,987	101,690	101,393	101,096	100,799	100,502	100,205	99,908	99,611	99,315	\$1,211,369
	b. Debt Component Grossed Up For Taxe	∋s (C)	35,955	35,850	35,746	35,642	35,538	35,434	35,330	35,226	35,122	35,018	34,914	34,810	424,585
8.	Investment Expenses														
	Depreciation (D)		45,274	45,274	45,274	45,274	45,274	45,274	45,274	45,274	45,274	45,274	45,274	45,274	543,288
	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	<u>u</u>	0		<u>u</u>		<u> </u>	0	0	U	<u> </u>	<u> </u>	0
9.	Total System Recoverable Expenses (Line	es 7 + 8)	183,809	183,407	183,007	182,606	182,205	181.804	181,403	181.002	180,601	180,200	179,799	179,399	2,179,242
	a. Recoverable Costs Allocated to Energy		183,809	183,407	183,007	182,606	182,205	181,804	181,403	181,002	180,601	180,200	179,799	179,399	2,179,242
	b. Recoverable Costs Allocated to Demai	nd	0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1,0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
12.	Retail Energy-Related Recoverable Costs	(F)	183,809	183,407	183,007	182,606	182,205	181.804	181,403	181,002	180,601	180,200	179,799	179,399	2,179,242
13.	Retail Demand-Related Recoverable Cos		0.000	0	0	0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Li		\$183,809	\$183,407	\$183,007	\$182,606	\$182,205	\$181,804	\$181,403	\$181,002	\$180,601	\$180,200	\$179,799	\$179,399	\$2,179,242

Notes:

- (A) Applicable depreciable base for Big Bend; accounts 311.45 (\$39,818) and 312.45 (\$21,699,919)
 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
- (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rates are 2.0% and 2.5% (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend NO, 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 d. Other		U	U	0	Ü	Ü	U	Ü	0	Ü	0	0	0	
	d. Other		U	U	U	U	U	U	U	U	U	U	U	U	
2.	Plant-in-Service/Depreciation Base (A)	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	\$3,190,852	
3.	Less: Accumulated Depreciation	2,483,019	2,472,835	2,462,651	2,452,467	2,442,283	2,432,099	2,421,915	2,411,731	2,401,547	2,391,363	2,381,179	2,370,995	2,360,811	
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)	\$5,673,871	5,663,687	5,653,503	5,643,319	5,633,135	5,622,951	5,612,767	5,602,583	5,592,399	5,582,215	5,572,031	5,561,847	5,551,663	
6.	Average Net Investment		5,668,779	5,658,595	5,648,411	5,638,227	5,628,043	5,617,859	5,607,675	5,597,491	5,587,307	5,577,123	5,566,939	5,556,755	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	xes (B)	37,174	37,108	37,041	36,974	36,907	36,841	36,774	36,707	36,640	36,573	36,507	36,440	\$441,686
	b. Debt Component Grossed Up For Taxe	es (C)	13,030	13,006	12,983	12,959	12,936	12,913	12,889	12,866	12,842	12,819	12,796	12,772	154,811
8.	Investment Expenses														
	a Depreciation (D)		10,184	10.184	10.184	10,184	10,184	10,184	10,184	10,184	10.184	10.184	10.184	10,184	122,208
	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	00_	0	0	0	0	00
9.	Total System Recoverable Expenses (Line	es 7 + 81	60,388	60,298	60,208	60.117	60.027	59,938	59.847	59,757	59,666	59,576	59.487	59.396	718,705
	a. Recoverable Costs Allocated to Energy		60,388	60,298	60,208	60,117	60,027	59,938	59,847	59,757	59,666	59,576	59,487	59,396	718,705
	b. Recoverable Costs Allocated to Demai	nd	0	0	0	0	0	0	0	. 0	0	0	0	O	0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
12.	Retail Energy-Related Recoverable Costs	(E)	60,388	60,298	60,208	60,117	60.027	59.938	59.847	59,757	59.666	59,576	59,487	59.396	718,705
13.	Retail Demand-Related Recoverable Costs		00,366	00,290 N	60,208 0	00,117	60,02 <i>1</i>	39,936	39,647 N	39,737 O	39,000 N	39,570 0	39,461 0	99,390 0	7 16,705 N
14.	Total Jurisdictional Recoverable Costs (Li		\$60,388	\$60,298	\$60,208	\$60,117	\$60,027	\$59,938	\$59,847	\$59,757	\$59,666	\$59,576	\$59,487	\$59,396	\$718,705

Notes:

- (A) Applicable depreciable base for Big Bend; accounts 312.41 (\$1,675,171), 312.42 (\$1,075,718), and 312.43 (\$439,963). (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002). (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rates are 4.0%, 3.7%, and 3.5%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount Janaury 2013 to December 2013

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 b. Clearings to Plant c. Retirements d. Other		\$476,900 0 0 0	\$1,750,000 0 0	\$1,750,000 0 0 0	\$1,750,000 0 0 0	\$1,500,000 8,797,800 0 0	\$150,000 150,000 0 0	\$50,000 50,000 0	\$80,000 30,000 0 0	\$70,000 20,000 0 0	\$76,000 0 0 0	\$125,000 0 0 0	\$125,000 426,000 0 0	\$7,902,900 \$9,473,800
2. 3. 4. 5.	Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing Net Investment (Lines 2 + 3 + 4)	\$8,519,606 (2,038,295) 1,570,900 \$8,052,211	\$8,519,606 (2,064,590) 2,047,800 8,502,816	\$8,519,606 (2,090,885) 3,797,800 10,226,521	\$8,519,606 (2,117,180) 5,547,800 11,950,226	\$8,519,606 (2,143,475) 7,297,800 13,673,931	\$17,317,406 (2,169,770) 0 15,147,636	\$17,467,406 (2,222,458) 0 15,244,948	\$17,517,406 (2,275,596) 0 15,241,810	\$17,547,406 (2,328,884) 50,000 15,268,522	\$17,567,406 (2,382,262) 100,000 15,285,144	\$17,567,406 (2,435,700) 176,000 15,307,706	\$17,567,406 (2,489,138) 301,000 15,379,268	\$17,993,406 (2,542,576) 0 15,450,830	
6.	Average Net Investment		8,277,514	9,364,669	11,088,374	12,812,079	14,410,784	15,196,292	15,243,379	15,255,166	15,276,833	15,296,425	15,343,487	15,415,049	
7.	Return on Average Net investment a. Equity Component Grossed Up For Tax b. Debt Component Grossed Up For Taxe		54,282 19,026	61,411 21,525	72,715 25,487	84,018 29,449	94,502 33,123	99,653 34,929	99,962 35,037	100,040 35,064	100,182 35,114	100,310 35,159	100,619 35,267	101,088 35,431	\$1,068,782 374,611
8.	Investment Expenses a. Depreciation (D) b. Amortization c. Dismantement d. Property Taxes e. Other		26,295 0 0 0 0	26,295 0 0 0 0	2 6,295 0 0 0	26,295 0 0 0 0	26,295 0 0 0 0	52,688 0 0 0	53,138 0 0 0	53,288 0 0 0 0	53,378 0 0 0 0	53,438 0 0 0 0	53,438 0 0 0 0	53,438 0 0 0 0	504,281 0 0 0
9.	Total System Recoverable Expenses (Line a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Deman		99,603 99,603 0	109,231 109,231 0	124,497 124,497 0	139,762 139,762 0	153,920 153,920 0	187,270 187,270 0	188,137 188,137 0	188,392 188,392 0	188,674 188,674 0	188,907 188,907 0	189,324 189,324 0	189,957 189,957 0	1,947,674 1,947,674 0
10. 11.	Energy Jurisdictional Factor Dernand Jurisdictional Factor		1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	
12. 13. 14.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Costs Total Jurisdictional Recoverable Costs (Lin	s (F)	99,603 0 \$99,603	109,231 0 \$109,231	124,497 0 \$124,497	139,762 0 \$139,762	153,920 0 \$153,920	187,270 0 \$187,270	188,137 0 \$188,137	188,392 0 \$188,392	188,674 0 \$188,674	188,907 0 \$188,907	189,324 0 \$189,324	189,957 0 \$189,957	1,947,674 0 \$1,947,674

- Notes:

 (A) Applicable depreciable base for Big Bend; accounts 312.41 (\$1,513,263), 312.42 (\$5,153,072), 312.43 (\$955,619), 315.40 (\$176,000), 315.41 (\$142,504), 315.42 (\$125,000), 315.44 (\$351,594), and 315.43 (\$9,576,354) (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).

 - (C) Line 6 x 2.7582% x 1/12
 - (D) Applicable depreciation rates are 4.0%, 3.7%, 3.5%, 3.7%, 3.5%, 3.3%, 3.2%, and 3.6%
 - (E) Line 9a x Line 10
 - (F) Line 9b x Line 11

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Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

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 b. Clearings to Plant c. Retirements d. Other		\$0 0 0	\$0 0 0	\$0 0 0 0	\$0 0 0	\$0 0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0 0	\$0 0 0 0	\$0 0 0	\$0
2. 3. 4. 5.	Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Inverse Bearing	\$1,561,473 (470,970) 0 \$1,090,503	\$1,561,473 (475,394) 0 1,086,079	\$1,561,473 (479,818) 0 1,081,655	\$1,561,473 (484,242) 0 1,077,231	\$1,561,473 (488,666) 0	\$1,561,473 (493,090) 0 1,068,383	\$1,561,473 (497,514) 0 1,063,959	\$1,561,473 (501,938) 0 1,059,535	\$1,561,473 (506,362) 0	\$1,561,473 (510,786) 0 1,050,687	\$1,561,473 (515,210) 0 1,046,263	\$1,561,473 (519,634) 0 1,041,839	\$1,561,473 (524,058) 0 1,037,415	
6.	Net Investment (Lines 2 + 3 + 4) Average Net Investment	\$1,090,503	1,088,079	1,081,655	1,079,443	1,075,019	1,008,383	1,063,959	1,061,747	1,055,111	1,052,899	1,048,475	1,041,839	1,037,415	
7.	Return on Average Net investment a. Equity Component Grossed Up For Taxe b. Debt Component Grossed Up For Taxe		7,137 2,501	7,108 2,491	7,079 2,481	7,050 2,471	7,021 2,461	6,992 2,451	6,963 2,440	6,934 2,430	6,905 2,420	6,876 2,410	6,847 2,400	6,818 2,390	\$83,730 29,346
8.	Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes		4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	4,424 0 0 0	53,088 0 0
9.	e. Other Total System Recoverable Expenses (Line a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Demar		14,062 14,062 0	14,023 14,023 0	13,984 13,984 0	13,945 13,945 0	13,906 13,906 0	13,867 13,867 0	13,827 13,827 0	13,788 13,788 0	13,749 13,749 0	13,710 13,710 0	13,671 13,671 0	13,632 13,632 0	166,164 166,164 0
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	
12. 13. 14.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Cost Total Jurisdictional Recoverable Costs (Lir	s (F)	14,062 0 \$14,062	14,023 0 \$14,023	13,984 0 \$13,984	13,945 0 \$13,945	13,906 0 \$13,906	13,867 0 \$13,867	13,827 0 \$13,827	13,788 0 \$13,788	13,749 0 \$13,749	13,710 0 \$13,710	13,671 0 \$13,671	13,632 0 \$13,632	166,164 0 \$166,164

Notes

- (A) Applicable depreciable base for Polk; account 342.81
- (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
- (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rate is 3.4%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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

	(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 b. Clearings to Plant c. Retirements d. Other		\$0 0 0	\$0 0 0 0	\$0 0 0 0	\$0 0 0	\$0 0 0 0	\$0 0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0
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	\$2,558,730	
3.	Less: Accumulated Depreciation	(525,614)		(538,408)	(544,805)	(551,202)	(557,599)	(563,996)	(570,393)	(576,790)	(583,187)	(589,584)	(595,981)	(602,378)	
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)	\$2,033,116	2,026,719	2,020,322	2,013,925	2,007,528	2,001,131	1,994,734	1,988,337	1,981,940	1,975,543	1,969,146	1,962,749	1,956,352	
6.	Average Net Investment		2,029,918	2,023,521	2,017,124	2,010,727	2,004,330	1,997,933	1,991,536	1,985,139	1,978,742	1,972,345	1,965,948	1,959,551	
7.	Return on Average Net Investment a. Equity Component Grossed Up For Taxes (B) b. Debt Component Grossed Up For Taxes (C)		13,312 4,666	13,270 4,651	13,228 4,636	13,186 4,622	13,144 4,607	13,102 4,592	13,060 4,578	13,018 4,563	12,976 4,548	12,934 4,533	12,892 4,519	12,850 4,504	\$156,972 55,019
8.	Investment Expenses	, ,	0.007	0.007	0.007	0.007	0.007	0.007	0.007		,		·	0.007	
	Depreciation (D) Amortization		6,397	6,397	6,397	6,397	6,397	6,397	6,397	6,397	6,397	6,397	6,397	6,397	76,764
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	Ö	n	ŏ	Ô	0	0	0	0	0	0	0	n
	e. Other		ŏ	ō	ō	ŏ	ō	ō	ŏ	ő	õ	ō	ő	ŏ	ō
9.	Total System Recoverable Expenses (Line a. Recoverable Costs Allocated to Energy	y .	24,375 24,375	24,318 24,318	24,261 24,261	24,205 24,205	24,148 24,148	24,091 24,091	24,035 24,035	23,978 23,978	23,921 23,921	23,864 23,864	23,808 23,808	23,751 23,751	288,755 288,755
	 Recoverable Costs Allocated to Demai 	nd	0	0	0	0	0	0	0	0	0	0	0	0	0
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1,0000000	1.0000000 1.0000000								
12.	Retail Energy-Related Recoverable Costs	(E)	24,375	24,318	24,261	24,205	24,148	24.091	24,035	23,978	23,921	23,864	23,808	23,751	288,755
13.	Retail Demand-Related Recoverable Cost		0	0	0	0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Lin	nes 12 + 13)	\$24,375	\$24,318	\$24,261	\$24,205	\$24,148	\$24,091	\$24,035	\$23,978	\$23,921	\$23,864	\$23,808	\$23,751	\$288,755

Notes:

- (A) Applicable depreciable base for Big Bend; account 312.44
- (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002). (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rate is 3.0%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 1 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														
	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)	\$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	(335,809)		(345,803)	(352,300)	(357,797)	(363,294)	(368,791)	(374,288)	(379,785)	(385,282)	(390,779)	(396,276)	(401,773)	
4.	CWIP - Non-Interest Bearing	0		· · · o	o	0		o o		ì o	` o	0	` 0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$1,313,312	1,307,815	1,302,318	1,296,821	1,291,324	1,285,827	1,280,330	1,274,833	1,269,336	1,263,839	1,258,342	1,252,845	1,247,348	
6.	Average Net Investment		1,310,564	1,305,067	1,299,570	1,294,073	1,288,576	1,283,079	1,277,582	1,272,085	1,266,588	1,261,091	1,255,594	1,250,097	
7.	Return on Average Net investment														
	a. Equity Component Grossed Up For Tax	xes (B)	8,594	8,558	8,522	8,486	8,450	8,414	8,378	8,342	8,306	8,270	8,234	8,198	\$100,752
	b. Debt Component Grossed Up For Taxe	es (C)	3,012	3,000	2,987	2,974	2,962	2,949	2,937	2,924	2,911	2,899	2,886	2,873	35,314
8.	Investment Expenses														
	a. Depreciation (D)		5,497	5,497	5,497	5.497	5.497	5,497	5,497	5,497	5.497	5,497	5,497	5,497	65,964
	b. Amortization		. 0	. 0	0	. 0	. 0	0	0	. 0	. 0	. 0	. 0	Ò	. 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 (Line	es 7 + 8)	17,103	17.055	17,006	16,957	16,909	16,860	16,812	16,763	16,714	16,666	16,617	16,568	202.030
	a. Recoverable Costs Allocated to Energy		17,103	17,055	17,006	16,957	16,909	16,860	16,812	16,763	16,714	16,666	16,617	16,568	202,030
	b. Recoverable Costs Allocated to Demar	nd	0	0	0	0	0	0	0	0	0	0	0	0	. 0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
12.	Retail Energy-Related Recoverable Costs	/E)	17,103	17,055	17,006	16,957	16,909	16,860	16,812	16,763	16,714	16,666	16,617	16,568	202,030
12.	Retail Demand-Related Recoverable Costs		17,103	17,055	17,000	10 ,9 5/ 0	0	10,000	10,812	10,703	10,714	000,01	0 .017	aoc,or	202,030
14.	Total Jurisdictional Recoverable Costs (Li		\$17,103	\$17,055	\$17,006	\$16,957	\$16,909	\$16,860	\$16.812	\$16,763	\$16.714	\$16,666	\$16.617	\$16,568	\$202,030
, ,,		,	7.1,700	5.1,000	J.7,000	4.0,00 ,	+ . 0,566	J.0,000	7.0,012		J 10,7 1-7	5.0,000	Ţ, O,O ,1	4.5,000	72-2,000

- (A) Applicable depreciable base for Big Bend; account 312.41
 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
- (C) Line 6 x 2.7582% x 1/12.
 (D) Applicable depreciation rate is 4.0%
- (E) Line 9a x Line 10 (F) Line 9b x Line 11

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Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2013 to December 2013

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

(iii Dollars)														
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
Investments a. Expenditures/Additions b. Clearings to Plant c. Ratirements		\$0 0	\$0 0	\$0 0	\$0 0	\$0 0	\$0 0	\$0 0	\$0 0	\$0 0	\$0 0	\$0 0 0	\$0 0	\$0 \$0
d. Other		ō	ŏ	ō	ŏ	ŏ	ō	ő	ő	ō	ŏ	Ö	ō	
Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing	\$1,581,887 (301,700) 0	\$1,581,887 (306,577) 0	\$1,581,887 (311,454) 0	\$1,581,887 (316,331) 0	\$1,581,887 (321,208) 0	\$1,581,887 (326,085) 0	\$1,581,887 (330,962) 0	(335,839) 0	(340,716) 0	\$1,581,887 (345,593) 0	\$1,581,887 (350,470) 0	\$1,581,887 (355,347) 0	\$1,581,887 (360,224) 0	
Net Investment (Lines 2 + 3 + 4)	\$1,280,187	1,275,310	1,270,433	1,265,556	1,260,679	1,255,802	1,250,925	1,246,048	1,241,171	1,236,294	1,231,417	1,226,540	1,221,663	
Average Net Investment		1,277,749	1,272,872	1,267,995	1,263,118	1,258,241	1,253,364	1,248,487	1,243,610	1,238,733	1,233,856	1,228,979	1,224,102	
		8,379 2,937	8,347 2,926	8,315 2,914	8,283 2,903	8,251 2,892	8,219 2,881	8,187 2,870	8,155 2,858	8,123 2,847	8,091 2,836	8,059 2,825	8,027 2,814	\$98,436 34,503
Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other		4,877 0 0 0	4,877 0 0 0	4,877 0 0 0	4,877 0 0 0	4,877 0 0 0	4,877 0 0 0	4,877 0 0 0	4,877 0 0 0	4,877 0 0 0	4,877 0 0 0	4,877 0 0	4,877 0 0 0	58,524 0 0 0
Total System Recoverable Expenses (Line a. Recoverable Costs Allocated to Energy	y	16,193 16,193 0	16,150 16,150 0	16,106 16,106 0	16,063 16,063 0	16,020 16,020 0	15,977 15,977 0	15,934 15,934 0	15,890 15,890 0	15,847 15,847 0	15,804 15,804 0	15,761 15,761 0	15,718 15,718 0	191,463 191,463 0
Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000	1.0000000 1.0000000	1,0000000 1,0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1,0000000 1,0000000	1.0000000 1.0000000	1.0000000 1.0000000	
Retail Demand-Related Recoverable Cost	s (F)	16,193 0 \$16,193	16,150 0 \$16,150	16,106 0 \$16,106	16,063 0 \$16,063	16,020 0 \$16,020	15,977 0 \$15,977	15,934 0 \$15,934	15,890 0 \$15,890	15,847 0 \$15,847	15,804 0 \$15,804	15,761 0 \$15,761	15,718 0 \$15,718	191,463 0 \$191,463
	Investments a. Expenditures/Additions b. Clearings to Plant c. Retirements d. Other Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing Net Investment (Lines 2 + 3 + 4) Average Net Investment Return on Average Net Investment a. Equity Component Grossed Up For Tax b. Debt Component Grossed Up For Tax Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other Total System Recoverable Expenses (Lin a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Demail Energy Jurisdictional Factor Demand Jurisdictional Factor Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Costs Retail Demand-Related Recoverable Costs	Description Investments a. Expenditures/Additions b. Clearings to Plant c. Retirements d. Other Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing Net Investment (Lines 2 + 3 + 4) Average Net Investment Return on Average Net Investment a. Equity Component Grossed Up For Taxes (B) b. Debt Component Grossed Up For Taxes (C) Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other Total System Recoverable Expenses (Lines 7 + 8) a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Demand Energy Jurisdictional Factor	Description	Description	Description	Description Beginning of Projected January Projected Projected April	Description Beginning of Period Amount Projected Perojected Projected April Projected April	Description Beginning of Projected Projected Projected Projected Projected April Projected Proj	Description Beginning of Period Amount Projected Period Projected Period Projected Projec	Description Beginning of Projected Project	Projected Pro	Projected Pro	Projected Proj	Description Description Description Projected Projected Projected Projected Mayer Projected Mayer Projected Projec

Notes:

- (A) Applicable depreciable base for Big Bend; account 312.42
- (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
- (C) Line 6 x 2.7582% x 1/12.
- (D) Applicable depreciation rate is 3.7%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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<u>Tampa Electric Company</u> Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

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

Investments	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
b. Clearings to Plant	1.	Investments														
C. Retirements D. D		a. Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
a. Other 0 0 0 0 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
2. Plant-in-Service/Depreciation Base (A) \$2,706,507 \$2				0	0	0	0	0	0	0	0	0	0	0	0	
3. Less: Accumulated Depreciation (355,022) (362,975) (379,828) (378,881) (386,834) (394,787) (402,740) (410,693) (418,646) (426,599) (434,552) (432,552) (432,552) (432,552) (450,458) (4		d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
CWIP - Nort-Interest Bearing O O O O O O O O O	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	
5. Net Investment (Lines 2 + 3 + 4)	3.	Less: Accumulated Depreciation	(355,022)	(362,975)	(370,928)	(378,881)	(386,834)	(394,787)	(402,740)	(410,693)	(418,646)	(426,599)	(434,552)	(442,505)	(450,458)	
6. Average Net Investment 2,347,509 2,339,556 2,331,603 2,323,650 2,315,697 2,307,744 2,299,791 2,291,838 2,283,885 2,275,932 2,267,979 2,260,026 7. Return on Average Net Investment a. Equity Component Grossed Up For Taxes (B) b. Debt Component Grossed Up For Taxes (C) 5,396 5,377 5,359 5,341 5,323 5,304 5,286 5,286 5,286 5,280 5,281 15,029 14,977 14,925 14,873 14,821 \$181,290 63,543 8. Investment Expenses a. Depreciation (D) Amortization 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
7. Return on Average Net Investment a. Equity Component Grossed Up For Taxes (B) b. Debt Component Grossed Up For Taxes (C) 5,396 5,377 5,359 5,341 5,323 5,304 5,286 5,286 5,286 5,286 5,286 5,286 5,287 5,281 5,281 5,283 5,	5.	Net Investment (Lines 2 + 3 + 4)	\$2,351,485	2,343,532	2,335,579	2,327,626	2,319,673	2,311,720	2,303,767	2,295,814	2,287,861	2,279,908	2,271,955	2,264,002	2,256,049	
a. Equity Component Grossed Up For Taxes (B) b. Debt Component Grossed Up For Taxes (C) 5,396 5,377 5,359 5,341 5,323 5,304 5,305 5,306 5,306 5,306 5,266 5,266 5,266 5,267 5,	6.	Average Net Investment		2,347,509	2,339,556	2,331,603	2,323,650	2,315,697	2,307,744	2,299,791	2,291,838	2,283,885	2,275,932	2,267,979	2,260,026	
b. Debt Component Grossed Up For Taxes (C) 5,396 5,377 5,359 5,341 5,323 5,304 5,286 5,268 5,268 5,260 5,231 5,213 5,195 63,543 8. Investment Expenses a. Depreciation (D) 7,953 7,953 7,953 7,953 7,953 7,953 7,953 7,953 7,953 7,953 7,953 7,953 7,953 7,953 95,436 b. Amortization 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7.	Return on Average Net Investment														
8. Investment Expenses a. Depreciation (D) 7,953		a. Equity Component Grossed Up For Ta	ixes (B)	15,394	15,342	15,290	15,238	15,186	15,134	15,081	15,029	14,977	14,925	14,873	14,821	\$181,290
a. Depreciation (D)		b. Debt Component Grossed Up For Tax	es (C)	5,396	5,377	5,359	5,341	5,323	5,304	5,286	5,268	5,250	5,231	5,213	5,195	63,543
a. Depreciation (D)	8.	investment Expenses														
C. Dismantlement C. Dis		a. Depreciation (D)		7,953	7,953	7,953	7,953	7,953	7,953	7,953	7,953	7,953	7,953	7,953	7,953	95,436
d. Property Taxes		b. Amortization		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 0 0 0 0 0 0		c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
9. Total System Recoverable Expenses (Lines 7 + 8) 28,743 28,672 28,602 28,532 28,462 28,391 28,320 28,250 28,180 28,109 28,039 27,969 340,269 a. Recoverable Costs Allocated to Energy 28,743 28,672 28,602 28,532 28,462 28,391 28,320 28,250 28,180 28,109 28,039 27,969 340,269 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	0	0	0	0	0	0	0	O	•
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		e. Other		0	0	0	0	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	9.	Total System Recoverable Expenses (Lin	es 7 + 8)	28,743	28.672	28.602	28.532	28,462	28,391	28,320	28,250	28,180	28,109	28.039	27,969	340,269
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				28,743				28,462	28,391			28,180	28,109	28,039	27,969	340,269
11. Demand Jurisdictional Factor 1.000000 1.0000		b. Recoverable Costs Allocated to Dema	ind	0	0	0		0	0	0	0	0	0	0		0
11. Demand Jurisdictional Factor 1.000000 1.0000	10	Energy Jurisdictional Factor		1 0000000	1.0000000	1 0000000	1 0000000	1 0000000	1 0000000	1.0000000	1 0000000	1.0000000	1.0000000	1 0000000	1 0000000	
13. Retail Demand-Related Recoverable Costs (F) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													,,			
13. Retail Demand-Related Recoverable Costs (F) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10	Potoil Energy Related Resourceble Costs	· (E)	20 742	20 672	20 602	20 522	20.462	20 204	20 220	20.060	20 400	20 100	20 020	27.000	240.250
10. Holds building Holds de Costo (1)	_			20,143					,			∡0,100 ∩	20, 109 n	20,039	,	340,20 9
	14.			\$28,743	\$28,672	\$28,602	\$28,532	\$28,462	\$28,391	\$28,320	\$28,250	\$28,180	\$28,109	\$28,039	\$27,969	\$340,269

- (A) Applicable depreciable base for Big Bend; account 312.43 (\$1,995,677) and 315.43 (\$710,830)
 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
- (C) Line 6 x 2.7582% x 1/12.
 (D) Applicable depreciation rate is 3.5% and 3.6%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

<u>Tampa Electric Company</u> Environmental Cost Recovery Clause (ECRC)

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

Calculation of the Projected Period Amount January 2013 to December 2013

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	\$500,000	\$0	\$0	\$500,000	\$0	\$0	\$500,000	\$500,000	\$2,000,000
	b. Clearings to Plant c. Retirements		0	0	0	0	0	0	0	0	0	0	0	2,000,000	\$2,000,000
	d. Other		ő	0	0	0	0	o o	ő	0	0	0	0	0	
,	Plant-in-Service/Depreciation Base (A)	\$84.099.314	\$84.099.314	\$84.099.314	\$84.099.314	\$84,099,314	\$84.099.314	\$84,099,314	\$84,099,314	\$84.099.314	\$84.099.314	\$84.099.314	\$84,099,314	\$86.099.314	
3.	Less: Accumulated Depreciation	(10.392.573)		(10,999,297)	(11,302,659)	(11,606,021)		(12,212,745)	(12.516.107)	(12,819,469)	(13,122,831)	(13,426,193)			
4.	CWIP - Non-interest Bearing	(10,552,515)	(10,000,000)	(10,030,207)	(11,502,055)	(11,000,021)	500.000	500.000	500.000	1,000,000	1,000,000	1,000,000	1.500.000	(14,002,511)	
5.	Net Investment (Lines 2 + 3 + 4)	\$73,706,741	73,403,379	73,100,017	72,796,655	72,493,293	72,689,931	72,386,569	72,083,207	72,279,845	71,976,483	71,673,121	71,869,759	72,066,397	
6.	Average Net Investment		73,555,060	73,251,698	72,948,336	72,644,974	72,591,612	72,538,250	72,234,888	72,181,526	72,128,164	71,824,802	71,771,440	71,968,078	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		482,356	480,366	478,377	476,388	476,038	475,688	473,698	473,348	472,998	471,009	470,659	471,949	\$5,702,874
	 b. Debt Component Grossed Up For Taxes (C) 		169,066	168,369	167,672	166,974	166,852	166,729	166,032	165,909	165,787	165,089	164,967	165,419	1,998,865
8.	Investment Expenses														
٥.	a. Depreciation (D)		303,362	303.362	303,362	303,362	303,362	303,362	303,362	303,362	303,362	303,362	303,362	303,362	3,640,344
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	O	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 (Lines 7 + 8)		954,784	952,097	949,411	946,724	946,252	945,779	943.092	942,619	942,147	939,460	938.988	940,730	11,342,083
	a. Recoverable Costs Allocated to Energy		954,784	952,097	949,411	946,724	946,252	945,779	943,092	942,619	942,147	939,460	938,988	940,730	11,342,083
	 Recoverable Costs Allocated to Demand 		0	0	0	0	D	0	0	0	0	0	0	0	0
10	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1,0000000	1.0000000	
12.	Retail Energy-Related Recoverable Costs (E)		954,784	952,097	949,411	946,724	946,252	945,779	943,092	942,619	942,147	939,460	938,988	940,730	11,342,083
13.	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Lines 12 +	13)	\$954,784	\$952,097	\$949,411	\$946,724	\$946,252	\$945,779	\$943,092	\$942,619	\$942,147	\$939,460	\$938,988	\$940,730	\$11,342,083

- Notes:
 (A) Applicable depreciable base for Big Bend; account 311.51 (\$22,915,197), 312.51 (\$48,249,476), 315.51 (\$14,063,245), and 316.51 (\$871,396).
 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
 (C) Line 6 x 2.7582% x 1/12.

 - (D) Applicable depreciation rate is 4.1%, 4.3%, 4.8% and 4.1%
 - (E) Line 9a x Line 10 (F) Line 9b x Line 11

Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 2 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 a. Expenditures/Additions b. Clearings to Plant c. Retirements d. Other		\$0 0 0	\$0 \$0											
2. 3. 4.	Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing Net Investment (Lines 2 + 3 + 4)	\$94,048,278 (12,498,395) 0 \$81,549,883	\$94,048,278 (12,802,472) 0 81,245,806	\$94,048,278 (13,106,549) 0 80,941,729	\$94,048,278 (13,410,626) 0 80,637,652	\$94,048,278 (13,714,703) 0 80,333,575	\$94,048,278 (14,018,780) 0 80,029,498	\$94,048,278 (14,322,857) 0 79,725,421	\$94,048,278 (14,626,934) 0 79,421,344	\$94,048,278 (14,931,011) 0 79,117,267	\$94,048,278 (15,235,088) 0 78,813,190	\$94,048,278 (15,539,165) 0 78,509,113	\$94,048,278 (15,843,242) 0 78,205,036	\$94,048,278 (16,147,319) 0 77,900,959	
6.	Average Net Investment	\$01,345,003	81,397,845	81,093,768	80,789,691	80,485,614	80,181,537	79,877,460	79,573,383	79,269,306	78,965,229	78,661,152	78,357,075	78,052,998	
7.	Return on Average Net Investment a. Equity Component Grossed Up For Ta b. Debt Component Grossed Up For Tax		533,787 187,093	531,793 186,394	529,799 185,695	527,805 184,996	525,810 184,297	523,816 183,598	521,822 182,899	519,828 182,200	517,834 181,502	515,840 180,803	513,846 180,104	511,852 179,405	\$6,273,832 2,198,986
8.	Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other	-	304,077 0 0 0 0	304,077 0 0 0	3,648,924 0 0 0										
9.	Total System Recoverable Expenses (Lin a. Recoverable Costs Allocated to Energ b. Recoverable Costs Allocated to Dema	y	1,024,957 1,024,957 0	1,022,264 1,022,264 0	1,019,571 1,019,571 0	1,016,878 1,016,878 0	1,014,184 1,014,184 0	1,011,491 1,011,491 0	1,008,798 1,008,798 0	1,006,105 1,006,105 0	1,003,413 1,003,413 0	1,000,720 1,000,720 0	998,027 998,027 0	995,334 995,334 0	12,121,742 12,121,742 0
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1,0000000 1,0000000	1.0000000 1.0000000								
12. 13. 14.	Retail Energy-Related Recoverable Costs Retail Demand-Relatad Recoverable Cost Total Jurisdictional Recoverable Costs (Li	ts (F)	1,024,957 0 \$1,024,957	1,022,264 0 \$1,022,264	1,019,571 0 \$1,019,571	1,016,878 0 \$1,016,878	1,014,184 0 \$1,014,184	1,011,491 0 \$1,011,491	1,008,798 0 \$1,008,798	1,006,105 0 \$1,006,105	1,003,413 0 \$1,003,413	1,000,720 0 \$1,000,720	998,027 0 \$998,027	995,334 0 \$995,334	12,121,742 0 \$12,121,742

- Notes:

 (A) Applicable depreciable base for Big Bend; account 311.52 (\$25,208,869), 312.52(\$51,966,366), 315.52 (\$15,914,427), and 316.52 (\$958,616).

 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).

 (C) Line 6 x 2.7582% x 1/12.

 (D) Applicable depreciation rates are 3.5%, 4.0%, 4.1% and 3.7%.

 (E) Line 9a x Line 10

 (F) Line 9b x Line 11

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Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 3 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														
	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)	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	\$80,433,979	
3.	Less: Accumulated Depreciation	(13,045,725)	(13,293,474)	(13,541,223)	(13,788,972)	(14,036,721)	(14,284,470)	(14,532,219)	(14,779,968)	(15,027,717)	(15,275,466)	(15,523,215)	(15,770,964)	(16,018,713)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	o o	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$67,388,254	67,140,505	66,892,756	66,645,007	66,397,258	66,149,509	65,901,760	65,654,011	65,406,262	65,158,513	64,910,764	64,663,015	64,415,266	
6.	Average Net Investment		67,264,380	67,016,631	66,768,882	66,521,133	66,273,384	66,025,635	65,777,886	65,530,137	65,282,388	65,034,639	64,786,890	64,539,141	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Ta	ixes (B)	441,103	439,478	437,854	436,229	434,604	432,980	431,355	429,730	428,106	426,481	424,856	423,232	\$5,186,008
	b. Debt Component Grossed Up For Tax	es (C)	154,607	154,038	153,468	152,899	152,329	151,760	151,190	150,621	150,052	149,482	148,913	148,343	1,817,702
8.	Investment Expenses														
	a. Depreciation (D)		247,749	247,749	247,749	247,749	247,749	247,749	247,749	247,749	247,749	247,749	247,749	247,749	2,972,988
	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	es 7 + 8)	843,459	841.265	839.071	836.877	834,682	832,489	830,294	828,100	825,907	823,712	821.518	819,324	9,976,698
-	a. Recoverable Costs Allocated to Energ		843,459	841,265	839,071	836,877	834,682	832,489	830,294	828,100	825,907	823,712	821,518	819,324	9,976,698
	b. Recoverable Costs Allocated to Dema		0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1,0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
12.	Retail Energy-Related Recoverable Costs	s (E)	843,459	841,265	839.071	836,877	834.682	832,489	830,294	828,100	825,907	823,712	821,518	819,324	9,976,698
13.	Retail Demand-Related Recoverable Cos		0	0 77,200	0	0	0	0	0	020,100	0_0,00,	020,112	0	0.0,024	0
14.	Total Jurisdictional Recoverable Costs (L		\$843,459	\$841,265	\$839,071	\$836,877	\$834,682	\$832,489	\$830,294	\$828,100	\$825,907	\$823,712	\$821,518	\$819,324	\$9,976,698

Notes:

- (A) Applicable depreciable base for Big Bend; account 311.53 (\$21,689,422), 312.53 (\$44,228,920), 315.53 (\$13,690,954), and 316.53 (\$824,683).
 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).

- (C) Line 6 x 2.7582% x 1/12. (D) Applicable depreciation rates are 3.1%, 3.9%, 4.0%, and 3.4%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

Return on Capital Investments, Depreciation and Taxes For Project: Big Bend Unit 4 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 a. Expenditures/Additions b. Clearings to Plant c. Retirements d Other		\$0 0 0 0	\$0 0 0	\$0 0 0 0	\$0 0 0 0	\$0 0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0 0	\$0 0
2. 3. 4. 5.	Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing Net Investment (Lines 2 + 3 + 4)	\$62,853,033 (11,546,903) 0 \$51,306,130	\$62,853,033 (11,726,871) 0 51,126,162	\$62,853,033 (11,906,839) 0 50,946,194	\$62,853,033 (12,086,807) 0 50,766,226	\$62,853,033 (12,266,775) 0 50,586,258	\$62,853,033 (12,446,743) 0 50,406,290	\$62,853,033 (12,626,711) 0 50,226,322	\$62,853,033 (12,806,679) 0 50,046,354	\$62,853,033 (12,986,647) 0 49,866,386	\$62,853,033 (13,166,615) 0 49,686,418	\$62,853,033 (13,346,583) 0 49,506,450	\$62,853,033 (13,526,551) 0 49,326,482	\$62,853,033 (13,706,519) 0 49,146,514	
6.	Average Net Investment		51,216,146	51,036,178	50,856,210	50,676,242	50,496,274	50,316,306	50,136,338	49,956,370	49,776,402	49,596,434	49,416,466	49,236,498	
7.	Return on Average Net Investment a. Equity Component Grossed Up For Taxo b. Debt Component Grossed Up For Taxo		335,863 117,720	334,682 117,307	333,502 116,893	332,322 116,479	331,142 116,066	329,962 115,652	328,782 115,238	327,601 114,825	326,421 114,411	325,241 113,997	324,061 113,584	322,881 113,170	\$3,952,460 1,385,342
8.	Investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other		179,968 0 0 0 0	179,968 0 0 0	179,968 0 0 0 0	179,968 0 0 0 0	179,968 0 0 0 0	2,159,616 0 0 0							
9.	Total System Recoverable Expenses (Line a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Deman	y ´	633,551 633,551 0	631,957 631,957 0	630,363 630,363 0	628,769 628,769 0	627,176 627,176 0	625,582 625,582 0	623,988 623,988 0	622,394 622,394 0	620,800 620,800 0	619,206 619,206 0	617,613 617,613 0	616,019 616,019 0	7,497,418 7,497,418 -
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1,0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1,0000000 1,0000000	1.0000000 1.0000000	1.0000000 1.0000000	
12. 13. 14.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Cost Total Jurisdictional Recoverable Costs (Li	ts (F)	633,551 0 \$633,551	631,957 0 \$631,957	630,363 0 \$630,363	628,769 0 \$628,769	627,176 0 \$627,176	625,582 0 \$625,582	623,988 0 \$623,988	622,394 0 \$622,394	620,800 0 \$620,800	619,206 0 \$619,206	617,613 0 \$617,613	616,019 0 \$616,019	7,497,418 0 \$7,497,418

- (A) Applicable depreciable base for Big Bend; account 311.54 (\$16,857,250), 312.54 (\$34,665,822), 315.54 (\$10,642,027), and 316.54 (\$687,934).

 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).

- (C) Line 6 x 2.7582% x 1/12.
 (D) Applicable depreciation rate is 2.4%, 3.8%, 3.9%, and 3.3%.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

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														
	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	Q	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	\$24,894,395	\$24,894,395	\$24.894,395	\$24,894,395	\$24,894,395	\$24,894,395	\$24,894,395	\$24,894,395	\$24,894,395	\$24,894,395	\$24,894,395	\$24,894,395	\$24.894.395	
3.	Less: Accumulated Depreciation	(\$1,527,733)	(1,580,204)	(1,632,675)	(1,685,146)	(1,737,617)	(1,790,088)	(1,842,559)	(1,895,030)	(1,947,501)	(1,999,972)	(2,052,443)	(2,104,914)	(2,157,385)	
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)	\$23,366,662	23,314,191	23,261,720	23,209,249	23,156,778	23,104,307	23,051,836	22,999,365	22,946,894	22,894,423	22,841,952	22,789,481	22,737,010	
6.	Average Net Investment		23,340,426	23,287,955	23,235,484	23,183,013	23,130,542	23,078,071	23,025,600	22,973,129	22,920,658	22,868,187	22,815,716	22,763,245	
7.	Return on Average Net investment														
	a. Equity Component Grossed Up For Taxes	s (8)	153,061	152,717	152,372	152,028	151,684	151,340	150,996	150,652	150,308	149,964	149,620	149,276	\$1,814,018
	b. Debt Component Grossed Up For Taxes	(C)	53,648	53,527	53,407	53,286	53,166	53,045	52,924	52,804	52,683	52,563	52,442	52,321	635,816
8.	Investment Expenses														
•	a. Depreciation (D)		52,471	52,471	52,471	52,471	52,471	52,471	52,471	52,471	52,471	52,471	52,471	52,471	629,652
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	Ö	0	0	0	O.	0	Ō	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	00	0	0	0	0	0	0	0	0
a	Total System Recoverable Expenses (Lines	7 + 8)	259,180	258,715	258,250	257,785	257,321	256,856	256,391	255,927	255,462	254,998	254,533	254,068	3,079,486
•	a. Recoverable Costs Allocated to Energy	,	259,180	258,715	258,250	257,785	257,321	256,856	256,391	255,927	255,462	254,998	254,533	254,068	3,079,486
	b. Recoverable Costs Allocated to Demand		0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1,0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1,0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
• • • •															
12.	Retail Energy-Related Recoverable Costs (E		259,180	258,715	258,250	257,765	257,321	256,856	256,391	255,927	255,462	254,998	254,533	254,068	3,079,486
13.	Retail Demand-Related Recoverable Costs (0	0	0	0	0	0	0	0	0	0	0	0_	00
14.	Total Jurisdictional Recoverable Costs (Lines	s 12 + 13)	\$259,180	\$258,715	\$258,250	\$257,785	\$257,321	\$256,856	\$256,391	\$255,927	\$255,462	\$254,998	\$254,533	\$254,068	\$3,079,486

- Notes:

 (A) Applicable depreciable base for Big Bend; account 312.44 (\$1,456,209) and 312.45 (\$23,438,186)

 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).
 - (C) Line 6 x 2.7582% x 1/12.
 - (D) Applicable depreciation rate is 3.0% and 2.5%.(E) Line 9a x Line 10

 - (F) Line 9b x Line 11

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Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

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	End of Period Total
1.	Investments a. Expenditures/Additions b. Clearings to Plant c. Retirements d. Other		\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0 0	\$0 0 0	\$0 \$0						
2. 3. 4. 5.	Plant-in-Service/Depreciation Base (A) Less: Accumulated Depreciation CWIP - Non-Interest Bearing Net Investment (Lines 2 + 3 + 4)	\$1,169,053 (135,684) 74,758 \$1,108,127	\$1,169,053 (139,289) 74,758 1,104,522	\$1,169,053 (142,894) 74,758 1,100,917	\$1,169,053 (146,499) 74,758 1,097,312	\$1,169,053 (150,104) 74,758 1,093,707	\$1,169,053 (153,709) 74,758 1,090,102	\$1,169,053 (157,314) 74,758 1,086,497	\$1,169,053 (160,919) 74,758 1,082,892	\$1,169,053 (164,524) 74,758 1,079,287	\$1,169,053 (168,129) 74,758 1,075,682	\$1,169,053 (171,734) 74,758 1,072,077	\$1,169,053 (175,339) 74,758 1,068,472	\$1,169,053 (178,944) 74,758 1,064,867	
6.	Average Net investment		1,106,325	1,102,720	1,099,115	1,095,510	1,091,905	1,088,300	1,084,695	1,081,090	1,077,485	1,073,880	1,070,275	1,066,670	
7.	Return on Average Net Investment a. Equity Component Grossed Up For Taxe b. Debt Component Grossed Up For Taxe		7,255 2,543	7,231 2,535	7,208 2,526	7,184 2,518	7,160 2,510	7,137 2,501	7,113 2,493	7,090 2,485	7,066 2,477	7,042 2,468	7,019 2,460	6,995 2,452	\$85,500 29,968
8.	investment Expenses a. Depreciation (D) b. Amortization c. Dismantlement d. Property Taxes e. Other		3,605 0 0 0	3,605 0 0 0	3,605 0 0 0	3,605 0 0 0	3,605 0 0 0 0	3,605 0 0 0 0	3,605 0 0 0	3,605 0 0 0 0	3,605 0 0 0 0	3,605 0 0 0	3,605 0 0 0 0	3,605 0 0 0 0	43,260 0 0 0 0
9.	Total System Recoverable Expenses (Line a. Recoverable Costs Allocated to Energy b. Recoverable Costs Allocated to Deman	•	13,403 13,403 0	13,371 13,371 0	13,339 13,339 0	13,307 13,307 0	13,275 13,275 0	13,243 13,243 0	13,211 13,211 0	13,180 13,180 0	13,148 13,148 0	13,115 13,115 0	13,084 13,084 0	13,052 13,052 0	158,728 158,728 0
10. 11.	Energy Jurisdictional Factor Demand Jurisdictional Factor		1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1,0000000 1,0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1.0000000 1.0000000	1,0000000 1,0000000	
12. 13. 14.	Retail Energy-Related Recoverable Costs Retail Demand-Related Recoverable Costs Total Jurisdictional Recoverable Costs (Lir	s (F)	13,403 0 \$13,403	13,371 0 \$13,371	13,339 0 \$13,339	13,307 0 \$13,307	13,275 0 \$13,275	13,243 0 \$13,243	13,211 0 \$13,211	13,180 0 \$13,180	13,148 0 \$13,148	13,115 0 \$13,115	13,084 0 \$13,084	13,052 0 \$13,052	158,728 0 \$158,728

- Notes:

 (A) Applicable depreciable base for Big Bend and Polk; accounts 312.41, 312.43, 312.44, 345.81, and 315.40 (\$1,169,053)

 (B) Line 6 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).

 - (C) Line 6 x 2.9324% x 1/12.
 (D) Applicable depreciation rate is 4.0%, 3.5%, 3.0%, 3.3% and 3.7%
 - (E) Line 9a x Line 10
 - (F) Line 9b x Line 11

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

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January 2013 to December 2013 For Project: SO₂ Emissions Allowances (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. O		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	b. Sales/Transfers		0	Õ	Ō	0	Õ	0	0	Ö	Ö	0	0	Ō	0
	c. Auction Proceeds/Other		0	0	0	o	Ō	0	0	Ō	0	0	0	Ō	0
2.	Working Capital Balance														
	a. FERC 158.1 Allowance Inventory	\$0	0	0	0	0	0	0	0	0	0	0	0	0	
	b. FERC 158.2 Allowences Withheld	0	0	0	0	0	0	0	0	0	0	0	0	0	
	c. FERC 182.3 Other Regl. Assets - Losses	0	0	0	0	0	0	0	0	0	0	0	0	0	
	d. FERC 254.01 Regulatory Liabilities - Gains	(37,356)	(37,261)	(37,191)	(37,119)	(37,053)	(36,968)	(36,873)	(36,775)	(36,677)	(36,584)	(36,497)	(36,419)	(36,337)	
3.	Total Working Capital Balance	(\$37,356)	(37,261)	(37,191)	(37,119)	(37,053)	(36,968)	(36,873)	(36,775)	(36,677)	(36,584)	(35,497)	(36,419)	(36,337)	
4.	Average Net Working Capital Balance		(\$37,309)	(\$37,226)	(\$37,155)	(\$37,086)	(\$37,011)	(\$36,921)	(\$36,824)	(\$36,726)	(\$36,631)	(\$36,541)	(\$36,458)	(\$36,378)	
5.	Return on Average Net Working Capital Balance														
	a. Equity Component Grossed Up For Taxes (A)		(245)	(244)	(244)	(243)	(243)	(242)	(241)	(241)	(240)	(240)	(239)	(239)	(2.901)
	b. Debt Component Grossed Up For Taxes (B)		(86)	(86)	(85)	(85)	(85)	(85)	(85)	(84)	(84)	(84)	(84)	(84)	(1,017)
6.	Total Return Component	-	(331)	(330)	(329)	(328)	(328)	(327)	(326)	(325)	(324)	(324)	(323)	(323)	(3,918)
7.	Expenses:														
	a. Gains		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Losses		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. SO ₂ Allowance Expense	_	1,905	1,930	1,928	1,934	1,915	1,905	1,902	1,901	1,908	1,912	1,922	1,918	22,980
8.	Net Expenses (D)		1,905	1,930	1,928	1,934	1,915	1,905	1,902	1,901	1,908	1,912	1,922	1,918	22,980
9.	Total System Recoverable Expenses (Lines 6 + 8)		1,574	1.600	1,599	1,606	1.587	1,578	1,576	1,576	1.584	1,588	1,599	1,595	19,062
•	a. Recoverable Costs Allocated to Energy		1,574	1,600	1,599	1,606	1,587	1,578	1,576	1,576	1,584	1.588	1,599	1,595	19,062
	b. Recoverable Costs Allocated to Demand		0	0	0	0	0	0	0	0	0	0	0	0	0
10.	Energy Jurisdictional Factor		1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
11.	Demand Jurisdictional Factor		1.0000000	1.0000000	1,0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1,0000000	1.0000000	1.0000000	1.0000000	
12	Retail Energy-Related Recoverable Costs (E)		1,574	1,600	1,599	1,606	1,587	1,578	1,576	1,576	1,584	1,588	1,599	1,595	19,062
13.	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0,000	0	0	0
14.	Total Juris. Recoverable Costs (Lines 12 + 13)	-	\$1,574	\$1,600	\$1,599	\$1.606	\$1,587	\$1,578	\$1,576	\$1,576	\$1,584	\$1,588	\$1,599	\$1,595	\$19,062
		_													1

- Notes:

 (A) Line 4 x 7.8693% x 1/12. Based on ROE of 11.25% and weighted income tax rate of 38.575% (expansion factor of 1.628002).

 (B) Line 4 x 2.7582% x 1/12.
- (C) Line 6 is reported on Schedule 3P
- (D) Line 8 is reported on Schedule2P (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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

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 2012

through December 2012, is \$735,696 compared to the original projection of

\$768,402 representing an insignificant variance.

The actual/estimated O&M expense for the period January 2012 through December 2012 is \$4,562,661 compared to the original projection of

\$4,490,200 resulting in an insignificant variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013, is expected to be \$1,123,304.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$5,526,100.

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 2012 through December 2012 is \$415,503 compared to the original projection of \$384,629 representing an a variance of 8 percent due to updating depreciation rates consistent with Order No.: PSC-12-0175-PAA-EI.

The actual/estimated O&M expense for this project for the period January 2012 through December 2012 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 2013 through

December 2013 is projected to be \$375,431.

There are no estimated O&M costs for the period January 2013 through

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 2012

through December 2012 is \$83,239 compared to the original projection of \$74,263 representing a variance of 12.1 percent due to updating depreciation

rates consistent with Order No.: PSC-12-0175-PAA-EI.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$75,414.

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 2012

through December 2012 is \$132,352 compared to the original projection of

\$123,674 representing an insignificant variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$119,754.

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 2012

through December 2012 is \$95,423 compared to the original projection of

\$89,861 representing an insignificant variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$86,368.

Project Title: Big Bend Units 1 & 2 FGD

Project Description:

The Big Bend Units 1 & 2 FGD system consists of equipment capable of removing SO_2 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 SO_2 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 2012

through December 2012 is \$8,843,462 compared to the original projection of

\$8,815,500 representing an insignificant variance.

The actual/estimated O&M expense for the period January 2012 through December 2012 is \$17,606,161 as compared to the original estimate of \$8,835,100 representing a variance of 99.3 percent. This variance is driven by landfilling approximately 350,000 tons of lesser quality gypsum to be used as

valley fill in two landfills.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is expected to be \$8,128,926.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$11,080,000.

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 2012

through December 2012, is \$13,770 compared to the original projection of

\$12,739 representing an insignificant variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is expected to be \$12,493.

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 2012

through December 2012 is \$2,400,129 compared to the original projection of

\$2,359,083 representing an insignificant variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is expected to be \$2,179,242.

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 2012

through December 2012 is \$1,101,472 as compared to the original projection

of \$1,076,352 resulting in an insignificant variance.

The actual/estimated O&M expense the period January 2012 through December 2012 is \$395,718 as compared to the original projection of

\$390,400 resulting in an insignificant variance.

Progress Summary: This project was placed in-service July 2005.

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is expected to be \$1,947,674.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$390,000.

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 2012

through December 2012 is \$790,395 as compared to the original projection of

\$769,550 representing an insignificant variance.

The actual/estimated O&M expense the period January 2012 through December 2012 is \$380,422 as compared to the original projection of

\$395,000 resulting in an insignificant variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is expected to be \$718,705.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$375,000.

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 2012

through December 2012 is \$53,818 compared to the original projection of

\$50,065 representing an insignificant variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$48,777.

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 2012

through December 2012 is \$88,515 compared to the original projection of

\$82,344 representing an insignificant variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$80,227.

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 2012 through December 2012 is (\$4,419) compared to the original projection of (\$4,391) representing an insignificant variance.

The actual/estimated O&M for the period January 2012 through December 2012 is \$9,959 compared to the original projection of \$22,262 representing a variance of 55.3 percent. The variance is driven by less cogeneration purchases than expected and the application of a lower rate than originally projected.

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 2013

through December 2013 is projected to be (\$3,918).

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$22,980.

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 2012 through

December 2012 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 2013 through December 2013

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 2012 through

December 2012 is \$0 compared to the original projection of \$20,000, which represents a variance of 100 percent. The variance is due to pending acceptance of Big Bend Plan of Study regarding thermal variances that will

have regulatory impact at Bayside Power Station.

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

September 4, 2001.

Projections: There are no estimated O&M costs projected for the period of January 2013

through December 2013.

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 2012

through December 2012 is \$183,237 as compared to the original projection of

\$183,237 representing no variance.

The actual/estimated O&M for the period January 2012 through December 2012 is \$16,336 compared to the original projection of \$35,000, which represents a variance of 53.3 percent. The variance is due forced outages at the Polk Power Station in addition to reduction in water costs and maintenance associated with the saturator that is used to reduce NO_x

emissions.

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

Project Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$166,164.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$28,500.

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 2012 through

December 2012 is \$121,844 compared to the original projection of \$106,400

resulting in an insignificant variance.

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 2013 through December 2013

are projected to be \$106,000.

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 2012

through December 2012 is \$318,119 compared to the original projection of

\$303,655 representing an insignificant variance.

The actual/estimated O&M for the period January 2012 through December 2012 is \$0 compared to the original projection of \$0 representing no variance.

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$288,755.

There are no estimated O&M costs for the period January 2013 through

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 2012 through 2012. 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:

The actual/estimated depreciation plus return for the period January 2012 Fiscal Expenditures:

through December 2012 is \$222,824 compared to the original projection of

\$211,950 representing an insignificant variance.

The actual/estimated O&M for the period January 2012 through December

2012 is \$0 compared to the original projection of \$0 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 2013 through

December 2013 is projected to be \$202,030.

There are no estimated O&M costs for the period January 2013 through

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 2012through 2012. 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 2012

through December 2012 is \$211,090 compared to the original projection of

\$202,159 representing an insignificant variance.

The actual/estimated O&M for the period January 2012 through December 2012 is \$0 compared to the original projection of \$0 compared to the original projecti

2012 is \$0 compared to the original projection of \$0 representing no variance.

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 2013 through

December 2013 is projected to be \$191,463.

There are no estimated O&M costs for the period January 2013 through

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 2012 through 2012. 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 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 2012

through December 2012 is \$374,972 compared to the original projection of \$350,697, resulting in a variance of 6.9 percent due to updating depreciation

rates consistent with Order No.: PSC-12-0175-PAA-EI.

The actual/estimated O&M for the period January 2012 through December 2012 is \$0 compared to the original projection of \$0 resulting in no variance.

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 2013 through

December 2013 is projected to be \$340,269.

There are no estimated O&M costs for the period January 2013 through

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 2012 through December

2012 is \$56,140 compared to the original projection of \$30,000 resulting in a variance of 87.1 percent. This variance is due to an extension of the comment period and postponing of the final rule. The extension created the need for additional outside services in preparation for EPA's rendering the final rule.

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 2013 through December 2013

are projected to be \$72,500.

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 2012 through 2012. 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 April 2010.

Project Accomplishments:

Fiscal Expenditures:

The actual/estimated depreciation plus return for the period January 2012 through December 2012 is \$12,544,301 compared to the original projection of \$11,474,749 resulting in a variance of 9.3 percent. This variance is due to updating of depreciation rates consistent with Order No. PSC-12-0175-PAA-EI.

The actual/estimated O&M for the period January 2012 through December 2012 is \$2,300,371 compared to the original projection of \$2,466,489 resulting in a variance due to a decrease in generation caused by extended outages; thereby creating a lower consumption of ammonia that originally projected.

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 2013 through

December 2013 is projected to be \$11,342,083.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$2,259,818.

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 2012 through 2012. 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 September 2009.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2012

through December 2012 is \$13,355,306 compared to the original projection of \$12,505,318, resulting in a variance of 6.8 percent. This variance is due to updating of depreciation rates consistent with Order No. PSC-12-0175-PAA-

EI.

The actual/estimated O&M for the period January 2012 through December 2012 is \$2,328,275 compared to the original projection of \$2,536,432 representing a variance of 8.2 percent due to the consumption of ammonia utilized in the SO₃ mitigation system being less than projected. The ammonia is utilized in the SO₃ mitigation system to meet ongoing regulation

requirements.

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 2013 through

December 2013 is projected to be \$12,121,742.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$2,506,409.

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 2012 through 2012. 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 July 2008.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2012

through December 2012 is \$11,105,329 compared to the original projection of \$10,258,438 resulting in a variance of 8.3 percent. This variance is due to updating of depreciation rates consistent with Order No. PSC-12-0175-PAA-

EI.

The actual/estimated O&M for the period January 2012 through December 2012 is \$1,868,922

compared to the original projection of \$1,513,033 resulting in a variance of 23.5 percent. This variance is due to consumption in ammonia for the SO_3 mitigation system being greater than projected. The ammonia is utilized in the

SO₃ mitigation system to meet ongoing regulation requirements.

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

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

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$9,976,698.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$1,548,628.

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 2012 through 2012. 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 May 2007.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2012

> through December 2012 is \$8,363,075 compared to the original projection of \$7,799,065 resulting in a variance of 7.2 percent. This variance is due to updating of depreciation rates consistent with Order No. PSC-12-0175-PAA-

EI.

The actual/estimated O&M for the period January 2012 through December 2012 is \$868,068 compared to the original projection of \$998,269 representing a variance of 13 percent. The variance is due to a credit for equipment that

offset an increase in ammonia consumption for SO₃ mitigation system.

Progress Summary: This project was placed in-service in May 2007.

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$7,497,418.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$1,041,076.

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 2012 through December

2012 is \$84,499 compared to the original projection of \$667,000 resulting in a variance of 87.3 percent. The variance is due to FDEP delay in approval of

activity associated with projected work.

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 2013 through December 2013

are projected to be \$667,000.

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, 2011 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 2012

through December 2012 is \$2,977,349 compared to the original projection of \$3,473,539 resulting in variance of 14.3 percent. This variance is due to overall expenditures for the project now estimated to be less and an extension

of its in-service date from January 2012 to July 2012.

Progress Summary: In Docket No. 050598-El, Order No. PSC-06-0602-PAA-El, 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 2013 through

December 2013 is projected to be \$3,079,486.

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 Clean Air Act, known as the Clean Air Mercury Rule ("CAMR"). CAMR was designed to permanently cap mercury emissions nation-wide in two phases ending in 2018. 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 and vacated the Clean Air Mercury Rule. However, on May 3, 2011 EPA published a new proposed rule for mercury and other hazardous air pollutants according to the National Emissions Standards for Hazardous Air Pollutants section of the Clean Air Act. The proposed rule calls for mercury monitoring requirements comparable to CAMR by 2014. Tampa Electric must conduct extensive emissions testing and engineering studies at Big Bend Station and Polk Power Station to determine what actions are required to meet the proposed standards.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2012

through December 2012 is \$174,891 compared to the original projection of

\$166,916 resulting in an insignificant variance.

The actual/estimated O&M for the period January 2012 through December 2012 is \$25,401 compared to the original projection of \$24,000 resulting in an

insignificant variance.

Progress Summary: In Docket No. 060583-EI, Order No.: PSC-06-0926-PAA-EI, issued November

6, 2006, the Commission granted cost recovery approval for prudent costs

associated with this project.

Projections: Estimated depreciation plus return for the period January 2013 through

December 2013 is projected to be \$158,728.

Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$20,000.

Project Title: Greenhouse Gas Reduction Program

Project Description:

On September 22, 2009, the EPA enacted a new rule for reporting Greenhouse Gas ("GHG") emissions from large sources and suppliers effective January 1, 2010 in preparation for the first annual GHG report, due March 31, 2011. The new rule is intended to collect accurate and timely emissions data to inform future policy decisions as set forth in the final rule for GHG emission reporting pursuant to the Florida Climate Protection Act, Chapter 403.44 of the Florida Statutes and the docket EPA-HQ-OAR2008-0508-054. The nationwide GHG emissions reduction rule will impact Tampa Electric's generation fleet, components of its transmission and distribution system as well as company service vehicles. According to the rule, the company must begin collecting greenhouse gas emissions data effective January 1, 2010 to establish a baseline inventory to report to the EPA.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated O&M for the period January 2012 through December

2012 is \$90,788 compared to the original projection of \$40,000 resulting in a variance of 127 percent. The variance is due the cost of the Enviance

subscription being higher than originally projected.

Progress Summary: Cost recovery was approved in Docket No. 090508-EI, Order No. PSC-10-

0157-PAA-EI, issued March 22, 2010.

Projections: Estimated O&M costs for the period January 2013 through December 2013

are projected to be \$90,000.

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 2012

through December 2012 is \$31,318 compared to the original projection of \$5,267 representing a variance of 494.6 percent. This variance is due to

retirement of this asset and the resulting recovery of net investment.

Progress Summary: The project is to be retired December 2012.

Projections: See Project Summary above.

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 2012

through December 2012 is \$49,049 compared to the original projection of \$8,267 representing a variance of 493.3 percent. This variance is due to

retirement of this asset and the resulting recovery of net investment.

Progress Summary: The project is to be retired December 2012.

Projections: See Project Summary above.

Tampa Electric Company

Environmental Cost Recovery Clause (ECRC) Calculation of the Energy & Demand Allocation % By Rate Class January 2013 to December 2013

	(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)	MWh Sales	Percentage of 12 CP Demand at Generation (%)	12 CP & 25% Allocation Factor (%)
RS	51.79%	8,476,092	8,476,092	1,868	1.08103	1.05698	8,959,031	2,019	46.72%	56.21%	53.84%
GS, TS	57.57%	1,014,602	1,014,602	201	1.08103	1.05696	1,072,394	217	5.59%	6.04%	5.93%
GSD, SBF	75.72%	7,632,062	7,619,584	1,151	1.07653	1.05315	8,037,724	1,239	41.91%	34.49%	36.35%
IS	89.14%	861,507	846,603	110	1.03199	1.01859	877,522	114	4.58%	3.17%	3.52%
LS1	935.37%	217,753	217,753	3	1.08103	1.05698	230,160	3	1.20%	0.08%	0.36%
TOTAL *		18,202,016	18,174,634	3,333			19,176,831	3,592	100.00%	100.00%	100.00%

- Notes: (1) Average 12 CP load factor based on 2012 Projected calendar data
 - (2) Projected MWh sales for the period January 2013 to December 2013
 - (3) Effective sales at secondary level for the period January 2013 to December 2013.
 - (4) Column 2 / (Column 1 x 8760)
 - (5) Based on 2012 projected demand losses.
 - (6) Based on 2012 projected energy losses.
 - (7) Column 2 x Column 6
 - (8) Column 4 x Column 5
 - (9) Column 7 / Total Column 7
 - (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

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Tampa Electric Company

Environmental Cost Recovery Clause (ECRC) Calculation of the Energy & Demand Allocation % By Rate Class January 2013 to December 2013

	(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	46.72%	53.84%	46,773,423	520,661	47,294,084	8,476,092	8,476,092	0.558
GS, TS	5.59%	5.93%	5,598,768	57,330	5,656,098	1,014,602	1,014,602	0.557
GSD, SBF Secondary Primary Transmission	41.91% on	36.35%	41,963,452	351,504	42,314,956	7,632,062	7,619,584	0.555 0.550 0.544
IS Secondary Primary Transmission	4.58% on	3.52%	4,581,378	34,057	4,615,435	861,507	846,603	0.545 0.540 0.534
LS1	1.20%	0.36%	1,201,622	3,482	1,205,104	217,753	217,753	0.553
TOTAL*	100.00%	100.00%	100,118,644	967,107	101,085,751	18,202,016	18,174,634	0.556

^{*} 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 10

Form 42 - 8P

Tampa Electric Company Environmental Cost Recovery Clause (ECRC) Calculation of the Projected Period Amount January 2013 to December 2013

Calculation of Revenue Requirement Rate of Return (In Dollars)

		(1)	(2)	(3)	(4)		
	Ju	risdictional			Weighted		
	Ra	te Base Per		Cost	Cost		
	Acti	ial May 2012	Ratio	Rate	Rate		
	Cap	ital Structure					
		(\$000)	%	%	%		
Long Term Debt	\$	1,488,583	39.08%	6.59%	2.5754%		
Short Term Debt		9,122	0.24%	0.64%	0.0015%		
Preferred Stock		0	0.00%	0.00%	0.0000%		
Customer Deposits		105,073	2.76%	6.21%	0.1714%		
Common Equity		1,633,530	42.87%	11.25%	4.8229%		
Deferred ITC - Weighted Cost		8,810	0.23%	9.00%	0.0207%		
Accumulated Deferred Income Taxes Zero Cost ITCs		<u>564,424</u>	<u>14.82%</u>	0.00%	<u>0.0000%</u>		
Total	\$	3,809,542	100.00%		<u>7.5919%</u>		
ITC split between Debt and Equity:							
Long Term Debt	\$	1,488,583	L	ong Term D	ebt	47.54%	
Short Term Debt		9,122	Short Term Debt		0.29%	47.83%	
Equity - Preferred		0 Equity - Preferred		erred	0.00%		
Equity - Common		<u>1,633,530</u>	E	quity - Com	mon	<u>52.17%</u>	52.170%
	\$	3,131,235		Total		100.00%	

Debt = .0207% * 47.83%	0.0099%
Equity = .0207% * 52.17%	<u>0.0108%</u>
Weighted Cost	0.0207%

Total Equity Cost Rate:

Preferred Stock	0.0000%
Common Equity	4.8229%
Deferred ITC - Weighted Cost	0.0108%
	4.8337%
Times Tax Multiplier	1.628002
Total Equity Component	<u>7.8693%</u>

Total Debt Cost Rate:

Long Term Debt	2.5754%
Short Term Debt	0.0015%
Customer Deposits	0.1714%
Deferred ITC - Weighted Cost	0.0099%
Total Debt Component	<u>2.7582%</u>

Column (1) - From WACC Stipulation & Settlement Agreement Dated July 17, 2012

Column (2) - Column (1) / Total Column (1)

Column (3) - From WACC Stipulation & Settlement Agreement Dated July 17, 2012

Column (4) - Column (2) x Column (3)



BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 120007-EI
ENVIRONMENTAL COST RECOVERY FACTORS

PROJECTIONS

JANUARY 2013 THROUGH DECEMBER 2013

TESTIMONY

OF

PAUL L. CARPINONE

FILED: AUGUST 30, 2012

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

consulting. In February 1988, I joined Tampa Electric as

a Principal Engineer, and I have primarily worked in the

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area of Environmental Health and Safety. In 2006, Ι became Director, Environmental Health and Safety. My responsibilities include the development and administration of the company's environmental, health and safety policies and goals. I am also responsible for ensuring resources, procedures and programs or 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 A. activities for which Tampa Electric seeks cost recovery through the Environmental Cost Recovery Clause ("ECRC") for the January 2013 through December 2013 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 Florida Department of Environmental the ("FDEP") and the Consent Decree ("CD") lodged with the U.S. Environmental Protection Agency ("EPA") and the Department of Justice. I will also discuss other programs

previously approved by the Commission for recovery through the ECRC.

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.

 \mathbf{Q} . What do the Orders require for SO_2 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. It also addressed the use of environmental dispatching in the event of a scrubber outage. All of the SO₂ emission reduction projects have been completed.

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

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Α. Orders require Tampa Electric to develop implement a best operational practices ("BOP") study to minimize from PMemissions each electrostatic precipitator ("ESP") and complete and implement a best available control technology ("BACT") analysis of ESPs at Big Bend Station. The Orders also require the 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 another Big Bend unit. The first PM CEM was installed in February 2002. The installation and certification of the second PM CEM was completed in August 2009. Over time,

however, the first PM CEM did not perform satisfactorily and replacement was required. Installation and certification of the replacement was completed in December 2010.

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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 2013 through December 2013.

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Α. 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. Order, the Commission found that the program met 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 2013, capital expenditures anticipated to be \$7,902,900 for BOP and equipment while O&M expenses associated with existing and recently installed BOP and BACT equipment and continued implementation of the BOP procedures are expected to be \$390,000.

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Q. What do the Orders require for NO_x reductions?

The Orders require Tampa Electric to perform NO_x emission A. 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 innovative technologies 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 2013 through December 2013.

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The Big Bend NO_x Emission Reduction program was approved Α. 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. No capital expenditures are anticipated in 2013; however, Tampa Electric will perform maintenance on the previously approved and installed NO_x Reduction equipment. This activity is expected to result in approximately \$375,000 O&M

expenses.

 ${\bf Q}.$ 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. Thus, Big Bend Units 3, 2 and/or 1 must operate 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.

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 Big Bend Station. The results of the study clearly indicated that the option to remain coal-fired at Big Bend Station and install the necessary NO_x reduction technologies was the most cost-effective alternative to satisfy the NO_x emission reductions required by the

Orders. This decision was communicated to the EPA and FDEP in August 2004. Tampa Electric also apprised the 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 2013 through December 2013.

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In Docket No. 040750-EI, Order No. PSC-04-0986-PAA-EI, A. 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 Docket No. 041376-EI, Order No. PSC-05-0502-PAA-EI, issued The purpose of the Pre-SCR technologies is May 9, 2005. to reduce inlet NO_x concentrations to the SCR systems, thereby mitigating overall SCR capital and O&M costs. These Pre-SCR technologies include windbox modifications, secondary air controls and coal/air flow controls. 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. The SCRs for Big Bend Units 1 through 4 were placed in-service April

2010, September 2009, July 2008 and May 2007, respectively.

For the period of January 2013 through December 2013, no capital or O&M expenditures are anticipated for the Big Bend Units 1 through 3 Pre-SCR projects. For 2013, there are no anticipated capital expenditures for Big Bend Units 2, 3 and 4 SCRs; however, the anticipated capital expenditure for Big Bend Unit 1 SCR is \$2,000,000 for catalyst replacement. The 2013 SCR O&M expenses are projected to be \$2,259,818 for Big Bend Unit 1 SCR, \$2,506,409 for Big Bend Unit 2 SCR, \$1,548,628 for Big Bend Unit 3 SCR and \$1,041,076 for Big Bend Unit 4 SCR. O&M expenses are driven by ammonia purchases.

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

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

- 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) Clean Water Act Section 316(b) Phase II Study
- 6) Big Bend FGD System Reliability
- 7) Arsenic Groundwater Standard
- 8) Clean Air Mercury Rule ("CAMR")
- 9) Greenhouse Gas ("GHG") Reduction Program

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 2013 through December 2013.

A. The Big Bend Unit 3 FGD Integration program was approved 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 2013 through December 2013 capital expenditures for the Big Bend Unit 3 FGD Integration project are \$3,507,284 for controls upgrades as well as

duct replacements. O&M expenses are anticipated to be \$5,526,100 for consumables and ongoing maintenance. The projected January 2013 through December 2013 capital expenditures for the Big Bend FGD Units 1 and 2 project are \$1,195,443 for improvements to waste water treatment reliability and the oxidation air header, both scheduled to occur during the spring outage. O&M expenses are anticipated to be \$11,080,000 for consumables and ongoing maintenance.

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Q. Please describe the Gannon Thermal Discharge Study program activities and provide the estimated capital and O&M expenditures for the period of January 2013 through December 2013.

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A. The Gannon Thermal Discharge Study program was approved by the Commission in Docket No. 010593-EI, Order No. 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 2013 through December 2013, there will be no capital expenditures for this program. Tampa Electric anticipates M&O expenses will be approximately \$12,500 for continuation of the ongoing study.

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Q. Please describe the Bayside SCR Consumables program activities and provide the estimated capital and O&M expenditures for the period of January 2013 through December 2013.

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 2013 through December 2013, 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 \$106,000 for the period.

Q. 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 2013 through December 2013.

A. 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. On March 20, 2007 the EPA announced that the rule adopted pursuant to Section 316(b) be considered suspended. The suspension of the final rule was made on July 9, 2007. On

April 20, 2012, EPA published a proposed rule for existing steam electric generators, with the final rule expected in July 2012. In July 2012, the final rule was postponed once again until June 2013. Tampa Electric believes that the current work will continue to be useful for related to the Phase II Rule and does not intend to suspend the work because it would not be cost-effective appropriate to do so. Therefore. Tampa Electric anticipates O&M expenses associated with the 2013 planned study activities will be approximately \$60,000. No capital expenditures are anticipated.

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Q. Please describe the Big Bend FGD System Reliability program activities and provide the estimated capital and O&M expenses for the period of January 2013 through December 2013.

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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 has been running concurrently with the installation of SCR systems on the generating units.

For the period of January 2013 through December 2013, there are no anticipated capital or O&M expenditures for this project.

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Q. Please describe the Arsenic Groundwater Standard program activities and provide the estimated capital and O&M expenditures for the period of January 2013 through December 2013.

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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 2013 through December 2013, there will be no capital expenditures for this program; Electric however, Tampa anticipates M&O expenses associated with the sampling activities will be approximately \$667,000.

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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 2013 through December 2013.

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A. The CAMR program was approved by the Commission in Docket 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 regulated sources of list of hazardous pollutants under section 112. At the same time, Court vacated the Clean Air Mercury Rule. On May 2011, the EPA published a new proposed rule for mercury and other hazardous air pollutants according to the National Emissions Standards for Hazardous Air Pollutants section of the Clean Air Act. The proposed rule calls for continued mercury monitoring requirements comparable to CAMR and additional monitoring and testing of other pollutants by 2014. On February 16, 2012, the published the final rule for mercury and other hazardous air pollutants. The rule revised the mercury limits and provided more flexible monitoring/recordkeeping requirements. Existing sources will have through February 16, 2015 to comply with the rule. Tampa Electric must conduct extensive emissions testing and engineering studies at Big Bend Station and Polk Power Station to determine what actions are required to meet the proposed standards.

For 2013, there are no capital expenditures anticipated; however, O&M expenditures are projected to be \$20,000.

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

A. On July 6, 2010, the EPA proposed a new rule, the Clean Air Transport Rule to replace CAIR. On July 6, 2011, the EPA issued the final CAIR replacement rule, now called the Cross State Air Pollution Rule ("CSAPR"). CSAPR is focused on reducing SO₂ and NO_x in 27 eastern states that contribute to ozone and/or fine particle pollution in other states. In the final rule, Florida is subject to the ozone season control program (May through September). In December 2011, the final rule was stayed by the United States Court of Appeals District of Columbia Circuit. The stay on the finalized CSAPR and the remand of CAIR 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 the and Electric; therefore, the EPA Tampa company anticipates continuing its efforts to complete and maintain the projects. ECRC projects The completed support compliance with CSAPR.

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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. Subsequent to the vacatur, the company has continued utilizing the resources already secured to establish a baseline of mercury emissions.

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On May 3, 2011 the EPA proposed rules under National Emission Standards for Hazardous Air Pollutants pursuant to a court order referred to as the Utility Maximum Achievable Control Technology ("U MACT"). The proposed rules are to replace CAMR and are expected to reduce not only mercury but acid gas, organics and certain nonmercury metals emissions and require MACT. The final U MACT rules released in February 2012 were with implementation in May 2015. The company continues to utilize the resources already secured to establish

baseline on mercury and other emissions subject to the proposed rule and expects to purchase other equipment that will be required to comply with the rules.

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Q. Please describe the GHG Reduction Program activities and provide the estimated capital and O&M expenditures for the period of January 2013 through December 2013.

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A. Tampa Electric's GHG Reduction Program approved by the Commission in Docket No. 090508-EI, Order No. PSC-10-0157-PPA-EI, issued March 22, 2010 is a result of the EPA's Mandatory Reporting Rule requiring annual reporting of greenhouse gas emissions. Tampa Electric is required to report greenhouse gas emissions to the EPA for the first Reporting for the EPA's Greenhouse Gas time in 2011. Mandatory Reporting Rule will continue in 2013. For 2013, activity is anticipated to require this not capital expenditures; however, it is expected to result in approximately \$90,000 in O&M expenses.

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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. testimony that My identified projects are legally 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 2013. Additionally, my testimony identified projects that are required for Tampa Electric to meet the environmental requirements and I provided the associated 2013 activities and projected expenditures.

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Q. Does this conclude your testimony?

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A. Yes it does.

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